CDM



Final Energy Audit Report

Jersey City Public School Board of Education
May 4, 2012

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Executive Summary

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As part of an initiative to reduce energy cost and consumption, The Jersey City Board of Education has secured the services of Camp Dresser and McKee (CDM) to perform an energy audit for 41 facilities which are owned and operated by the Board of Education (BOE) in an effort to develop comprehensive Energy Conservation and Retrofit Measures (ECRMs).

CDM's energy audit team visited the facilities August 15th through August 19th. As a result of the site visit and evaluation of the historical energy usage of the facilities, CDM was successful in identifying opportunities for energy savings measures.

CDM has also evaluated the potential for renewable energy technologies to be implemented at the BOE's facilities to offset the electrical energy usage. Specifically, the use of solar electric photovoltaic panels, ground source heat pumps and wind turbines were investigated.

Potential energy cost savings may be available for the BOE through the use of a third party electric or gas supplier. Additionally, there is potential for the BOE to generate revenue by participation in a Demand Response Program, as discussed in Section 5.2.

Not all ECRMs identified as a result of the energy audit are recommended. ECRMs must be economically feasible to be recommended to the BOE for implementation. The feasibility of each ECRM was measured through a simple payback analysis. The simple payback period was determined after establishing Engineer's Opinion of Probable Construction Cost estimates, Operation and Maintenance (O&M) cost estimates, projected annual energy savings estimates, and the potential value of New Jersey Clean Energy rebates, or Renewable Energy Credits, if applicable. ECRMs with a payback period of 20 years or less can be recommended.

Historical Energy Usage

The following table, Table ES-1, summarizes the historical energy usage at each of the BOE's facilities as presented in Section 3. The data in Table ES-1 has been taken from the facility data forms, provided by the BOE. These values can serve as a bench-marking tool, along with the building profiles that have been established through the EPA's Portfolio Manager Program, to quantify the reduction in electrical energy and natural gas usage following the implementation of the recommended ECRMs. Usages in this table have been taken from utility bills and facility data forms supplied by the Board.

Table ES-1

Summary of Annual Energy Usage & Cost

Building	Electrical Energy Use (kWh)	Peak Summer Demand (kW)	Peak Winter Demand (kW)	Fuel Use for Entire Building (therms)	Fuel Use for Entire Building (Gallons)	Cost for Electric Service	Cost for Gas	Cost for Oil
NJBPU Program Properties								
Dickinson High School	2,213,087	N/A	N/A	2,204	N/A	$197,072	$1,953	N/A
Ferris High School	2,922,740	524	486	177,095	N/A	$470,240	$191,434	N/A
Lincoln High School	3,209,347	635	484	4,807	N/A	$239,578	$471	N/A
McNair Academic High School	1,798,328	415	328	4,510	N/A	$259,982	$40,935	N/A
Snyder High School	2,222,830	188	198	N/A	40,860	$328,402	N/A	$88,115
Middle School #40	694,080	85	88	79,970	4,000	$32,063	$86,277	$9,326
Middle School #41	1,635,668	135	142	25,054	57,004	$248,016	$19,915	$123,437
PS #15	2,940,311	356	298	140,611	N/A	$202,434	$158,072	N/A
PS #22	$62,000	212	104	77,525	N/A	$124,940	$87,619	N/A
Owner Funded Properties								
Cunningham ECCC	176,600	52	70	N/A	N/A	$8,265	N/A	N/A
Liberty High School	388,480	37	44	4,807	N/A	$36,571	$471	N/A
Middle School #4	2,720,461	544	374	37,804	N/A	$216,500	$42,073	N/A
Middle School #7	3,082,200	278	210	92,420	N/A	$451,158	$100,229	N/A
Jersey City Infinity School	2,091,947	8	15	N/A	N/A	$134,729	N/A	N/A
Academy 1 School	N/A	75	196	N/A	N/A	N/A	N/A	N/A
Public School #1	253,965	N/A	N/A	1,082	N/A	$40,276	$1,294	N/A
Public School #3	4,529,251	880	433	42,762	N/A	$205,883	$47,005	N/A
Public School #5	946,490	193	230	5,321	N/A	$84,616	$60,972	N/A
Public School #6	1,703,784	251	293	3,553	N/A	NA	$33,124	N/A
Public School #8	405,940	209	273	3,376	N/A	$63,467	$4,365	N/A
Public School #11	340,275	139	212	971	N/A	$53,562	$1,289	N/A
Public School #14	333,955	127	139	41	N/A	$56,873	$133	N/A
Public School #16	2,940,311	69	174	23815	N/A	$50,227	$27,514	N/A
Public School #17	4,390,782	174	266	51366	N/A	N/A	$61,518	N/A
Public School #20	375,240	26	54	1317	16,641	N/A	$1,709	$35,722
Public School #23	2,049,400	206	264	191278	N/A	$107,086	$4,275	N/A
Public School #24	654,023	186	183	1481	N/A	$102,258	$1,621	N/A
Public School #25	1,320,800	250	476	111	N/A	$194,780	$820	N/A
Public School #27	1,971,954	350	786	N/A	N/A	N/A	N/A	N/A

Table ES-1

Summary of Annual Energy Usage & Cost

Building	Electrical Energy Use (kWh)	Peak Summer Demand (kW)	Peak Winter Demand (kW)	Fuel Use for Entire Building (therms)	Fuel Use for Entire Building (Gallons)	Cost for Electric Service	Cost for Gas	Cost for Oil
Public School #28	3,127,175	126	208	N/A	N/A	$227,732	N/A	N/A
Public School #29	332,542	127	155	470	11,641*	$53,219	$637	$32,364
Public School #30	1,474,970	194	164	3,813	17,719	$110,475	$2,224	$38,405
Public School #31	222,060	780	150	19,707	N/A	$35,960	$23,627	N/A
Public School #33	309,544	120	279	15,466	N/A	$51,081	$19,377	N/A
Public School #34	1,572,800	182	142	35,685	N/A	$114,691	$540,598	N/A
Public School #37	1,116,174	171	188	420	N/A	$86,183	$658	N/A
Public School #38	552,276	125	190	911	26,447	$92,939	$8,120	$57,316
Public School #39	433,200	117	138	7,710	N/A	$68,136	$9,147	N/A
Regional Day School	659,840	168	238	N/A	N/A	$68,136	N/A	N/A
Administration Building	7,883,716	344	417	N/A	N/A	$670,286	N/A	N/A

*Includes assumptions of monthly oil use for missing months of data.

Recommended ECRMs

The following Table ES-2 presents the ranking of recommended ECRMs identified for the building lighting and HVAC systems based on the simple payback analysis.

Additional ECRMs associated with the building envelope and other miscellaneous appliances were identified and evaluated, as discussed in Sections 2 and 4; however, were not recommended due to longer payback periods. This table includes the Engineer's Opinion of Probable Construction Cost, projected annual energy cost savings, projected annual energy usage savings, and total simple payback period for each recommended ECRM. The ECRMs are ranked based on payback period.

Table ES-2

Ranking of Energy Savings Measures Summary

Overall Ranking (Based on Simple Payback)	Facility Measure	Total Cost	Annual Energy Savings	Annual Energy Savings	Simple Payback
1	**Lincoln High School** AHU night setback	$2,702	38,100 kWh	$ 20,468	**0.1**
2	**PS #3** AHU night setback	$2,702	43600 kWh	$10,464	**0.1**
3	**PS #31 - Total** Lighting Upgrades	$6,863	46,797 kWh	$7,956	**0.9**
4	**Regional Day School** AHU night setback	$14,930	82780 kWh	$14,072	**1.0**

Table ES-2

Ranking of Energy Savings Measures Summary

Overall Ranking (Based on Simple Payback)	Facility Measure	Total Cost	Annual Energy Savings	Annual Energy Savings	Simple Payback
5	**PS #1 - Total** Lighting Upgrades	$15,307	86,475 kWh	$12,971	**1.2**
6	**PS #11 - Total** Lighting Upgrades	$25,362	125,537 kWh	$18,831	**1.3**
7	**PS #27 - Total** Lighting Upgrades	$15,796	82,531 kWh	$12,380	**1.3**
8	**PS #8 - Total** Lighting Upgrades	$20,023	97,266 kWh	$14,590	**1.4**
9	**PS #23 - Total** Lighting Upgrades	$24,049	101,904 kWh	$15,286	**1.4**
10	**PS #28 - Total** Lighting Upgrades	$27,916	153,197 kWh	$19,422	**1.4**
11	**PS #6 - Total** Lighting Upgrades	$53,588	175,368 kWh	$33,320	**1.6**
12	**PS #24 - Total** Lighting Upgrades	$51,960	233,427 kWh	$32,680	**1.6**
13	**PS #3** Boiler OA Reset	$5,750	5,300 Therms	$3284	**1.8**
14	**PS #33 - Total** Lighting Upgrades	$6,317	30,966 kWh	$3,406	**1.8**
15	**Dickinson High School - Total** Lighting Upgrades	$75,698	252,484 kWh	$37,873	**1.9**
16	**MS #4** Demand Control Ventilation	$2,790.91	2,000 Therms	$1,468	**1.9**
17	**Liberty High School - Total** Lighting Upgrades	$8,773	29,439 kWh	$4,416	**2.0**
18	**PS #25 - Total** Lighting Upgrades	$21,851	71,299 kWh	$10,695	**2.0**
19	**McNair/Academic High School - Total** Lighting Upgrades	$52,540	150,727 kWh	$22,609	**2.3**
20	**PS #39 - Total** Lighting Upgrades	$33,848	91,149 kWh	$14,584	**2.3**
21	**PS #34 - Total** Lighting Upgrades	$30,353	73,757 kWh	$11,801	**2.6**
22	**PS #14 - Total** Lighting Upgrades	$34,837	78,061 kWh	$8,587	**2.7**
23	**PS #16 - Total** Lighting Upgrades	$23,342	53,086 kWh	$7,963	**2.8**
24	**PS #22** Cafeteria AHU controls	$ 1,430	3170 kWh	$ 507	**2.8**
25	**MS #41 - Total** Lighting Upgrades	$40,864	77,459 kWh	$13,942	**2.9**
26	**Ferris High School - Total** Lighting Upgrades	$91,055	206,237 kWh	$28,873	**3.1**

Table ES-2

Ranking of Energy Savings Measures Summary

Overall Ranking (Based on Simple Payback)	Facility Measure	Total Cost	Annual Energy Savings	Annual Energy Savings	Simple Payback
27	**Lincoln High School - Total** Lighting Upgrades	$82,650	234,092 kWh	$25,750	**3.1**
28	**Snyder High School - Total** Lighting Upgrades	$104,479	209,391 kWh	$31,408	**3.1**
29	**PS#15** Lighting Upgrades	$68,134	160,766 kWh	$19,291	**3.2**
30	**Ferris High School** Economizer	$2,790	6,000 kWh	$840	**3.3**
31	**PS #5 – Total** Lighting Upgrades	$164,784	359,942 kWh	$43,193	**3.6**
32	**Lincoln High School** Boiler OA Reset	$5,750	2,100 Therms	$1,536	**3.7**
33	**Cunningham Center ECC - Total** Lighting Upgrades	$11,657	20,130 kWh	$3,019	**3.8**
34	**PS #30 - Total** Lighting Upgrades	$170,535	232,323 kWh	$39,495	**3.8**
35	**PS #22 - Total** Lighting Upgrades	$381,380	545,028 kWh	$87,204	**4.1**
36	**Infinity Institute - Total** Lighting Upgrades	$23,540	32,387 kWh	$4,858	**4.2**
37	**PS #38 - Total** Lighting Upgrades	$57,926	94,211 kWh	$12,247	**4.5**
38	**Snyder High School - Total** Steam Boiler Replacement	$80,536	8,143 Gal	$17,589	**4.6**
39	**Public School** Boiler Replacement	$436,138	80,500 Therms	$95,795	**4.6**
40	**PS #29 - Total** Lighting Upgrades	$132,972	147,179 kWh	$25,020	**4.6**
41	**MS #7 - Total** Lighting Upgrades	$107,043	151,266 kWh	$22,690	**4.7**
42	**PS #20 - Total** Lighting Upgrades	$167,669	173,593 kWh	$26,039	**5.0**
43	**MS #40 - Total** Lighting Upgrades	$137,043	167,859 kWh	$25,178	**5.2**
44	**PS #15 - Total** Condensing Boiler	$390,076	58,014 Therms	$69,957	**5.6**
45	**PS #17 - Total** Lighting Upgrades	$332,169	455,391 kWh	$50,093	**5.8**
46	**Regional Day School - Total** Lighting Upgrades	$96,264	85,949 kWh	$14,611	**6.1**
47	**PS #12 - Total** Lighting Upgrades	$54,508	79,427 kWh	$8,737	**6.1**
48	**Academy 1 - Total** Lighting Upgrades	$161,862	164,199 kWh	$19,703	**6.6**
49	**Administrative Building - Total** Lighting Upgrades	$145,853	177,932 kWh	$19,572	**6.7**

Table ES-2

Ranking of Energy Savings Measures Summary

Overall Ranking (Based on Simple Payback)	Facility Measure	Total Cost	Annual Energy Savings	Annual Energy Savings	Simple Payback
50	**MS #40 - Total** Steam Boiler Replacement	$152,231	15,628 Therms 840 Gal	$20,554	**7.4**
51	**MS #41 - Total** Steam Boiler Replacement	$161,252	8,857 Gal	$19,220	**8.4**
52	**PS #37 - Total** Lighting Upgrades	$30,778	27,043 kWh	$3,516	**8.4**
53	**PS #11** Boiler Replacement	$219,794	13,731 Therms	$20,047	**11.0**
54	**PS #29 - Total** Building Management System	$60,375	1,485 Gal/ 11,368 kWh	$5,170	**11.7**
55	**McNair High School** Night Setback	$5,750.00	3,100 kWh / 0 Therms	$465	**12.4**
56	**PS #15 - Total** Building Management System	$241,500	14,165 Therms/ 20,710 kWh	$19,200	**12.6**
57	**PS #38 - Total** Building Management System	$97,031	2,645 Gal/ 11,125 kWh	$7,186	**13.5**
58	**PS #17 - Total** Condensing Boiler	$358,064	16,859 Therms	$23,754	**15.1**
59	**Academy #1 - Total** Building Management System	$135,844	70,960 kWh	$8,515	**16.0**
60	**PS #5** Condensing Boilers	$72,622.50	5,930 Therms	$4,287	**16.1**
61	**PS #30 - Total** Building Management System	$97,031	1,772 Gal/ 9,095 kWh	$5,391	**18.0**
62	**Snyder High School - Total** Building Management System	$247,969	4,350 Gal/ 27,130 kWh	$13,466	**18.4**
63	**PS #29 - Total** Steam Boiler Replacement	$109,106	2,651 Gal	$5,779	**18.9**
64	**MS #40 - Total** Building Management System	$241,500	400 Gal/ 7,592 Therms / 12,895 kWh	$11,900	**20.3**
65	**PS #20 - Total** Building Management System	$97,031	1,166 Gal/ 7,771 kWh	$4,744	**20.5**
66	**PS #20 - Total** Steam Boiler Replacement	$198,303	3,479 Gal	$7,480	**26.5**
67	**PS #22** Demand Control Ventilation	$ 19,501	3,170 kWh	$ 514	**37.9**

1. Engineers Probable Construction Cost takes into account any applicable rebates.
2. Annual Fiscal Savings takes into account additional O&M cost or savings associated with the measure.

Renewable Energy Technologies

Solar Energy

Section 4 of the report provides for an economic evaluation of a solar energy systems recommended to be further investigated for installation at several of the Board facilities. The evaluation covered the economic feasibility of the Board installing a solar energy system under a typical construction contract and to assume full responsibility of the operation of such a system.

Based on a simple payback model, summarized in Table ES-3, it would benefit the Board to further investigate the installation of a solar energy system at 36 buildings. This is primarily based on the initial upfront capital investment required for a solar energy system installation and the 17 year payback period. This payback period may justify installing the solar energy system. Other options such as Power Purchase Agreements are potentially available as well to help finance the project. Solar technology is constantly changing and will most likely continue to lower in price.

Two major factors influencing the project financial evaluation is the variance of the prevailing energy market conditions and Solar Renewable Energy Credit (SREC) rates, with the largest impact to the payback model being the SREC credit pricing. For the payback model, conservative estimates of the SREC's market value over a 25 year period were assumed, as discussed in Section 4.

Table ES-3 includes a simple payback analysis for the installation of a solar energy system at the identified Board buildings.

Table ES-3

Simple Payback Analysis for Solar Energy Systems

Estimated Budgetary Project Cost	$84,141,125
1st Year Production	8,524,092 kWh
Annual Electric Savings	$1,231,677
Annual Estimated SREC Revenue	$3,684,607
Project Simple Payback	17 Years

Wind Power Generation

Section 4 of the report provides for an economic evaluation of a wind turbine energy system recommended to be installed at Board Facilities. The evaluation covered the economic feasibility of furnishing and installing a wind turbine energy system under a typical construction contract and to assume full responsibility of the operation of such a system.

CDM completed a preliminary desktop wind power production analysis and has concluded that an additional on-site feasibility study is warranted and recommended. Such a feasibility study would include the installation of a wind test rig to measure actual wind conditions as observed on-site.

Wind power as a renewable energy source also qualifies for Renewable Energy Certificates (REC's). The prevailing energy market, Renewable Energy Incentive Program (REIP) and REC's comprise the major factors influencing a wind turbine energy system installation. Other options, such as government bonds or a Power Purchase Agreement are potentially available and can assist with the financing of this project.

Table ES-4 includes a typical simple payback analysis for the installation of a wind turbine energy system located in the Board. Refer to Appendix K for a more detailed wind energy financing spreadsheet.

Table ES-4

Ranking of Energy Savings Measures Summary – Wind Turbine Energy System

Parameter	Wind Turbine (Minimum Site Wind Speed – 4.36 m/s)	Wind Turbine (Maximum Site Wind Speed – 6.3 m/s)	Wind Turbine (Average Site Wind Speed –5.41 m/s)
Engineer's Opinion of Probable Cost	$450,000	$450,000	$450,000
Renewable Energy Incentive Program	($80,403)	($120,374)	($103,254)
Total Cost	$369,598	$329,627	$346,747
1st Year Production	74,405	154,347	120,107
Annual Estimated Electric Savings	$11,161	$23,152	$18,016
Annual Estimated REC Revenue	$1,860	$3,859	3,003
Project Simple Payback (Years)	**32.1**	**13.8**	**18.6**

** REIP incentive is calculated for only the first year and is applied as a deduction.

Computer Power Management Software

Section 4 of the report provides for a sample economic evaluation of computer power management software recommended to be installed at the Board facilities.

Table ES-5 includes a typical sample simple payback analysis for the installation of the computer power management software. Refer to Appendix L for a more detailed computer power management software financing spreadsheet.

Table ES-5

PC Power Management System

Site	Engineers Opinion of Probable Cost	Annual Energy Savings	Lifetime Energy Savings (5 Years)*	Simple Payback (Years)	Annual Return On Investment (AROI)	Net Present Value (NPV)	Internal Rate of Return (IRR)
Sample Facility	$1,840	$3,205	$17,016	0.6	154%	$13,719	176%

Recommended ECRMs

Table ES-6 summarizes the Total Engineer's Opinion of Probable Construction Cost, annual energy savings, projected annual energy and O&M cost savings and the payback period based on the implementation of all of the above recommended ECRMs.

Table ES-6

Recommended ECRM's[1]

Total Engineer's Opinion of Probable Construction Cost	Projected Annual Energy Savings	Projected Annual Fiscal Savings	Simple Payback Period (years)
$6,552,087	221,819 Therms 6,086,248 kWh 35,788 Gallons Fuel Oil	$1,227,461	5.3

1. Does not include energy savings associated with Solar Energy System or Wind Power Generation.

Section 1

Section 1
Introduction

1.1 General

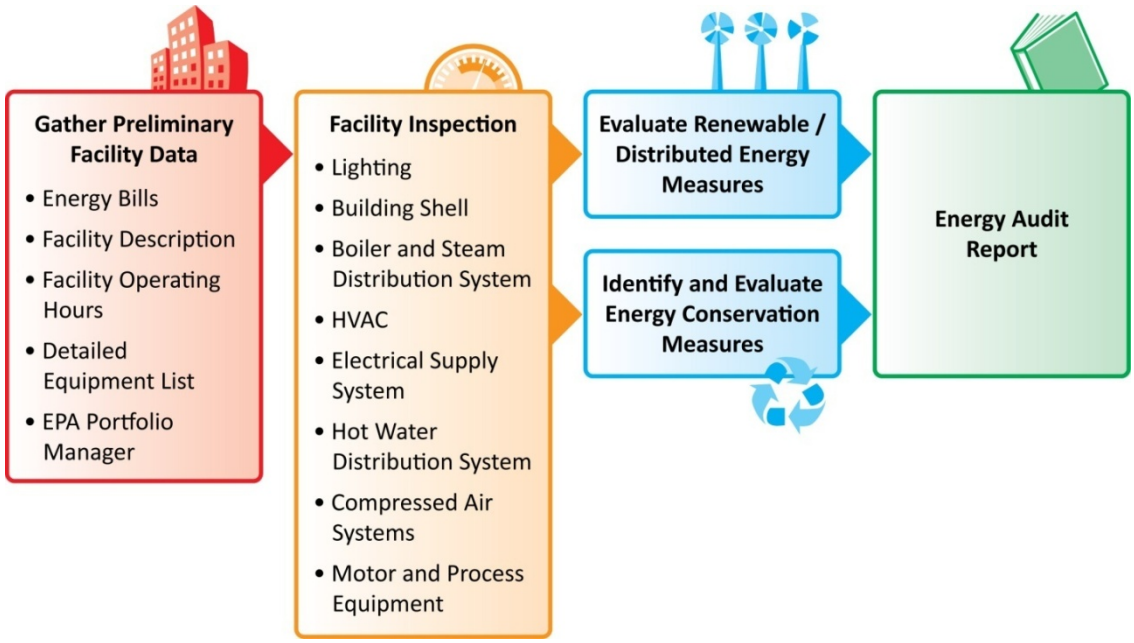
As part of an initiative to reduce energy cost and consumption, the Jersey City Public School District has secured the services of Camp Dresser and McKee (CDM) to perform an energy audit at 41 facilities in an effort to develop comprehensive energy conservation initiatives.

The performance of an Energy Audit requires a coordinated phased approach to identify, evaluate and recommend energy conservation and retrofit measures (ECRM). The various phases conducted under this Energy Audit included the following:

- Gather preliminary data on all facilities;
- Facility inspection;
- Identify and evaluate potential ECRMs and evaluate renewable/distributed energy measures;
- Develop the energy audit report.

Figure 1-1 is a schematic representation of the phases utilized by CDM to prepare the Energy Audit Report.

Figure 1-1: Energy Audit Phases



1.2 Background

The facilities that were included in the energy audit for the Jersey City Board of Education were:

School	Construction Year	Square Footage	Occupied Hours Per Week	Occupants (Students & Staff)
Dickinson High School	1904	356,000	110	2,763
Ferris High School	1969	282,115	110	1,893
Lincoln High School	1919	272,931	110	1,207
McNair Academic High School	1910	132,311	110	808
Snyder High School	1923	209,500	110	1,306
Middle School #40	1963	132,483	100	511
Middle School #41	1977	140,467	100	574
PS #15	1971	179,590	80	752
PS #22	1931	157,134	80	740
Cunningham ECCC	2005	12,100	75	14
Liberty High School	1911	33,316	110	231
Middle School #4	2006	169,678	100	991
Middle School #7	2007	163,855	100	891
Jersey City Infinity School	1925	60,000	60	61
Academy 1 School	1966	64,884	80	469
Public School #1	1898	56,230	75	1,744
Public School #3	1909	117,939	85	731
Public School #5	1914	148,409	85	762
Public School #6	1919	148,882	85	998
Public School #8	1951	169,196	85	900
Public School #11	1968	104,509	85	888
Public School #12	1954	86,375	85	483
Public School #14	1954	118,873	85	496
Public School #16	1918	61,684	85	335
Public School #17	1996	153,864	85	1,301
Public School #20	1900	78,996	85	674
Public School #23	1922	177,028	90	1,744
Public School #24	1920	118,240	80	1,039
Public School #25	1896	132,860	80	912
Public School #27	1966	94,611	80	1,175
Public School #28	1990	126,761	80	1,091
Public School #29	1901	66,180	80	557
Public School #30	1906	93,129	60	918
Public School #31	1906	36,973	70	318
Public School #33	1906	30,607	80	472
Public School #34	1911	141,806	80	685
Public School #37	1925	135,534	80	869
Public School #38	1953	120,940	80	1,043
Public School #39	1963	126,429	80	372
Regional Day School	1981	30,587	75	199
Administrative Building	1919	166,500	75	803

1.3 Purpose and Scope

The objective of the energy audit is to identify energy conservation and retrofit measures to reduce energy usage and to develop an economic basis to financially validate the planning and implementation of identified energy conservation and retrofit measures.

Significant energy savings may be available with retrofits to the heating and cooling systems and lighting systems. It should be noted that the magnitude of energy savings available is not only dependent on the type of heating, lighting or insulation systems in use, but also on the age and condition of the equipment and the capital available to implement major changes. Due to the rising cost of power and the desire to minimize dependence on foreign oil supplies, energy consumption is taking a higher priority across the nation and feasible alternatives for reducing energy consumption and operating costs must be evaluated on a case-by-case basis.

The purpose of this energy audit is to identify the various critical building comfort systems that are major consumers of electrical energy and are clear candidates for energy savings measures. In addition, potential energy producing systems such as solar electric, ground source heat pumps, and wind energy systems were also evaluated. A discussion on these technologies is included in Section 4 Energy Conservation and Retrofit Measures (ECRM).

In addition to identifying ECRMs and the potential for on-site energy generation, there is potential for further energy cost savings through the use of a third party energy supplier and participation in a Demand Response Program. This is discussed further in Section 5.

Section 2

Section 2
Facility Description

2.1 Dickinson High School

2.1.1 Description of Building Envelope

The energy audit included an evaluation of the building envelope (exterior shell) to determine the components' effective R-values to be utilized in the building model and to locate and fix any thermal weaknesses that may be present. The components of a building envelope include the exterior walls, foundation and roof. The construction and material, age and general condition of these components, including exterior windows and doors, impact the building's energy use.

The building is solid masonry. The exterior walls are brick, stone, and ceramic tile. The interior wall finish is plaster. The plaster has areas of significant water damage from roof leaks. The structure has some timber framing for the ceiling. The floors are generally terracotta in the hallways and the bathrooms. The class rooms have vinyl tile. The gym building is also masonry with steel structure. The building is brick exterior with tile and plaster interior. The gym building houses the central heating plant, cafeteria, a pool, a gym and the athletic offices.



The windows of both buildings were replaced in the 1990's. They were found to be double-pane with blinds between the panes, aluminum frame and in good condition.

The school has a flat roof. The roof structure is steel framing and poured concrete deck. The roof surface is a rubber membrane, less than five years old. The roof is presently having leaks repaired. This is mostly attributed to problems at the roof drains. The roof has very minimal insulation. The gymnasium roof is flat. The roof surface is bitumen rolls. The roof appears to have minimal insulation.

2.1.2 Description of Building HVAC

The school's building heat is supplied by the central boiler plant located in the gym building. The boilers are oil-fired, Weil McLain, cast iron sectional. The boilers produce steam that is distributed to the radiators. The school is heated by pipe coil and cast iron radiators located on the exterior walls. The radiators have pneumatic control valves on the steam lines. The pneumatic lines were disconnected from the control valves at the time of the site visit. Each

class room has a thermostat to regulate the control valve, which is also disconnected. The heating control system in the school is now limited to the building staff turning the heating system on and off depending on the school schedule and the outdoor temperature.

The school's building ventilation is primarily by operable windows. There are some exhaust fans. The wood shop has a dust collection system that is not operational. The Gym building has dedicated ventilation fans for each major space.

The cooling system for the school consists of window air conditioners. The window air conditioners are located in administrator offices, computer classrooms, and teacher lounges. The gym has packaged units and split systems to cool the spaces. The units were observed to have damaged condensate drains which were preventing the unit from draining. One observed split system had been disassembled apparently to be repaired, and then never reassembled. The cooling systems are controlled by either a remote wall-mounted thermostat in the space or integral, unit-mounted controls.

2.1.3 Description of Building Lighting

The school's existing interior lighting system consists of 1X4 (2 lamp), 2X4 (3 and 4 lamp) T8 and T12 linear fluorescent fixtures with magnetic and electronic ballasts, compact fluorescent, and high intensity discharge (HID) fixtures. The building is manually controlled. Existing exterior lighting consists of HID wall packs, and HID parking lot and sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.2 Ferris High School

2.2.1 Description of Building Envelope

The exterior walls of Ferris High School are brick construction with finished interior. The existing roof is flat with a built-up surface.

The windows throughout the main building were found to be original, operable, double-pane. As the windows are in average condition, replacement is not recommended. However, to minimize infiltration, it is recommended that locks be secured and new caulking applied each season.

Overall, it was determined that the building envelope is in average condition and is currently providing a sufficient level of insulation. While some minor repairs and upgrades may be recommended, modifications to the insulation system would not prove to be cost-effective, from an energy savings stand-point.

2.2.2 Description of Building HVAC

Heating in Ferris High School is primarily provided by a building-wide hot water system. Two Cleaver-Brooks hot water fire-tube boilers serve air handlers throughout the building.

The water system piping is a two pipe system.

Most cooling is provided by a chilled water system with coils in the aforementioned air handling units. Chilled water for this system is generated by two 300-ton York water-cooled chillers located on the roof. These chillers reject their heat to two Carrier cooling towers located on the roof.

2.2.3 Description of Building Lighting

The school's existing interior lighting system consists of 1X4 (2 lamp), 2X4 (3 and 4 lamp) T8 and T12 linear fluorescent fixtures with magnetic and electronic ballasts, compact fluorescent, and high intensity discharge (HID) fixtures. The building is manually controlled. Existing exterior lighting consists of HID wall packs, and HID parking lot and sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.3 Lincoln High School

2.3.1 Description of Building Envelope

There are two buildings on the campus of Lincoln High school. The main building is in its original state and has had no major renovations. The exterior walls of the main building are brick construction with finished interior. The existing roof is flat with a built-up surface.

The Annex building was renovated in 2007 and serves primarily 9th grade students. The exterior walls of the annex are brick construction with finished interior. The existing roofing system of the building consists of EPDM membrane over flat roof decks.

The windows throughout the main building were found to be original, operable, double-pane. As the windows are in average condition, replacement is not recommended. However, to minimize infiltration, it is recommended that locks be secured and new caulking applied each season.

The windows throughout the Annex building were found to be original, insulated double-pane. As the windows are in average condition, replacement is not recommended.

Overall, it was determined that the building envelope for both buildings is in good condition and is currently providing a sufficient level of insulation. While some minor repairs and upgrades may be recommended, modifications to the insulation system would not prove to be cost-effective, from an energy savings stand-point.

2.3.2 Description of Building HVAC

Heating in Lincoln High School is primarily provided by a campus-wide hot water system that serves both buildings. Two Smith steam boilers serve radiators throughout the main building and through a heat exchanger provide domestic hot water to both buildings. Heating in the annex building is primarily provided by gas-fired rooftop packaged air conditioning units.

The main building does not have a central cooling system, but there is one unit that serves the gym, and window air conditioning units in a few offices. The Annex building's cooling is provided by the above-mentioned rooftop air conditioning units.

For the main building, there is no central building control system. In the Annex building, there is an Automated Logic DDC control system.

2.3.3 Description of Building Lighting

The school's existing interior lighting system consists of 1X4 (2 lamp), 2X4 (3 and 4 lamp) T8 and T12 linear fluorescent fixtures with magnetic and electronic ballasts, compact fluorescent, and high intensity discharge (HID) fixtures. The building is manually controlled. Existing exterior lighting consists of HID wall packs, and HID parking lot and sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.4 McNair Academic High School

2.4.1 Description of Building Envelope

The exterior walls of McNair Academic High School are brick construction with finished interior. The existing roofing system of the building is thermoplastic polyolefin (TPO).

The windows throughout the main building were found to be original, operable, double-pane. As the windows are in average condition, replacement is not recommended. However, to minimize infiltration, it is recommended that locks be secured and new caulking applied each season.

Overall, it was determined that the building envelope is in average condition and is currently providing a sufficient level of insulation. While some minor repairs and upgrades may be recommended, modifications to the insulation system would not prove to be cost-effective, from an energy savings stand-point.

2.4.2 Description of Building HVAC

Heating in McNair Academic High School is primarily provided by a building-wide hot water system. Two Smith hot water cast-iron boilers serve air handlers throughout the building.

The water system piping is a two pipe system in the original section of the building and four pipe system in the new section.

Cooling is primarily provided by a chilled water system with coils in the aforementioned air handling units. Chilled water for this system is generated by two Trane air-cooled chillers located on the roof.

The building automation system is a combination of pneumatic locally controlled thermostats and DDC controls. The science lab fume hoods are provided with ventilation controls.

2.4.3 Description of Building Lighting

The school's existing interior lighting system consists of 1X4 (2 lamp), 2X4 (3 and 4 lamp) T8 and T12 linear fluorescent fixtures with magnetic and electronic ballasts, compact fluorescent, and high intensity discharge (HID) fixtures. The building is manually controlled. Existing exterior lighting consists of HID wall packs, and HID parking lot and sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.5 Snyder High School

2.5.1 Description of Building Envelope

The exterior walls of the Snyder High School consist of brick and mortar façade with finished drywall interior. The existing roof on the building consists of ballasted asphalt roof exterior over flat roof decks. In 2000, a 4th floor was added to a portion of the building. The addition's roofing system consists of EPDM membrane over flat metal roof decks. Many patches have been applied where screws have penetrated the membrane layer. The school's classrooms have either a finished drywall or acoustic tile dropped ceiling.

The windows throughout the building were found to be double-pane with aluminum frames. Weather-stripping applied to windows appeared to be in good condition. The exterior doors are FRP doors. FRP doors are recommended on an energy efficiency level, as the doors are made out of a high strength, light weight material with energy saving insulation and good sealing ability, as the doors will not expand or contract with changing climate.

Overall, it was determined that the building envelope is in average condition and is currently providing a sufficient level of insulation. While some minor repairs and upgrades may be recommended, modifications to the insulation system would not prove to be cost-effective, from an energy savings stand-point.

2.5.2 Description of Building HVAC

Heating in the Snyder High School is provided by a steam system. Steam is generated by three boilers. Two of the boilers are 1922 W.W. Farrier Co. boilers while the third is a Burnham fire-tube boiler. These boilers have an input capacity of 10,500 MBH (1 MBH = 1,000 BTU/Hr). Staff reported while on site that one of these boilers is not currently working. The Burnham Commercial fire-tube boiler has in input capacity of 10,500 MBH. Boiler firing of the W.W. Farrier Co. is controlled by Honeywell. The Burnham boiler is modulated by a Multi-Mod Platinum Heat Timer mounted on the wall. Steam generated by these units is delivered to radiators, unit heaters, fan coils, and air handlers in the various locations throughout the building. A Carrier packaged DX cooling gas fired make-up air unit provide heating to a room on the south west side of the building. A packaged gas-fired rooftop make-up air unit provides heating to the kitchen. An A.O. Smith indirect water heater located in the boiler room provides domestic hot water and shower water throughout the building.

Cooling is provided to the Snyder High School by two air cooled chillers. A high efficiency 104 ton York scroll chiller and a Carrier chiller provide chilled water to the chilled water coils in the Racan air handling units serving the cafeteria, the fourth floor, and some other spaces. A packaged air conditioning unit provides cooling to room 308. Air cooled condensing units are matched to DX cooling coils serving the stage and other various spaces in the school. Magic Air fan coils tied to an air cooled condensing units provide cooling to the auditorium. A 40-ton Trane air cooled condensing unit provides cooling to the library. The aforementioned packaged air conditioning unit provides cooling to a room on the south west side of the building. Forty+ window air conditioning units provide cooling to various spaces in the school.

Most of the HVAC units have packaged electric controls. Some of the steam radiators have shut-off valves.

2.5.3 Description of Building Lighting

Snyder High School's existing interior lighting system consists of 2X2 (2 lamp), 1X4 (2, and 3 lamp), 2X4 (2, 3, and 4 lamp) T8 and T12 linear fluorescent fixtures with magnetic and electronic ballasts, compact fluorescent, incandescent, and high intensity discharge (HID) fixtures. The building is manually controlled. Existing exterior lighting consists of HID wall packs, canopy fixtures, compact fluorescent fixtures, and HID parking lot and sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.6 Middle School #40

2.6.1 Description of Building Envelope

The exterior walls of Middle School #40 consist of brick and mortar façade with finished drywall interior. The existing roof on the older part of the school consists of asphalt roof exterior over flat roof decks. The section of roofing over the auditorium is a flat, metal deck with an EPDM membrane exterior. Ceiling insulation observed over the auditorium appeared to be in great shape. Most of the school has 9-foot high dropped ceilings.

The windows throughout the building were found to be double-pane with aluminum frames, and in good condition. The exterior doors are FRP doors. FRP doors are recommended on an energy efficiency level, as the doors are made out of a high strength, light weight material with energy saving insulation and good sealing ability, as the doors will not expand or contract with changing weather.

Overall, it was determined that the building envelope is in average condition and is currently providing a sufficient level of insulation. While some minor repairs and upgrades may be recommended, modifications to the insulation system would not prove to be cost-effective, from an energy savings stand-point.

2.6.2 Description of Building HVAC

Heating in Middle School #40 is provided by a hot water system. Hot water is generated by a heat exchanger from four steam boilers. An HB Smith cast-iron boiler is used to generate summer domestic hot water and for heating the pool. This boiler has an I=B=R Net output capacity of 1,089 MBH. A Pacific Steel Heating Boiler runs on oil while two remaining heating boilers are gas-fired. Nameplate data could not be read off the oil-fired Pacific Steel Heating boiler. A second HB Smith cast-iron boiler is gas-fired with an input capacity of 5,862 MBH. The gas-fired Pacific Heating Boiler has an input capacity of 5,460 MBH. Hot water generated by a steam-to-water heat exchanger is delivered to unit ventilators and air handlers in the various locations throughout the building. A gas-fired rooftop make-up air unit serves the kitchen area.

Cooling is provided by approximately 14 window air conditioning units. The window air conditioning units serve the offices and rooms 110, 211,205 214, 217, and 215. The Auditorium is cooled by an air-cooled Carrier chiller located in the courtyard. Chilled water coils are in the Trane M-Series air handling units above the Auditorium. A rooftop air conditioning unit, also serving the Auditorium, could not be accessed at the time of the audit.

Some of the boiler controls are electric while most of the building is pneumatically controlled.

2.6.3 Description of Building Lighting

Middle School #40's existing interior lighting system consists of 1X4 (2, lamp), 2X4 (2 and 4 lamp) T8 and T12 linear fluorescent fixtures with magnetic and electronic ballasts, compact fluorescent, incandescent, and high intensity discharge (HID) fixtures. The building is manually controlled. Existing exterior lighting consists of HID wall packs, canopy fixtures, compact fluorescent fixtures, and HID parking lot and sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.7 Middle School #41

2.7.1 Description of Building Envelope

The exterior walls of Middle School #41 consist of brick and mortar façade with concrete masonry unit (CMU) back up blocks. Some of the exterior wall consists of aluminum insulated paneling. The existing roof is EPDM membrane over flat metal roof decks. The third floor roof has been ballasted while the lower roof has not. Most of the school has an acoustic tile dropped ceiling.

The windows throughout the building were found to be double-pane with aluminum frames, and in good condition. Weather-stripping applied to windows appeared to be in good condition. The exterior doors are FRP doors. FRP doors are recommended on an energy efficiency level, as the doors are made out of a high strength, light weight material with energy saving insulation and good sealing ability, as the doors will not expand or contract with changing weather.

Overall, it was determined that the building envelope is in average condition and is currently providing a sufficient level of insulation. While some minor repairs and upgrades may be recommended, modifications to the insulation system would not prove to be cost-effective, from an energy savings stand-point.

2.7.2 Description of Building HVAC

Heating in Middle School #41 is provided by a hot water system. Hot water is generated by a heat exchanger from two steam boilers. Each 1976 Continental boiler has an input capacity 94.1 GPH of No. 4 oil, which equates to approximately 13,600 MBH. Hot water generated by the heat exchanger is delivered to unit ventilators, unit heaters, and air handlers in the various locations throughout the building. Two gas-fired rooftop make-up air units serve the pool area. Domestic hot water is generated by a Weil McLain boiler. The Weil McLain boiler has in input capacity of 1,703 MBH and stores the water in two Weil McLain tanks. These tanks are approximately 200 gallons each. A 10-kW Dayton electric unit heater provides heating to the Library.

Cooling is provided to Middle School #41 by split air-cooled systems and window AC units. About twenty window AC units provide cooling to various classrooms. About half of these are new Friedrich units. 20+ air-cooled condensing units are matched to DX cooling coils serving classrooms. These condensing units are very old and rusted, and are most likely not operational. There are two air-cooled condensing units on the roof that appear functional and are serving various spaces below. Two more air cooled condensing units on the lower roof are matched to DX coils, which serve the Library and offices. A packaged rooftop air conditioning unit is also located on the lower roof and serves the computer room. A York air-cooled chiller provides chilled water to coils in the gym air handling units.

This school used to have pneumatic controls, but has switched over to electric control. Staff reported that space temperatures can be adjusted via a PC.

2.7.3 Description of Building Lighting

Middle School #41's existing interior lighting system consists of 1X4 (4 lamp), 2X4 (4 lamp) T8 and T12 linear fluorescent fixtures with magnetic ballasts, compact fluorescent, incandescent, and high intensity discharge (HID) fixtures. The building is manually controlled. Existing exterior lighting consists of HID wall packs, canopy fixtures, compact fluorescent fixtures, and HID parking lot and sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.8 Public School #15

2.8.1 Description of Building Envelope

The exterior walls of PS #15 consist of brick and mortar façade with concrete masonry unit (CMU) back up blocks. The existing roof consists of a built-up roof over flat roof decks. Leaking was reported near room 211a. At the time of the audit, pooling was observed and patches have been applied in multiple locations indicating that the roof is in need of replacement or repair. This roof is original to the building and has been in place for about 40 years. As such, it is recommended that a qualified roofing contractor evaluate the system, including the structural capacity of the building frame and repair or replace the existing built up roofing system. A roof replacement will be costly; therefore, the system analysis including the structural integrity of the building is recommended. The application of an elastomeric waterproof roof coating system may rectify any leaks. A roof analysis should include the providing code-recommended insulation thicknesses, which will improve the level of insulation that the current roof provides.

It is also recommended that a white thermal barrier coating be considered. This coating works to reduce the surface temperature of the roof by reflecting the UV rays, and provides insulation for the interior of the building reducing the heating and cooling loads. It is anticipated that the cost of the roof replacement will result in a payback period in excess of 20 years, and as such, this recommendation will not be evaluated further.

The hallways in the school have ~8-foot high acoustic-tile, dropped ceilings. The classrooms have ~10-foot high finished drywall ceilings. The balance of the school has 9-foot high dropped ceilings.

The windows and doors have been replaced recently and are less than five years old. The windows throughout the building were found to be double-pane with aluminum frames, and in good condition. The exterior doors are FRP doors. FRP doors are recommended on an energy efficiency level, as the doors are made out of a high strength, light weight material with energy saving insulation and good sealing ability, as the doors will not expand or contract with changing weather.

Overall, it was determined that the building envelope is in average condition and is currently providing a sufficient level of insulation. While some repairs and upgrades may be recommended, modifications to the insulation system would not prove to be cost-effective, from an energy savings stand-point.

2.8.2 Description of Building HVAC

Heating in PS #15 is provided by a hot water system. Hot water is generated by three Cleaver Brooks fire-tube boilers. Each boiler has an input capacity of 8,375 MBH. The boilers are modulated by a Multi-Mod Platinum Heat Timer, mounted on the wall. Hot water generated by these units is delivered to unit ventilators, air handlers, and unit heaters in the various locations throughout the building. Bard heat pumps supply hot air to the modular classrooms. There is one unit per classroom. A 200 gallon PK Compact Series domestic water heater is located in the boiler room and provides hot water to sinks, bathrooms and showers throughout the building.

The aforementioned Bard heat pump units provide cooling to each modular classroom. A McQuay air-cooled water chiller unit on the roof provides cooling to the gym. Two Carrier air-cooled condensing units are matched to DX cooling coils in the air handling units serving the Auditorium. A packaged rooftop air conditioning provides cooling to the offices. There is an air-cooled condensing unit in the courtyard that was not accessed at the time of the audit. There are about 10 window AC units installed providing cooling to the offices, teachers' room, and room 106 and 102.

The boiler controls are electric, while the rest of the building is pneumatic. Staff reported that the pneumatic controls on the unit ventilators in the classrooms are not properly functioning. Six heating water pumps in the Boiler Room distribute the hot water throughout the building. Two of the larger pumps have Lincguard motors that are 25-HP each. The Bard units serving the modular classrooms are controlled by a manual wall mounted thermostat.

2.8.3 Description of Building Lighting

PS #15's existing interior lighting system consists of 1X4 (2 lamp), 2X4 (4 lamp) T8 linear fluorescent fixtures with electronic ballasts, compact fluorescent, incandescent, and high intensity discharge (HID) fixtures. The building is manually controlled. Existing exterior lighting consists of HID wall packs, canopy fixtures, and HID parking lot and sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.9 Public School #22

2.9.1 Description of Building Envelope

The exterior walls of PS #22 are of concrete masonry unit (CMU) construction with a brick exterior and wooden stud interior with a plaster finish. Roof access was not obtained during the audit; however, from ground level inspection it was noted that the roof is in average condition.

The windows throughout the building were found to be original, operable, double-pane. As the windows are in average condition, replacement is not recommended. However, to minimize infiltration, it is recommended that locks be secured and new caulking applied each season.

Overall, it was determined that the building envelope is in good condition and is currently providing a sufficient level of insulation. While some minor repairs and upgrades may be recommended, modifications to the insulation system would not prove to be cost-effective, from an energy savings stand-point.

2.9.2 Description of Building HVAC

Heating in PS #22 is primarily provided by a building-wide hot water system. Two 140 HP gas-fired Smith cast-iron boilers deliver hot water to radiators throughout the building.

PS #22 does not have a central cooling system, but there is a cooling tower with associated air handler(s) and DX split systems that serve the Auditorium and Cafeteria.

DDC controls are used to control the HVAC systems and boilers.

2.9.3 Description of Building Lighting

The school's existing interior lighting system consists of 1X4 (2 lamp), 2X4 (3 and 4 lamp) T8 and T12 linear fluorescent fixtures with magnetic and electronic ballasts, compact fluorescent, and high intensity discharge (HID) fixtures. The building is manually controlled. Existing exterior lighting consists of HID wall packs, and HID parking lot and sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.10 Academy 1

2.10.1 Description of Building Envelope

The exterior walls of Academy #1 consist of brick and mortar façade with finished drywall interior. Staff mentioned that new wall insulation in the lower floors has recently been installed. The existing roof consists of a ballasted built up roof over flat metal roof decks. At the time of the audit, leaking into the Gymtorium was reported. If roof leaks are minimal roof patching can be performed. Classrooms have ~10-foot high acoustic tile dropped ceilings. The hallways have ~ 8-foot high finished plaster dropped ceilings.

The windows throughout the building were found to be double-pane with aluminum frames, and in good condition. Weather-stripping applied to windows appeared to be in good condition. The exterior doors are FRP doors. FRP doors are recommended on an energy efficiency level, as the doors are made out of a high strength, light weight material with energy saving insulation and good sealing ability, as the doors will not expand or contract with changing climate.

Overall, it was determined that the building envelope is in average condition and is currently providing a sufficient level of insulation. While some minor repairs and upgrades may be recommended, modifications to the insulation system would not prove to be cost-effective, from an energy savings stand-point.

2.10.2 Description of Building HVAC

Heating in Academy #1 is provided with electricity. Classrooms are heated by Nesbitt electric heating unit ventilators. Nesbitt electric cabinet heaters provide heating for the hallways. Nesbitt electric ceiling mounted fan coils, and unit ventilators provide heating for the cafeteria. Chromalox electric unit heaters provide heating for the boys and girls locker rooms. Two large Nesbitt air handling units serving the

gymatorium are not currently functional. Room G10 is heated by a Q-Tec two-ton heat pump. A large Patterson Kelley Co. 200 kW electric domestic water heater provides hot water to sinks throughout the building.

The aforementioned Q-Tec heat pump units provide cooling to G10. A Carrier air-cooled condensing unit matched to DX cooling coils in an air handling unit serves the Media Center. A portable AC unit in the office provides almost one-ton of cooling. Two window AC units provide cooling for the Principal and Nurses office.

Electric unit ventilators are manually turned on every morning. An electric control panel located in the Boiler Room controls all the units.

2.10.3 Description of Building Lighting

Academy #1's existing interior lighting system consists of 1X4 (1, and 2 lamp), T12 linear fluorescent fixtures with magnetic ballasts, incandescent, and high intensity discharge (HID) fixtures. The building is manually controlled. Existing exterior lighting consists of HID wall packs, canopy fixtures, and HID parking lot and sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.11 Administrative Building

2.11.1 Description of Building Envelope

The exterior walls of the Administration Building consist of brick and mortar façade with finished drywall interior. The existing roof on the building consists of ballasted asphalt roof exterior over flat roof decks. The existing roofing system over 3R consists of EPDM membrane over flat roof decks, and was in good condition. While on site, it was reported that the new insulation was installed in the 80's. Most of the office area of the building has an acoustic tile dropped ceiling.

The windows throughout the building were found to be double-pane with aluminum frames, and in good condition. The windows in the storage spaces should be re-sealed because of the gaps seen at the outside of the frames. Weather-stripping applied to windows appeared to be in good condition. The exterior doors are steel doors.

Overall, it was determined that the building envelope is in average condition and is currently providing a sufficient level of insulation. While some minor repairs and upgrades may be recommended, modifications to the insulation system would not prove to be cost-effective, from an energy savings stand-point.

2.11.2 Description of Building HVAC

Heating of the Administration Building is done by electric heat. Electric unit heaters provide heating for the stairwells, storage spaces, mechanical rooms, and the street level maintenance office. Packaged DX cooling electric heat rooftop units provide heating to the third floor. Air handling units with electric heat provide heating to the 5th, 6th, 7th, and 8th floors. Two Airedale packaged heat pump units provide heating to the 1R multi-purpose room. Electric domestic water heaters provide hot water to sinks throughout the building.

There are four Carrier air-cooled condensing units matched to the Carrier indoor packaged cooling units in the mechanical rooms for the 5th, 6th, 7th, and 8th floors. The cooling coils in the packaged unit supply cold air to the 5th, 6th, 7th, and 8th floors. VAV boxes installed in the ductwork provide airflow control for the individual zones. Air-cooled condensing units are matched to DX cooling coils in air handlers, which serve the computer rooms, the data center, administration office, 6th floor conference room, and other various

rooms throughout the building. A Sole US Air Portable AC unit provides cooling to the 6th floor server room. The aforementioned packaged rooftop units provide cooling to the third floor. The aforementioned heat pump provides cooling to the 1R multi-purpose room. A Carrier packaged indoor cooling unit provides cooling to the street level. Window air conditioning units provide cooling to some rooms.

The air handling units for the top four flours are pneumatically controlled while the rest of the units have packaged controls.

2.11.3 Description of Building Lighting

The Administrative Building existing interior lighting system consists of 2X2 (2 and 4 lamp), 1X4 (2, lamp), 2X4 (2, and 4 lamp) T8 and T12 linear fluorescent fixtures with magnetic and electronic ballasts, compact fluorescent, incandescent, and high intensity discharge (HID) fixtures. The building is manually controlled. Existing exterior lighting consists of HID wall packs, canopy fixtures, compact fluorescent fixtures, and HID parking lot and sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.12 Cunningham Center ECC

2.12.1 Description of Building Envelope

The exterior walls of Cunningham Center ECC consist of brick and mortar façade with finished drywall interior. The existing roof consists of an asphalt exterior surface membrane over flat roof decks. The roof over the large play area is a curved corrugated steel roof. Dropped ceilings are either acoustic tile or finished drywall everywhere except the play area.

The windows throughout the building were found to be double-pane with aluminum frames, and in good condition. The exterior doors are FRP, or steel doors. FRP doors are recommended on an energy efficiency level, as the doors are made out of a high strength, light weight material with energy saving insulation and good sealing ability, as the doors will not expand or contract with changing weather.

Overall, it was determined that the building envelope is in average condition and is currently providing a sufficient level of insulation. While some minor repairs and upgrades may be recommended, modifications to the insulation system would not prove to be cost-effective, from an energy savings stand-point.

2.12.2 Description of Building HVAC

Heating to the Cunningham Center ECC is provided by packaged gas-fired heating, DX cooling rooftop units. Four Carrier units ranging from 125 to 296 MBH of heating capacity provide heating for the entire building. The domestic water heater for the building could not be accessed at the time of the audit.

The packaged rooftop units also provide cooling to the entire building. An air-cooled split-system air conditioner cools the Administration Office.

Each HVAC unit is electrically controlled with its own thermostat.

2.12.3 Description of Building Lighting

The Cunningham Center ECC existing interior lighting system consists of 2X2 (4 lamp), 1X4 (3 lamp), 2X4 (3 lamp) T8 linear fluorescent fixtures with electronic ballasts, compact fluorescent, and high intensity discharge (HID) fixtures. The building is manually controlled. Existing exterior lighting consists of HID wall packs, canopy fixtures, and HID sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.13 Infinity Institute

2.13.1 Description of Building Envelope

The exterior walls of Infinity Institute consist of brick and mortar façade with finished drywall interior. The existing roof consists of an asphalt exterior surface membrane over flat roof decks. Basement spaces have ~11 foot high ceilings with dropped tile ceilings. The remaining spaces have ~13 foot high finished drywall ceiling.

The windows throughout the building were found to be double-pane with aluminum frames. The exterior doors are FRP doors. FRP doors are recommended on an energy efficiency level, as the doors are made out of a high strength, light weight material with energy saving insulation and good sealing ability, as the doors will not expand or contract with changing weather.

Overall, it was determined that the building envelope is in average condition and is currently providing a sufficient level of insulation. While some minor repairs and upgrades may be recommended, modifications to the insulation system would not prove to be cost-effective, from an energy savings stand-point.

2.13.2 Description of Building HVAC

Heating in the Infinity Institute is provided by a steam system. Steam is generated by two gas-fired, Weil McLain cast-iron boilers. The two boilers have an input capacity of 3,608 and 3,103 MB, respectively. The boilers are controlled by a Heat Timer mounted on the wall. Steam generated by these units is delivered to radiators, unit heaters, and fan coils in the various locations throughout the building. A 40-gallon 36 MBH input Richmond domestic water heater is located in the boiler room. A 75-gallon 70 MBH input Rheem domestic water heater is located in the basement storage. These gas-fired heaters provide hot water to sinks throughout the building.

Two air-cooled condensing units, in the courtyards are matched to DX cooling coils in the air handling unit which serve the cafeteria. An old reciprocating water-cooled chiller is located in the basement, but is assumed to be de-commissioned. Window AC units provide cooling for some rooms.

Electric controls are used for HVAC and boiler controls.

2.13.3 Description of Building Lighting

The Infinity Institute existing interior lighting system consists of 1X4 (2 lamp) T8 linear fluorescent fixtures with electronic ballasts, compact fluorescent, incandescent, and high intensity discharge (HID) fixtures. The building is manually controlled. Existing exterior lighting consists of HID wall packs, canopy fixtures, compact fluorescent fixtures, and HID parking lot and sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.14 Liberty High School

2.14.1 Description of Building Envelope

The building was constructed in 1911. The building is a satellite high school. Site staff reported that the building was an adult education center but recently changed to a more traditional high school.

The building walls are 16 inches of solid brick. The walls have no insulation. The interior finish of the walls is plaster. The windows were replaced in the 1990's. The windows are aluminum frame, double-pane, with blinds between the panes.

The roof is steeply pitched. The roof construction is slate shingles on timber framing. There is no insulation in the roof or the ceiling of the top floor.

2.14.2 Description of Building HVAC

The building heating is provided by a Titus fire-tube boiler. The site staff reported that the boiler is over 60 years old. The boilers provide steam to bare pipe coils and cast iron radiators in the spaces. The classrooms have pneumatic thermostats, which control valves on the radiator supply pipes. The actuators have been removed from the control valves. This has removed the heating temperature control.

The cooling system is limited to window air conditioners in the classrooms. The majority of classrooms have window air conditioners. The unit installation dates range from 1990 to 2006. The unit cooling capacities ranges from 8,000 btuh to 21,000 btuh. The unit efficiencies range from 9.3 to 10.7 EER.



The heating system controls are disconnected or bypassed. The cooling controls are the unit mounted controls.

The domestic hot water is produced by an A.O. Smith condensing storage water heater. The unit has a 100-gallon capacity and 199,000 btuh input rating and 95% efficient.

2.14.3 Description of Building Lighting

The school's existing interior lighting system consists of 1X4 (2 lamp), 2X4 (3 and 4 lamp) T8 and T12 linear fluorescent fixtures with magnetic and electronic ballasts, compact fluorescent, incandescent, and high intensity discharge (HID) fixtures. The building is manually controlled. Existing exterior lighting consists of HID wall packs, and HID parking lot and sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.15 Regional Day School

2.15.1 Description of Building Envelope

The exterior walls of the Regional Day School are of concrete masonry unit (CMU) construction and steel, and stud interior with a drywall finish. There is also a permanent addition to the building that is a modular building referred to as the "trailer" area. The roof system varies, consisting of a built up roof and thermoplastic polyolefin (TPO) in the addition area.

The windows throughout the building were found to be double-pane. As the windows are in good condition, replacement is not recommended.

Overall, it was determined that the building envelope is in good condition and is currently providing a sufficient level of insulation. While some minor repairs and upgrades may be recommended, modifications to the insulation system would not prove to be cost-effective, from an energy savings stand-point.

2.15.2 Description of Building HVAC

Heating in this building is primarily provided by gas-fired rooftop packaged air conditioning units.

Cooling is provided by the above-mentioned rooftop air conditioning units.

2.15.3 Description of Building Lighting

The school's existing interior lighting system consists of 1X4 (2 lamp), 2X4 (3 and 4 lamp) T8 and T12 linear fluorescent fixtures with magnetic and electronic ballasts, compact fluorescent, and high intensity discharge (HID) fixtures. The building is manually controlled. Existing exterior lighting consists of HID wall packs, and HID parking lot and sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.16 Middle School #4

2.16.1 Description of Building Envelope

The exterior walls of MS #4 are glazed brick construction with finished interior. The existing roofing system of the building is thermoplastic polyolefin (TPO).

The windows throughout the building were found to be double-pane insulating windows. Overall, it was determined that the building envelope is in good condition and is currently providing a high level of insulation. As such, any modifications to the insulation system would not prove to be cost effective, from an energy savings stand-point.

2.16.2 Description of Building HVAC



Heating in MS #4 is primarily provided by a building-wide hot water system, served by two Smith gas-fired, cast-iron hot water boilers. Air handling units, located in the building and on the roof, provide warm air through the use of variable air volume boxes with hot water reheat coils to the various occupied areas of the building. Two sections of the heating boiler had leaks during the site visit and were out of service.

Cooling is primarily provided by a chilled water system with coils in the aforementioned air handling units. Chilled water for this system is generated by three McQuay air-cooled chillers located on the roof. Several AHU's and "slim jim" units were out of service during the site visit and the return fan for AHU-1 was found to broken and without a belt. Several other AHU's had loose belts. Chiller#1 had one compressor out of service and Chiller#2 had two compressors out of service during the site visit.

The building is controlled through a web based DDC system that includes all HVAC equipment and pumps. At the time of the site visit, several points were showing as failed/out of service including the zone sensor for the Auxiliary gym.

2.16.3 Description of Building Lighting

The school's existing interior lighting system consists of 1X4 (2 lamp), 2X4 (3 and 4 lamp) T8 linear fluorescent fixtures with magnetic and electronic ballasts, compact fluorescent, and high intensity discharge (HID) fixtures. The building is occupancy sensor controlled. Existing exterior lighting consists of HID wall packs, and HID parking lot and sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.17 Middle School #7

2.17.1 Description of Building Envelope

The exterior walls of MS #7 are brick construction with finished interior. The existing roofing system of the building is thermoplastic polyolefin (TPO).

The windows throughout the building were found to be double-pane insulating windows. Overall it was determined that the building envelope is in good condition and is currently providing a high level of insulation. As such, any modifications to the insulation system would not prove to be cost effective, from an energy savings stand-point.

2.17.2 Description of Building HVAC

Heating in MS #7 is primarily provided by a building-wide hot water system, served by two Smith gas-fired hot water boilers. Air handling units, located in the building and on the roof, provide warm air through the use of variable air volume boxes with hot water reheat coils to the various occupied areas of the building.



Cooling is primarily provided by a chilled water system with coils in the aforementioned air handling units. Chilled water for this system is generated by two York water-cooled chillers located in the main mechanical room, where an energy transfer station (ETS) is also located. These chillers reject heat to two Marley cooling towers, located on the roof.

The building is control through a web based DDC system that includes all HVAC equipment and pumps.

2.17.3 Description of Building Lighting

The school's existing interior lighting system consists of 1X4 (2 lamp), 2X4 (3 and 4 lamp) T8 and T12 linear fluorescent fixtures with magnetic and electronic ballasts, compact fluorescent, and high intensity discharge (HID) fixtures. The building is manually controlled. Existing exterior lighting consists of HID wall packs, and HID parking lot and sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.18 Public School #1

2.18.1 Description of Building Envelope

The building was built in 1898. The building has been relabeled multiple times. The stone façade has PS 17 on it. The top floor is not used because it does not have two differentiated means of egress.



The building walls are 16 inches of solid brick. The walls have no insulation. The interior finish of the walls is plaster. The windows were replaced in the 1990's. The windows are aluminum frame, double-pane, with blinds between the panes. The floors are wood sub-floor with vinyl tiles.

The roof is a steeply pitched. The roof construction is slate shingles on timber framing. There is no insulation in the roof or the ceiling of the top floor.

2.18.2 Description of Building HVAC

The building heating is provided by a pair of Titusville fire-tube boilers. The boiler nameplates date from 1952. The burners are rated at 43 GPH number 2 fuel oil. The site reported that the buried oil tanks fill with water during periods of heavy rain. The boilers provide steam to bare pipe coils and cast iron radiators in the spaces. The classrooms have pneumatic thermostats, which control valves on the radiator supply pipes. The air compressor has been removed. This has removed the heating temperature control.

The cafeterias do not have any steam radiators. The building is heated with electric unit heaters.

The cooling system is limited to window air conditioners. The Administration Offices have window air conditioners. The units are nominally 18,000 btuh cooling.

The heating system controls are disconnected or bypassed. The air conditioners and unit heaters are regulated by the unit mounted controls.

The domestic hot water is produced by a Rheem, natural gas-fired, storage water heater installed in 2004. The unit has a 40-gallon capacity and 38,000 btuh input rating and 80% efficient.

2.18.3 Description of Building Lighting

The school's existing interior lighting system consists of 1X4 (2 lamp), 2X4 (4 lamp) T8 and T12 linear fluorescent fixtures with electronic ballasts, and high intensity discharge (HID) fixtures. The building is manually controlled. Existing exterior lighting consists of HID wall packs, and HID parking lot and sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.19 Public School #3

2.19.1 Description of Building Envelope

The exterior walls of PS #3 are brick construction with finished interior. The existing roofing system of the building is thermoplastic polyolefin (TPO).



The windows throughout the building were found to be double-pane insulating windows. Water infiltration was identified around the second story exterior doors. Repairs to seal the doors are recommended.

Overall, it was determined that the building envelope is in good condition and is currently providing a high level of insulation. As such, any modifications to the insulation system would not prove to be cost effective, from an energy savings stand-point.

2.19.2 Description of Building HVAC

Heating in PS #3 is primarily provided by a building-wide hot water system, served by two Smith gas-fired hot water boilers. Air handling units, located in the building and on the roof, provide warm air through the use of variable air volume boxes with hot water reheat coils to the various occupied areas of the building.

Cooling is primarily provided by a glycol/water system with coils in the aforementioned air handling units. Chilled water for this system is generated by two McQuay air-cooled chillers located on the roof.

The building is controlled through a web based DDC system that includes all HVAC equipment and pumps.

2.19.3 Description of Building Lighting

The school's existing interior lighting system consists of 1X4 (2 lamp), 2X4 (3 and 4 lamp) T8 linear fluorescent fixtures with magnetic and electronic ballasts, compact fluorescent, and high intensity discharge (HID) fixtures. The building is occupancy sensor controlled. Existing exterior lighting consists of HID wall packs, and HID parking lot and sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.20 Public School #5

2.20.1 Description of Building Envelope

The exterior walls of PS #5 are brick construction with finished interior. The existing roofing system of the building consists of EPDM membrane over flat roof decks.

The windows throughout the building were found to be original, operable, double-pane. As the windows are in average condition, replacement is not recommended. However, to minimize infiltration it is recommended that locks be secured and new caulking applied each season.

Overall, it was determined that the building envelope is in good condition and is currently providing a sufficient level of insulation. While some minor repairs and upgrades may be recommended, modifications to the insulation system would not prove to be cost-effective, from an energy savings stand-point.

2.20.2 Description of Building HVAC

Heating in PS #5 is primarily provided by a building-wide hot water system. Three H.B. Smith, cast-iron steam boilers serve radiators throughout the building.

PS #5 does not have a central cooling system. One rooftop unit serves the gym and window air conditioning units serve a few offices.

There is no central building control system, but there is a motor control center.

2.20.3 Description of Building Lighting

The school's existing interior lighting system consists of 1X4 (2 lamp), 2X4 (3 and 4 lamp) T8 and T12 linear fluorescent fixtures with magnetic and electronic ballasts, compact fluorescent, and high intensity discharge (HID) fixtures. The building is manually controlled. Existing exterior lighting consists of HID wall packs, and HID parking lot and sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.21 Public School #6

2.21.1 Description of Building Envelope

The building was built about 50 years ago. The building had an addition in the 1990's.

The building walls are 16 inches of solid brick. The walls appear to have no insulation. The interior finish of the walls is plaster. The windows were replaced in the 1990's. The windows are aluminum frame, double-pane, with blinds between the panes. The addition has gypsum interior wall finishes an exterior insulation with a stucco finish.



The roof is flat with a rubber membrane surface. The roof appears to be sloped and tapered by insulation.

The site also has four modular classrooms. These buildings are temporary trailers and have been on site for more than 10 years.

2.21.2 Description of Building HVAC

The building heating system is comprised of four boilers. Two HB Smith steam boilers; one natural gas fired and one oil-fired; and two Weil McLain hot water, natural gas-fired boilers. Spaces are heated by hot water unit ventilators and steam coils are installed in air handlers. The addition is heated by electric unit ventilators. The upper levels of the Auditorium have been walled off from the main room. These areas are now served by gas-fired packaged rooftop units.

The unit ventilators in the addition have DX cooling. The Auditorium balcony areas are cooled by packaged roof top units. Window air conditioners cool the Administration Offices and the Cafeteria. The units range in age from five to twenty years-old.

The building has a mix of controls. The unit ventilators have pneumatic controls. The addition unit ventilators have programmable thermostats in their cases. They do not all seem functional. The pneumatic controls do not appear to be operational.

The building ventilation systems consists of fresh air from unit ventilators and exhaust fans in each classroom storage closet and roof exhaust fans for the bathrooms. Pool and Locker Rooms have exhaust fans and make-up air units to ventilate and condition the areas. The make-up air units have heat recovery from the exhaust air stream.

Domestic hot water is produced by an A.O. Smith condensing domestic water heater and an atmospheric storage water heater with 240-gallons of storage. The condensing unit is rated at 95% efficient and the atmospheric is rated at 80%.

The trailers use electricity for heating and cooling. There are two packaged terminal air conditioners, or PTAC's, per trailer which provide all heating and cooling for the space.

2.21.3 Description of Building Lighting

The school's existing interior lighting system consists of 1X4 (2 lamp), 2X2 (4 Lamp), 2X4 (4 lamp) T8 and T12 linear fluorescent fixtures with magnetic and electronic ballasts, and high intensity discharge (HID) fixtures. The building is manually controlled. Existing exterior lighting consists of HID wall packs, and HID parking lot and sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.22 Public School #8

2.22.1 Description of Building Envelope

The building was built in 1950. The building had an addition added in the 1990's.



The building walls are 16 inches of solid brick. The walls appear to have no insulation. The interior finish of the walls is plaster and tile. The windows were replaced in the 1990's. The windows are aluminum frame, double-pane, with blinds between the panes. The addition has gypsum interior wall finishes and a 2" polystyrene exterior insulation with a stucco finish. The insulation has been damaged. It appears it was damaged by baseballs.

The addition roof is flat with a rubber membrane surface sloped by tapered by insulation. The original roof is asphalt rolls. The roof also supports a 225 kW solar array.

2.22.2 Description of Building HVAC

The building heating system is comprised of two Kewanee fire-tube, steam boilers. The name plates state their build date as 1960. The Gordon-Piatt burners are from 2007 and rated at 75 GPH number 2 fuel oil. The heat is transmitted to the space by recessed wall convectors, steam unit heaters, and unit ventilators in the classrooms. The unit ventilators in the original building use steam as a heating medium. The unit ventilators and convectors in the addition use hot water as a heating medium. This hot water is generated in a steam-to-water heat exchanger with steam from the central plant, which is located in the basement mechanical room. The Gym has a pair of heating and ventilating units with steam heating coils.

The unit ventilators in the addition have a dual temp loop. During the cooling months, chilled water can be circulated through the unit ventilator coils. The site staff reported that this system was not functioning at the time of the site visit. Window air conditioners cool the Administration Offices and the Cafeteria. The units range in age from five to twenty-years old.

The building has a mix of controls. The steam unit ventilators and some exhaust fans are on pneumatic controls. The addition unit ventilators have wall-mounted electronic thermostats. The pneumatic controls do not appear to be operational.

The building ventilation systems consists of outside air from unit ventilators and roof exhaust fans for the bathrooms and other spaces

Domestic hot water is produced by a Bradford White atmospheric storage water heater with an 80-gallon storage capacity. The unit has a motorized stack damper and is rated at 250,000 btuh input and 80% thermal efficiency.

2.22.3 Description of Building Lighting

The school's existing interior lighting system consists of 1X4 (2 lamp), 2X4 (3 and 4 lamp) T8 linear fluorescent fixtures with magnetic and electronic ballasts, and high intensity discharge (HID) fixtures. The building is manually controlled. Existing exterior lighting consists of HID wall packs, and HID parking lot and sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.23 Public School #11

2.23.1 Description of Building Envelope

The building was built in 1969. The building is block construction with a brick façade. The interior face is gypsum and painted block. The roof has four inches of rigid insulation with an EPDM membrane with stone ballast over a poured concrete deck. The staff reported that the roof insulation was recently added and that there is no insulation in the exterior walls.



The classroom windows were replaced in the 1990's. They are aluminum frame, double-pane with blinds between the panes. The corridors have singe pane glass in aluminum frames.

2.23.2 Description of Building HVAC

The heating system is fed from a pair of Weil McLain, natural gas-fired, hot water boilers. The boilers appear to be original to the building and in fair condition. The boilers serve hot water unit ventilators, air handlers and unit heaters.

The building has two air handlers that provide heating and cooling to the gym and cafeteria. The cooling for the air handlers is provided by two large condensing units on the roof. The Administration Offices have window air conditioners. The roof has a few condensing units for split-systems. The site staff could not identify the areas served by these units. All the air conditioning equipment is nearing the end of their useful service life.

The building ventilation is provided by exhaust fans, special area air handlers and unit ventilators. The building also has operable windows.

The building controls are comprised of malfunctioning pneumatics. The classrooms have pneumatic thermostats to cycle the hot water valve. The big air handlers have three-way valves on the hot water coils. The cooling is controlled by on-board thermostats and unit specific thermostats.

The domestic hot water is generated by an A.O. Smith water heater, rated at 670,000 btuh and 80% efficient. The water heater feeds a 500-gallon storage tank. Both these units appear to be original equipment for the building.

2.23.3 Description of Building Lighting

The school's existing interior lighting system consists of 1X4 (2 lamp), 2X4 (3 and 4 lamp) T8 linear fluorescent fixtures with electronic ballasts, and high intensity discharge (HID) fixtures. The building is manually controlled. Existing exterior lighting consists of HID wall packs, and HID parking lot and sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.24 Public School #12

2.24.1 Description of Building Envelope

The exterior walls of PS #12 are brick construction with finished interior. Roof access was not obtained during the audit; however, from ground level inspection, it was noted that the roof is in good condition.

The windows throughout the building were found to be original, operable, single pane. As the windows are in average condition, replacement is not recommended. However, to minimize infiltration, it is recommended that locks be secured and new caulking applied each season.



Overall, it was determined that the building envelope is in good condition and is currently providing a sufficient level of insulation. While some minor repairs and upgrades may be recommended, modifications to the insulation system would not prove to be cost-effective, from an energy savings stand-point.

2.24.2 Description of Building HVAC

Heating in PS #12 is primarily provided by a building-wide hot water system. Two Smith, cast-iron steam boilers serve radiators throughout the building.

PS #12 does not have a central cooling system. There are window air conditioning units in the auditorium with exhaust fans. There is also a nonfunctioning air handler in the gym.

Pneumatic controls are used for the boilers and radiators.

2.24.3 Description of Building Lighting

The school's existing interior lighting system consists of 1X4 (2 lamp), 2X4 (3 and 4 lamp) T8 and T12 linear fluorescent fixtures with magnetic and electronic ballasts, compact fluorescent, and high intensity discharge (HID) fixtures. The building is manually controlled. Existing exterior lighting consists of HID wall packs, and HID parking lot and sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.25 Public School #14

2.25.1 Description of Building Envelope

The exterior walls of PS #14 are of concrete masonry unit (CMU) construction with a brick exterior and wooden stud interior with a plaster finish. The existing roofing system of the building consists of rigid insulation and EPDM membrane over flat roof decks. Roof access was not obtained during the audit; however, from ground level inspection it was noted that the roof is in good condition.

The windows throughout the building were found to be original, operable, double-pane. As the windows are in average condition, replacement is not recommended. However, to minimize infiltration, it is recommended that locks be secured and new caulking applied each season.

Overall, it was determined that the building envelope is in good condition and is currently providing a sufficient level of insulation. While some minor repairs and upgrades may be recommended, modifications to the insulation system would not prove to be cost-effective, from an energy savings stand-point.

2.25.2 Description of Building HVAC

Heating in PS #14 is primarily provided by a building-wide hot water system. Two 130-HP gas-fired Smith boilers deliver hot water to radiators throughout the building.

PS #14 does not have a central cooling system.

Pneumatic controls are used to control the radiators throughout the building.

2.25.3 Description of Building Lighting

The school's existing interior lighting system consists of 1X4 (2 lamp), 2X4 (3 and 4 lamp) T8 and T12 linear fluorescent fixtures with magnetic and electronic ballasts, compact fluorescent, and high intensity discharge (HID) fixtures. The building is manually controlled. Existing exterior lighting consists of HID wall packs, and HID parking lot and sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.26 Public School #16

2.26.1 Description of Building Envelope

The exterior walls of PS #16 are brick construction and wooden stud interior with a plaster finish. Roof access was not obtained during the audit; however, from ground level inspection, it was noted that the roof is in good condition.

The windows throughout the building were found to be original, operable, single pane. As the windows are in average condition, replacement is not recommended. However, to minimize infiltration it is recommended that locks be secured and new caulking applied each season.

Overall, it was determined that the building envelope is in good condition and is currently providing a sufficient level of insulation. While some minor repairs and upgrades may be recommended, modifications to the insulation system would not prove to be cost-effective, from an energy savings stand-point.

2.26.2 Description of Building HVAC

Heating in PS #16 is primarily provided by a building-wide steam heating system. One Kewanee steam boiler serves radiators throughout the building.

PS #16 does not have a central cooling system, but there are ceiling fans throughout the building with speed control switches.

2.26.3 Description of Building Lighting

The school's existing interior lighting system consists of 1X4 (2 lamp), 2X4 (3 and 4 lamp) T8 and T12 linear fluorescent fixtures with magnetic and electronic ballasts, compact fluorescent, and high intensity discharge (HID) fixtures. The building is manually controlled. Existing exterior lighting consists of HID wall packs, and HID parking lot and sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.27 Public School #17

2.27.1 Description of Building Envelope

The exterior walls of Public School # 17 consist of brick and mortar façade with concrete masonry (CMU) back up blocks. The existing roof consists of flat metal deck with an EPDM membrane exterior. There was sprayed insulation observed above the Auditorium at the time of the audit. Most of the school has an acoustic tile dropped ceiling.

The windows throughout the building were found to be double-pane with aluminum frames. Weather-stripping can be applied to the windows, which creates a tighter seal around the windows minimizing infiltration. The exterior doors are FRP doors. FRP doors are recommended on an energy efficiency level, as the doors are made out of a high strength, light weight material with energy saving insulation and good sealing ability, as the doors will not expand or contract with changing weather.

Overall, it was determined that the building envelope is in average condition and is currently providing a sufficient level of insulation. While some minor repairs and upgrades may be recommended, modifications to the insulation system would not prove to be cost-effective, from an energy savings stand-point.

2.27.2 Description of Building HVAC

Heating in PS # 17 is provided by a hot water system. Hot water is generated by two Superior Boiler Works fire-tube boilers. The boilers have an input capacity of 10,040 MBH. The boilers are controlled via the Trane Tracer building management system. Hot water generated by these units is delivered to unit ventilators, fan coils, air handlers, and unit heaters in the various locations throughout the building. Eighteen Trane air handling units with hot and chilled water coils provide conditioning to Industrial Arts, corridors, Locker Rooms, Nursing and Lounge, Administration Offices, Music Room, Cafeteria, Gymnasium, Auditorium, and Kitchen (room 6 air handling unit only has hot water coils). A Gaylord heat reclaim unit recovers heat exhausted from the kitchen by means of a heat pipe. A Trane packaged DX cooling, electric heating rooftop unit serves the library. Bard heat pumps supply hot air to the modular classrooms. There is one unit per classroom. Two A.O. Smith Duran Max indirect domestic water heaters with an input capacity of 1,188 MBH provide hot water to two large Lochinvar storage tanks. The domestic hot water generated provides hot water to sinks, bathrooms, and showers throughout the building.

The aforementioned Trane packaged rooftop unit provides cooling to the Library. The air handling units mentioned above provide cooling to their respective spaces and are equipped with air-side economizers. Two Inter-city Products Corp. air-cooled condensing units are matched to DX cooling coils serving two rooms. Two Heatcraft Inc. air-cooled condensing units are matched to DX evaporator coils, which serve the kitchen freezers. Three Trane air-cooled chillers provide chilled water to the air handling units, and unit ventilators. The chilled water supply set point is set at 45 degrees F. The Bard heat pump units provide cooling and heating for each modular classroom.

The main school building's HVAC system is controlled by a Trane tracer building management system. The Bard units serving the modular classrooms are controlled by a manual wall mounted thermostat.

2.27.3 Description of Building Lighting

Public School #17 existing interior lighting system consists of 1X4 (2 lamp), 2X4 (2, and 3, lamp) T12 linear fluorescent fixtures with magnetic ballasts, compact fluorescent, incandescent, and high intensity discharge (HID) fixtures. The building is manually controlled. Existing exterior lighting consists of HID wall packs, canopy fixtures, compact fluorescent fixtures, and HID sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.28 Public School #20

2.28.1 Description of Building Envelope

The exterior walls of Public School #20 consist of brick and mortar façade with finished drywall interior. The existing roof is a flat roof deck with an EPDM membrane exterior. The existing roof is a flat roof deck with an EPDM membrane exterior.

The windows throughout the building were found to be double-pane with aluminum frames, and in good condition. Weatherstripping applied to windows appeared to be in good condition. The exterior doors are FRP doors. FRP doors are recommended on an energy efficiency level, as the doors are made out of a high strength, light weight material with energy saving insulation and good sealing ability, as the doors will not expand or contract with changing weather.

Overall, it was determined that the building envelope is in average condition and is currently providing a sufficient level of insulation. While some minor repairs and upgrades may be recommended, modifications to the insulation system would not prove to be cost-effective, from an energy savings stand-point.

2.28.2 Description of Building HVAC

Heating in Public School #20 is provided by a steam system. Steam is generated by two Pacific fire-tube boilers. Each of the two boilers has an input capacity of ~4,320 MBH. The boilers are controlled by an MPC Platinum Heat Timer mounted on the wall. It was reported while on site that the boilers are shut off if the outside temperature rises above 55 deg F. Steam generated by these units is delivered to radiators, and air handling units in the various locations throughout the building. Bard heat pumps supply hot air to the modular classrooms. There is one unit per classroom. A 6-gallon 200 Watt Rheem electric domestic water heater is located in the upstairs bathroom. A 40-gallon 38 MBH input, gas-fired, Rheem domestic water heater is located in the boiler room. These heaters provide hot water to sinks in the building.



There are window AC units installed providing cooling to the main office, teachers' room, library, resource room, and auditorium. The Bard heat pump units mentioned above provide cooling to each modular classroom.

Electric controls are used for boiler firing modulation. The Bard units serving the modular classrooms are controlled by their respective manual wall mounted thermostats.

2.28.3 Description of Building Lighting

Public School #20 existing interior lighting system consists of 1X4 (2, lamp), 2X4 (4 lamp) T8 and T12 linear fluorescent fixtures with magnetic and electronic ballasts, compact fluorescent, incandescent, and high intensity discharge (HID) fixtures. The building is manually controlled. Existing exterior lighting consists of HID wall packs, canopy fixtures, compact fluorescent fixtures, and HID sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.29 Public School #23

2.29.1 Description of Building Envelope

Public School #23 has two campuses. The PS #23 Annex is a kindergarten only school that is part of a strip mall which opened about 15 years ago. The main building was built in 1918.

The main building is solid brick. There does not appear to be any insulation in the walls. The roof is flat with membrane finish and stone ballast. The roof has been replaced four times since 1997 to address issues. The Annex is block construction, with gypsum interior finish and a 1-1/2" thick, polystyrene insulation with stucco finish on the exterior.

The windows are aluminum frame, double-pane with roller shades. The windows at the Annex are double-pane with metal screens.

2.29.2 Description of Building HVAC

The main building heating system has a pair of Cleaver Brooks, oil-fired, fire-tube boilers. The boilers are rated at 5,000,000 btuh each. The boilers make steam for the air handlers. The unit ventilators are served by a hot water loop that is supplied with heat from the steam plant through a converter. The unit ventilators are controlled by a pneumatic thermostat in each classroom. The unit ventilators were added about 20 years ago and are in fair condition. They are in a mix of room locations including below the windows or above the ceiling. The building has steam unit heaters in the swimming pool and locker room areas. The building has steam heating and ventilating (HV) units for the Gym, Library, Locker Rooms, and Pool.

The Annex is heated by a natural-gas Hydrotherm Multitemp. The boiler is rated at 750,000 btuh and 82% efficient. The space is heated by convectors on the wall that are controlled by wall thermostats.

The building has window air conditioners in the Library, Cafeteria, and Administrative Offices. These units are controlled by the onboard controls. The units range in age from new to 20 years old.

Domestic hot water is generated by a natural gas-fired Lochinvar water heater with a capacity of 645,000 btuh. The water heater is matched with a 500-gallon storage tank. The pool has a Coates 57 kW electric pool heater.

2.29.3 Description of Building Lighting

The school's existing interior lighting system consists of 1X4 (2 lamp), 2X4 (3 and 4 lamp) T8 and T12 linear fluorescent fixtures with magnetic and electronic ballasts, and high intensity discharge (HID) fixtures. The building is manually controlled. Existing exterior lighting consists of HID wall packs, and HID parking lot and sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.30 Public School #24

2.30.1 Description of Building Envelope



The building is brick exterior with plaster interior. There appears to be no insulation in the walls. The building has had some upgrades and renovations. The balcony of the auditorium has been converted into additional classroom and storage space.

The roof is flat with rubber membrane and in fair condition. The roof is pitched to drain. It appears that the pitch is created by tapered insulation.

The windows are aluminum frame, double-pane with roller shades. The windows were replaced about 20 year ago. When the windows were replaced, insulated panels were installed for the top portion of the opening. The building staff reported that the windows have broken springs which prevents the windows from remaining open.

2.30.2 Description of Building HVAC

The building is heated by two steam fire-tube boilers. The site staff reported that the boilers have tube leaks and one boiler will not hold pressure. The boiler tags have been removed but they appear to be 40 years old. The steam serves cast iron steam radiators in the spaces and is converted to hot water for perimeter radiation. The converted areas of a balcony are heated by packaged gas-fired roof top units.

The building is cooled by window air conditioners and packaged outdoor units. The window units are located in an array of classrooms and Administrative Offices. The converted balcony is cooled by the rooftop unit.

The building controls were converted to a Barber Colman electronic control system. There are central control panels in the areas outside the Boiler Room. This system controls the exhaust fans, pumps, heating and ventilation units and the heating control valves for the classrooms. Thermostats in the classroom controlled the control valve on the steam supply. The controls were generally in manual or off position, which may be due to class not being in session during the site visit.

The domestic hot water is produced by storage water heaters throughout the building. These include electric water heaters and natural gas fired units.

2.30.3 Description of Building Lighting

The school's existing interior lighting system consists of 1X4 (2 lamp), 2X4 (4 lamp) T8 and T12 linear fluorescent fixtures with magnetic and electronic ballasts, and high intensity discharge (HID) fixtures. The building is manually controlled. Existing exterior lighting consists of HID wall packs, and HID parking lot and sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.31 Public School #25

2.31.1 Description of Building Envelope

The original building was built in 1912. The original building is solid brick with plaster interior finish. This portion of the building does not appear to have any insulation in the exterior walls. The building has had a major addition. The addition is face brick with block structure and painted block interior finish. The addition was built in the late 1980's. The exterior walls of the addition are assumed to have about two inches of rigid insulation installed.



The roof has a rubber membrane on a flat deck. The building has evidence of roof leaks.

The windows in the addition are aluminum frame, double-pane. The windows in the original building are wood frame single pane windows with interior storm windows.

2.31.2 Description of Building HVAC

The original building is heated by a central boiler plant. The plant consists of two Cleaver Brooks fire-tube boilers from 1998. The boilers are oil-fired and rated at 4,000,000 btuh and 82% efficiency. The classrooms were converted to hot water unit ventilators. It appears the convectors in the stairwells and other areas were replaced at the same time as the unit ventilators were installed. The addition is heated by electric resistance convectors.

The building's cooling is provided by window AC units in the Cafeteria, Teachers Lounges and the Administration Offices. The Gym and Auditorium are conditioned by McQuay packaged roof top units.

The original building is pneumatic controls. The addition is unit controls and wall thermostats. Every classroom has a single set point thermostat for the heating control.

The domestic hot water is generated by a Rheem, natural gas-fired, 40-gallon capacity, storage water heater rated at 80% efficient and 40,000 btuh. The addition domestic water is heated by an A.O. Smith electric storage water heater, rated at 24 kW and 119-gallons.

2.31.3 Description of Building Lighting

The school's existing interior lighting system consists of 1X4 (2 lamp), 2X4 (4 lamp) T8 and T12 linear fluorescent fixtures with magnetic and electronic ballasts, incandescent, and high intensity discharge (HID) fixtures. The building is manually controlled. Existing exterior lighting consists of HID wall packs, and HID parking lot and sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.32 Public School #27

2.32.1 Description of Building Envelope

The building was built in 1966. The building also has two additions. One addition is a permanent block and brick structure that houses two classrooms called the modulars. The other addition has four temporary trailers.

The building façade is face brick and stucco over block and precast concrete. The building appears to be a steel structure. The floors are precast concrete "waffle". The top surface of the floors is vinyl tile. Some classrooms have dropped ceilings while other rooms are just the painted concrete of the structure. The building staff does not know, so the exterior walls are assumed to have no insulation installed. The interior finish of the walls is plaster and tile.

The roof is a flat roof. The surface is a mix of bitumen rolls and rubber membrane. The roof insulation may have been added when the roof surface was replaced. The building staff did not have any information regarding the roof insulation levels.

The Trailer is wood exterior and rubber roof. The windows are two-single pane windows. The exterior walls and roof are assumed to be R-11 insulation.

The modulars have four inch face brick, CMU walls, and gypsum interior finish.

2.32.2 Description of Building HVAC

The modulars and the trailers have packaged electric heat and cooling controlled by wall thermostats.

The building's heating system consists of electric heaters. These consist of electric heat in the unit ventilators, electric unit heaters in classrooms, Library, and Locker rooms, and air handlers in Cafeteria, Gym, and Pool. The unit heaters are added to areas that are having problems maintaining temperature. The unit ventilators and air handlers are original to the building and in fair condition. The pool area heating and ventilating unit has rusted and is not operable.



The building's cooling system consists of window air conditioners in the Administrative and Staff Offices.

The building has a central control panel which controls the unit ventilators and air handlers. This system stages the unit startups and cycles them from occupied to unoccupied. The air conditioners are controlled by the unit controls.

The domestic hot water for the building is produced by electric storage water heaters. The two additions have 4500w units. The main building has a 54 kW heater for the domestic water. The pool has a 60 kW unit from 1965. All the pool equipment was in poor condition.

2.32.3 Description of Building Lighting

The school's existing interior lighting system consists of 1X4 (2 lamp), 2X2 (4 Lamp), 2X4 (3 lamp) T8 and T12 linear fluorescent fixtures with magnetic and electronic ballasts. The building is manually controlled. Existing exterior lighting consists of HID wall packs, and HID parking lot and sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.33 Public School #28

2.33.1 Description of Building Envelope

The building was built in 1996. This is a high school, which has longer use than most of the buildings being open from 5 AM to 10 PM. The building also has a solar photovoltaic array on the roof. The array is rated at 200 kW. The site has two modular classrooms which are brick and block buildings. The site also has a trailer.

The building is a steel super structure with block walls and face brick. The interior finish is gypsum. The exterior wall insulation values are assumed to be R-11. Floors are poured concrete on corrugated steel. The floors are generally vinyl tile.

The roof is flat. The exterior surface is rubber membrane with stone ballast. The insulation values are assumed to be R-20.

The windows are double-pane aluminum and are original. The building also has some skylights.

2.33.2 Description of Building HVAC

The building's heating, ventilation and cooling systems are all electric. The classrooms each have a heat pump air conditioner. The building has some electric unit heaters, electric baseboard and electric unit heaters. The Gym and Cafeteria are served by split systems and roof top air conditioners. These units have electric resistance coils and DX coils. The site staff said that the electric preheat coils have generally been turned off.



The cooling systems were operating at the time of the site visit. The site staff reported that 32 units need compressor replacement to get their cooling operational.

The units have Andover controls to coordinate start up and occupied, unoccupied status of the units. The units are controlled by wall thermostats. These control the heating and cooling. The thermostats for the main units have a manual switchover from heating to cooling.

The site has two observed water heaters. The main water heater is an Adamson electric storage water heater rated at 500-gallons and 108 kW. The building also has an electric storage water heater.

2.33.3 Description of Building Lighting

The school's existing interior lighting system consists of 1X4 (2 lamp), 2X4 (3 and 4 lamp) T8 linear fluorescent fixtures with magnetic and electronic ballasts, and high intensity discharge (HID) fixtures. The building is manually controlled. Existing exterior lighting consists of HID wall packs, and HID parking lot and sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.34 Public School #29

2.34.1 Description of Building Envelope

The exterior walls of Public School #29 consist of brick and mortar façade with finished drywall interior. Staff reported that there is damage in the basement from water penetrating the walls. To avoid this problem, water must be diverted away from the base of the building. There are sections of the building where the brick facade has broken off creating gaps in the walls. Overall, this has a minimal effect on the

thermal resistance of the building. The existing roof consists mostly of pitched roof decks with asphalt shingle exterior. There is a portion of ballasted built-up roofing exterior over flat roof decks. The ceiling in the school consists mostly of plaster.

The windows throughout the building were found to be double-pane with wood frames, and are in bad shape. The exterior doors are steel doors.

Overall, it was determined that there are many features of the building envelope that are in poor shape. The envelope should be assessed weather windows, roof, and walls should be repaired or replaced. While most of the changes would not prove to be cost-effective from an energy stand point, the school could benefit from envelope renovation.

2.34.2 Description of Building HVAC

Heating in Public School #29 is provided by a steam system. Steam is generated by two fire-tube boilers. A Federal boiler has an input capacity of ~7,700 MBH, while a Titusville boiler has an input capacity of 6,753 MBH. Steam generated by these units is delivered to radiators, unit heaters, and air handling units in the various locations throughout the building. Bard heat pumps supply hot air to the modular classrooms. There is one unit per classroom. A 30-gallon 32 MBH input Rheem domestic water heater is located in the basement providing hot water to sinks in the building.

There are window AC units installed providing cooling to the Nurse, Principal, Secretary Office, and the Library. The Bard heat pump units mentioned above provide cooling to each modular classroom.

There are thermostatic radiator valves installed on some of the radiators in the school. The Bard units serving the modular classrooms are controlled by a manual wall mounted thermostat.

2.34.3 Description of Building Lighting

Public School #29's existing interior lighting system consists of 1X4 (2 lamp), 2X4 (4 lamp) T12 linear fluorescent fixtures with magnetic ballasts, compact fluorescent, incandescent, and high intensity discharge (HID) fixtures. The building is manually controlled. Existing exterior lighting consists of HID wall packs, canopy fixtures, compact fluorescent fixtures, and HID sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.35 Public School #30

2.35.1 Description of Building Envelope

The exterior walls of Public School #30 consist of brick and mortar façade with finished drywall interior. There was a large amount of water on the gymnasium floor at the time of the audit. Further evaluation of the envelope is required to identify the location and cause of the leak. This should be resolved to prevent future damage. The existing roof consists of a flat deck with an EPDM membrane exterior. The school has either an acoustic tile or plaster dropped ceiling.

The windows throughout the building were found to be double-pane with aluminum frames, and in good condition. Weather-stripping applied to windows appeared to be in good condition. The exterior doors are FRP doors. FRP doors are recommended on an energy efficiency level, as the doors are made out of a high strength, light weight material with energy saving insulation and good sealing ability, as the doors will not expand or contract with changing weather.

Overall, it was determined that the building envelope is in average condition and is currently providing a sufficient level of insulation. While some minor repairs and upgrades may be recommended, modifications to the insulation system would not prove to be cost-effective, from an energy savings stand-point.

2.35.2 Description of Building HVAC

Heating in Public School #30 is provided by a steam system. Steam is generated by two, gas-fired Weil McLain boilers. These boilers each have an input capacity of ~4,900 MBH. The boilers are controlled by a Hays Cleveland control panel mounted on the wall. Steam generated by these units is delivered to radiators, cabinet heaters, unit ventilators, unit heaters, and air handling units in the various locations throughout the building. Dayton electric unit heaters provide heating to some classrooms. A Trane packaged DX cooling, gas fired heating, rooftop unit provides 72.9 MBH of heating to rooms below. Bard heat pumps supply hot air to the modular classrooms. There is one unit per classroom. A 300 MBH input A.O. Smith domestic water heater is located in the boiler room basement providing hot water to sinks in the building.

The aforementioned packaged rooftop unit provides four tons of cooling to the space below. About 10 window air conditioning units provide cooling to various rooms. Each classroom has a Penn Ventilator exhaust fan mounted in the storage closet exhausting air from the room. The aforementioned Bard heat pump units provide cooling to each modular classroom.

Staff mentioned during the site visit that the steam boiler controls are not currently working properly. Most of the building is pneumatically controlled.

2.35.3 Description of Building Lighting

Public School #30's existing interior lighting system consists of 1X4 (2, lamp), 2X4 (2 and 4 lamp) 1X8 (2, lamp) T8 and T12 linear fluorescent fixtures with magnetic and electronic ballasts, compact fluorescent, incandescent, and high intensity discharge (HID) fixtures. The building is manually controlled. Existing exterior lighting consists of HID wall packs, canopy fixtures, compact fluorescent fixtures, and HID parking lot and sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.36 Public School #31

2.36.1 Description of Building Envelope

Public School #31 is an elementary school that was built in the early 1900's. The site has a trailer outside the building. The facility has not had any major upgrades.

The building is 16 inch brick for the exterior walls. Given the age and construction, the walls are assumed to have no insulation. The windows of the building are double-pane aluminum frame windows.

The roof construction is peaked with timber framing and decking. The roofing surface appears to be bitumen rolls. The attic does not have any insulation installed.

2.36.2 Description of Building HVAC



The building heating system is heated by steam. The steam is produced by two HB Smith, natural gas-fired, cast iron sectional boilers. Both boilers are rated at about 1,200 MBH. One boiler was installed in 1990 and the other boiler is about 40 years old. These boilers serve cast iron steam radiators in the classrooms. The building domestic hot water is made by a natural gas storage water heater.

The building is cooled by window air conditioners located in the Staff and Administration Offices in the building.

The trailer is heated and cooled by a packaged terminal air conditioner.

The building heating system is controlled by pneumatic thermostats in the space that regulate the control valves on the radiators. The cooling is controlled by the unit controls.

2.36.3 Description of Building Lighting

The school's existing interior lighting system consists of 1X4 (2 lamp), 2X4 (4 lamp) T8 linear fluorescent fixtures with magnetic and electronic ballasts, and incandescent fixtures. The building is manually controlled. Existing exterior lighting consists of HID wall packs, and HID parking lot and sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.37 Public School #33

2.37.1 Description of Building Envelope

Public School #33 is an elementary school that was built in the early 1900's. The site has four trailers outside the building. The facility has not had any major upgrades.

The building is 16 inch brick for the exterior walls. Given the age and construction, the walls are assumed to have no insulation. The windows of the building are double-pane aluminum frame windows, with blinds between the panes.

The roof construction is peaked with timber framing and decking. The roofing surface asphalt shingles. The attic is assumed to have no insulation installed. There is evidence of water damage on the exterior walls near the ceiling. This assumed to be due to roof leaks.

2.37.2 Description of Building HVAC

The building's heating system is heated by steam. The steam is produced by two HB Smith, natural gas-fired, cast iron sectional boilers. Both boilers are rated at about 4,340 MBH and from the 1940's. These boilers serve cast iron steam radiators in the classrooms. The building has installed an electric unit heater to supplement the installed heating in the basement. The building domestic hot water is made by a natural gas storage water heater.

The building is cooled by window air conditioners located in the Multipurpose Room, Staff, and Administration Offices in the building.

The building was originally ventilated by a large central fans located in the basement. These were abandoned in place. Presently, the building is ventilated by windows.



The trailer is heated and cooled by a packaged terminal air conditioner. Six units are under window and 10 are wall-mounted. Domestic hot water is made by electric storage water heaters.

The building's heating system is controlled by pneumatic thermostats in the space that regulate the control valves on the radiators. The cooling is controlled by the unit controls.

2.37.3 Description of Building Lighting

The school's existing interior lighting system consists of 1X4 (2 lamp), 2X4 (4 lamp) T8 linear fluorescent fixtures with magnetic and electronic ballasts, and incandescent fixtures. The building is manually controlled. Existing exterior lighting consists of HID wall packs, and HID parking lot and sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.38 Public School #34

2.38.1 Description of Building Envelope

The exterior walls of Public School #34 consist of brick and mortar façade or concrete with finished drywall interior. The first floor exterior walls of the addition added on in 2001 are brick and mortar façade, while the higher floors are concrete. There are some moisture problems in the basement entry ways. Further evaluation of the envelope is required to identify the location and cause of the leak. This should be resolved to prevent future damage. Some brickwork was repaired or replaced in 2009. The existing roof consists of flat deck with EPDM membrane exterior on the addition, and ballasted built up roofing on the older section. Staff mentioned that the insulation is in good shape.

The windows throughout the building were found to be double-pane with aluminum frames, and were a part of the 2009 renovation. Weather-stripping applied to windows appeared to be in good condition.

Overall, it was determined that the building envelope is in average condition and is currently providing a sufficient level of insulation. While some minor repairs and upgrades may be recommended, modifications to the insulation system would not prove to be cost-effective, from an energy savings stand-point.

2.38.2 Description of Building HVAC

Heating in Public School #34 is provided by a steam system. Steam is generated by two gas-fired HB Smith cast iron boilers. These boilers each have an input capacity of ~5,862 MBH. The boilers are controlled via the building management system. Staff mentioned that one boiler runs 24/7 during the heating season, while the other turns on in the mornings. Steam generated by these units is delivered to radiators, and unit heaters in the various locations throughout the old section of the building. Steam is converted to hot water by two Bell and Gosset heat exchangers. The hot water generated is delivered to unit ventilators, unit heaters, and air handling units. A Carrier packaged gas-fired DX cooling rooftop make-up air unit provides heat to the upper rooms in the addition. A Carrier packaged electric heat DX cooling unit provides heat to spaces in the addition. .A 60-gallon gas-fired 125 MBH input A.O. Smith domestic water heater is located in

the basement providing hot water to sinks in the new side of the building. A 40-gallon 4,500 Watt Reliance electric domestic hot water heater is located in the boiler room providing hot water to sinks in the old side of the building.

The addition of the building is cooled by a Carrier condenser-less reciprocating liquid chiller. This chiller's heat is rejected through an air-cooled condenser located outside. Chilled water is served to cooling coils in air handling units, and unit ventilators. An air cooled condensing unit is matched to DX cooling coils in the Carrier air handling unit serving the Cafeteria, Industrial Arts, and basement area. The aforementioned packaged units provide cooling to the addition part of the building. There are about five window AC units installed providing cooling to the old section of the building rooms.

The school's HVAC system is controlled by a Penetta building management system.

2.38.3 Description of Building Lighting

Public School #34 interior lighting system consists of 1X4 (2 lamp), 2X4 (2 lamp) T8 linear fluorescent fixtures with electronic ballasts, incandescent, and high intensity discharge (HID) fixtures. The building has occupancy controls in various rooms. Existing exterior lighting consists of HID wall packs, canopy fixtures, compact fluorescent fixtures, and HID sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.39 Public School #37

2.39.1 Description of Building Envelope

The exterior walls of PS #37 are brick construction and wooden stud interior with a plaster finish. The existing roofing system of the building is a built up roof.

The windows throughout the building were found to be original, operable, double-pane. As the windows are in average condition, replacement is not recommended. However, to minimize infiltration it is recommended that locks be secured and new caulking applied each season.

Overall, it was determined that the building envelope is in good condition and is currently providing a sufficient level of insulation. While some minor repairs and upgrades may be recommended, modifications to the insulation system would not prove to be cost-effective, from an energy savings stand-point.

2.39.2 Description of Building HVAC

Heating in PS #37 is primarily provided by a building-wide hot water system. Two 150 HP gas-fired, Burnham steam boilers convert steam heat to hot water through a heat exchanger. This hot water is delivered to radiators throughout the building. There is a condensate recovery system in place.

PS #37 does not have a central cooling system, but there are two rooftop DX split-systems that serve the Auditorium.

PS #37 does not have a building automation system.

2.39.3 Description of Building Lighting

The school's existing interior lighting system consists of 1X4 (2 lamp), 2X4 (3 and 4 lamp) T8 and T12 linear fluorescent fixtures with magnetic and electronic ballasts, compact fluorescent, and high intensity discharge (HID) fixtures. The building is manually controlled. Existing exterior lighting consists of HID wall packs, and HID parking lot and sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.40 Public School #38

2.40.1 Description of Building Envelope

The exterior walls of Public School #38 consist of brick and mortar façade with finished drywall interior. The existing roof consists of built up roofing over flat roof decks. There is an ~8 foot high acoustic tile dropped ceiling. The dropped ceiling was installed three to four years ago.

The windows throughout the building were found to be double-pane with aluminum frames, and are in good condition. Weather-stripping applied to windows appeared to be in good condition. The exterior doors are FRP doors. FRP doors are recommended on an energy efficiency level, as the doors are made out of a high strength, light weight material with energy saving insulation and good sealing ability, as the doors will not expand or contract with changing weather.

Overall, it was determined that the building envelope is in average condition and is currently providing a sufficient level of insulation. While some minor repair and upgrades may be recommended, modifications to the insulation system would not prove to be cost-effective, from an energy savings stand-point.

2.40.2 Description of Building HVAC

Heating in the Public School #38 is provided by a steam system. Steam is generated by two gas-fired, Weil McLain cast-iron boilers. The two boilers have an input capacity of ~6,650 MBH. The boilers are controlled by a Hays Cleveland control panel mounted on the wall. Steam generated by these units is delivered to radiators, unit ventilators, cabinet heaters, and air handling units in the various locations throughout the building. A gas-fired, 420 MBH input A.O. Smith domestic water heater with a 100 gallon storage tank is located in the boiler room provides hot water to the sinks throughout the building.

Cooling to various rooms throughout the school is provided by 15-20 window air conditioning units.

Electric controls are used for boiler firing control while most of the building is pneumatically controlled.

2.40.3 Description of Building Lighting

Public School #38 existing interior lighting system consists of 1X4 (1 and 4 lamp) T8 linear fluorescent fixtures with electronic ballasts, incandescent, and high intensity discharge (HID) fixtures. The building is manually controlled. Existing exterior lighting consists of HID wall packs, canopy fixtures, compact fluorescent fixtures, and HID parking lot and sidewalk fixtures. Refer to Section 4 for a more detailed description.

2.41 Public School #39

2.41.1 Description of Building Envelope

Public School #39 was built in 1955. The facility has a large auditorium, pool and gymnasium. The building appears to have multiple additions due to the wandering hallways and various roof heights.

The building is block construction with face brick and plaster and tile interior. The building is assumed to have no insulation in the walls due to the age of the building.

The roof is flat. The roof deck is poured concrete with a bitumen finish. The roof is in fair condition. The roof has some pooling which is assumed to be due to failure of roof insulation. Roof insulation is assumed to be minimal and not effective.

2.41.2 Description of Building HVAC

The building heating system is supplied with steam. The steam is generated by three dual-fuel Kewanee fire-tube steam boilers. Two boilers are rated at 10,000 MB; the other is rated at 3,500 MBH. All the boilers are from 1955. The steam is fed to air handlers and unit ventilators. The unit ventilators have pneumatic outdoor air dampers and steam control valves. The heating is controlled by the pneumatic thermostat in each classroom. The pool area is heated by a heat recovery unit with a steam coil.



The building cooling is provided by window AC units located in the staff and administration offices.

Most of exhaust fans are original to the building. The fans were found to not be operational and in poor condition. One fan observed did not have a drive belt.

The domestic hot water is produced by a steam to hot water converter with 2000-gallon storage tank in the boiler plant. The pool water is heated by a natural gas boiler rated at 400 MBH and 83% efficient.

2.41.3 Description of Building Lighting

The school's existing interior lighting system consists of 1X4 (2 lamp), 2X4 (4 lamp) T8 linear fluorescent fixtures with magnetic and electronic ballasts, incandescent, and high intensity discharge (HID) fixtures. The building is manually controlled. Existing exterior lighting consists of HID wall packs, and HID parking lot and sidewalk fixtures. Refer to Section 4 for a more detailed description.

Section 3

Section 3
Baseline Energy Use

3.1 Utility Data Analysis

The first step in the energy audit process is the compilation and quantification of the facility's current and historical energy usage and associated utility costs. It is important to establish the existing patterns of electricity, gas, and oil usage in order to be able to identify areas in which energy consumption can be reduced.

For this study, the monthly gas and electric bills per facility were analyzed and unit costs of energy were obtained. The unit cost of energy, as determined from the information provided by the Board, was utilized in determining the feasibility of switching from one energy source to another or reducing the demand on that particular source of energy to create annual cost savings for the Board.

Although at least twelve consecutive months of billing data was requested by CDM at the onset of this project, the utility information provided by the Board was found to be insufficient for many of the buildings. Missing information has been identified and requested by CDM, but has not been provided.

Energy usage at buildings for which no monthly bills have been provided was estimated based on annual consumption information provided by the Board in the facility data forms. Additionally, utility bill data provided for many of the buildings was lacking certain months. Energy usage for these months has been estimated to be the average consumption of the prior and subsequent months. Furthermore, oil bills were not provided by the Board for any buildings. However, the facility data forms do indicate annual oil consumption for many buildings. This consumption data was therefore used to aid in model calibration, where necessary, as well as aggregate oil cost-per-therm calculations.

3.1.1 Electric Charges

It is also important to understand how the utilities charge for the service. The majority of the energy consumed is electric as a result of both indoor and outdoor lighting and appliances, such as kitchen appliances, computers, printers and projectors. Electricity is charged by three basic components: electrical consumption (kWh), electrical demand (kW) and power factor (kVAR) (reactive power). The cost for electrical consumption is similar to the cost for fuel and the monthly consumption appears on the utility bill as kWh consumed per month with a cost figure associated with it. The service connections are either billed on a flat rate or time of day rates per kWh.

Electrical demand can be as much as 50 percent or more of the electric bill. The maximum demand (kW value) during the billing period is multiplied by the demand cost factor and the result is added to the electric bill. It is often possible to decrease the electric bill by 15 – 25 percent by reducing the demand, while still using the same amount of energy.

The power factor (reactive power) is the power required to energize electric and magnetic fields that result in the production of real power. Power factor is important because transmission and distribution systems must be designed and built to manage the need for real power, as well as the reactive power component (the total power). If the power factor is low, then the total power required can be greater than 50 percent or more than the real power alone. The power factor charge is a penalty for having a low power factor. Fortunately, this penalty charge does not impact the Board.

The other parts of the electric bill are the supply charges, delivery charges, system benefits, transmission revenue adjustments, state and municipality tariff surcharges and sales taxes, which cannot be avoided.

Public Service Electric & Gas is the current distributor and South Jersey Energy is the supplier of electric energy for the Board.

3.1.2 Natural Gas Charges

Hess is the current supplier and PSE&G the distributor of natural gas for the Board. The Board is charged for the cost of the natural gas, a delivery charge and a customer charge, which covers gas administration charges.

3.2 Facility Results

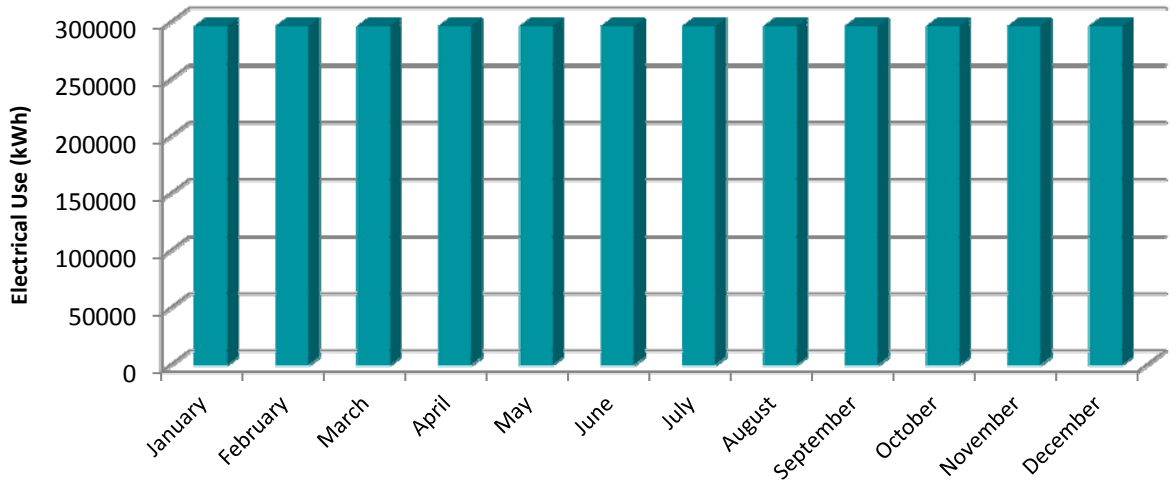
3.2.1 Dickinson High School

Electric power for Dickinson High School is fed from three General Service Secondary three phase line from PSE&G. Figure 3.2-1 illustrates the average monthly total energy consumption from January 2010 through January 2011. Monthly utility billing information has been requested by CDM, but has not yet been received. Therefore, the figures presented for this building are the averages of the annual usages in the facility data forms. The data has been averaged evenly over the year until monthly data can be provided.

From this graph, it can be determined that the baseline electrical consumption for Dickinson High School is approximately, 296,725 kWh/month.

Table 3.2-1 illustrates the seasonal peak demand loads for the Dickinson High School from January 2010 through January 2011. The information presented is only as current as the most recent bill received.

Figure 3.2-1: Dickinson High School Electricity Usage

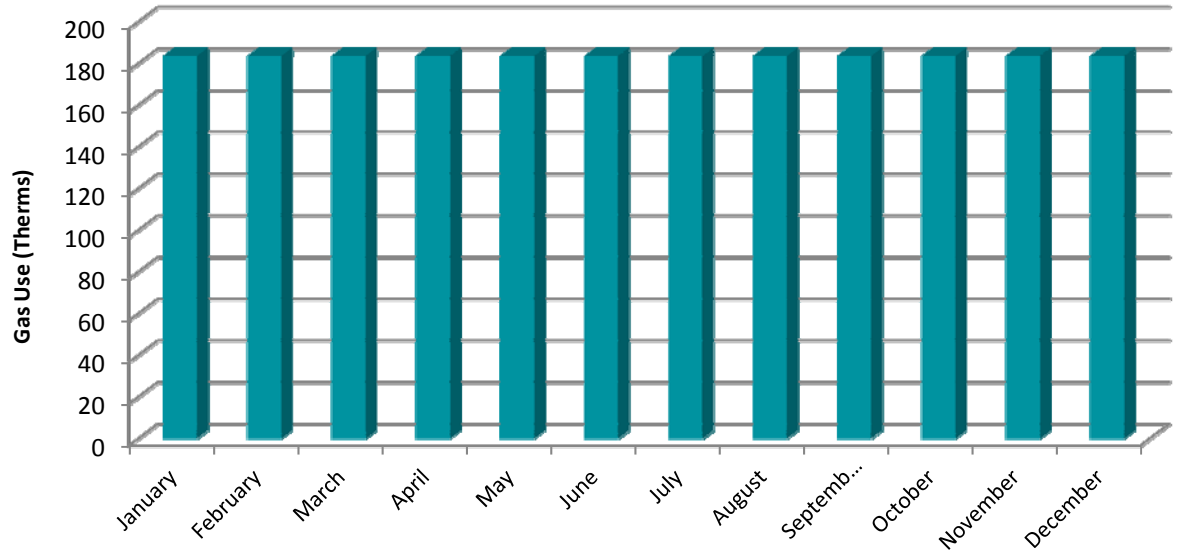


The rate schedule for this school is not available since we were not supplied with the utility bills for this school. The rate schedule for this school will be incorporated in the final comments.

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. Refer to Appendix A for a complete Historical Data Analysis.

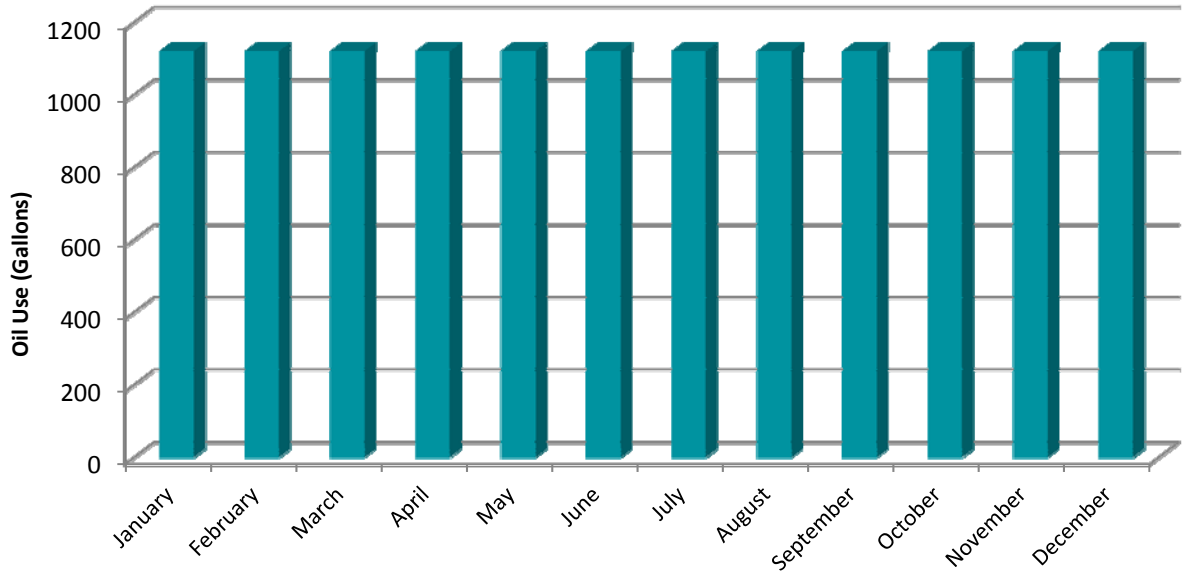
Figure 3.2-2 illustrates the monthly average natural gas consumption at Dickinson High School from January 2010 through January 2011.

Figure 3.2-2: Dickinson High School Gas Usage



Fuel oil is provided by Finch, a local provider. Figure 3.2-3 illustrates the monthly average oil consumption at Dickinson High School from January 2010 through January 2011.

Figure 3.2-3: Dickinson High School Oil Usage

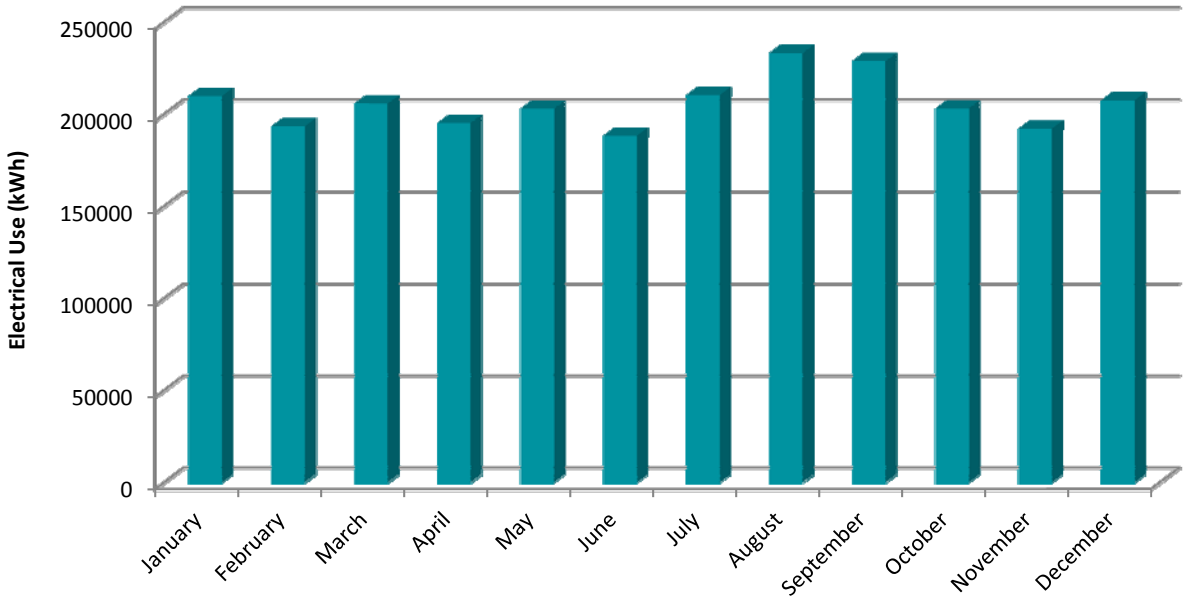


3.2.2 Ferris High School

Electric power for Ferris High School is fed from one General Service Secondary three phase line from. Figure 3.2-4 illustrates the average monthly total energy consumption from June, 2010 through June, 2011. From this graph, it can be determined that the baseline electrical consumption for Ferris High School is approximately, 205,914kWh/month. Utility bills for 2011 were incomplete. CDM has requested this information but was unable to include it in the report. This value has been estimated based off of utility usages of adjacent months.

Table 3.2-2 illustrates the seasonal peak demand loads for the Ferris High School from June, 2010 through June, 2011. The information presented is only as current as the most recent bill received.

Figure 3.2-4: Ferris High School Electricity Usage



The most recent tariff rates available at the time of this audit for the electrical service at Ferris High School, from PSE&G are as follows:

		Acct #: 42-005-547-04
Service Charge:		$377.71/month
Delivery Service Charges:	Annual Demand:	$3.424001780/kW
	Summer Demand:	$8145896992/kW
	On-Peak: 60462kWh	$1.004119943/kWh
	Next: 71889kWh	$13117164060/kWh
	Off-Peak: 50404	$0.004119911/kWh
	Next: 7200kWh	$0.0071640060/kWh
Societal Benefits Charge:		$0.00732119349/kWh

		Acct #: 42-005-547-04
Securitization Transition:		$0.012067983/kWh
Supply Service Charges:	Generation:	$4.864883281/kW
	Transmission:	$1.962963941/kW
	On-Peak: 1011651Wh	$0.117721026/kWh
	Next: 3120kWh	$0.117682085/kWh
	Off-Peak: 89781Wh	$0.069023958/kWh
	Next: k34669Wh	$0.068984972/kWh

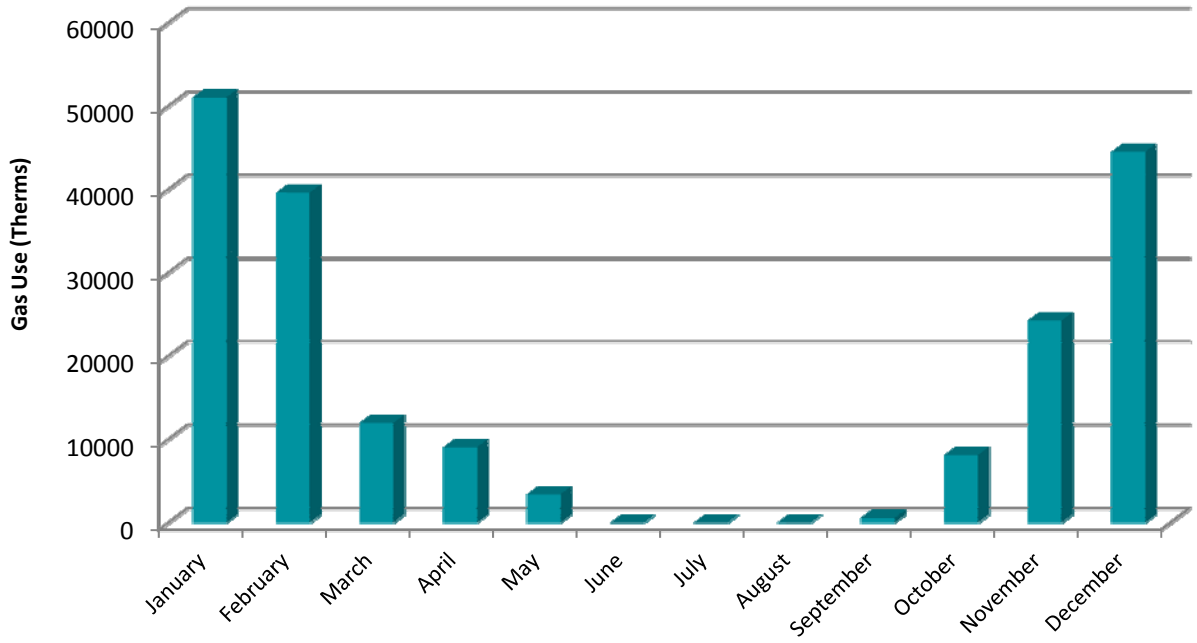
Table 3.2-2: Seasonal Peak Demands

Season	Peak Demand (kW)
Summer	524
Winter	486

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis.

Figure 3.2-5 illustrates the monthly average natural gas consumption at Ferris High School from June, 2010 through June, 2011.

Figure 3.2-5: Ferris High School Gas Usage



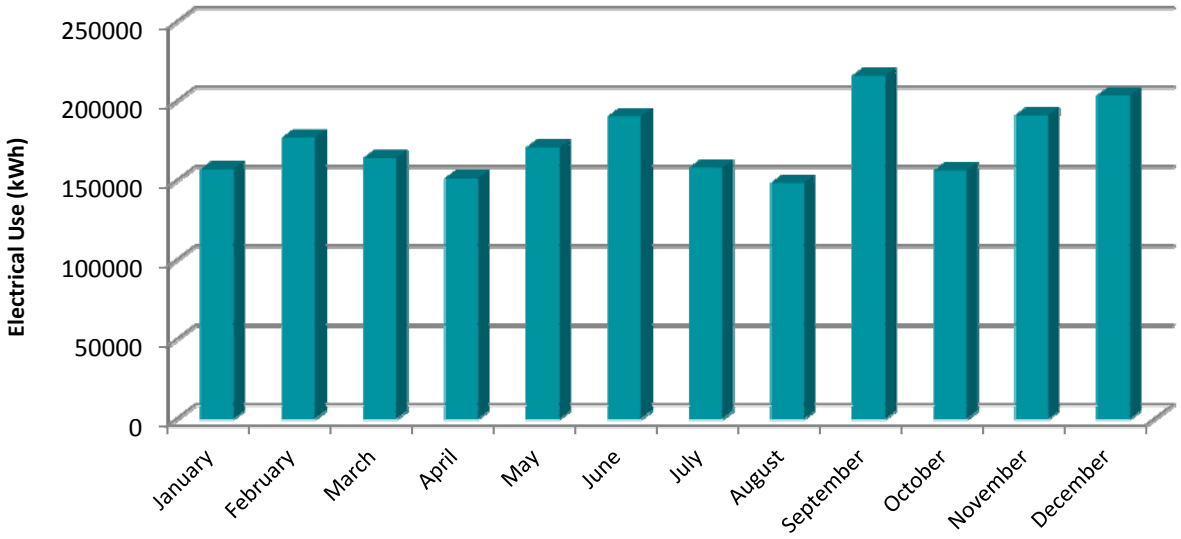
3.2.3 Lincoln High School

Electric power for Lincoln High School is fed from one General Service Secondary three phase line from PSE&G. Figure 3.2-6 illustrates the average monthly total energy consumption from June, 2010 through June, 2011.

From this graph, it can be determined that the baseline electrical consumption for Lincoln High School is approximately, 205,914 kWh/month.

Table 3.2-3 illustrates the seasonal peak demand loads for the Lincoln High School from June, 2010 through June, 2011. The information presented is only as current as the most recent bill received.

Figure 3.2-6: Lincoln High School Electricity Usage



The most recent tariff rates available at the time of this audit for the electrical service at Lincoln High School, from PSE&G are as follows:

		Acct #: 42-005-547-04
Service Charge:		$377.71/month
Delivery Service Charges:	Annual Demand:	$3.424001780/kW
	Summer Demand:	$8145896992/kW
	On-Peak: 60462kWh	$1.004119943/kWh
	Next: 71889kWh	$13117164060/kWh
	Off-Peak: 50404	$0.004119911/kWh
	Next: 7200kWh	$0.0071640060/kWh
Societal Benefits Charge:		$0.00732119349/kWh

		Acct #: 42-005-547-04
Securitization Transition:		$0.012067983/kWh
Supply Service Charges:	Generation:	$4.864883281/kW
	Transmission:	$1.962963941/kW
	On-Peak: 1011651Wh	$0.117721026/kWh
	Next: 3120kWh	$0.117682085/kWh
	Off-Peak: 89781Wh	$0.069023958/kWh
	Next: k34669Wh	$0.068984972/kWh

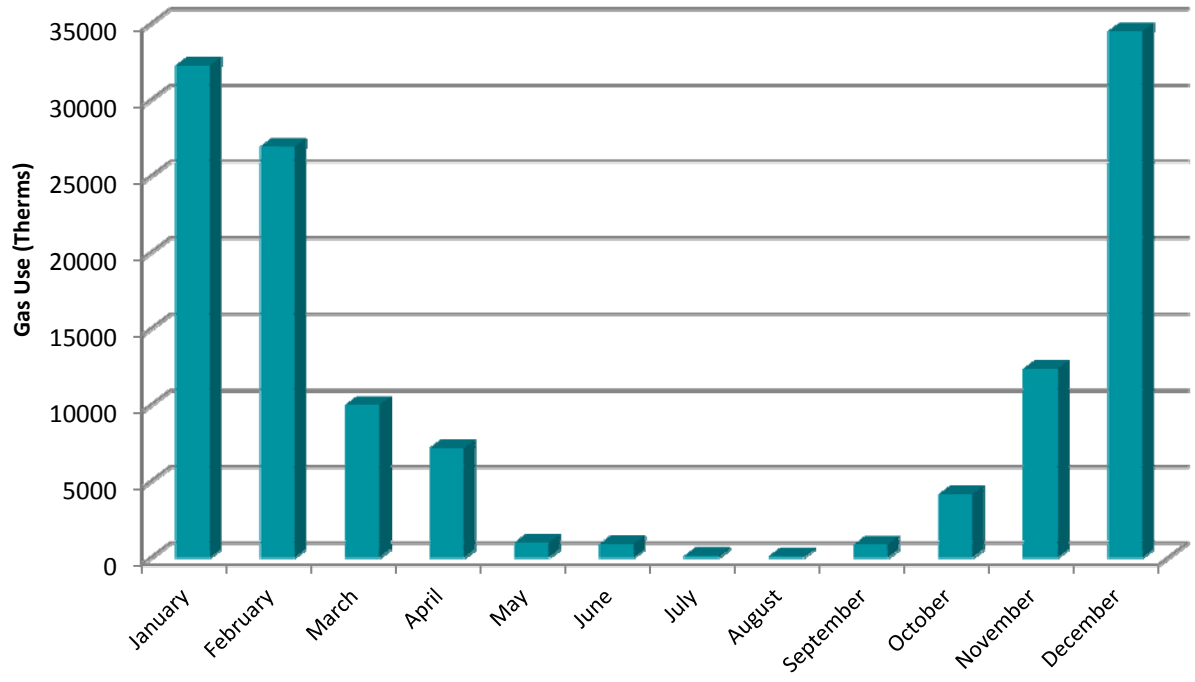
Table 3.2-3: Lincoln High School Seasonal Peak Demands

Season	Peak Demand (kW)
Summer	635
Winter	484

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis.

Figure 3.2-7 illustrates the monthly average natural gas consumption at Lincoln High School from June, 2010 through June, 2011.

Figure 3.2-7: Lincoln High School Gas Usage



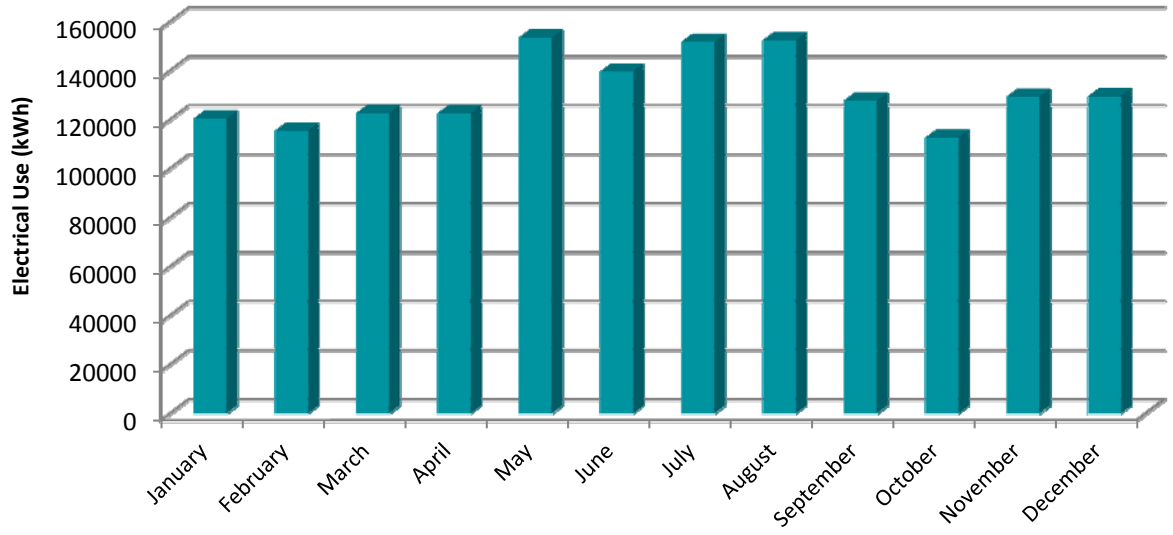
3.2.4 McNair Academic High School

Electric power for McNair Academic High School is fed from one General Service Secondary three phase line from PSE&G. Figure 3.2-8 illustrates the average monthly total energy consumption from June, 2010 through June, 2011.

From this graph, it can be determined that the baseline electrical consumption for McNair Academic High School is approximately 100,122 kWh/month.

Table 3.2-4 illustrates the seasonal peak demand loads for the McNair Academic High School from June, 2010 through June, 2011. The information presented is only as current as the most recent bill received.

Figure 3.2-8: McNair Academic High School Electricity Usage



The most recent tariff rates available at the time of this audit for the electrical service at McNair Academic High School, from PSE&G are as follows:

		Acct #: 42-004-785-01
Service Charge:		$377.71/month
Delivery Service Charges:	Annual Demand:	$3.423987619/kW
	Summer Demand:	$8.3145911787/kW
	On-Peak: 86543kWh	$0.007163953/kWh
	Off-Peak: 88072 kWh	$1.007164025/kWh
Societal Benefits Charge:		$0.007135011/kWh
Securitization Transition:		$0.012067978/kWh

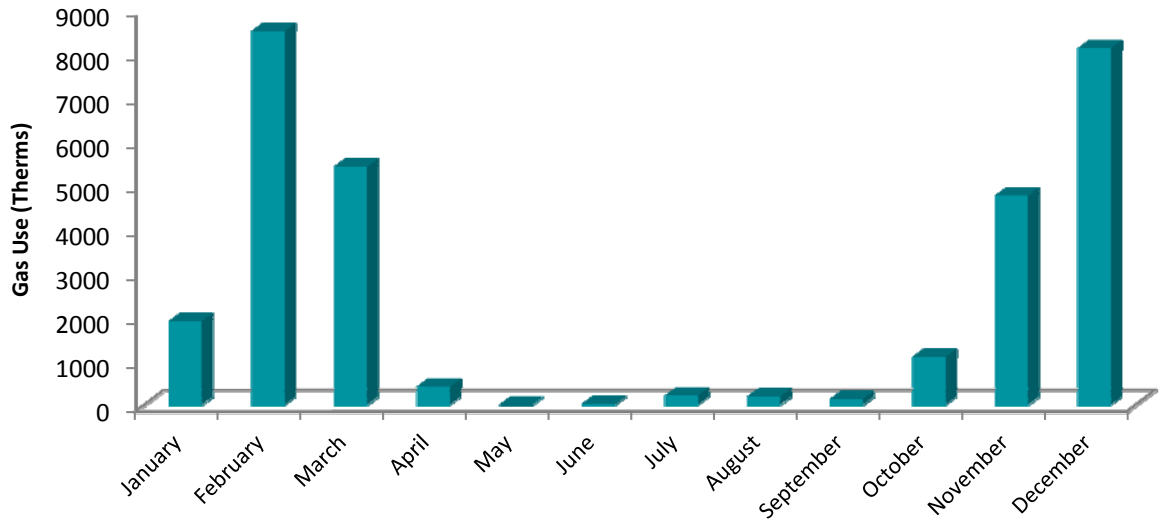
Table 3.2-4: McNair Academic High School Seasonal Peak Demands

Season	Peak Demand (kW)
Summer	415
Winter	328

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis.

Figure 3.2-9 illustrates the monthly average natural gas consumption at McNair Academic High School from June, 2010 through June, 2011.

Figure 3.2-9: McNair Academic High School Gas Usage



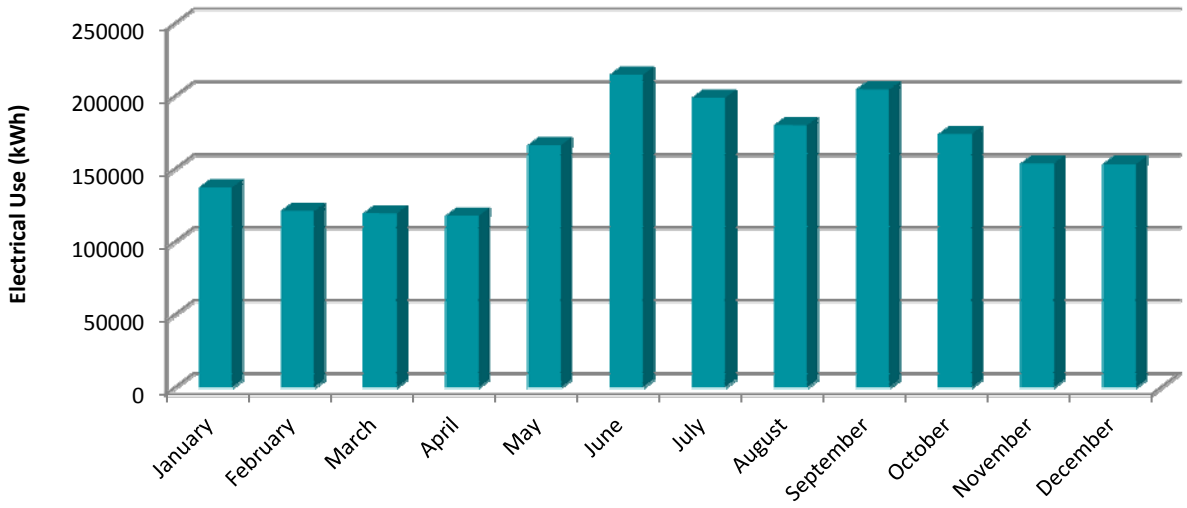
3.2.5 Snyder High School

Electric power for Snyder High School is fed from one General Service Secondary three phase line from PSE&G. Figure 3.2-10 illustrates the average monthly total energy consumption from June, 2010 through May, 2011. Electrical usage has been averaged by month for the above referenced time period to portray a more encompassing monthly usage trend. Utility bills for March, 2011 and January, 2011 have not been received. CDM has requested this information but it was not received prior to development and delivery of this report. These values have been estimated based off of utility usages of adjacent months.

From this graph, it can be determined that the baseline electrical consumption for Snyder High School is approximately, 60,000kWh/month.

Table 3.2-5 illustrates the seasonal peak demand loads for the Snyder High School from June, 2010 through May, 2011. The information presented is only as current as the most recent bill received.

Figure 3.2-10: Snyder High School Electricity Usage



The most recent tariff rates available at the time of this audit for the electrical service at Snyder High School, from PSE&G are as follows:

		Acct #: 42-000-897-18
Service Charge:		$379.26/month
Delivery Service Charges:	Annual Demand	$3.407408958/kWh
	Summer Demand	$8.106404353/kWh
	On-Peak 20476 kWh	$0.005105001/kWh
	Next 59092 kWh	$0.004120016/kWh
	Next 31318 kWh	$0.007162931/kWh
	Off-Peak 22259 kWh	$0.005104901/kWh
	Next 52203 kWh	$0.004120070/kWh
	Next 29443 kWh	$0.007164012/kW
Societal Benefits Charge:		$0.007445514/kWh
Securitization Transition:		$0.012048010/kWh

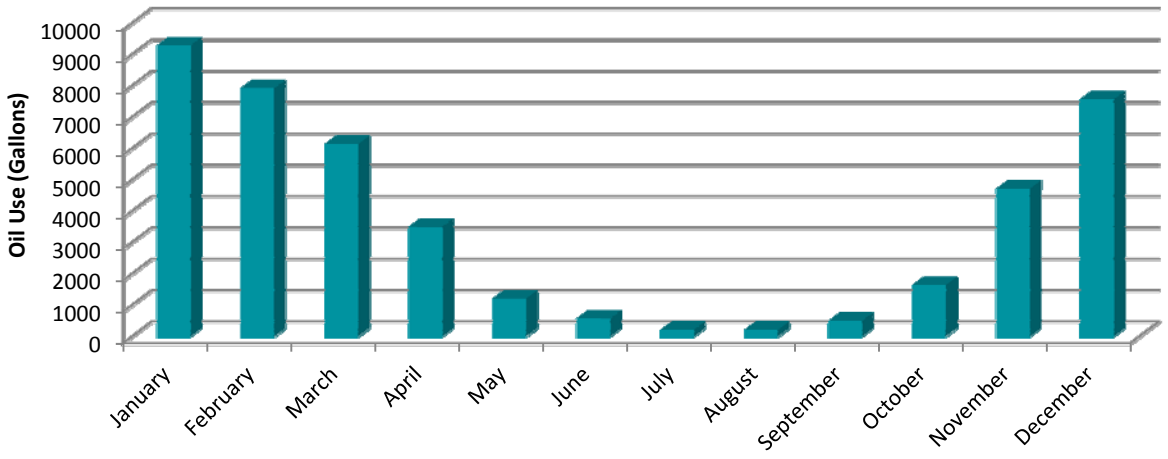
Table 3.2-5: Snyder High School Seasonal Peak Demands

Season	Peak Demand (kW)
Summer	188
Winter	198

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis.

Figure 3.2-11 illustrates the anticipated monthly oil usage at Snyder High School. Monthly fuel oil usage has been estimated based on the annual oil consumption provided by the Board in the facility data forms. CDM has requested the fuel oil usage bills but they have not been received. Annual oil usages were given and were used, along with information gathered while on site to aid in the prediction of oil usage shown below. The usage in the graph below is what eQuest predicts the usage to be.

Figure 3.2-11: Snyder High School Fuel Oil Usage



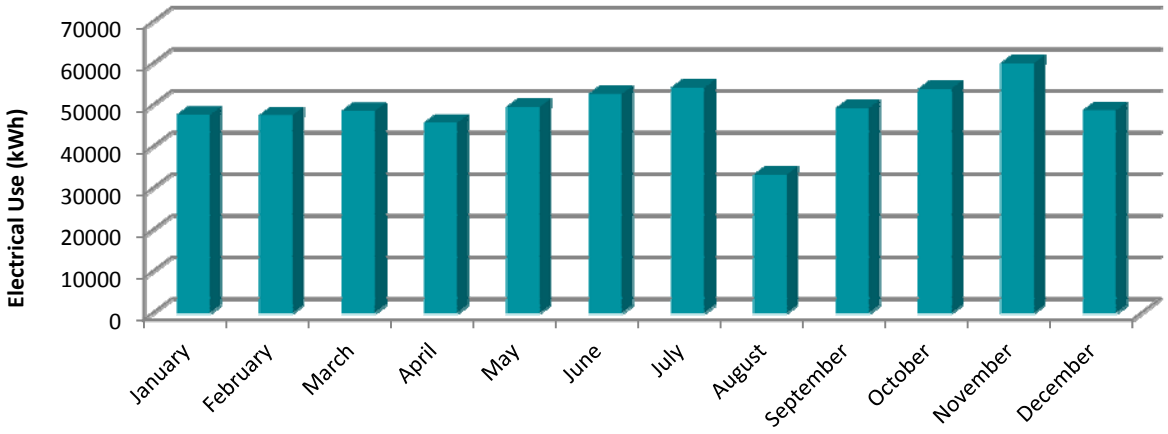
3.2.6 Middle School #40

Electric power for Middle School #40 is fed from one General Service Secondary three phase line from PSE&G. Figure 3.2-12 illustrates the average monthly total energy consumption from May, 2010 through May, 2011. Electrical usage has been averaged by month for the above referenced time period to portray a more encompassing monthly usage trend.

From this graph, it can be determined that the baseline electrical consumption for Middle School #40 is approximately, 24,000kWh/month.

Table 3.2-6 illustrates the seasonal peak demand loads for the Middle School #40 from May, 2010 through May, 2011. The information presented is only as current as the most recent bill received.

Figure 3.2-12: Middle School #40 Electricity Usage



The most recent tariff rates available at the time of this audit for the electrical service at Middle School #40, from PSE&G are as follows:

		Acct #: 42-004-722-01
Service Charge:		$380.55/month
Delivery Service Charges:	Annual Demand	$3.393574766/kWh
	Summer Demand	$8.073422897/kWh
	On-Peak 10240 kWh	$0.005105469/kWh
	Next 15200 kWh	$0.004119737/kWh
	Next 2880 kWh	$0.007163194/kWh
	Off-Peak 7840 kWh	$0.005104592/kWh
	Next 11680 kWh	$0.004119863/kWh
	Next 2240 kWh	$0.007165179/kW
Societal Benefits Charge:		$0.007523762/kWh
Securitization Transition:		$0.012068091/kWh

Table 3.2-6: Middle School #40 Seasonal Peak Demands

Season	Peak Demand (kW)
Summer	85
Winter	88

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis.

Figure 3.2-13 illustrates the monthly average natural gas consumption at Middle School #40 from June, 2010 through May, 2011. Utility bills for August, 2010, April, 2011, and June, 2011 have not been received. CDM has requested this information but it was not received prior to development and delivery of this report. These values have been estimated based off of utility usages of adjacent months.

Figure 3.2-13: Middle School #40 Gas Usage

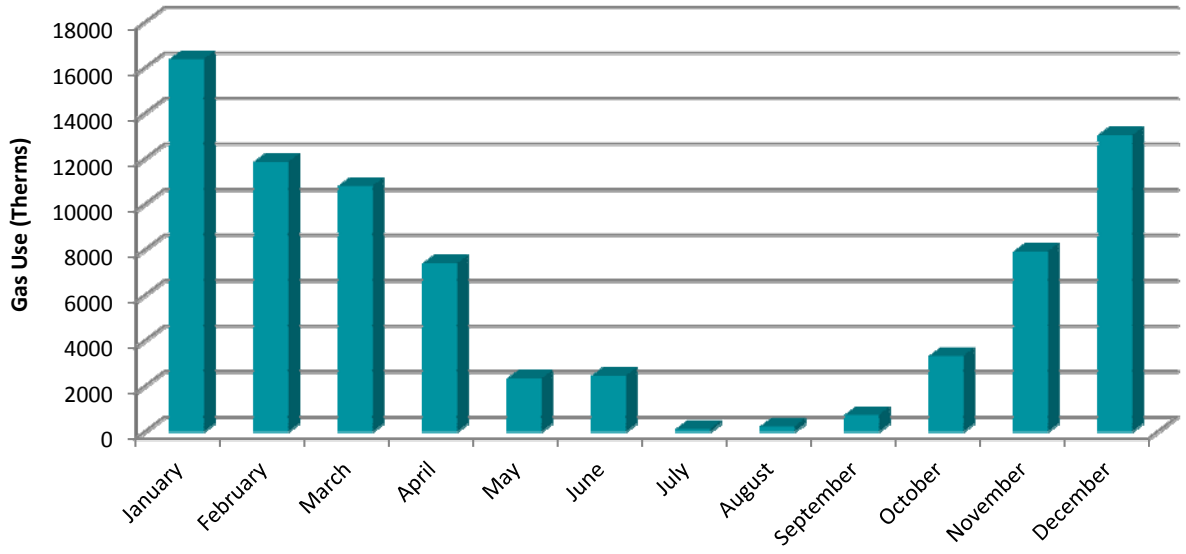
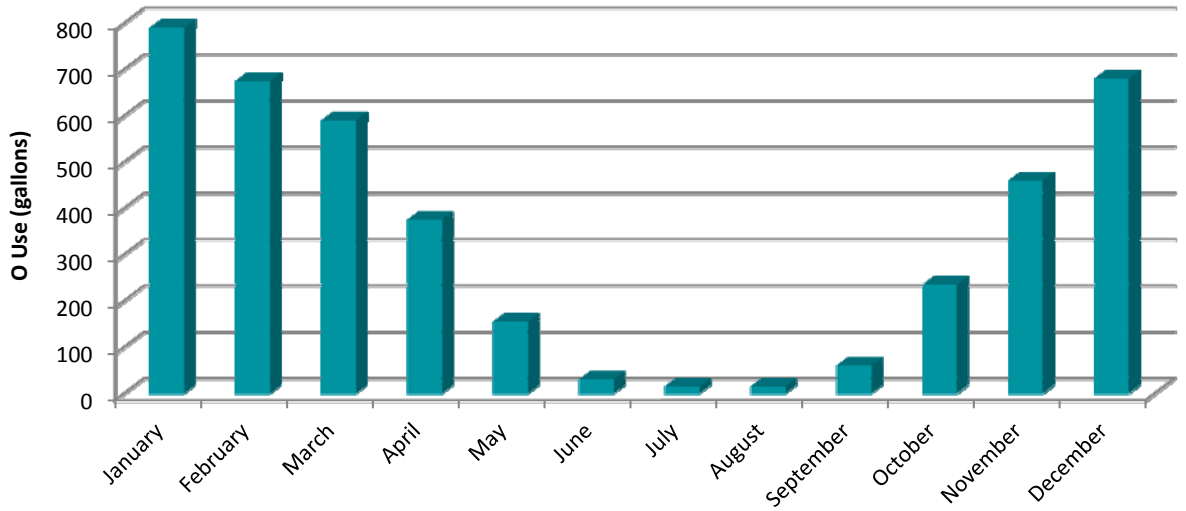


Figure 3.2-14 illustrates the monthly average fuel oil consumption at Middle School # 40. Monthly fuel oil usage has been estimated based on the annual oil consumption provided by the Board in the facility data forms. CDM has requested the fuel oil usage bills but they have not been received. Annual oil usages were given and were used, along with information gathered while on site to aid in the prediction of oil usage shown below. The usage in the graph below is what eQuest predicts the usage to be.

Figure 3.2-14: Middle School #40 Fuel Oil Usage



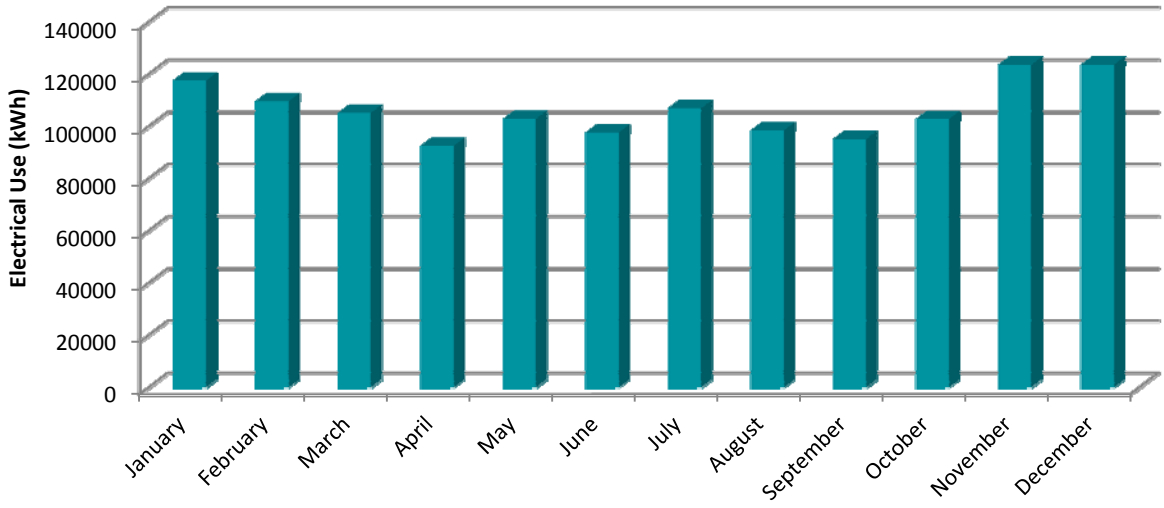
3.2.7 Middle School #41

Electric power for Middle School #41 is fed from one General Service Secondary three phase line from PSE&G. Figure 3.2-15 illustrates the average monthly total energy consumption from June 2010 through May 2011. Electrical usage has been averaged by month for the above referenced time period to portray a more encompassing monthly usage trend. Utility bills for March, 2011 and May, 2011 have not been received. CDM has requested this information but it was not received prior to development and delivery of this report. These values have been estimated based off of utility usages of adjacent months.

From this graph, it can be determined that the baseline electrical consumption for Middle School #41 is approximately, 53,000kWh/month.

Table 3.2-7 illustrates the seasonal peak demand loads for the Middle School #41 from June 2010 through May 2011. The information presented is only as current as the most recent bill received.

Figure 3.2-15: Middle School #41 Electricity Usage



The most recent tariff rates available at the time of this audit for the electrical service at Middle School #41, from PSE&G are as follows:

		Acct #: 42-006-843-06
Service Charge:		$377.71/month
Delivery Service Charges:	Annual Demand	$3.424017155/kWh
	Summer Demand	$8.145889921/kWh
	On-Peak 50999 kWh	$0.007164062/kWh
	Off-Peak 50999 kWh	$0.007164080/kWh
Societal Benefits Charge:		$0.007134980/kWh
Securitization Transition:		$0.012067956/kWh

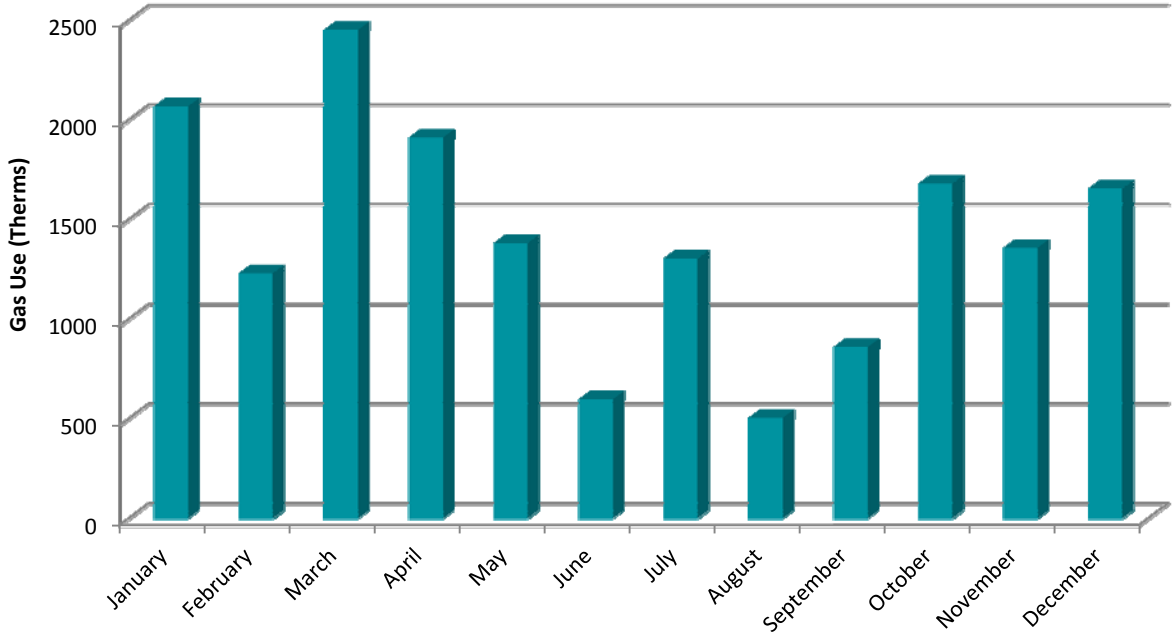
Table 3.2-7: Middle School #41Seasonal Peak Demands

Season	Peak Demand (kW)
Summer	135
Winter	142

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis.

Figure 3.2-16 illustrates the monthly average natural gas consumption at Middle School #41 from June 2010 through May 2011. Utility bills for March, 2011 and May, 2011 have not been received. CDM has requested, but was unable to obtain, this information. These values have been estimated based off of utility usages of adjacent months.

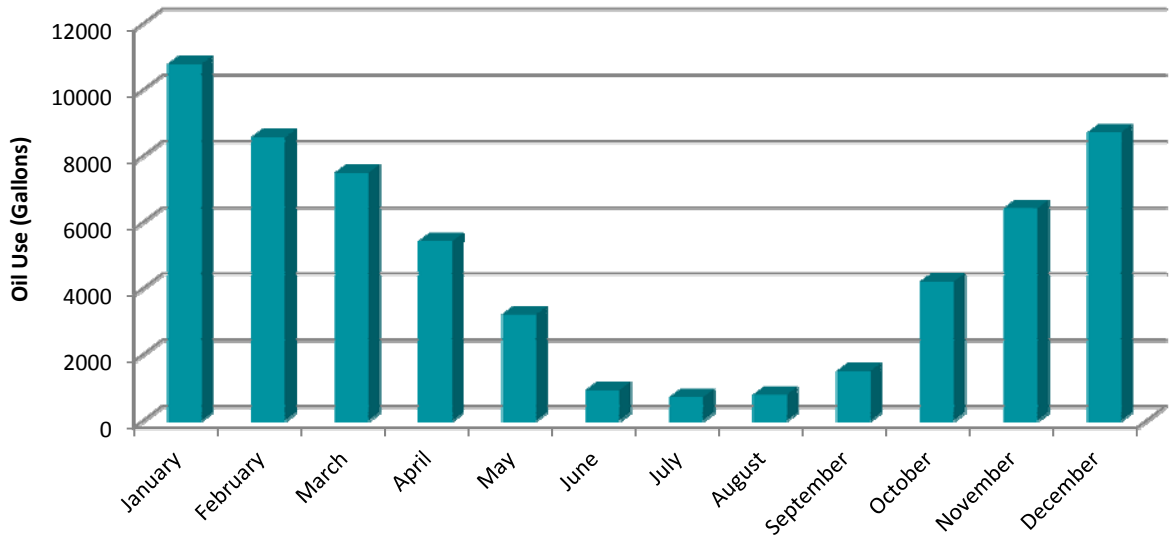
Figure 3.2-16: Middle School #41 Gas Usage



For more on Middle School #41 gas usage, refer to Section 4.2.

Figure 3.2-17 illustrates the monthly average fuel oil consumption at Middle School # 41. Monthly fuel oil usage has been estimated based on the annual oil consumption provided by the Board in the facility data forms. CDM was not able to obtain actual fuel oil bills. Annual oil usages were given and were used, along with information gathered while on site to aid in the prediction of oil usage shown below. The usage in the graph below is what eQuest predicts the usage to be.

Figure 3.2-17: Middle School #41 Fuel Oil Usage



3.2.8 Public School #15

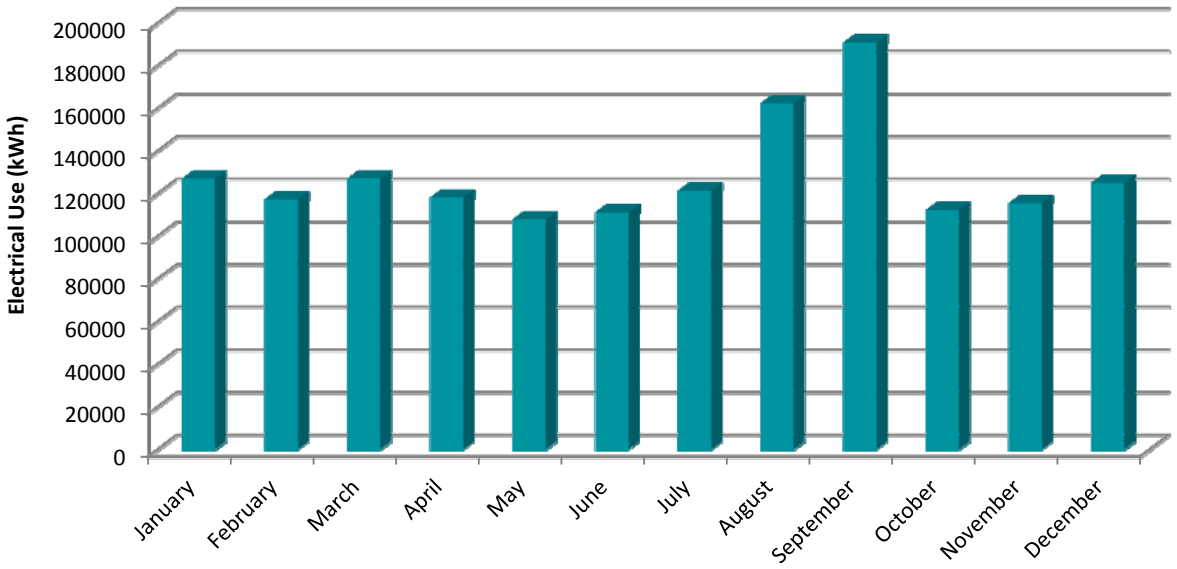
Electric power for PS #15 is fed from one General Service Secondary three phase line from PSE&G. Figure 3.2-18 illustrates the average monthly total energy consumption from July, 2010 through May 2011.

Utility bills for June, 2010, July, 2010, and April, 2011 have not been received. CDM has requested this information but it was not received prior to development and delivery of this report. These values have been estimated based off of utility usages of adjacent months.

From this graph, it can be determined that the baseline electrical consumption for PS #15 is approximately, 64,000kWh/month.

Table 3.2-8 illustrates the seasonal peak demand loads for the PS #15 from July, 2010 through May, 2011. The information presented is only as current as the most recent bill received.

Figure 3.2-18: PS #15 Electricity Usage



The most recent tariff rates available at the time of this audit for the electrical service at PS #15, from PSE&G are as follows:

		Acct #: 42-005-393-06
Service Charge:		$377.71/month
Delivery Service Charges:	Annual Demand	$3.424010171/kW
	Summer Demand	$8.145913549/kW
	On-Peak 2827kWh	$0.004120976/kWh
	Next 54480kWh	$0.007163913/kWh
	Off-Peak1466kWh	$0.004120055/kWh
	Next 63171kWh	$0.00164047/kW
Societal Benefits Charge:		$0.007150249/kWh
Securitization Transition:		$0.12067998/kWh

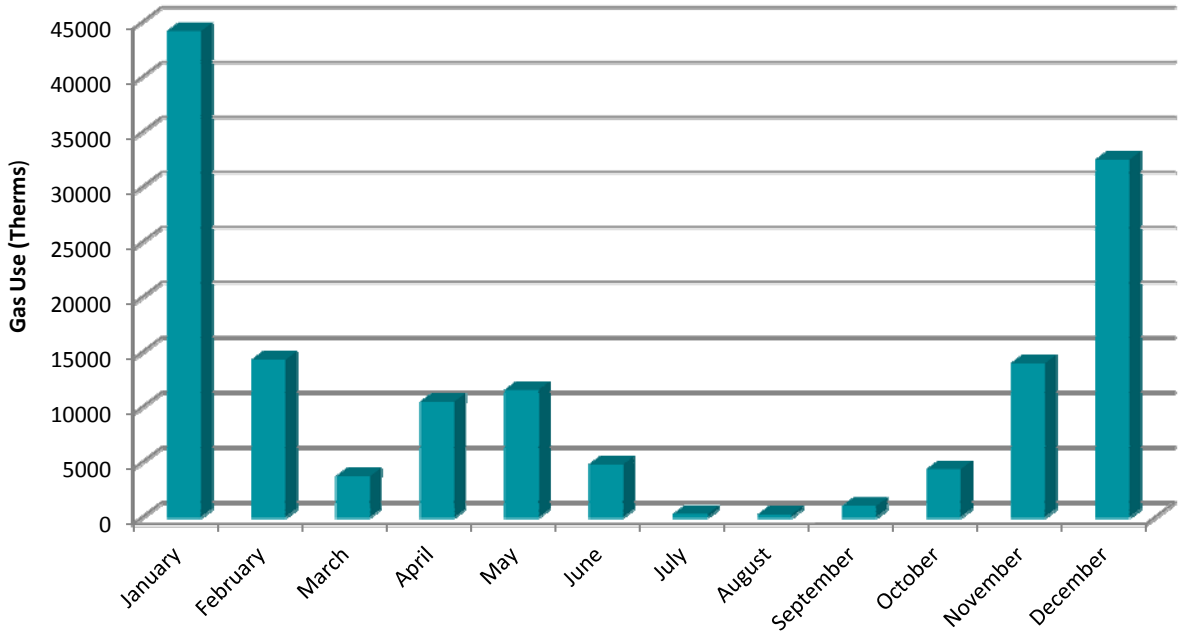
Table 3.2-8: PS #15 Seasonal Peak Demands

Season	Peak Demand (kW)
Summer	356
Winter	298

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis.

Figure 3.2-19 illustrates the monthly average natural gas consumption at PS #15 from June, 2010 through May 2011. Utility bills for April, 2011 and June, 2011 have not been received. CDM has requested this information but it was not received prior to development and delivery of this report. These values have been estimated based off of utility usages of adjacent months.

Figure 3.2-19: PS #15 Gas Usage



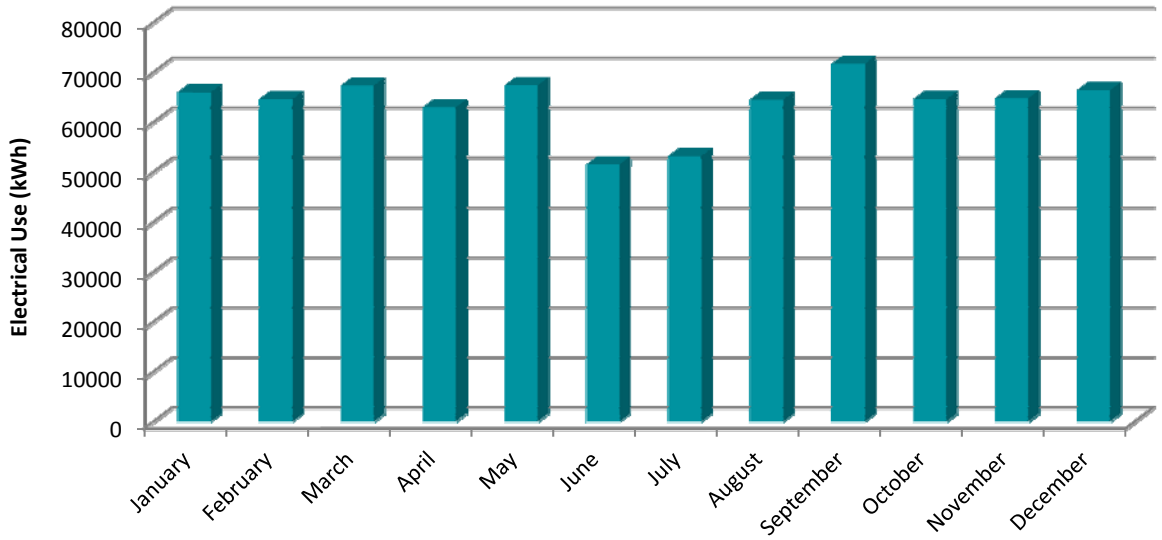
3.2.9 Public School #22

Electric power for PS #22 is fed from one General Service Secondary three phase line from PSE&G. Figure 3.2-20 illustrates the average monthly total energy consumption from June, 2010 through June, 2011.

From this graph, it can be determined that the baseline electrical consumption for PS #22 is approximately, 59,200 kWh/month.

Table 3.2-9 illustrates the seasonal peak demand loads for the PS #22 from June, 2010 through June, 2011. The information presented is only as current as the most recent bill received.

Figure 3.2-20: PS #22 Electricity Usage



The most recent tariff rates available at the time of this audit for the electrical service at PS #22, from PSE&G are as follows:

		Acct #: 42-010-069-05
Service Charge:		$377.71/month
Delivery Service Charges:	Annual Demand	$3.424010417/kW
	Summer Demand	$8.145885417/kW
	On-Peak	$0.007164000/kWh
	Off-Peak	$0.004163953/kW
Societal Benefits Charge:		$0.007163953/kWh
Securitization Transition:		$0.012060012/kWh

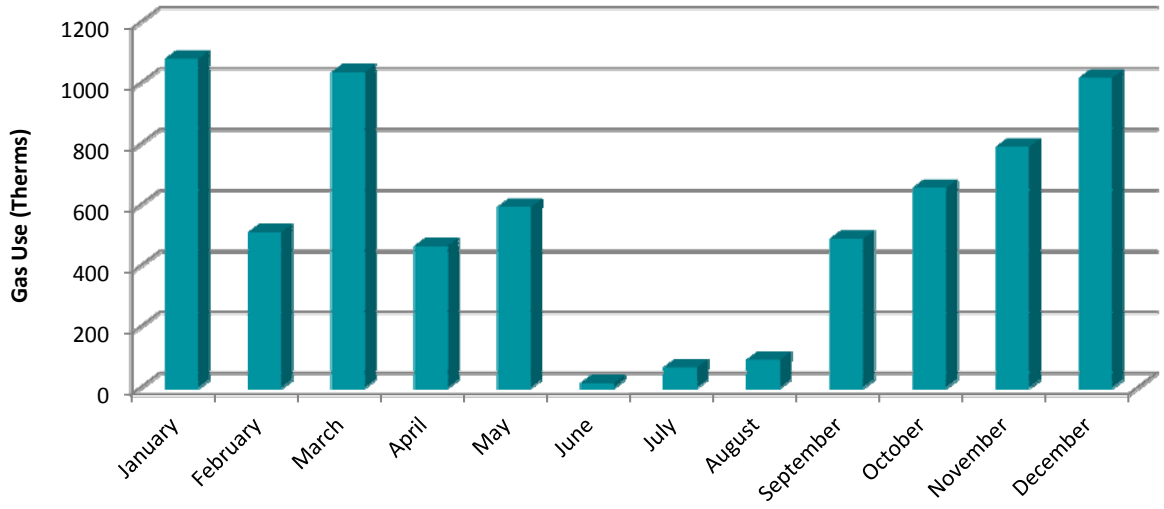
Table 3.2-9: PS #22 Seasonal Peak Demands

Season	Peak Demand (kW)
Summer	212
Winter	104

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis.

Figure 3.2-21 illustrates the monthly average natural gas consumption at PS #22 from June, 2010 through June, 2011.

Figure 3.2-21: PS #22 Gas Usage



CDM has requested the fuel oil usage but it was not provided.

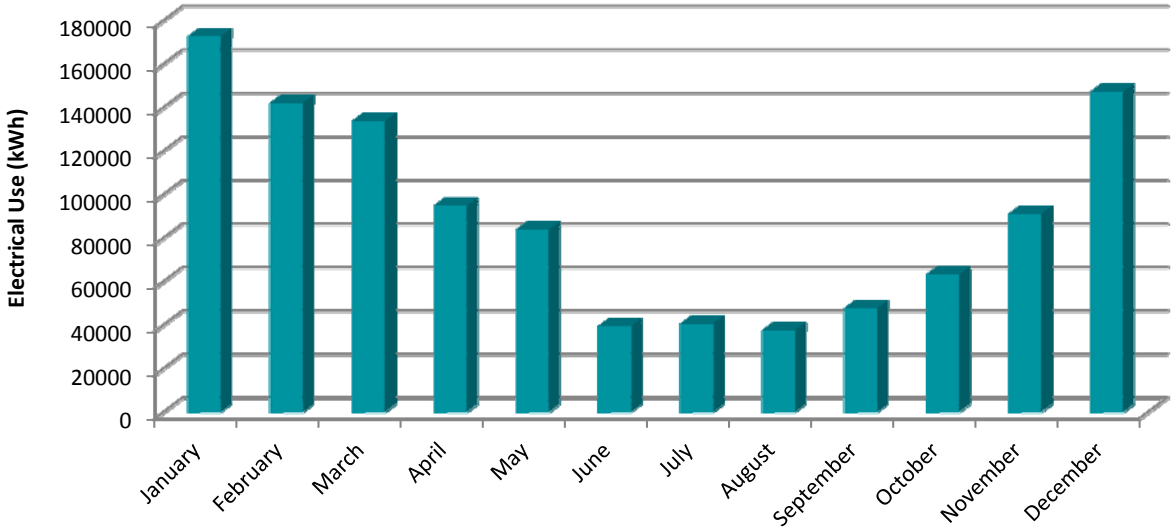
3.2.10 Academy 1

Electric power for Academy is fed from one General Service Secondary three phase line from PSE&G. Figure 3.2-22 illustrates the average monthly total energy consumption from June, 2010 through May, 2011. Electrical usage has been averaged by month for the above referenced time period to portray a more encompassing monthly usage trend.

From this graph, it can be determined that the baseline electrical consumption for Academy 1 is approximately, 45,000kWh/month.

Table 3.2-10 illustrates the seasonal peak demand loads for the Academy from June, 2010 through May, 2011. The information presented is only as current as the most recent bill received.

Figure 3.2-22: Academy #1 Electricity Usage



The most recent tariff rates available at the time of this audit for the electrical service at Academy 1, from PSE&G are as follows:

		Acct #: 42 007 383 09
Service Charge:		$377.71/month
Delivery Service Charges:	Annual Demand	$1.626717557/kW
	Summer Demand	$9.030703625/kW
	On-Peak 9296 kWh	$0.004154475/kWh
	Next 13714 kWh	$0.0.007121190/kWh
	Off-Peak 9690 kWh	$0.0.004154799/kW
	Next 15250 kWh	$0.0.007121311/kWh
Societal Benefits Charge:		$0.0.007186027/kWh

		Acct #: 42 007 383 09
Securitization Transition:		$0.0.0012067987/kWh
Supply Service Charges:	Generation:	$5.561926902/kW
	Transmission:	$1.962832426/kW
	Charge:	$0.090084463/kWh

Table 3.2-10: Academy 1 Seasonal Peak Demands

Season	Peak Demand (kW)
Summer	75
Winter	196

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis.

There is no gas use for the building, but are still receiving a monthly charge.

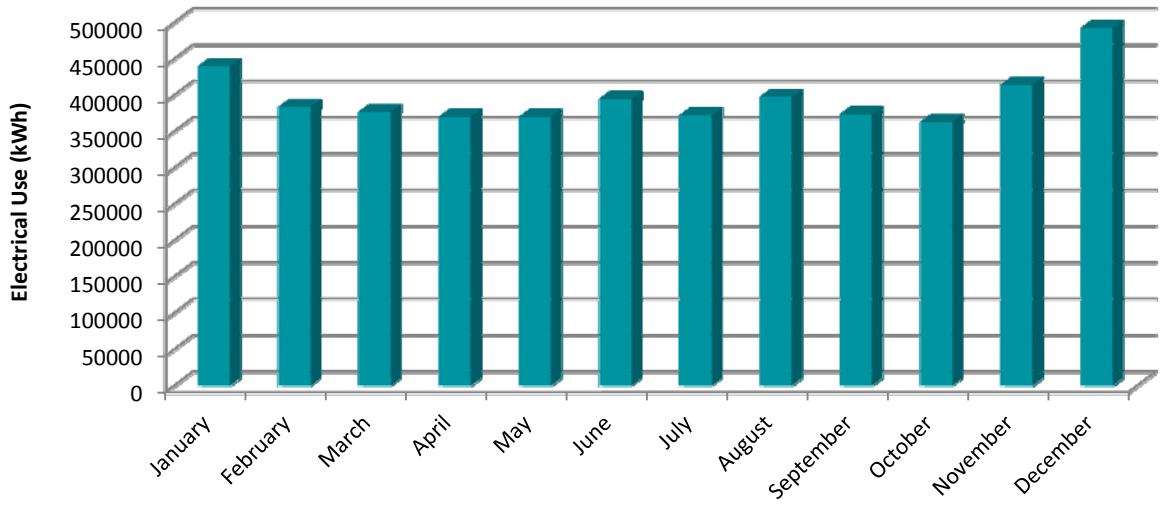
3.2.11 Administrative Building

Electric power for the Administrative Building is fed from one General Service Secondary three phase line from PSE&G. Figure 3.2-23 illustrates the average monthly total energy consumption from June, 2010 through May, 2011. Electrical usage has been averaged by month for the above referenced time period to portray a more encompassing monthly usage trend.

From this graph, it can be determined that the baseline electrical consumption for the Administrative Building is approximately, 166,000 kWh/month.

Table 3.2-4 illustrates the seasonal peak demand loads for the Administrative Building from June, 2010 through May, 2011. The information presented is only as current as the most recent bill received.

Figure 3.2-23: Administrative Building Electricity Usage



The most recent tariff rates available at the time of this audit for the electrical service at the Administrative Building, from PSE&G are as follows:

		Acct #: 42-007-199-08
Service Charge:		$377.71/month
Delivery Service Charges:	Annual Demand	$1.626701269/kWh
	Summer Demand	$9.030694925/kWh
	On Peak 24711kWh	$0.004154830/kWh
	Next154334kWh	$0.007120984/kWh
	Off-Peak 37343kWh	$0.004154996/kWh
	Next 178692kWh	$0.007121024/kWh
Societal Benefits Charge:		$0.007085274/kWh
Securitization Transition:		$0.012068012/kWh

Table 3.2-8: Administrative Building Seasonal Peak Demands

Season	Peak Demand (kW)
Summer	344
Winter	417

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis.

The Administrative Building does not have a natural gas service; therefore no gas utility usage can be reported.

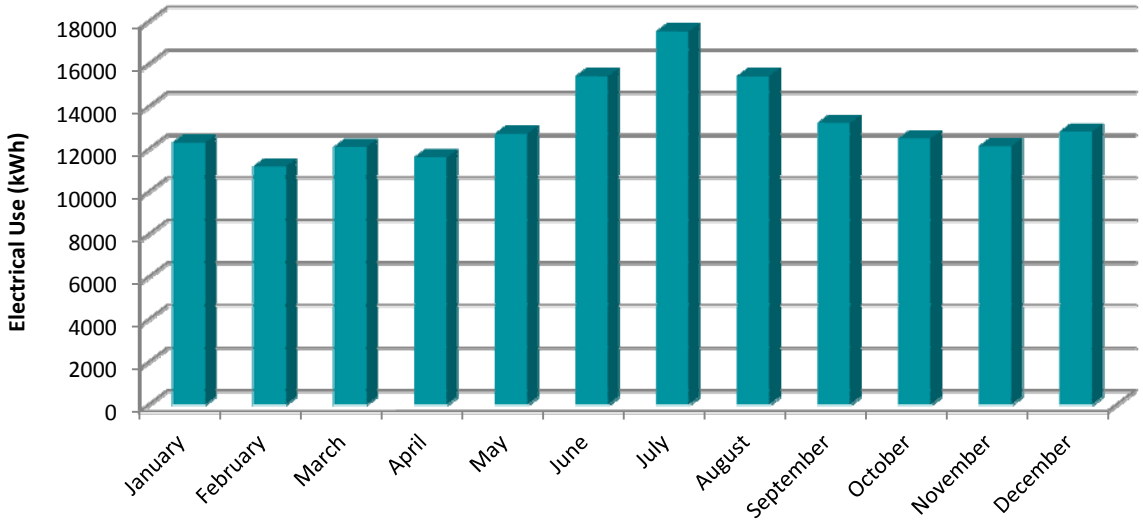
3.2.12 Cunningham Center ECC

Electric power for the Cunningham Center ECC is fed from one General Service Secondary three phase line from PSE&G. Figure 3.2-24 illustrates the average monthly total energy consumption from June, 2010 through April, 2011. Electrical usage has been averaged by month for the above referenced time period to portray a more encompassing monthly usage trend. Utility bills for April, 2011 and May, 2011 have not been received. CDM has requested, but was unable to obtain, this information. These values have been estimated based off of utility usages of adjacent months.

From this graph, it can be determined that the baseline electrical consumption for the Cunningham Center ECC is approximately, 13,250kWh/month.

Table 3.2-11 illustrates the seasonal peak demand loads for the Cunningham Center ECC from June, 2010 through April, 2011.

Figure 3.2-24: Cunningham Center ECC Electricity Usage



		Acct #: 67-272-769-00 Acct #: 69-569-536-09
Service Charge:		$378.19/month
Delivery Service Charges:	Annual Demand:	$4.160314685/kW
	Summer Demand:	$7.721503497/kW
	kWh Charges	$0.017587054/kWh
Societal Benefits Charge:		$0.007135045/kWh
Securitization Transition:		$0.012068080/kWh

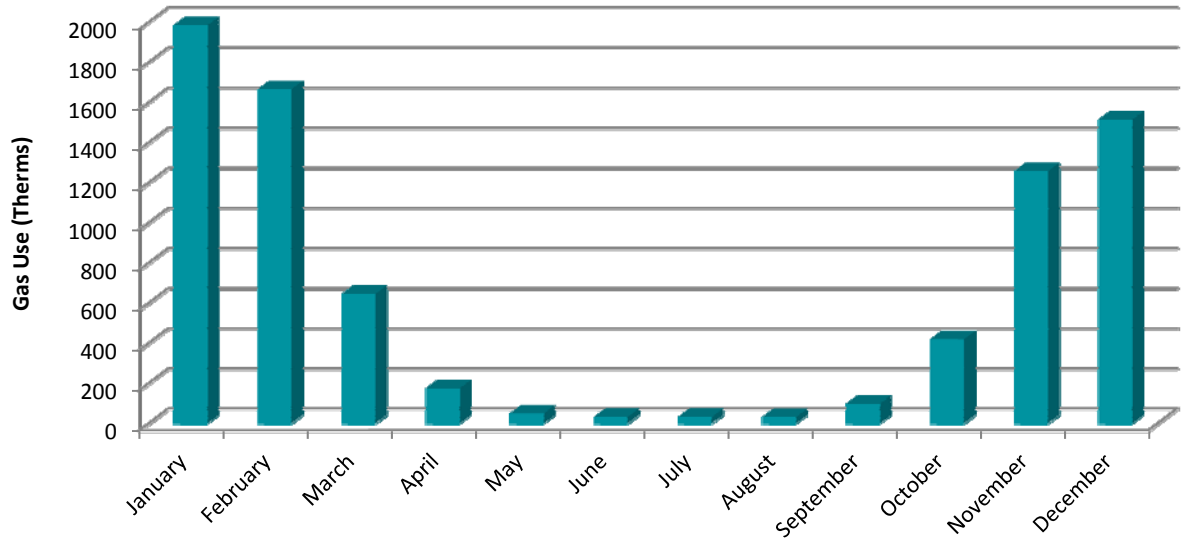
Table 3.2-11: The Cunningham Center ECC Seasonal Peak Demands

Season	Peak Demand (kW)
Summer	52
Winter	70

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis.

Figure 3.2-25 illustrates the monthly average natural gas consumption at Cunningham Center ECC from June, 2010 through April, 2011. Utility bills for March, 2011 and May, 2011 have not been received. CDM has requested, but was unable to obtain, this information. These values have been estimated based off of utility usages of adjacent months.

Figure 3.2-25: Cunningham Center ECC Gas Usage



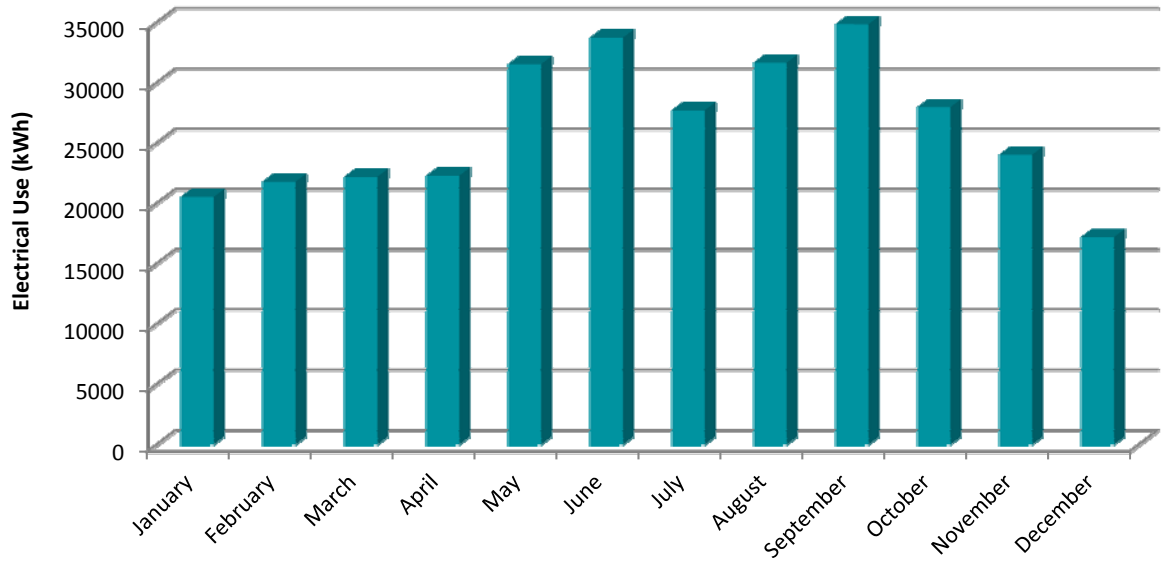
3.2.13 Infinity Institute

Electric power for the Infinity Institute is fed from one General Service Secondary three phase line from PSE&G. Figure 3.2-26 illustrates the average monthly total energy consumption from June 2010, through May, 2011. Electrical usage has been averaged by month for the above referenced time period to portray a more encompassing monthly usage trend. CDM has requested the electricity usage but it was not received. The graph below is what eQuest predicts the electricity usage to be based on information gathered while on site.

From this graph, it can be determined that the baseline electrical consumption for Infinity Institute is approximately, 979kWh/month.

Table 3.2-12 illustrates the seasonal peak demand loads for the Infinity Institute from June, 2010 through May, 2011. The information presented is only as current as the most recent bill received.

Figure 3.2-26: Infinity Institute Electricity Usage



The most recent tariff rates available at the time of this audit for the electrical service at the Infinity Institute, from PSE&G are as follows:

		Acct #: 66-873-417-07 Acct #: 69-329-141-07
Service Charge:		$378.19/month
Delivery Service Charges:	Annual Demand	$1.386842105/kW
	Summer Demand	$2.573684211/kW
	kWh Charge	$0.017562500/kWh
Societal Benefits Charge:		$0.00712500/kWh
Securitization Transition:		$0.012062500/kWh
Supply Service Charges:	Generation:	$4.845444060/kW
	Transmission:	$2.213804714/kW
	Charge: 75kWh	$0.088533333/kWh
	Next: 474 kWh	$0.086244726/kWh

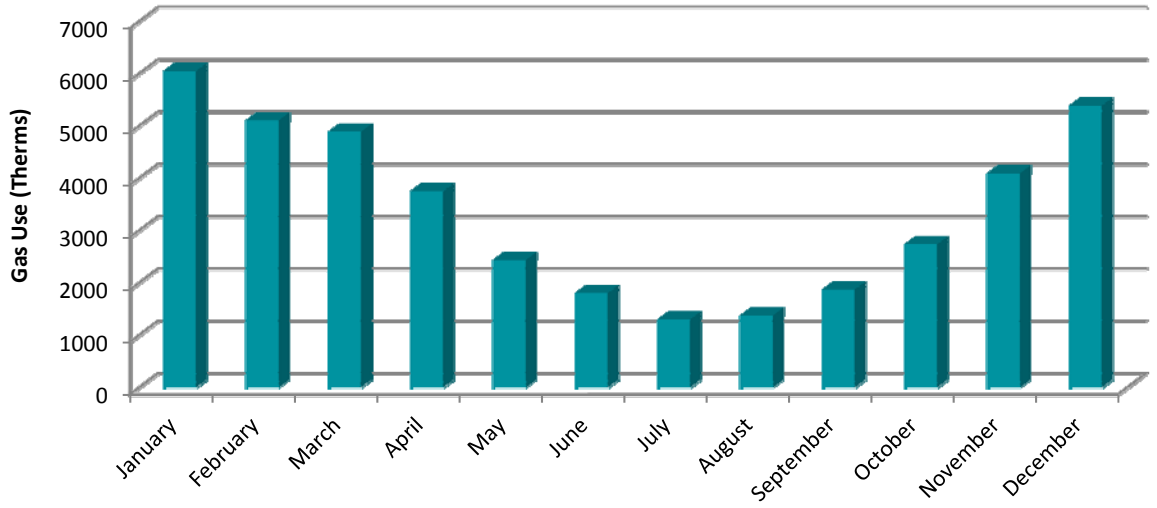
Table 3.2-12: Infinity Institute Seasonal Peak Demands

Season	Peak Demand (kW)
Summer	8
Winter	15

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis. CDM has requested the natural gas usage but it was not received. The graph below is what eQuest predicts the gas usage to be based on information gathered while on site.

Figure 3.2-27 illustrates the monthly average natural gas consumption at the infinity Institute from June 2010 through May 2011.

Figure 3.2-27: Infinity Institute Gas Usage



For more information on the gas usage for the Infinity Institute, refer to Section 4.2.

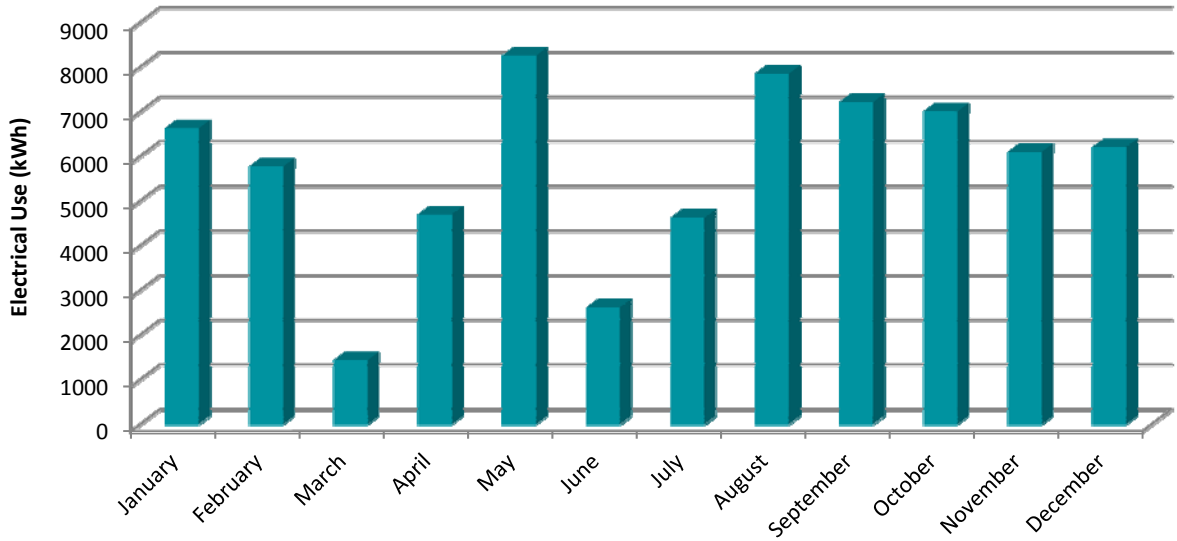
3.2.14 Liberty High School

Electric power for the Liberty High School is fed from one General Service Secondary three phase line from PSE&G. Figure 3.2-28 illustrates the average monthly total energy consumption from May, 2010 through June, 2011. Electrical usage has been averaged by month for the above referenced time period to portray a more encompassing monthly usage trend.

From this graph, it can be determined that the baseline electrical consumption for Liberty High School is approximately, 5,000 kWh/month.

Table 3.2-13 illustrates the seasonal peak demand loads for the Liberty High School from May, 2010 through June, 2011. The information presented is only as current as the most recent bill received.

Figure 3.2-28: Liberty High School Electricity Usage



The most recent tariff rates available at the time of this audit for the electrical service at Liberty High School, from PSE&G are as follows:

		Acct #: 67-547-023-03 Acct #: 69-575-555-18
Service Charge:		$378.19/month
Delivery Service Charges:	Annual Demand:	$4.15445642/kW
	Summer Demand:	$7.706793478/kW
	Chargers: 960kWh	$0.015229167/kWh
	Next: 8240kWh	$0.014542486/kWh
	Next: 7200kWh	$0.017587500/kWh
Societal Benefits Charge:		$X0.007378049/kWh
Securitization Transition:		$0.012058293/kWh
Supply Service Charges:	Generation:	$4.864585623/kW
	Transmission:	$1.963022508/kW
	Charge: 13280kWh	$0.096683735/kWh
	Next: 3120kWh	$0.096644231/kWh

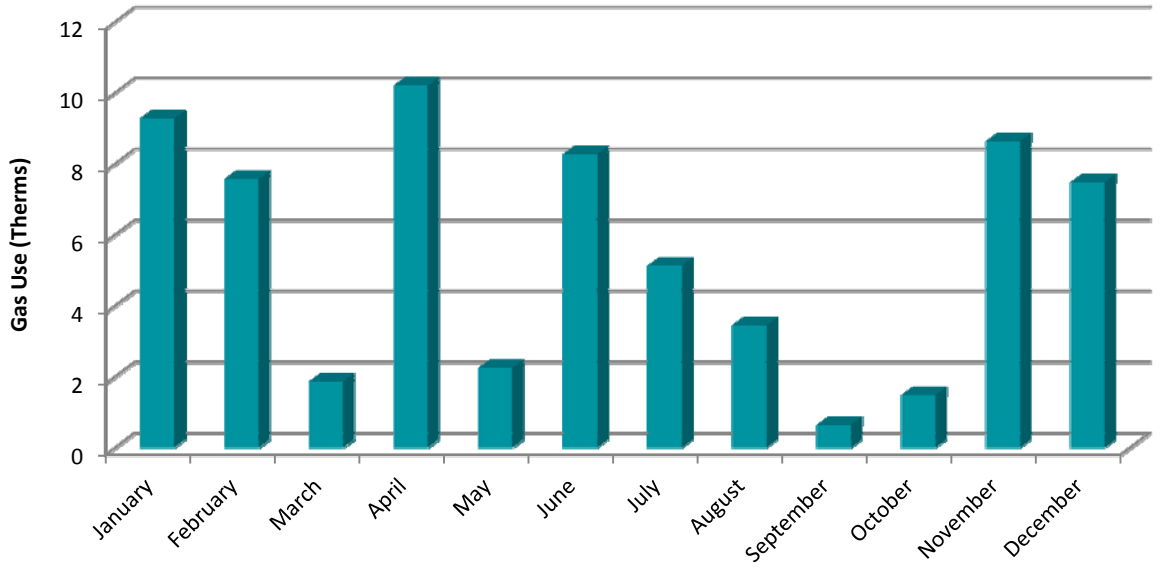
Table 3.2-13: Liberty High School Seasonal Peak Demands

Season	Peak Demand (kW)
Summer	37
Winter	44

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis.

Figure 3.2-29 illustrates the monthly average natural gas consumption at Liberty High School from June, 2010 through May, 2011.

Figure 3.2-29: Liberty High School Gas Usage



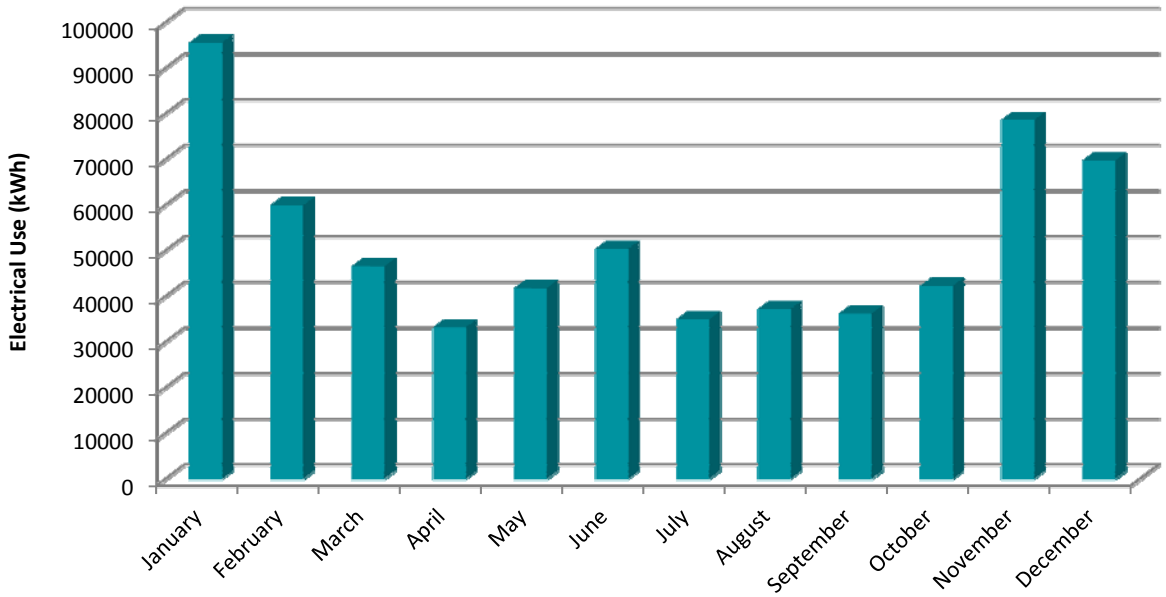
3.2.15 Regional Day School

Electric power for Regional Day School is fed from one General Service Secondary three phase line from PSE&G. Figure 3.2-30 illustrates the average monthly total energy consumption from June, 2010 through June, 2011.

From this graph, it can be determined that the baseline electrical consumption for Regional Day School is approximately, 52,227 kWh/month.

Table 3.2-14 illustrates the seasonal peak demand loads for the Regional Day School from June, 2010 through June, 2011. The information presented is only as current as the most recent bill received.

Figure 3.2-30: Regional Day School Electricity Usage



The most recent tariff rates available at the time of this audit for the electrical service at Regional Day School, from PSE&G are as follows:

		Acct #: 42-005-905-06
Service Charge:		$378.19/month
Delivery Service Charges:	Annual Demand	$3.423964968/kW
	Summer Demand	$8.145939490/kW
	On-Peak	$0.007164089/kW
	Off-Peak	$0.007164089/kW
Societal Benefits Charge:		$0.007134896kWh
Securitization Transition:		$0.012067969/kWh

Table 3.2-14: Regional Day School Seasonal Peak Demands

Season	Peak Demand (kW)
Summer	168
Winter	238

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis.

Regional Day School does not use natural gas.

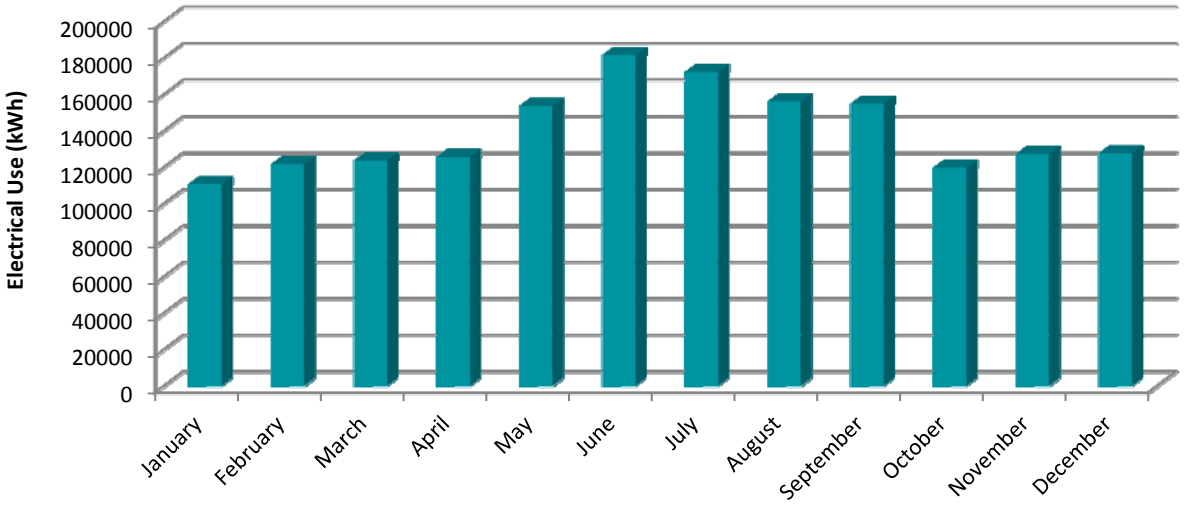
3.2.16 Middle School #4

Electric power for MS #4 is fed from one General Service Secondary three phase line from PSE&G. Figure 3.2-31 illustrates the average monthly total energy consumption from June, 2010 through June, 2011

From this graph, it can be determined that the baseline electrical consumption for MS #4 is approximately, 139,625 kWh/month.

Table 3.2-15 illustrates the seasonal peak demand loads for the MS #4 from June, 2010 through June, 2011. The information presented is only as current as the most recent bill received.

Figure 3.2-31: MS #4 Electricity Usage



The most recent tariff rates available at the time of this audit for the electrical service at MS #4, from PSE&G are as follows:

		Acct #: 42-004-211-00
Service Charge:		$378.19/month
Delivery Service Charges:	Annual Demand	$1.626308973/kW
	Summer Demand	$1.626308973/kW
	On-Peak: 57922kWh	$0.004155071/kW
	Next: 52830kWh	$0.007120854/kW
	Off-Peak: 5469kWh	$0.005101481/kW
	Next: 33511kWh	$0.004155054/kW
	Next: 31823kWh	$0.007120950/kW
Societal Benefits Charge:		$0.007244251/kWh
Securitization Transition:		$0.012068023/kWh
Supply Service Charges:	Generation:	$0.0683065/kW
	Transmission:	$0.4911610/kW
	Charge:	$0.68289780/kWh

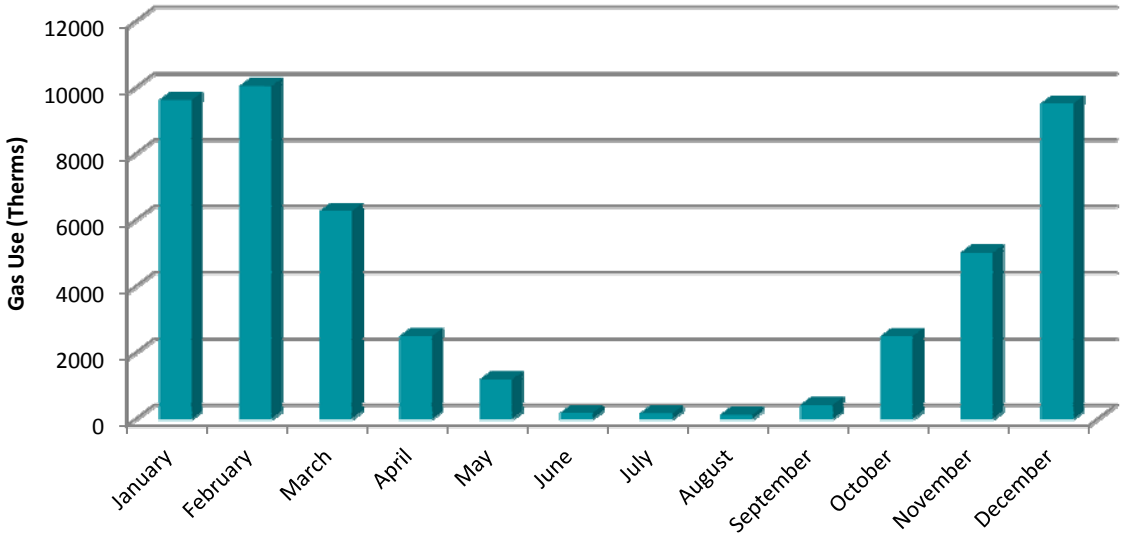
Table 3.2-15: MS #4 Seasonal Peak Demands

Season	Peak Demand (kW)
Summer	544
Winter	374

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis.

Figure 3.2-32 illustrates the monthly average natural gas consumption at MS #4 from June, 2010 through June, 2011.

Figure 3.2-32: MS #4 Gas Usage



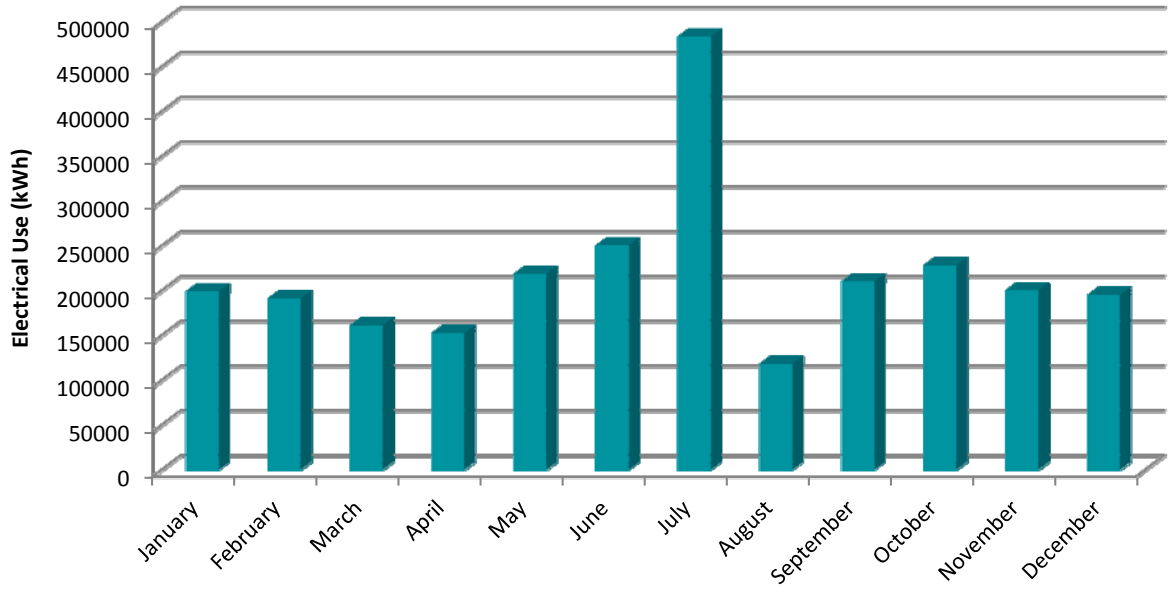
3.2.17 Middle School #7

Electric power for MS #7 is fed from one General Service Secondary three phase line from PSE&G. Figure 3.2-33 illustrates the average monthly total energy consumption from June, 2010 through June, 2011. Bills were not received for the following months: June 2010, March 2011, and April 2011. As a result, CDM averaged the usage to develop the following information.

From this graph, it can be determined that the baseline electrical consumption for MS #7 is approximately, 150,000 kWh/month.

Table 3.2-16 illustrates the seasonal peak demand loads for the MS #7 from June, 2010 through June, 2011. The information presented is only as current as the most recent bill received.

Figure 3.2-33: MS #7 Electricity Usage



The most recent tariff rates available at the time of this audit for the electrical service at MS #7, from PSE&G are as follows:

		Acct #: 42-006-390-09
Service Charge:		$377.71/month
Delivery Service Charges:	Annual Demand	$3.42000000/kW
	Summer Demand	$0.008220051/kW
	On-Peak: 57922kWh	$0.008220051/kW
	Off-Peak: 5469kWh	$0.008220000/kW
Societal Benefits Charge:		$0.008637979/kWh
Securitization Transition:		$0.009939987/kWh
Supply Service Charges:	Generation:	$4.845003528/kW
	Transmission:	$2.215111022/kW
	On-Peak: 51300kWh	$0.105260039/kWh
	Next: 27000kWh	$0.102934074/kWh
	Off-Peak: 52800kWh	$0.067777083/kWh
	Next: 28200kWh	$0.65451064/kWh

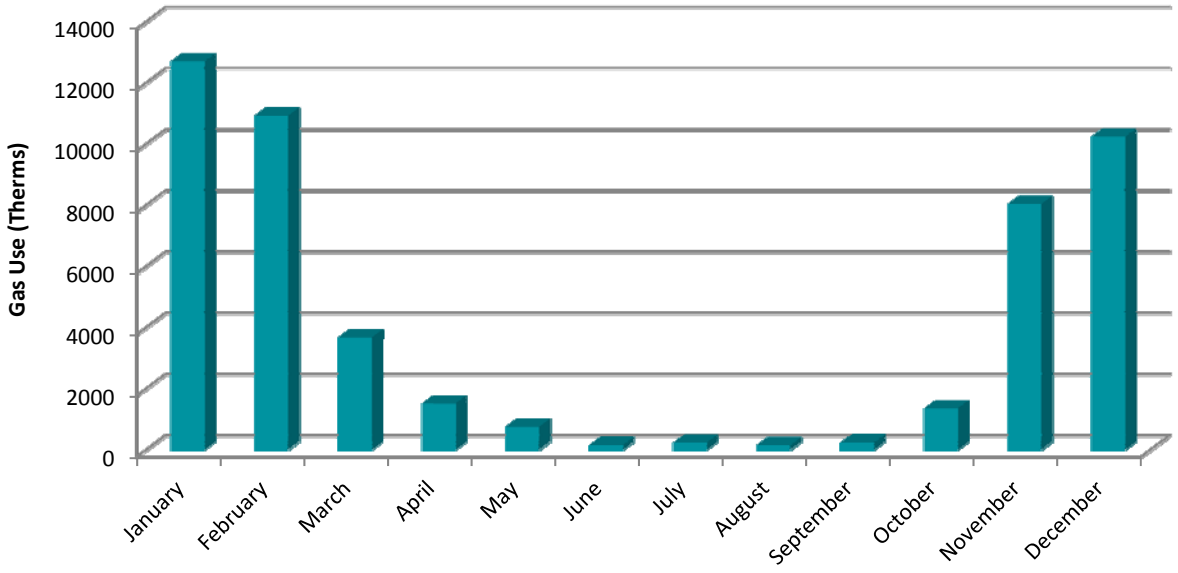
Table 3.2-16: MS #7 Seasonal Peak Demands

Season	Peak Demand (kW)
Summer	278
Winter	210

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis.

Figure 3.2-34 illustrates the monthly average natural gas consumption at MS #7 from June, 2010 through June, 2011.

Figure 3.2-34: MS #7 Gas Usage



3.2.18 Public School #1

Electric power and natural gas bills for Public School #1 were not received from the Board. As a result the gas and electric usage could not be compared to the models that were produced. CDM has requested this information from the Board, but it was not provided prior to development and delivery of this report. Annual energy usages have been used and compared to the models developed. These annual usages will be used as a baseline of comparison for the report.

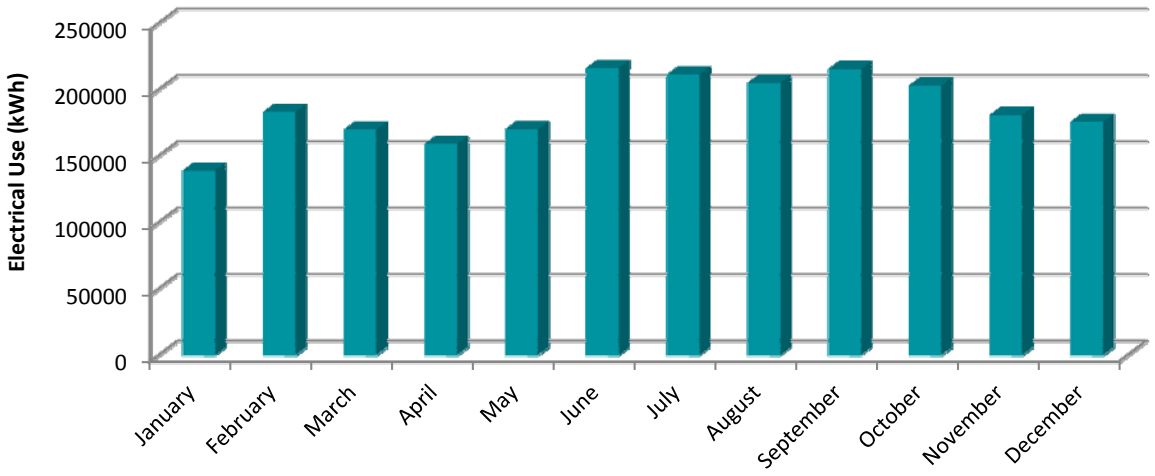
3.2.19 Public School #3

Electric power for PS #3 is fed from one General Service Secondary three phase line from PSE&G. Figure 3.2-35 illustrates the average monthly total energy consumption from June, 2010 through June, 2011.

From this graph, it can be determined that the baseline electrical consumption for PS #3 is approximately, 185,744 kWh/month.

Table 3.2-17 illustrates the seasonal peak demand loads for the PS #3 from June, 2010 through June, 2011. The information presented is only as current as the most recent bill received.

Figure 3.2-35: PS #3 Electricity Usage



The most recent tariff rates available at the time of this audit for the electrical service at PS #3, from PSE&G are as follows:

		Acct #: 42-004-212-08
Service Charge:		$378.19/month
Delivery Service Charges:	Annual Demand	$1.626299034/kW
	Summer Demand	$9.028425242/kW
	On-Peak: 67734kWh	$0.004154930/kW
	Next: 65405kWh	$0.007121015/kW
	Off-Peak: 10364kWh	$0.005101312/kW
	Next: 48120kWh	$0.0041550295/kW
	Next: 47274kWh	$0.007121039/kW
Societal Benefits Charge:		$0.007241949/kWh
Securitization Transition:		$0.012068004/kWh

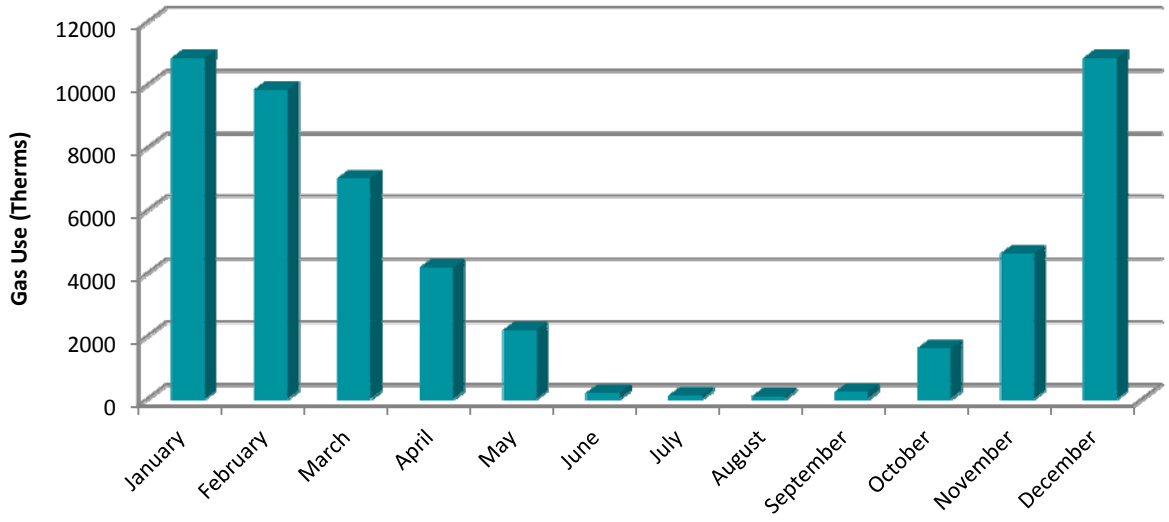
Table 3.2-17: PS #3 Seasonal Peak Demands

Season	Peak Demand (kW)
Summer	880
Winter	433

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis.

Figure 3.2-36 illustrates the monthly average natural gas consumption at PS #3 from June, 2010 through June, 2011.

Figure 3.2-36: PS #3 Gas Usage



The fuel oil is delivered by Finch, the local supplier. The annual fuel oil consumption is 11,977 gallons.

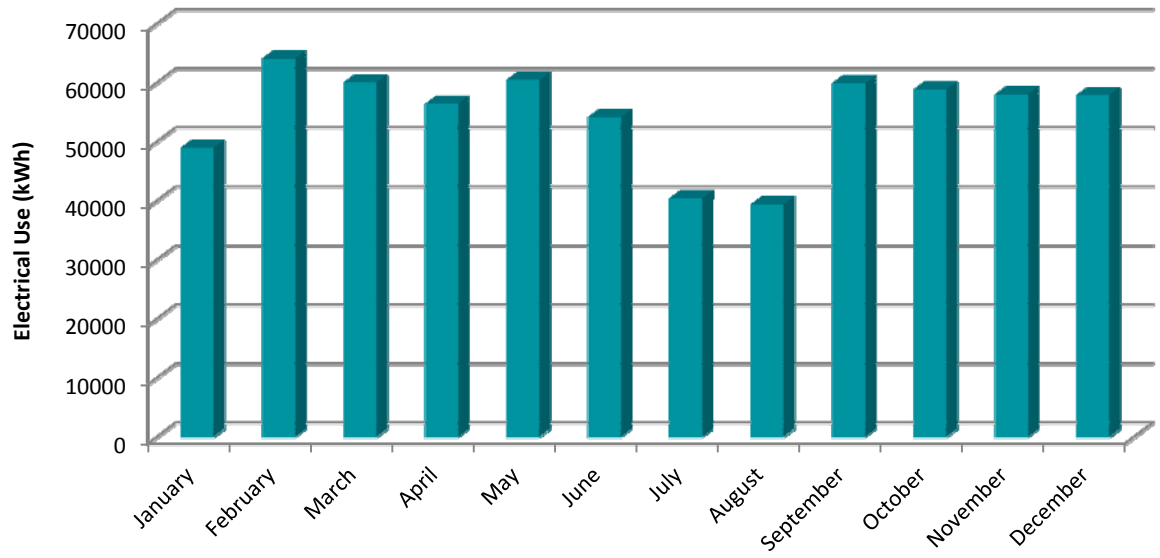
3.2.20 Public School #5

Electric power for PS #5 is fed from one General Service Secondary three phase line from PSE&G. Figure 3.2-37 illustrates the average monthly total energy consumption from June, 2010 through June, 2011.

From this graph, it can be determined that the baseline electrical consumption for PS #5 is approximately, 54,907 kWh/month.

Table 3.2-18 illustrates the seasonal peak demand loads for the PS #5 from June, 2010 through June, 2011. The information presented is only as current as the most recent bill received.

Figure 3.2-37: PS #5 Electricity Usage



The most recent tariff rates available at the time of this audit for the electrical service at PS #5, from PSE&G are as follows:

		Acct #: 42-000-988-06
Service Charge:		$378.19/month
Delivery Service Charges:	Annual Demand	$1.626269430/kW
	Summer Demand	$9.028393782/kW
	On-Peak: 19860kWh	$0.004155086/kWh
	Next: 11906kWh	$0.007120779/kWh
	Off-Peak: 2630kWh	$0.005102662/kWh
	Next: 12003kWh	$0.0.004154795/kWh
	Next: 10604kWh	$0.007120398/kWh
Societal Benefits Charge:		0.007274354/kWh
Securitization Transition:		$0.012067961/kWh

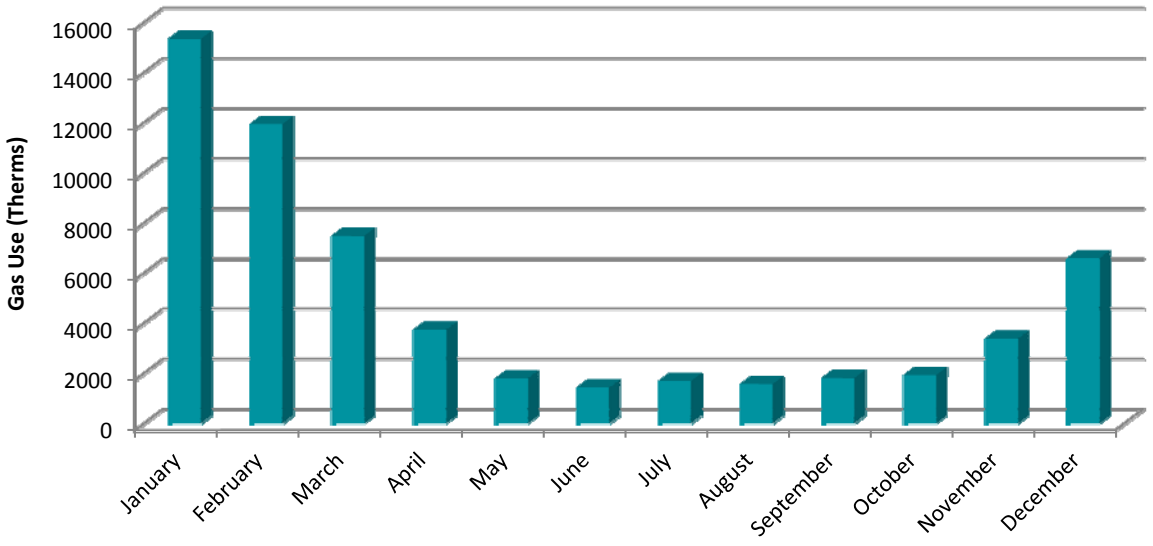
Table 3.2-18: PS #5 Seasonal Peak Demands

Season	Peak Demand (kW)
Summer	193
Winter	230

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis.

Figure 3.2-38 illustrates the monthly average natural gas consumption at PS #5 from June, 2010 through June, 2011.

Figure 3.2-38: PS #5 Gas Usage



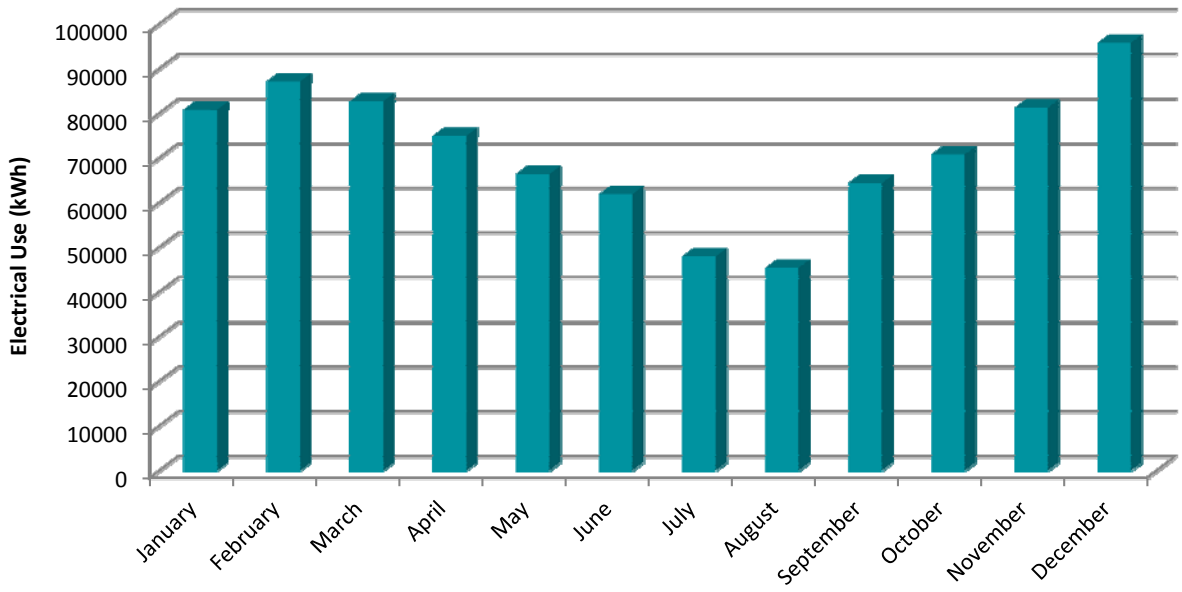
3.2.21 Public School #6

Electric power for Public School #6 is fed from one General Service Secondary three phase line from PSE&G. Figure 3.2-39 illustrates the average monthly total energy consumption from June, 2010 through May, 2011. Electrical usage has been averaged by month for the above referenced time period to portray a more encompassing monthly usage trend.

From this graph, it can be determined that the baseline electrical consumption for Public School #6 is approximately, 71,000kWh/month.

Table 3.2-19 illustrates the seasonal peak demand loads for the Public School from June, 2010 through May 2011. The information presented is only as current as the most recent bill received.

Figure 3.2-39: Public School #6 Electricity Usage



The most recent tariff rates available at the time of this audit for the electrical service at Public School #6, from PSE&G are as follows:

		Acct #: 42-008-955-01
Service Charge:		$377.71/month
Delivery Service Charges:	Annual Demand	$3.424009434/kW
	Summer Demand	$9.145896226/kW
	On-Peak: 14400kWh	$0.004120139/kWh
	Next: 19200kWh	$0.007164063/kWh
	Off-Peak: 11600kWh	$0.004119828/kWh
	Next: 16400kWh	$0.012068019/kWh
Societal Benefits Charge:		$0.007317858/kWh
Securitization Transition:		$0.012068019/kWh

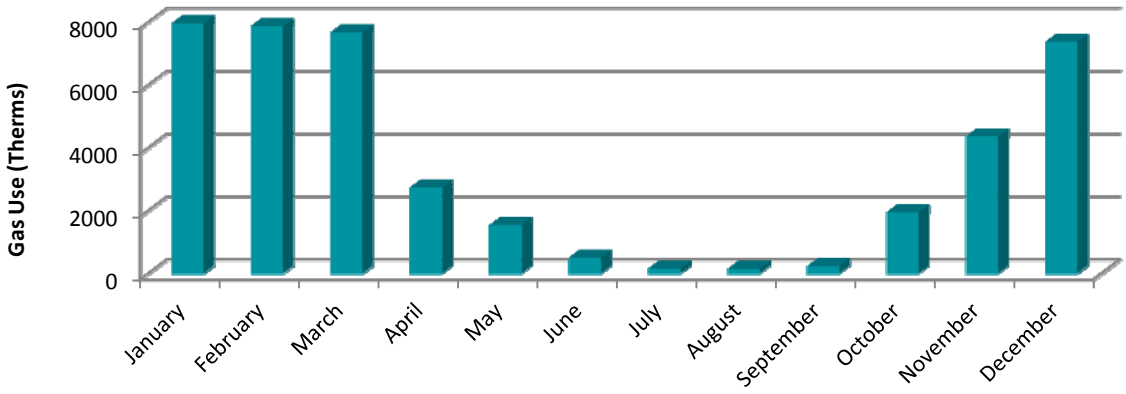
Table 3.2-19: Public School #6 Seasonal Peak Demands

Season	Peak Demand (kW)
Summer	251
Winter	293

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis.

Figure 3.2-40 illustrates the monthly average natural gas consumption at Public School #6 from June, 2010 through May, 2011.

Figure 3.2-40: Public School #6 Gas Usage



The oil is provided by Finch, a local supplier. The annual fuel oil consumption is 12,087 gallons.

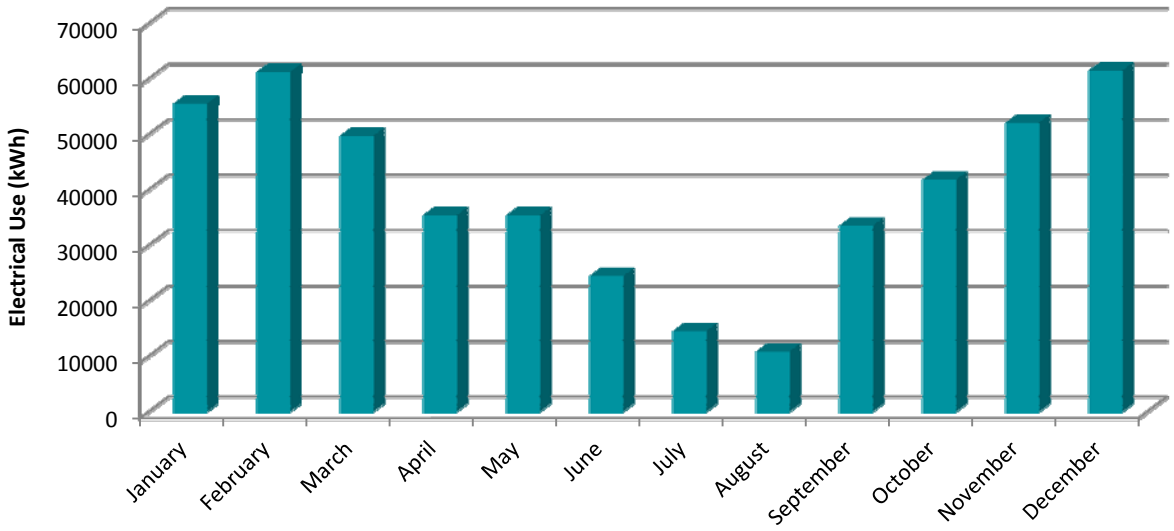
3.2.22 Public School #8

Electric power for Public School #8 is fed from one General Service Secondary three phase line from PSE&G. Figure 3.2-41 illustrates the average monthly total energy consumption from June, 2010 through May, 2011. Electrical usage has been averaged by month for the above referenced time period to portray a more encompassing monthly usage trend. The electrical information below does not include the production or usage of the solar array of the building.

From this graph, it can be determined that the baseline electrical consumption for Public School #8 is approximately, 40,000kWh/month.

Table 3.2-20 illustrates the seasonal peak demand loads for the Public School #8 from June, 2010 through May, 2011. The information presented is only as current as the most recent bill received.

Figure 3.2-41: Public School #8 Electricity Usage



The most recent tariff rates available at the time of this audit for the electrical service at Public School #8, from PSE&G are as follows:

		Acct #: 42-005-075-01
Service Charge:		$384.67/month
Delivery Service Charges:	Annual Demand:	$3.349291939/kW
	Summer Demand:	$7.968191721/kW
	On-Peak: 14057kWh	$0.005104930/kWh
	Next: 2444kWh	$0.004120296/kWh
	Off-Peak: 12949kWh	$0.005104641/kWh
	Next: 1803kWh	$0.0041200910/kWh

	Acct #: 42-005-075-01
Societal Benefits Charge:	$0.007567913/kWh
Securitization Transition:	$0.012067961/kWh

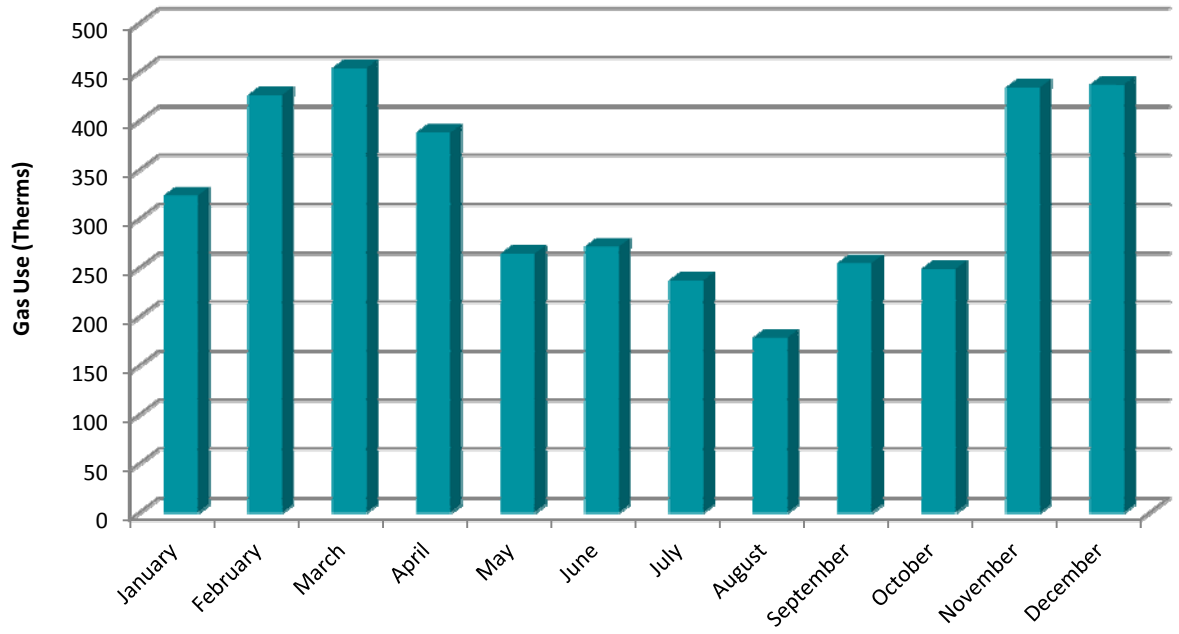
Table 3.2-20: Public School #8 Seasonal Peak Demands

Season	Peak Demand (kW)
Summer	209
Winter	273

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis.

Figure 3.2-42 illustrates the monthly average natural gas consumption at Public School #8 from June, 2010 through May, 2011.

Figure 3.2-42: Public School #8 Gas Usage



The oil is provided by Finch, a local supplier. The annual fuel oil consumption is 39,105 gallons.

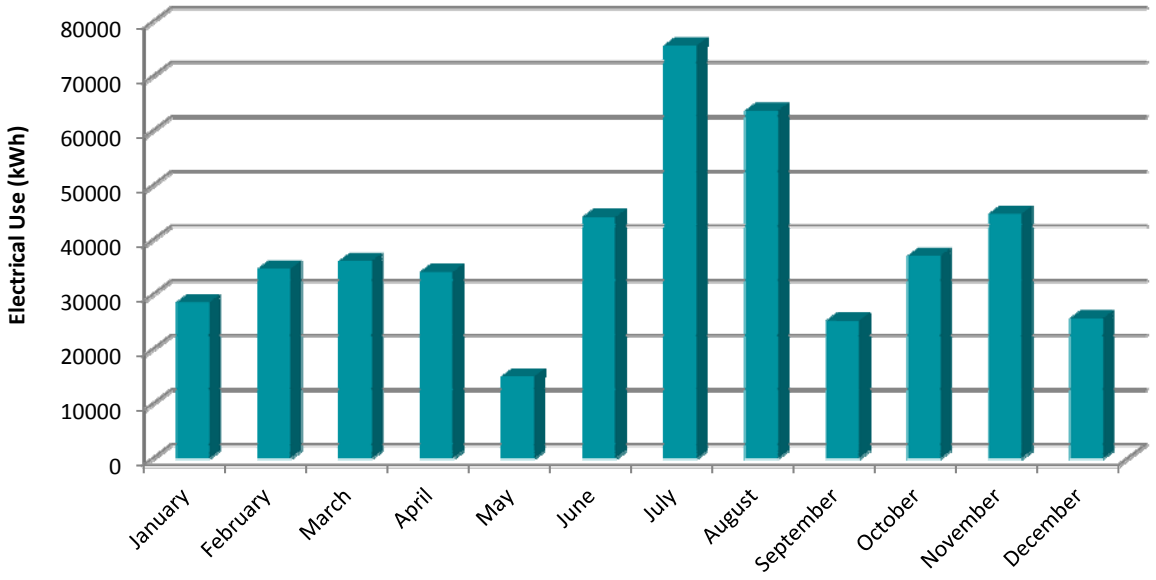
3.2.23 Public School #11

Electric power for Public School #11 is fed from one General Service Secondary three phase line from PSE&G. Figure 3.2-43 illustrates the average monthly total energy consumption from June, 2010 through May, 2011. Electrical usage has been averaged by month for the above referenced time period to portray a more encompassing monthly usage trend.

From this graph, it can be determined that the baseline electrical consumption for Public School #11 is approximately, 39,000kWh/month.

Table 3.2-21 illustrates the seasonal peak demand loads for the Public School #11 from June, 2010 through Mat, 2011. The information presented is only as current as the most recent bill received.

Figure 3.2-43: Public School #11 Electricity Usage



The most recent tariff rates available at the time of this audit for the electrical service at Public School #11, from PSE&G are as follows:

		Acct #: 42-012-059-08
Service Charge:		$906.50/month
Delivery Service Charges:	Annual Demand:	$8.217589928/kW
	Summer Demand:	$19.550143885/kW
	On-Peak: 9600kWh	$0.004119792/kWh
	Next: 91000kWh	$0.007163956/kWh
	Off-Peak: 8600kWh	$0.004119767/kWh
	Next:80600kWh	$0.007164020/kWh
Societal Benefits Charge:		$0.007260801/kWh
Securitization Transition:		$0.012068019/kWh

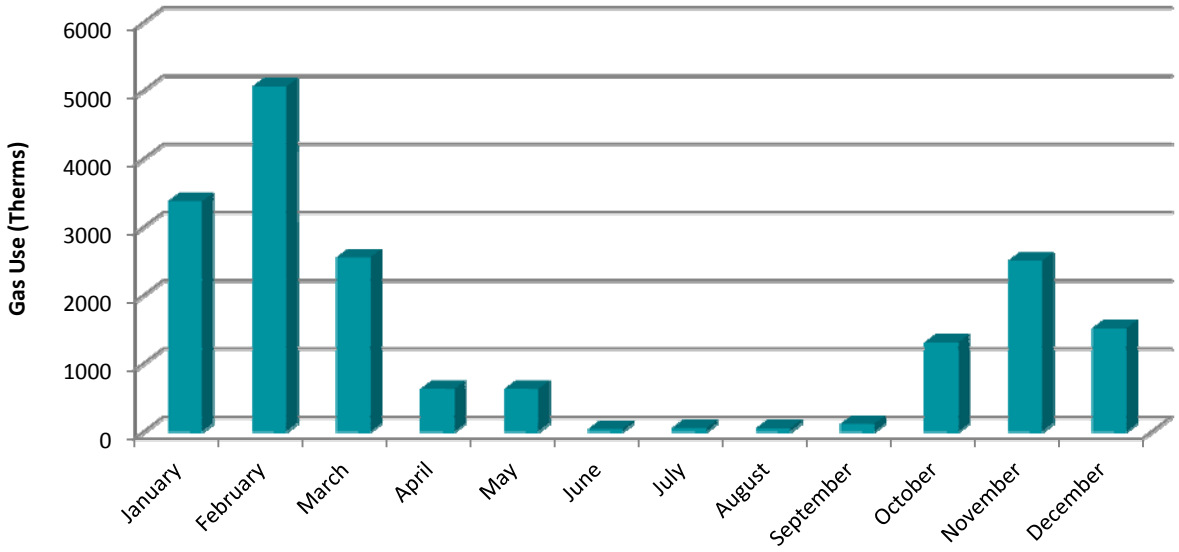
Table 3.2-21: Public School #11 Seasonal Peak Demands

Season	Peak Demand (kW)
Summer	139
Winter	212

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis.

Figure 3.2-44 illustrates the monthly average natural gas consumption at Public School #11 from June, 2010 through May, 2011.

Figure 3.2-44: Public School #11 Gas Usage



The oil is provided by Finch, a local supplier. The annual fuel oil consumption is 22,827 gallons.

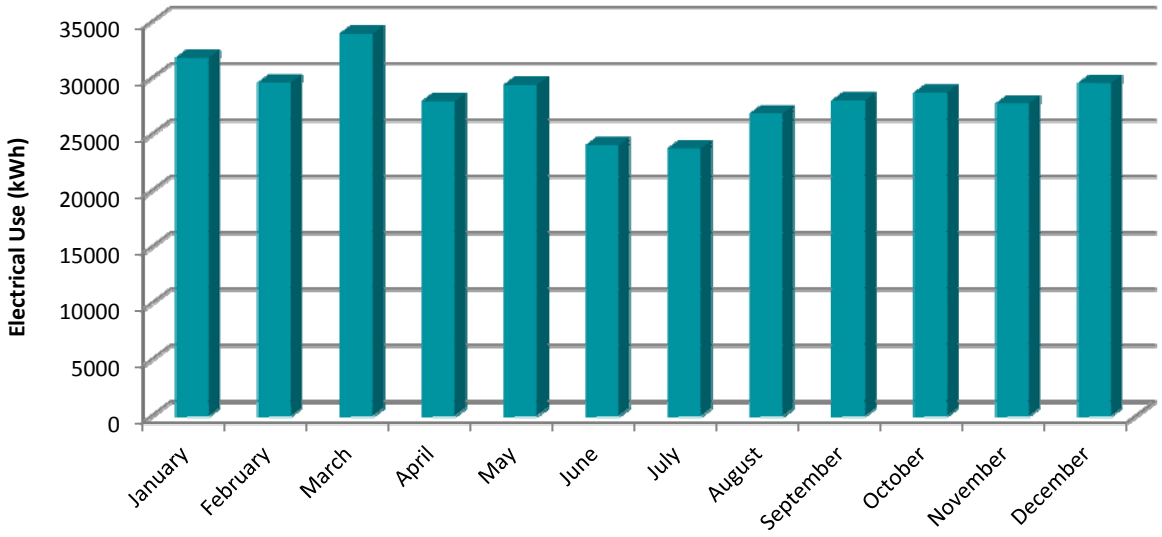
3.2.24 Public School #12

Electric power for PS #12 is fed from one General Service Secondary three phase line from PSE&G. Figure 3.2-45 illustrates the average monthly total energy consumption from June, 2010 through June, 2011. August 2010, March 2011, and May 2011 bills were not received from the board. This information has been requested from the Board. As a result the adjacent months have been used to average the energy usage for the months not know and have been used in this report.

From this graph, it can be determined that the baseline electrical consumption for PS #12 is approximately, 28,459 kWh/month.

Table 3.2-22 illustrates the seasonal peak demand loads for the PS #12 from June, 2010 through June, 2011. The information presented is only as current as the most recent bill received.

Figure 3.2-45: PS #12 Electricity Usage



The most recent tariff rates available at the time of this audit for the electrical service at PS #12, from PSE&G are as follows:

		Acct #: 65-354-853-07 Acct #: 69-573-747-18
Service Charge:		$4.30/month
Delivery Service Charges:	Annual Demand:	$4.152486772/kW
	Summer Demand:	$7.706772487/kW
	kWh Charge: 1800kWh	$0.0015227778/kWh
	Next: 14700kWh	$0.0014542857/kWh
	Next: 12900kWh	$0.017586822/kWh
Societal Benefits Charge:		$0.007377891/kWh
Securitization Transition:		$0.012068027/kWh

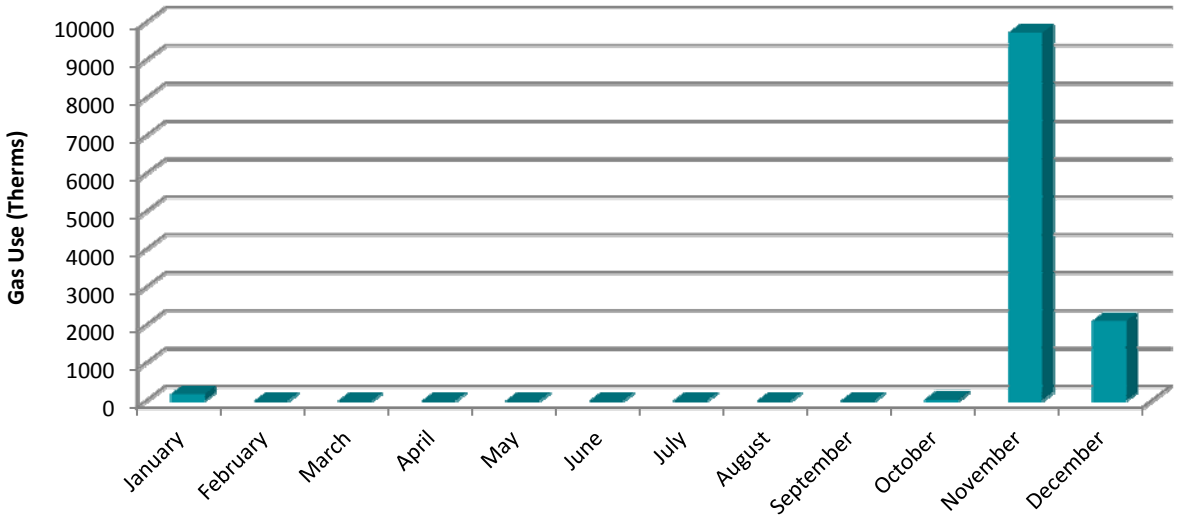
Table 3.2-22: Seasonal Peak Demands

Season	Peak Demand (kW)
Summer	95
Winter	199

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis.

Figure 3.2-46 illustrates the monthly average natural gas consumption at PS #12 from June, 2010 through June, 2011.

Figure 3.2-46: PS #12Gas Usage



CDM has requested the fuel oil usage but it was not received.

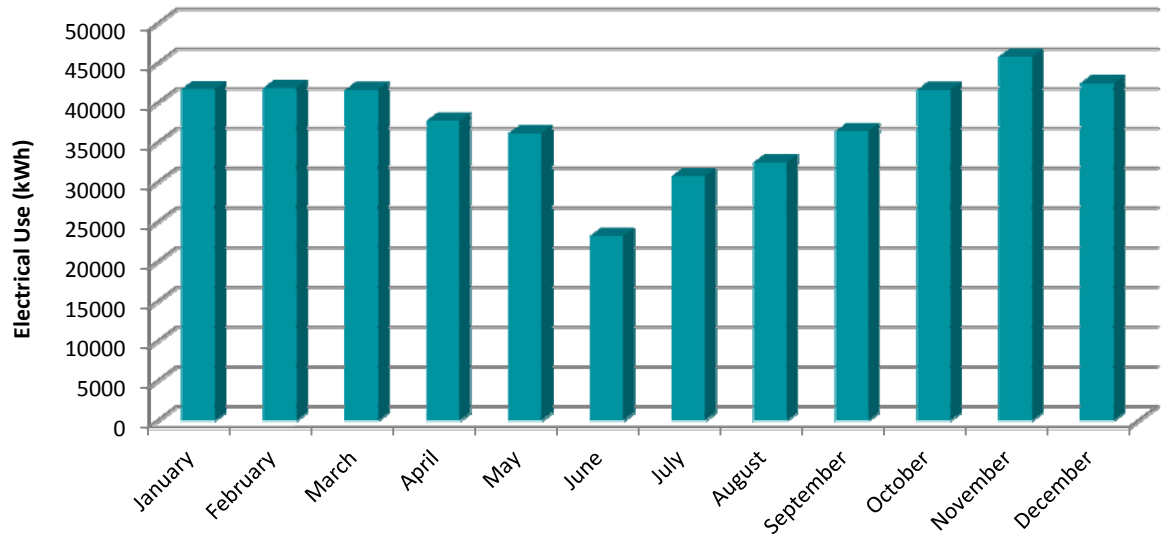
3.2.25 Public School #14

Electric power for PS #14 is fed from one General Service Secondary three phase line from PSE&G. Figure 3.2-47 illustrates the average monthly total energy consumption from June, 2010 through June, 2011.

From this graph, it can be determined that the baseline electrical consumption for PS #14 is approximately, 37,664 kWh/month.

Table 3.2-23 illustrates the seasonal peak demand loads for the PS #14 from June, 2010 through June, 2011. The information presented is only as current as the most recent bill received.

Figure 3.2-47: PS #14 Electricity Usage



The most recent tariff rates available at the time of this audit for the electrical service at PS #14, from PSE&G are as follows:

		Acct #: 42-011-523-08
Service Charge:		$377.71/month
Delivery Service Charges:	Annual Demand:	$5.424008811/kW
	Summer Demand:	$8.145925110/kW
	On-Peak: 18441kWh	$0.0071643682/kWh
	Off-Peak: 14427kWh	$0.007163969/kWh
Societal Benefits Charge:		$0.007134889/kWh
Securitization Transition:		$0.012068099/kWh

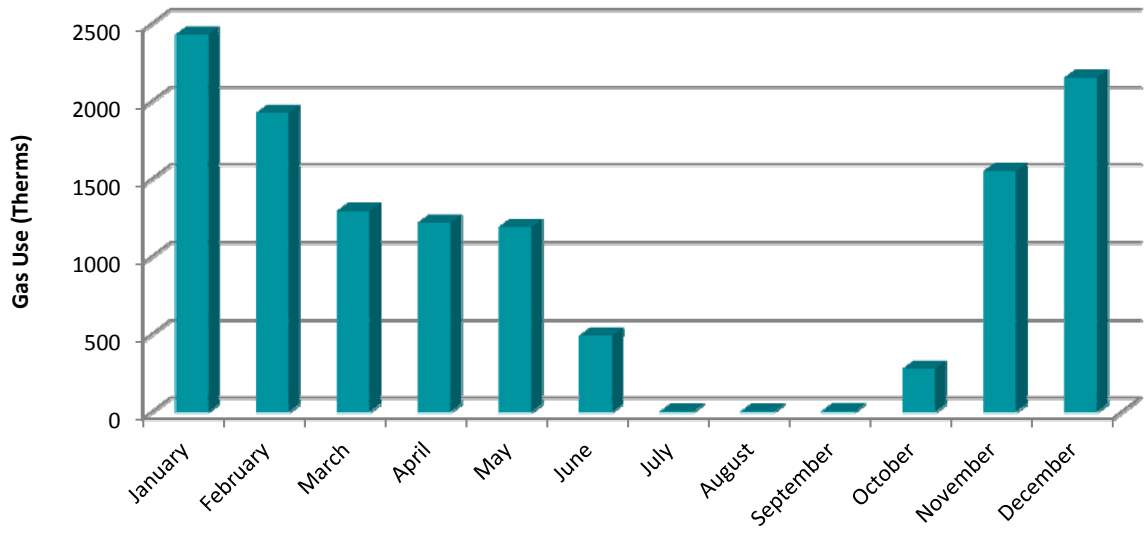
Table 3.2-23: PS #14 Seasonal Peak Demands

Season	Peak Demand (kW)
Summer	127
Winter	139

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis.

Figure 3.2-48 illustrates the monthly average natural gas consumption at PS #14 from June, 2010 through June, 2011.

Figure 3.2-48: PS #14 Gas Usage



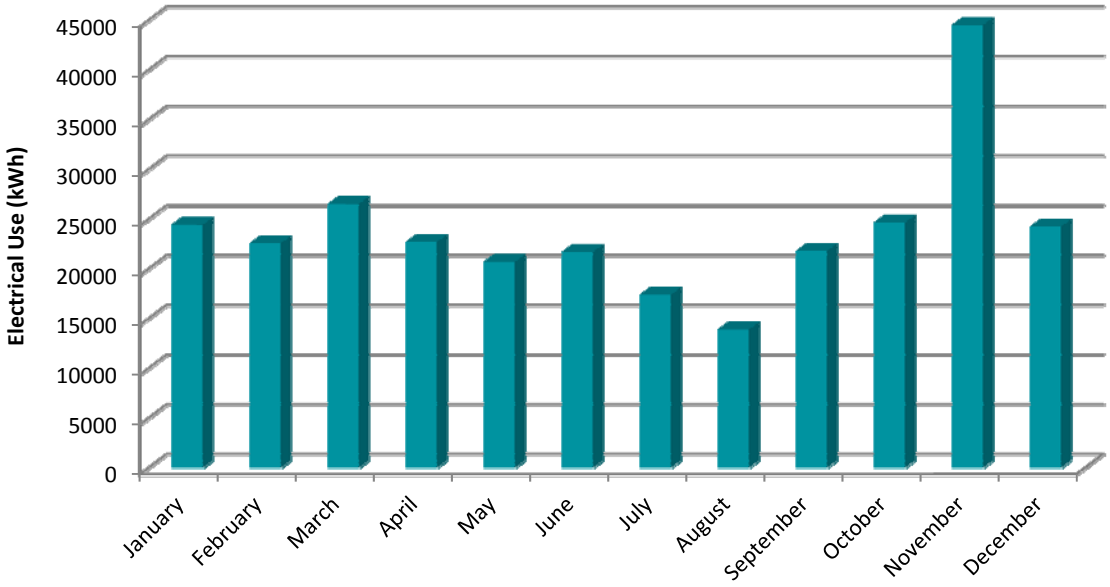
3.2.26 Public School #16

Electric power for PS #16 is fed from one General Service Secondary three phase line from PSE&G. Figure 3.2-49 illustrates the average monthly total energy consumption from June, 2010 through June, 2011.

From this graph, it can be determined that the baseline electrical consumption for PS #16 is approximately, 23,771 kWh/month.

Table 3.2-24 illustrates the seasonal peak demand loads for the PS #16 from June, 2010 through June, 2011. The information presented is only as current as the most recent bill received.

Figure 3.2-49: PS #16 Electricity Usage



The most recent tariff rates available at the time of this audit for the electrical service at PS #16, from PSE&G are as follows:

		Acct #: 65-354-903-00
Service Charge:		$4.30/month
Delivery Service Charges:	Annual Demand:	$4.152547307/kW
	Summer Demand:	$7.706695779/kW
	kWh Charge: 1440	$0.015229167/kWh
	Next: 11760kWh	$0.014543367/kWh
	Next: 10290kWh	$0.017586978/kWh
Societal Benefits Charge:		$0.007378459/kWh
Securitization Transition:		$0.012068114/kWh

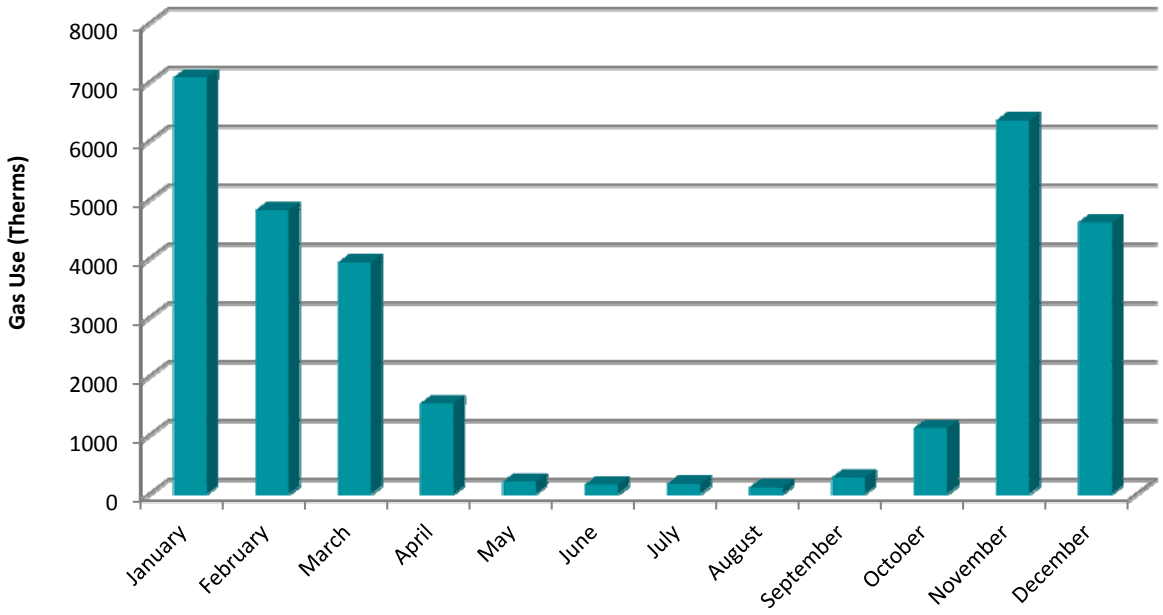
Table 3.2-24: PS #16 Seasonal Peak Demands

Season	Peak Demand (kW)
Summer	69
Winter	174

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis.

Figure 3.2-50 illustrates the monthly average natural gas consumption at PS #16 from June, 2010 through June, 2011.

Figure 3.2-50: PS #16 Gas Usage



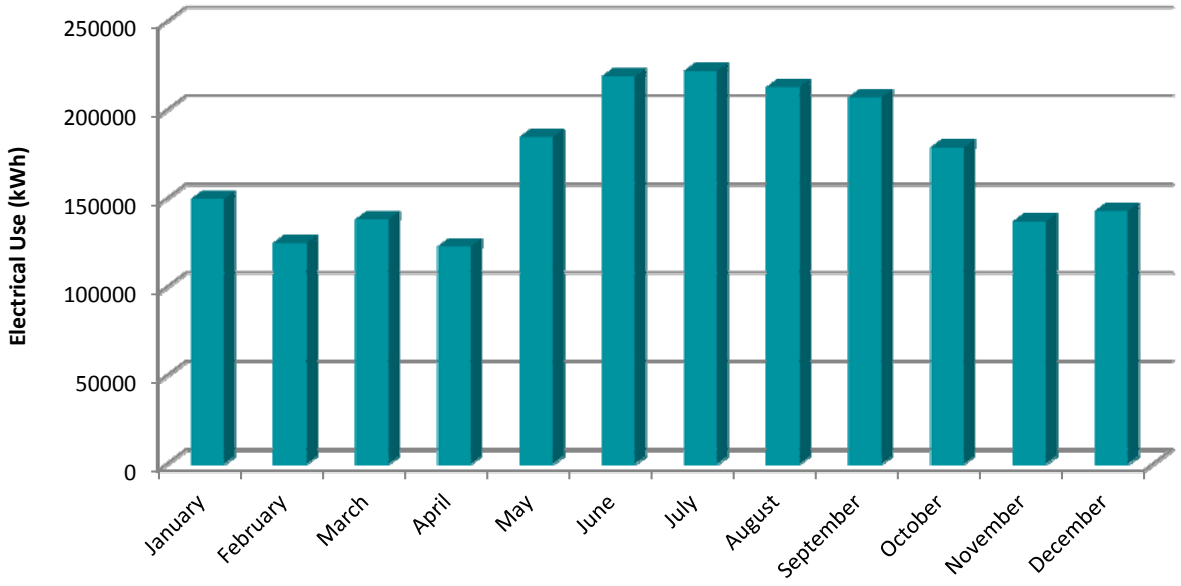
3.2.27 Public School #17

Electric power for Public School #17 is fed from one General Service Secondary three phase line from PSE&G. Figure 3.2-51 illustrates the average monthly total energy consumption from May, 2010 through April, 2011. Electrical usage has been averaged by month for the above referenced time period to portray a more encompassing monthly usage trend. Utility bills for May, 2010, February, 2011 and March, 2011 have not been received. CDM has requested this information but was unable to include it in this report. These values have been estimated based off of utility usages of adjacent months.

From this graph, it can be determined that the baseline electrical consumption for Public School #17 is approximately, 170,067kWh/month.

Table 3.2-25 illustrates the seasonal peak demand loads for the Public School #17 from May, 2010 through April, 2011. The information presented is only as current as the most recent bill received.

Figure 3.2-51: Public School #17 Electricity Usage



The most recent tariff rates available at the time of this audit for the electrical service at PS #17, from PSE&G are as follows:

		Acct #: 42-004-514-09
Service Charge:		$378.19/month
Delivery Service Charges:	Annual Demand:	$3.418812950/kW
	Summer Demand	$8.133561151/kW
	Ok-Peak: 7200kWh	$0.005105556/kW
	Next:59600kWh	$0.004119966/kW
	Next: 52400kWh	$0.007163931/kW
	Off-Peak: 7600kWh	$0.005105263/kW
	Next: 62000kWh	$0.004120000/kW
	Next: 54800kWh	$0.007164051/kW
Societal Benefits Charge:		$0.007277462/kWh
Securitization Transition:		$0.012068021/kWh

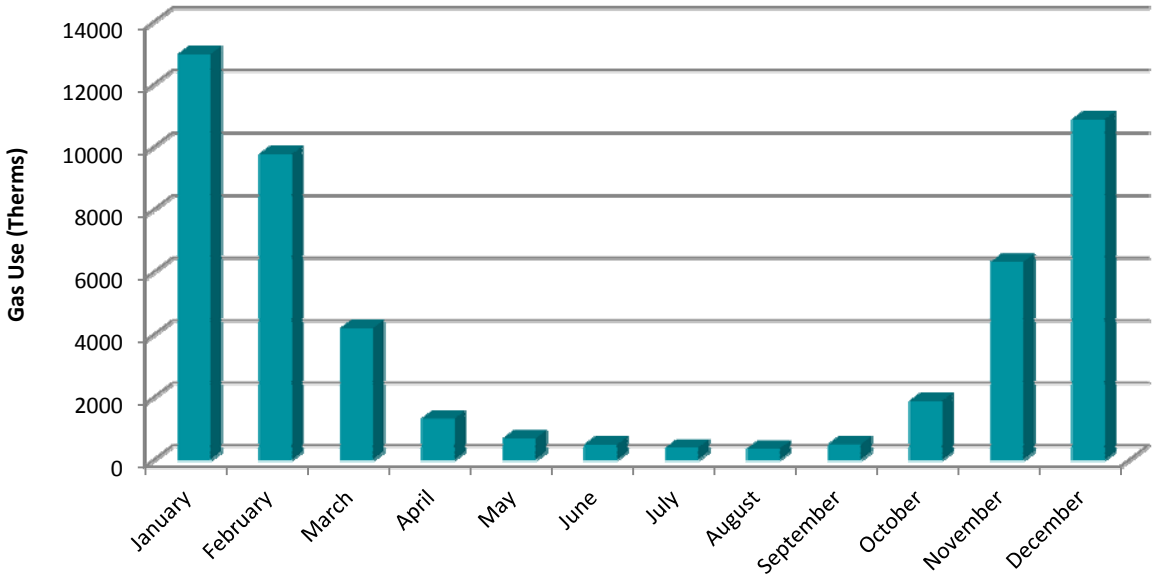
Table 3.2-25: Public School #17 Seasonal Peak Demands

Season	Peak Demand (kW)
Summer	174
Winter	266

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis. Utility bills for May, 2010, February, 2011 and March, 2011 have not been received. CDM has requested this information but it was not received prior to development and delivery of this report. These values have been estimated based off of utility usages of adjacent months.

Figure 3.2-52 illustrates the monthly average natural gas consumption at Public School #17 from May, 2010 through April, 2011.

Figure 3.2-52: Public School #17 Gas Usage



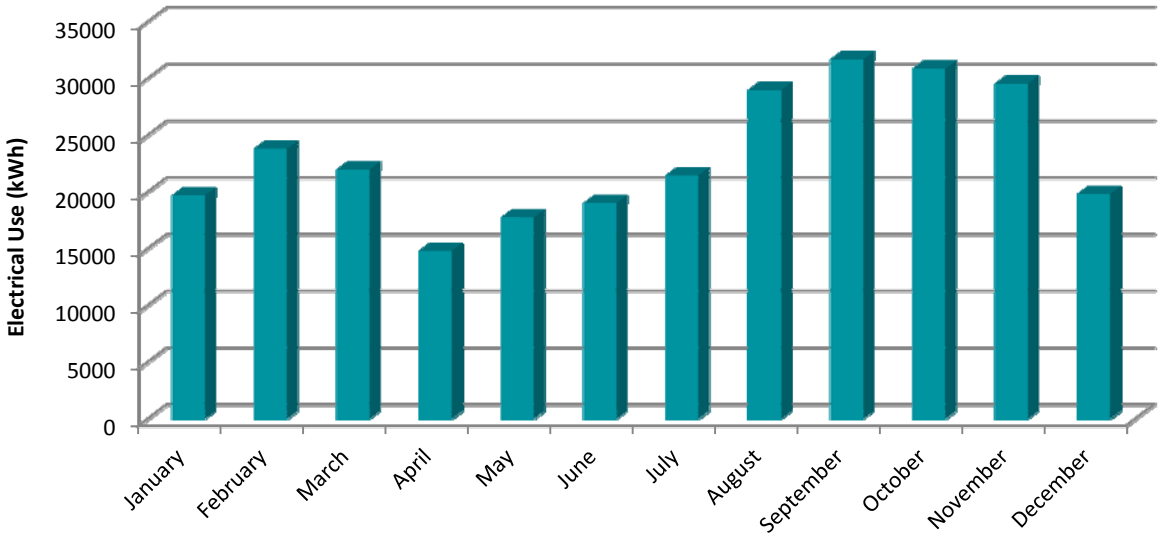
3.2.28 Public School #20

Electric power for Public School #20 is fed from one General Service Secondary three phase line from PSE&G. Figure 3.2-53 illustrates the average monthly total energy consumption from June, 2010 through May, 2011. Electrical usage has been averaged by month for the above referenced time period to portray a more encompassing monthly usage trend. Utility bills for March, 2010, February 2011, March, 2011, April, 2011, and May, 2011 have not been received. CDM has requested this information but it was not received prior to development and delivery of this report. These values have been estimated based off of utility usages of adjacent months. Two accounts have been combined to show the total electrical usage below.

From this graph, it can be determined that the baseline electrical consumption for Public School #20 is approximately, 8,249kWh/month.

Table 3.2-26 illustrates the seasonal peak demand loads for the Public School #20 from June, 2010 through May, 2011. The information presented is only as current as the most recent bill received.

Figure 3.2-53: Public School #20 Electricity Usage



The most recent tariff rates available at the time of this audit for the electrical service a Public School #20, from PSE&G are as follows:

		Acct #: 66-149-355-18 Acct #: 69-566-059-02
Service Charge:		$4.30/month
Delivery Service Charges:	Annual Demand:	$4.160344828/kWh
	kWh Charge:	$0.012309211/kW
Societal Benefits Charge:		$0.008638158/kWh
Securitization Transition:		$0.009940789/kWh

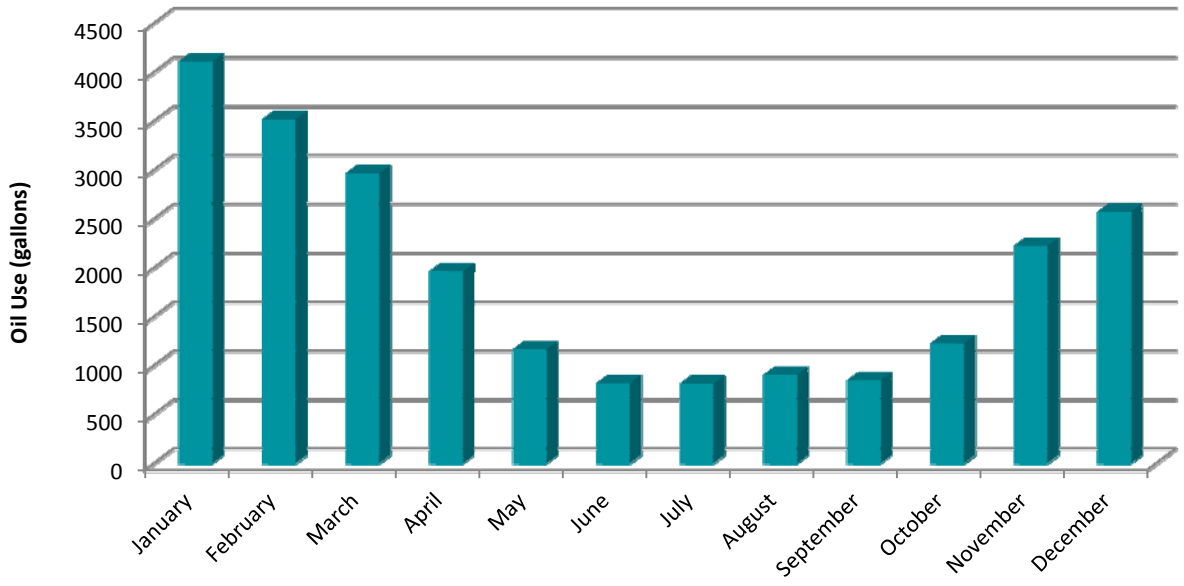
Table 3.2-26: Public School #20 Seasonal Peak Demands

Season	Peak Demand (kW)
Summer	26
Winter	54

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis. Monthly fuel oil usage has been estimated based on the annual oil consumption provided by the Board in the facility data forms. CDM has requested the fuel oil usage bills but they have not been received. Annual oil usages were given and were used, along with information gathered while on site to aid in the prediction of oil usage shown below. The usage in the graph below is what eQuest predicts the usage to be.

Figure 3.2-54 illustrates the monthly average fuel oil consumption at Public School #20.

Figure 3.2-54: Public School #20 Oil Usage



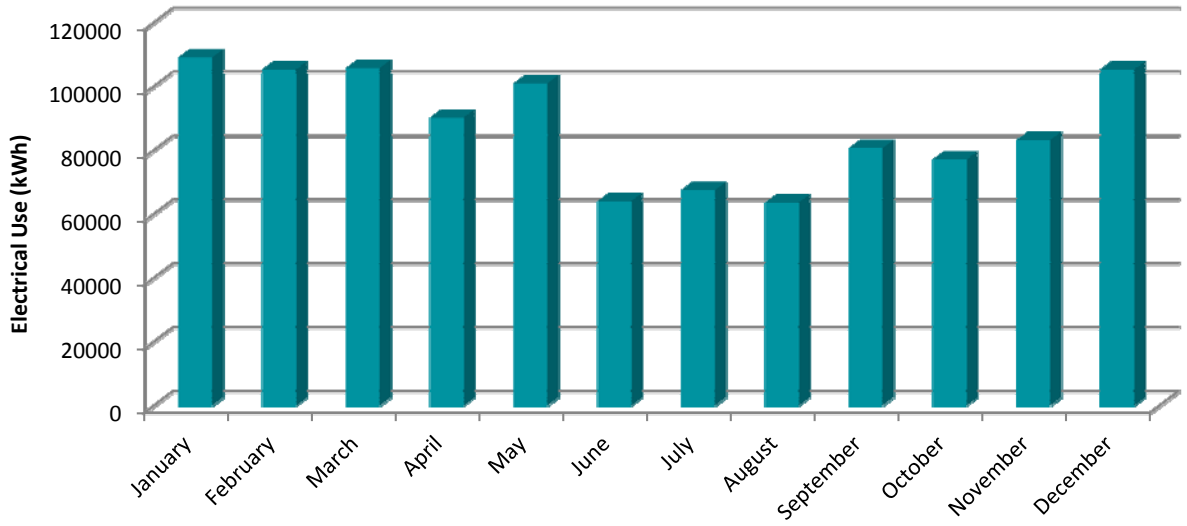
3.2.29 Public School #23

Electric power for Public School #23 is fed from one General Service Secondary three phase line from PSE&G. Figure 3.2-55 illustrates the average monthly total energy consumption from June, 2010 through June, 2011. Electrical usage has been averaged by month for the above referenced time period to portray a more encompassing monthly usage trend.

From this graph, it can be determined that the baseline electrical consumption for Public School #23 is approximately, 87,799kWh/month.

Table 3.2-27 illustrates the seasonal peak demand loads for the Public School #23 from June, 2010 through June 2010. The information presented is only as current as the most recent bill received.

Figure 3.2-55: Public School #23 Electricity Usage



The most recent tariff rates available at the time of this audit for the electrical service at Public School #23, from PSE&G are as follows:

		Acct #: 42-008-126-06
Service Charge:		$377.71/month
Delivery Service Charges:	Annual Demand:	$3.423980583/kW
	Summer Demand:	$8.45922330/kW
	On-Peak	$0.0041197337/kWh
	Next: 25600kWh	$0.007164063/kWh
	Off-Peak: 14000	$0.004120000/kWh
	Next: 24000kWh	$0.0071641678/kWh
Societal Benefits Charge:		$0.007295558/kWh
Securitization Transition:		$0.012068020/kWh

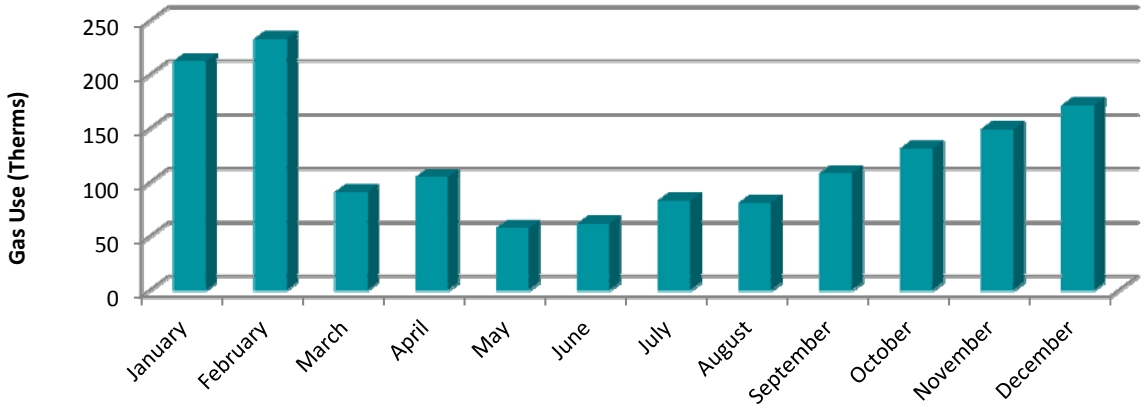
Table 3.2-27: Public School #23 Seasonal Peak Demands

Season	Peak Demand (kW)
Summer	206
Winter	264

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis.

Figure 3.2-56 illustrates the monthly average natural gas consumption at Public School #23 from June, 2010 through June 2011.

Figure 3.2-56: Public School #23 Gas Usage



The oil is provided by Finch, a local supplier. The annual fuel oil consumption is 31,711 gallons.

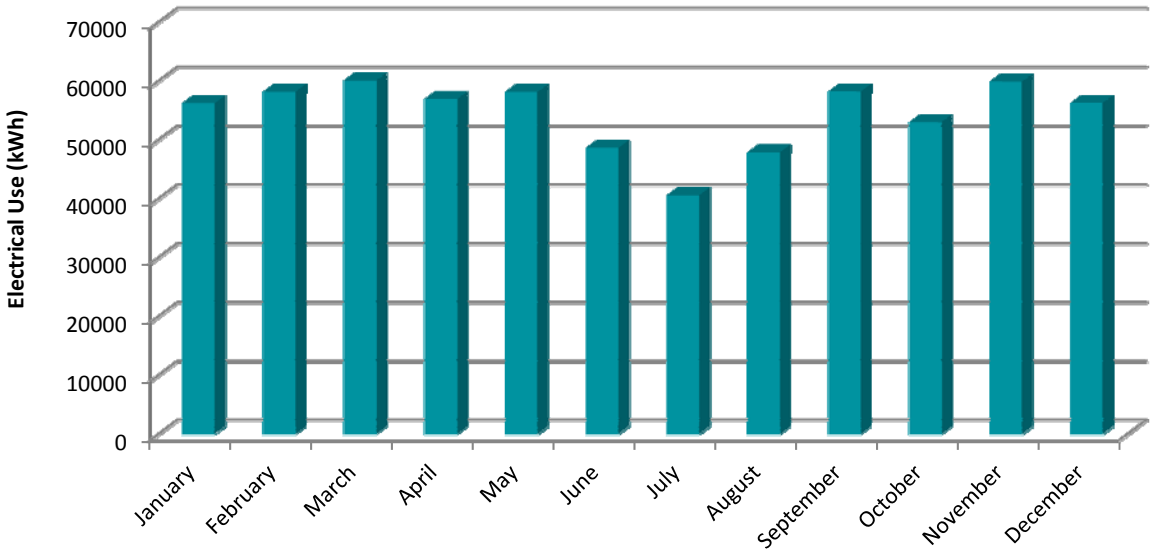
3.2.30 Public School #24

Electric power for Public School #24 is fed from one General Service Secondary three phase line from PSE&G. Figure 3.2-57 illustrates the average monthly total energy consumption from June, 2010 through June, 2011. Electrical usage has been averaged by month for the above referenced time period to portray a more encompassing monthly usage trend. Utility bills for April, 2011 and May, 2011 have not been received. CDM has requested this information but it was not received prior to development and delivery of this report. These values have been estimated based off of utility usages of adjacent months.

From this graph, it can be determined that the baseline electrical consumption for Public School #24 is approximately, 54,516kWh/month.

Table 3.2-28 illustrates the seasonal peak demand loads for the Public School #24 from June, 2010 through June, 2011. The information presented is only as current as the most recent bill received.

Figure 3.2-57: Public School #24 Electricity Usage



The most recent tariff rates available at the time of this audit for the electrical service at Public School #24, from PSE&G are as follows:

		Acct #: 42-002-370-08
Service Charge:		$377.71/month
Delivery Service Charges:	Annual Demand:	$3.423965763/kW
	Summer Demand:	$8.145934379/kW
	On-Peak: 24847kWh	$0.007163843/kWh
	Off-Peak: 26618kWh	$0.007163949/kWh

	Acct #: 42-002-370-08
Societal Benefits Charge:	$0.007134946/kWh
Securitization Transition:	$0.012068007/kWh

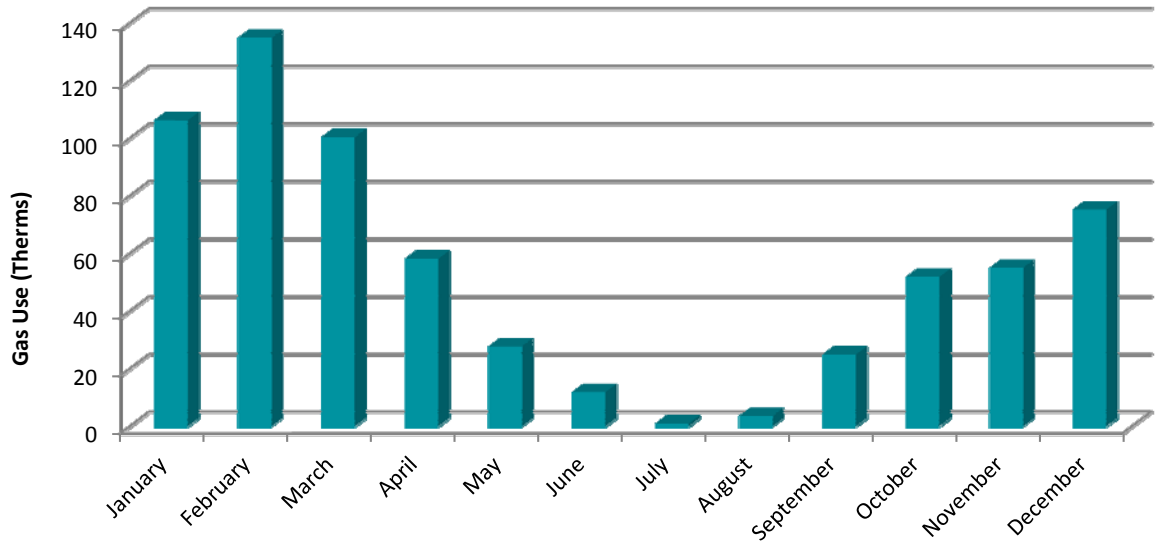
Table 3.2-28: Public School #24 Seasonal Peak Demands

Season	Peak Demand (kW)
Summer	186
Winter	183

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis.

Figure 3.2-58 illustrates the monthly average natural gas consumption at Public School #24 from June, 2010 through June, 2011.

Figure 3.2-58: Public School #24 Gas Usage



The oil is provided by Finch, a local supplier. The annual fuel oil consumption is 29,112 gallons.

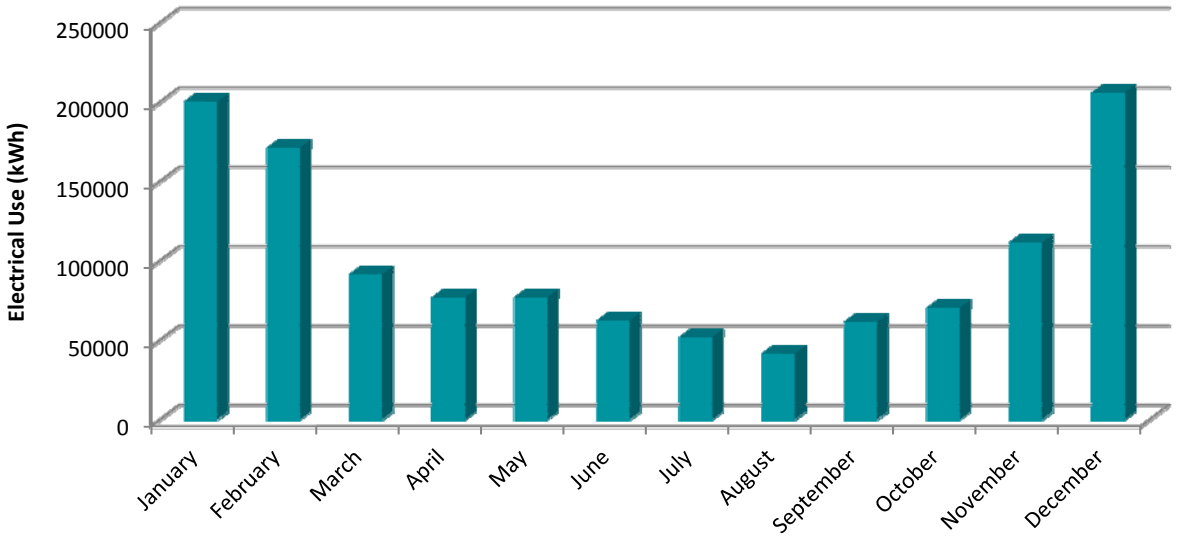
3.2.31 Public School #25

Electric power for Public School #25 is fed from one General Service Secondary three phase line from PSE&G. Figure 3.2-59 illustrates the average monthly total energy consumption from May, 2010 through May, 2011. Electrical usage has been averaged by month for the above referenced time period to portray a more encompassing monthly usage trend.

From this graph, it can be determined that the baseline electrical consumption for Public School #25 is approximately, 101,900kWh/month.

Table 3.2-29 illustrates the seasonal peak demand loads for the Public School #25 from May, 2010 through May, 2011. The information presented is only as current as the most recent bill received.

Figure 3.2-59: Public School #25 Electricity Usage



The most recent tariff rates available at the time of this audit for the electrical service at Public School #25, from PSE&G are as follows:

		Acct #: 42-008-465-00
Service Charge:		$378.51/month
Delivery Service Charges:	Annual Demand:	$3.415416667/kW
	Summer Demand:	$8.125468750/kW
	On-Peak: 3200kWh	$0.005106250/kWh
	Next: 18000kWh	$0.004120000/kWh
	Next: 11200kWh	$0.007164286/kWh
	Off-Peak: 2800kWh	$0.005102571/kWh
	Next: 16400kWh	$0.004120122/kWh
	Next: 10800kWh	$0.007163889/kWh
Societal Benefits Charge:		$0.007415285/kWh
Securitization Transition:		$0.012068109/kWh

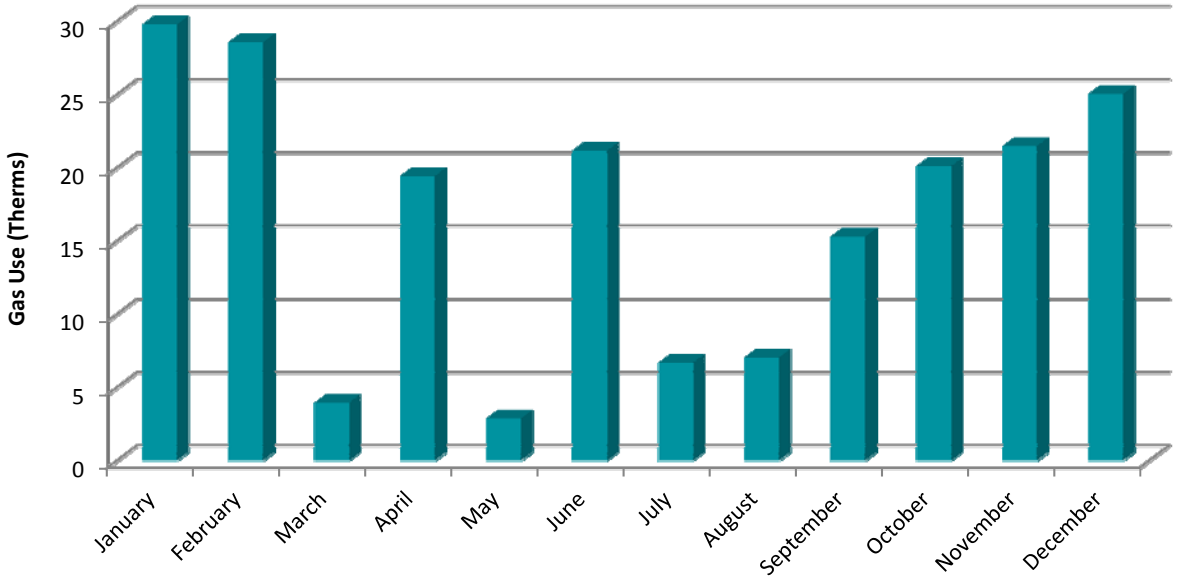
Table 3.2-29: Public School #25 Seasonal Peak Demands

Season	Peak Demand (kW)
Summer	250
Winter	476

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis.

Figure 3.2-60 illustrates the monthly average natural gas consumption at Public School #25 from May, 2010 through May, 2011.

Figure 3.2-60: Public School #25 Gas Usage



The oil is provided by Finch, a local supplier. The annual fuel oil consumption is 13,531 gallons.

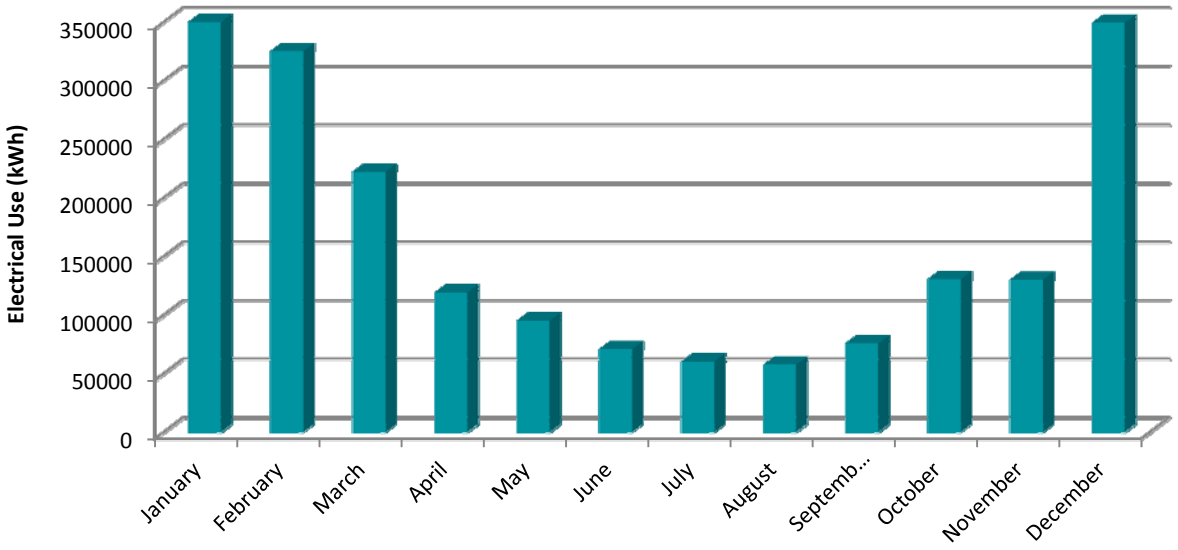
3.2.32 Public School #27

Electric power for Public School #27 is fed from one General Service Secondary three phase line from PSE&G. Figure 3.2-61 illustrates the average monthly total energy consumption from May 2010 through April 2011. This same graphical representation approach has been carried through for all months and is typical for all graphs presented in this Section. Electrical usage has been averaged to replace the missing month's data, by averaging the month before and the month after the missing month.

From this graph, it can be determined that the baseline electrical consumption for Public School #27 is approximately, 71,838 kWh/month.

Table 3.2-30 illustrates the seasonal peak demand loads for the Public School #27 from May 2010 through April 2011. The information presented is only as current as the most recent bill received.

Figure 3.2-61: Public School #27 Electricity Usage



The most recent tariff rates available at the time of this audit for the electrical service at Public School #27, from PSE&G are as follows:

		Acct #: 42-001-278-06
Service Charge:		$377.71/month
Delivery Service Charges:	Annual Demand:	$3.424011299/kW
	Summer Demand:	$8.145875706/kW
	On-Peak: 12600Wh	$0.004119841/kWh
	Next: 16500kWh	$0.007164242/kWh
	Off-Peak: 10200kWh	$0.004119841/kWh
	Next: 14100kWh	$0.007163830/kWh
Societal Benefits Charge:		$0.007319850/kWh
Securitization Transition:		$0.012067978/kWh
Supply Service Charges:	Generation:	$4.864784354/kW
	Transmission:	$1.962980769/kW
	On-Peak: 20100Wh	$0.117720896/kWh
	Next: 9000kWh	$0.117682222/kWh
	Off-Peak: 16800Wh	$0.069023810/kWh
	Next: 7500kWh	$0.068985333/kWh

Table 3.2-30: Public School #27 Seasonal Peak Demands

Season	Peak Demand (kW)
Summer	350
Winter	786

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis.

Public School #27 has no gas usage.

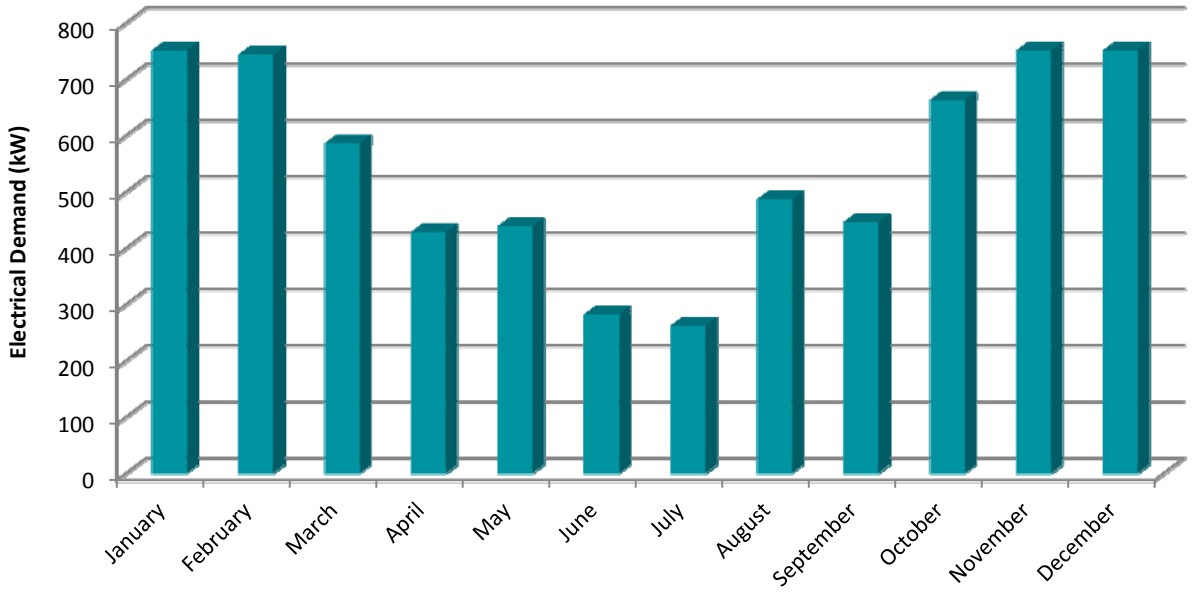
3.2.33 Public School #28

Electric power for Public School #28 is fed from one General Service Secondary three phase line from PSE&G. Figure 3.2-62 illustrates the average monthly total energy consumption from June 2010 through May 2011. This same graphical representation approach has been carried through for all months and is typical for all graphs presented in this Section. Electrical usage has been averaged to replace the missing month's data, by averaging the month before and the month after the missing month.

From this graph, it can be determined that the baseline electrical consumption for Public School #28 is approximately, 159,127 kWh/month. The information below does not include the production of the photo voltaic array or the usage of that energy.

Table 3.2-31 illustrates the seasonal peak demand loads for the Public School #28 from June 2010 through May 2011. The information presented is only as current as the most recent bill received.

Figure 3.2-62: Public School #28 Electricity Usage



The most recent tariff rates available at the time of this audit for the electrical service at Public School #28, from PSE&G are as follows:

		Acct #: 42-008-465-00
Service Charge:		$378.51/month
Delivery Service Charges:	Annual Demand:	$3.415416667/kW
	Summer Demand:	$8.125468750/kW
	On-Peak: 3200kWh	$0.005106250/kWh
	Next: 18000kWh	$0.004120000/kWh
	Next: 11200kWh	$0.007164286/kWh
	Off-Peak: 2800kWh	$0.005102571/kWh
	Next: 16400kWh	$0.004120122/kWh
	Next: 10800kWh	$0.007163889/kWh
Societal Benefits Charge:		$0.007415285/kWh
Securitization Transition:		$0.012068109/kWh

Table 3.2-31: Public School #28 Seasonal Peak Demands

Season	Peak Demand (kW)
Summer	126
Winter	208

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis.

Public School #28 has no gas usage.

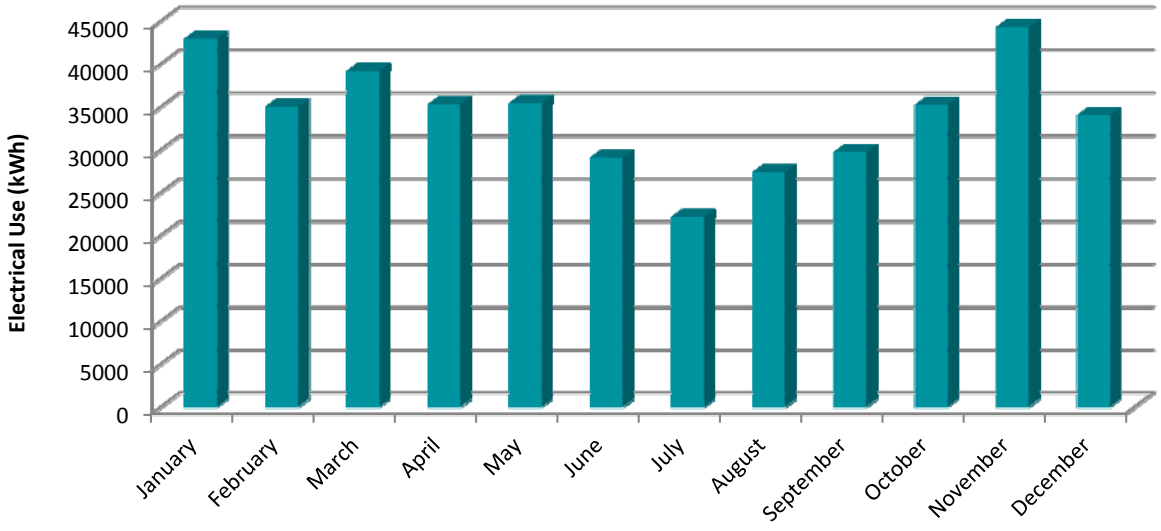
3.2.34 Public School #29

Electric power for Public School #29 is fed from one General Service Secondary three phase line from PSE&G. Figure 3.2-63 illustrates the average monthly total energy consumption from May, 2010 through April 2011. Electrical usage has been averaged by month for the above referenced time period to portray a more encompassing monthly usage trend.

From this graph, it can be determined that the baseline electrical consumption for Public School #29 is approximately 34,180 kWh/month.

Table 3.2-32 illustrates the seasonal peak demand loads for the Public School #29 from May, 2010 through April 2011. The information presented is only as current as the most recent bill received.

Figure 3.2-63: Public School #29 Electricity Usage



The most recent tariff rates available at the time of this audit for the electrical service at Public School #29, from PSE&G are as follows:

		Acct #: 42-005-547-04
Service Charge:		$4.30/month
Delivery Service Charges:	Annual Demand:	$4.160454545/kW
	Summer Demand:	$7.721477273/kW
	kWh Charge: 25760kWh	$0.017586957/kWh
Societal Benefits Charge:		$0.007135093/kWh
Securitization Transition:		$0.012067935/kWh

Table 3.2-32: Public School #29 Seasonal Peak Demands

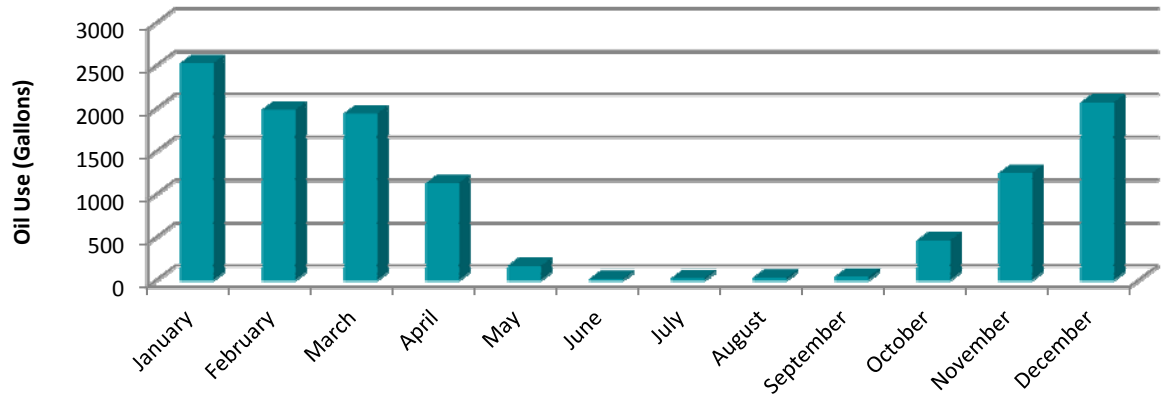
Season	Peak Demand (kW)
Summer	127
Winter	155

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis. Utility bills for March, 2010, May, 2010, July, 2010, and August, 2010 have not been received. CDM has requested this information but it was not received prior to development and delivery of this report. These values have been estimated based off of utility usages of adjacent months.

Monthly fuel oil usage has been estimated based on the annual oil consumption provided by the Board in the facility data forms. CDM has requested the fuel oil usage bills but they have not been received. Annual oil usages were given and were used, along with information gathered while on site to aid in the prediction of oil usage shown below. The usage in the graph below is what eQuest predicts the usage to be.

Figure 3.2-64 illustrates the monthly average oil consumption at Public School # 29 for May 2010 through April 2011.

Figure 3.2-64: Public School #29 Oil Usage



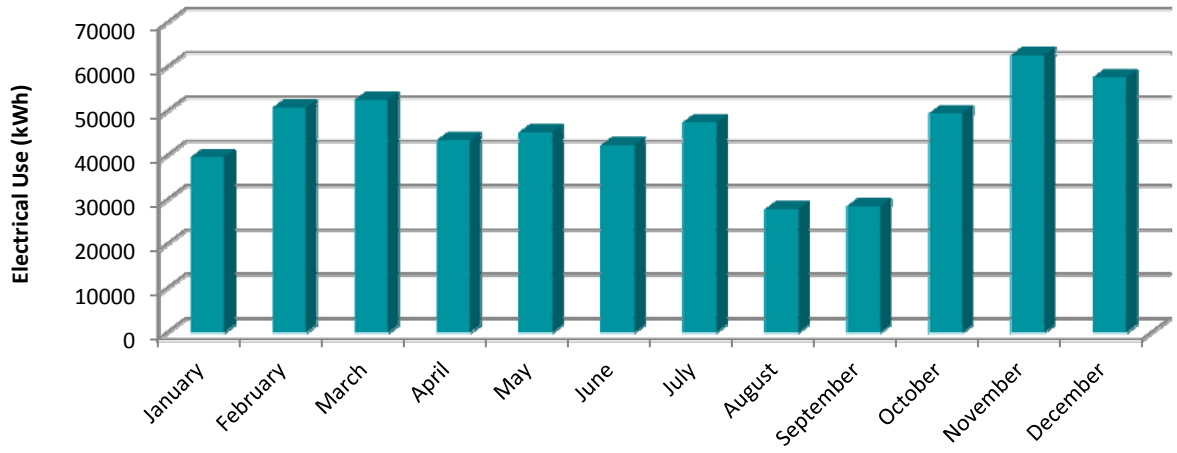
3.2.35 Public School #30

Electric power for Public School #30 is fed from one General Service Secondary three phase line from PSE&G. Figure 3.2-65 illustrates the average monthly total energy consumption from June, 2010 through April, 2011. Electrical usage has been averaged by month for the above referenced time period to portray a more encompassing monthly usage trend. Utility bills for June, 2010, March, 2011, April, 2011 have not been received. CDM has requested this information but it was not received prior to development and delivery of this report. These values have been estimated based off of utility usages of adjacent months.

From this graph, it can be determined that the baseline electrical consumption for Public School #30 is approximately, 45,557 kWh/month.

Table 3.2-33 illustrates the seasonal peak demand loads for the Public School #30 from June, 2010 through April, 2011. The information presented is only as current as the most recent bill received.

Figure 3.2-65: Public School #30 Electricity Usage



The most recent tariff rates available at the time of this audit for the electrical service at Public School #30, from PSE&G are as follows:

		Acct #: 42-008-652-03
Service Charge:		$1,1333.13/month
Delivery Service Charges:	Annual Demand:	$10.271988636/kW
	Summer Demand:	$24.437727273/kW
	On-Peak: 57600kWh	$0.007164063/kWh
	Off-Peak: 51200kWh	$0.007164063/kWh
Societal Benefits Charge:		$0.007309099/kWh
Securitization Transition:		$0.012068015/kWh

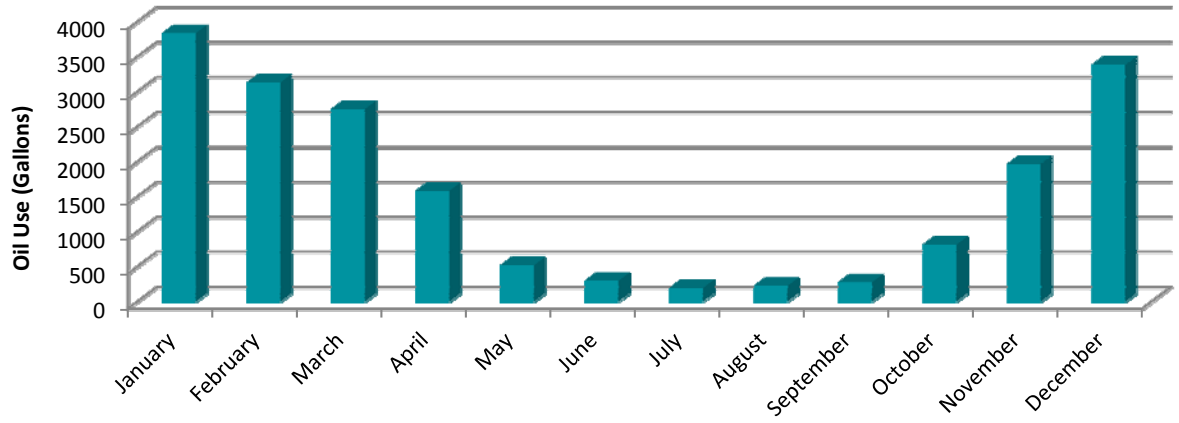
Table 3.2-33: Public School #30 Seasonal Peak Demands

Season	Peak Demand (kW)
Summer	194
Winter	164

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis. CDM has requested the fuel oil usage but it was not received. Annual oil usages were given and were used, along with information gathered while on site to aid in the prediction of oil usage shown below. The usage in the graph below is what eQuest predicts the usage to be.

Figure 3.2-66 illustrates the monthly average fuel oil consumption at Public School #30 from June, 2010 through April, 2011.

Figure 3.2-66: Public School #30 Oil Usage



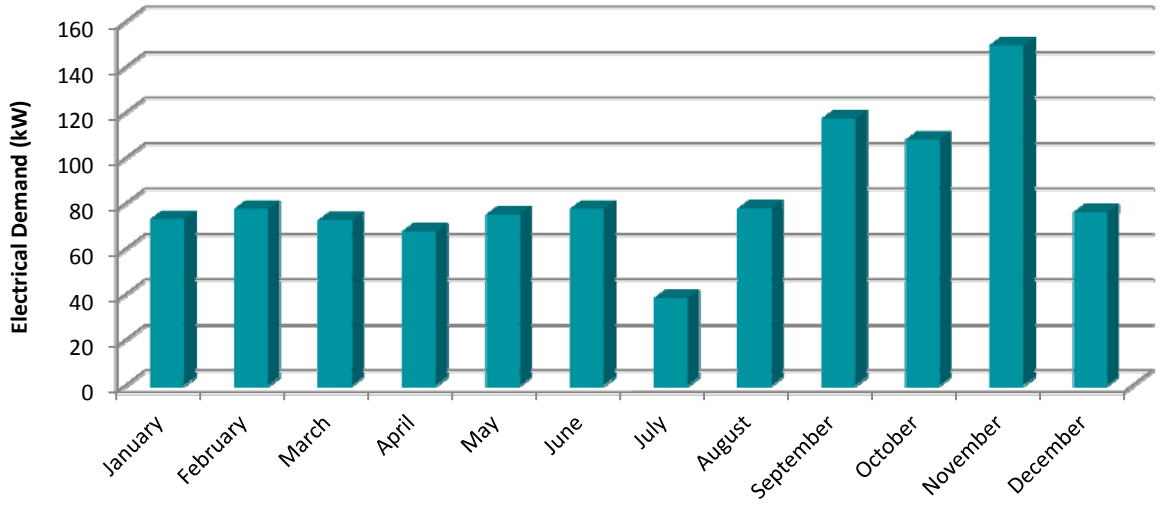
3.2.36 Public School #31

Electric power for Public School #31 is fed from one General Service Secondary three phase line from PSE&G. Figure 3.2-67 illustrates the average monthly total energy consumption from May 2010 through April 2011. This same graphical representation approach has been carried through for all months and is typical for all graphs presented in this Section. Electrical usage has been averaged to replace the missing month's data, by averaging the month before and the month after the missing month.

From this graph, it can be determined that the baseline electrical consumption for Public School #31 is approximately 21,858 kWh/month.

Table 3.2-34 illustrates the seasonal peak demand loads for the Public School #31 from May 2010 through April 2011. The information presented is only as current as the most recent bill received.

Figure 3.2-67: Public School #31 Electricity Usage



The most recent tariff rates available at the time of this audit for the electrical service at Public School #31, from PSE&G are as follows:

		Acct #: 66-498-045-09 Acct #: 69-563-072-00
Service Charge:		$4.30/month
Delivery Service Charges:	Annual Demand:	$4.160360360/kW
	Summer Demand:	$7.721492921/kW
	kWh Charge: 7800kWh	$0.014543590/kWh
	Next: 10200kWh	$0.017587255/kWh
Societal Benefits Charge:		$0.007322778/kWh
Securitization Transition:		$0.1206778/kWh

Table 3.2-34: Public School #31 Seasonal Peak Demands

Season	Peak Demand (kW)
Summer	78
Winter	150

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis.

The utility bills received for this school included estimated usages for the majority of the year. An actual read at the end of the twelve month billing cycle provided CDM the annual natural gas consumption, at Public School #31. This annual gas consumption, as reported from October 2009 through September 2010, is 102,893 therms.

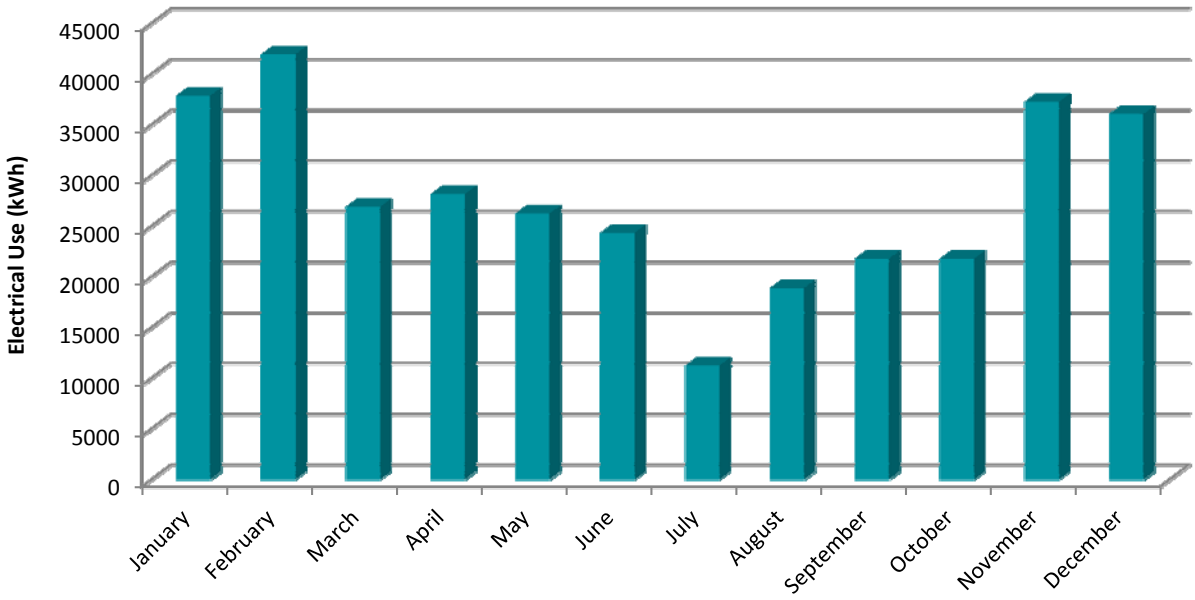
3.2.37 Public School #33

Electric power for Public School #33 is fed from one General Service Secondary three phase line from PSE&G. Figure 3.2-68 illustrates the average monthly total energy consumption from May 2010 through April 2011. This same graphical representation approach has been carried through for all months and is typical for all graphs presented in this Section. Electrical usage has been averaged to replace the missing month's data, by averaging the month before and the month after the missing month.

From this graph, it can be determined that the baseline electrical consumption for Public School #33 is approximately 25,800 kWh/month.

Table 3.2-35 illustrates the seasonal peak demand loads for the Public School #33 from May 2010 through April 2011. The information presented is only as current as the most recent bill received.

Figure 3.2-68: Public School #33 Electricity Usage



The most recent tariff rates available at the time of this audit for the electrical service at Public School #33, from PSE&G are as follows:

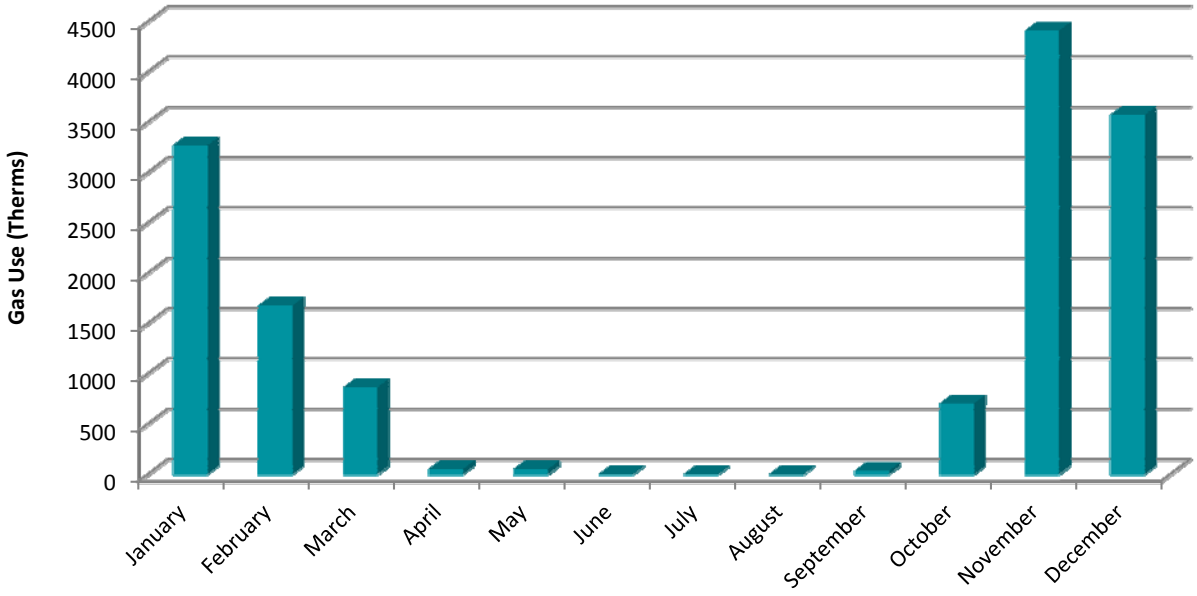
Table 3.2-35: Public School #33 Seasonal Peak Demands

Season	Peak Demand (kW)
Summer	120
Winter	279

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis.

Figure 3.2-69 illustrates the monthly average natural gas consumption at Public School #33 from May 2010 through April 2011.

Figure 3.2-69: Public School #33 Gas Usage



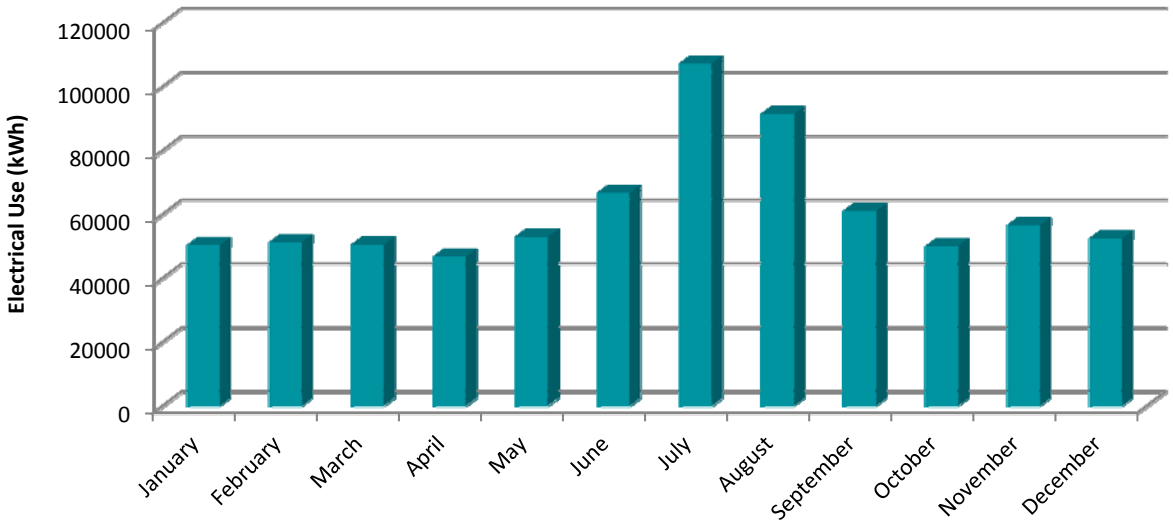
3.2.38 Public School #34

Electric power for Public School #34 is fed from one General Service Secondary three phase line from PSE&G. Figure 3.2-70 illustrates the average monthly total energy consumption from May, 2010 through April, 2011. Electrical usage has been averaged by month for the above referenced time period to portray a more encompassing monthly usage trend. Utility bills for May, 2010, and March, 2011 have not been received. CDM has requested this information but it was not received prior to development and delivery of this report. These values have been estimated based off of utility usages of adjacent months.

From this graph, it can be determined that the baseline electrical consumption for Public School #34 is approximately 61,458kWh/month.

Table 3.2-36 illustrates the seasonal peak demand loads for the Public School #34 from May, 2010, through April, 2011. The information presented is only as current as the most recent bill received.

Figure 3.2-70: Public School #34 Electricity Usage



The most recent tariff rates available at the time of this audit for the electrical service at Public School #34, from PSE&G are as follows:

		Acct #: 42-007-721-08
Service Charge:		$377.71/month
Delivery Service Charges:	Annual Demand:	$3.424024390/kW
	Summer Demand:	$8.145914634/kW
	On-Peak	$0.007164103/kWh
	Off-Peak	$0.007163874/kW
Societal Benefits Charge:		$0.007163874/kWh
Securitization Transition:		$0.007125014/kWh

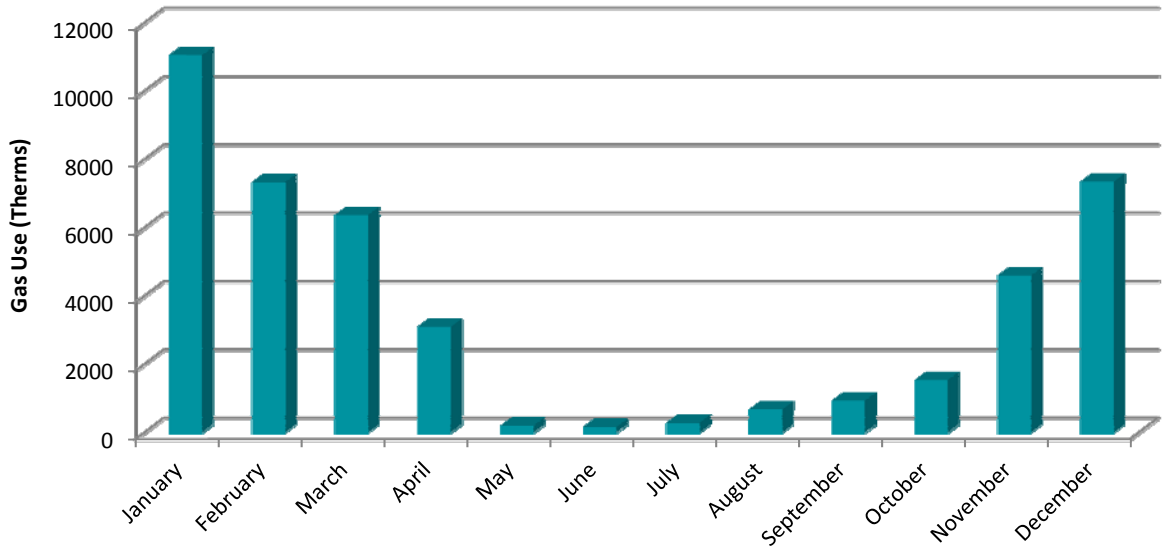
Table 3.2-36: Public School #34 Seasonal Peak Demands

Season	Peak Demand (kW)
Summer	182
Winter	142

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis. Utility bills for June through September, 2010, and April, 2011 have not been received. CDM has requested this information but it was not received prior to development and delivery of this report. These values have been estimated based off of utility usages of adjacent months.

Figure 3.2-71 illustrates the monthly average natural gas consumption at Public School #34 from June, 2010 through May, 2011.

Figure 3.2-71: Public School #34 Gas Usage



For more on Public School #34 gas usage, refer to Section 4.2.

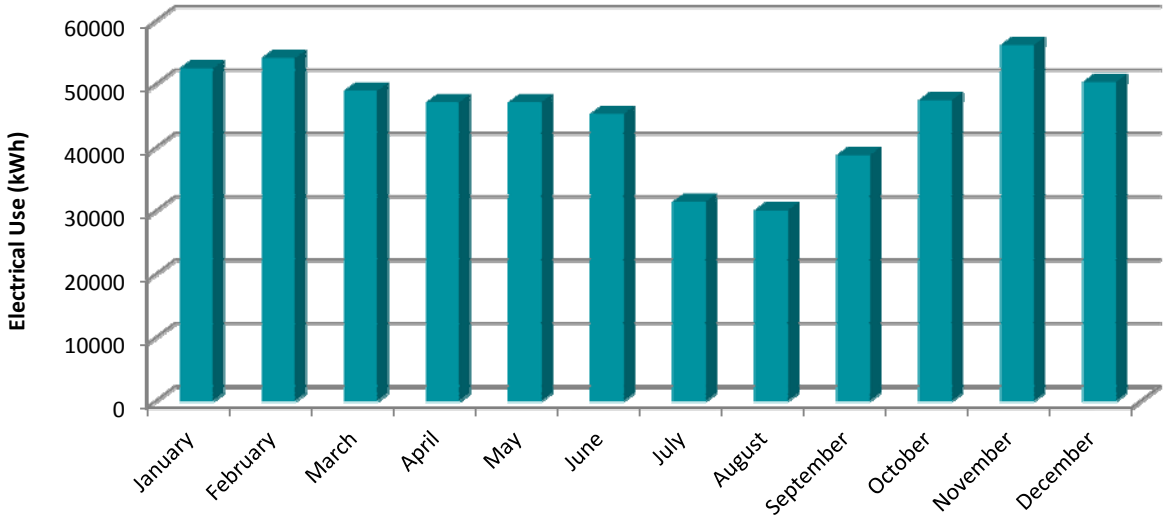
3.2.39 Public School #37

Electric power for PS #37 is fed from one General Service Secondary three phase line from PSE&G. Figure 3.2-72 illustrates the average monthly total energy consumption from June, 2010 through June, 2011.

From this graph, it can be determined that the baseline electrical consumption for PS #37 is approximately 45,795 kWh/month.

Table 3.2-37 illustrates the seasonal peak demand loads for the PS #37 from June, 2010 through June, 2011. The information presented is only as current as the most recent bill received.

Figure 3.2-72: PS #37 Electricity Usage



The most recent tariff rates available at the time of this audit for the electrical service at PS #37, from PSE&G are as follows:

		Acct #: 42-001-821-06
Service Charge:		$377.71/month
Delivery Service Charges:	Annual Demand:	$1.626711864/kW
	Summer Demand:	$9.030711864/kW
	On-Peak: 20098kWh	$0.007121107/kWh
	Off-Peak: 25217kWh	$0.007120990/kW
Societal Benefits Charge:		$0.007019089/kWh
Securitization Transition:		$0.012067969/kWh

Table 3.2-37: PS #37 Seasonal Peak Demands

Season	Peak Demand (kW)
Summer	171
Winter	188

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis.

There is negligible natural gas usage at PS #37.

Fuel oil is provided by Finch, a local provider. The annual usage oil usage is 35024 gallons.

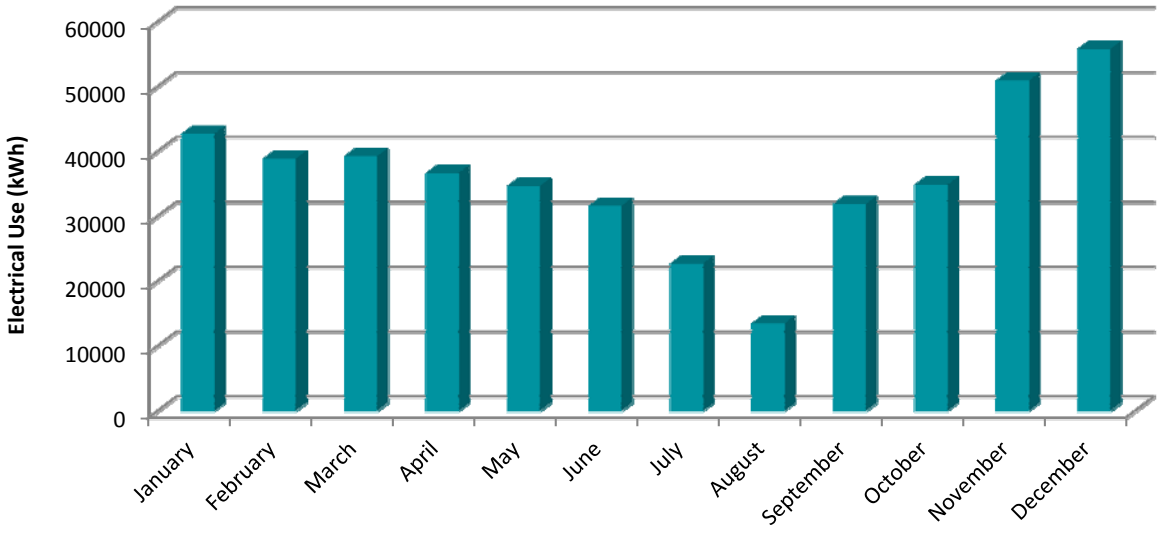
3.2.40 Public School #38

Electric power for Public School #38 is fed from one General Service Secondary three phase line from PSE&G. Figure 3.2-73 illustrates the average monthly total energy consumption from June, 2010 through May, 2011. Electrical usage has been averaged by month for the above referenced time period to portray a more encompassing monthly usage trend. Utility bills for May 2010 and March, 2011 have not been received. CDM has requested this information but it was not received prior to development and delivery of this report. These values have been estimated based off of utility usages of adjacent months.

From this graph, it can be determined that the baseline electrical consumption for Public School #38 is approximately, 36,146kWh/month.

Table 3.2-38 illustrates the seasonal peak demand loads for the Public School #38 form June, 2010 through May, 2011. The information presented is only as current as the most recent bill received.

Figure 3.2-73: Public School #38 Electricity Usage



The most recent tariff rates available at the time of this audit for the electrical service at Public School #38, from PSE&G are as follows:

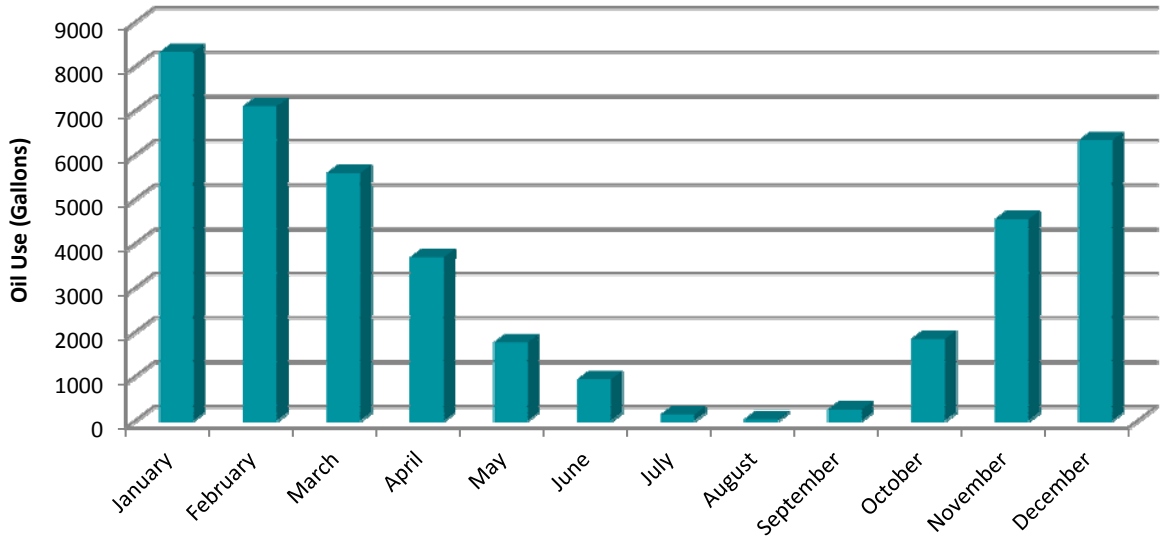
		Acct #: 66-190-122-05 Acct #: 69-560-851-00
Service Charge:		$4.30/month
Delivery Service Charges:	Annual Demand:	$4.160392799/kW
	Summer Demand:	$7.721522095/kW
	kWh Charge:	$0.017587077/kWh
Societal Benefits Charge:		$0.007135013/kWh
Securitization Transition:		$0.012068129/kWh

Table 3.2-38: Public School #38 Seasonal Peak Demands

Season	Peak Demand (kW)
Summer	125
Winter	190

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis. CDM has requested the fuel oil usage but it was not received. Annual oil usages were given and were used, along with information gathered while on site to aid in the prediction of oil usage shown below. The usage in the graph below is what eQuest predicts the usage to be.

Figure 3.2-74: PS #38 Oil Usage



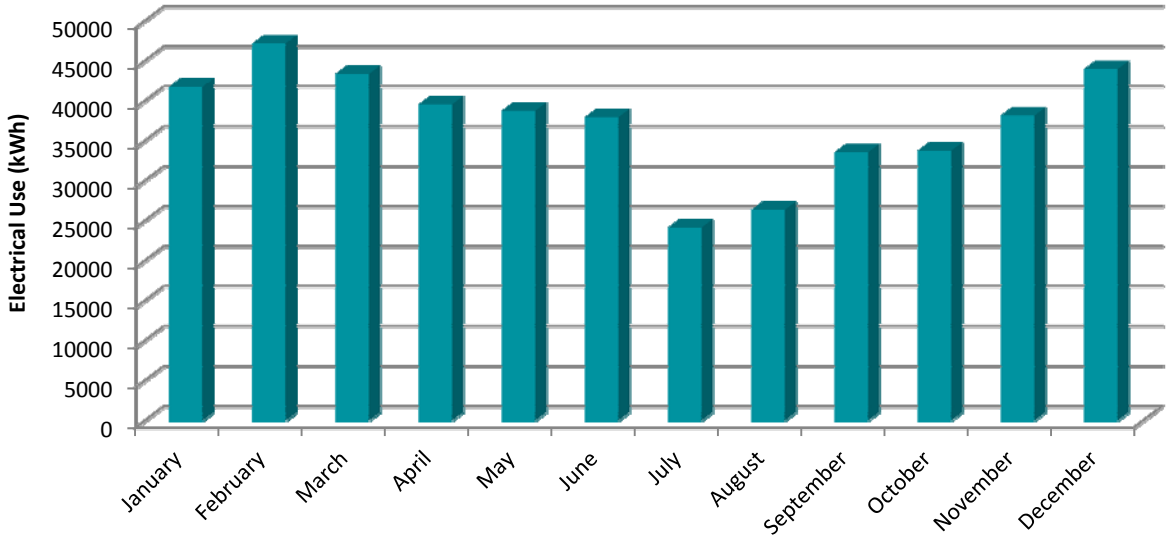
3.2.41 Public School #39

Electric power for Public School #39 is fed from one General Service Secondary three phase line from PSE&G. Figure 3.2-75 illustrates the monthly total energy consumption from May 2010 through April 2011. Electrical usage has been averaged to replace the missing month's data, by averaging the month before and the month after the missing month.

From this graph, it can be determined that the baseline electrical consumption for Public School #39 is approximately 37,400 kWh/month.

Table 3.2-39 illustrates the seasonal peak demand loads for the Public School #39 from May 2010 through April 2011. The information presented is only as current as the most recent bill received.

Figure 3.2-75: Public School #39 Electricity Usage



The most recent tariff rates available at the time of this audit for the electrical service at Public School #39, from PSE&G are as follows:

		Acct #: 42-004-469-01
Service Charge:		$378.19/month
Delivery Service Charges:	Annual Demand:	$3.418818182/kW
	Summer Demand:	$8.133636364/kW
	On-Peak: 20098kWh	$0.005108333/kWh
	Next:	$0.004120408/kWh
	Next:	$0.007163953/kWh
	Off-Peak: 25217kWh	$0.005100000/kWh
	Next:	$0.004120213/kWh
	Next:	$0.007163415/kWh
Societal Benefits Charge:		$0.007376579/kWh
Securitization Transition:		$0.012068158/kWh

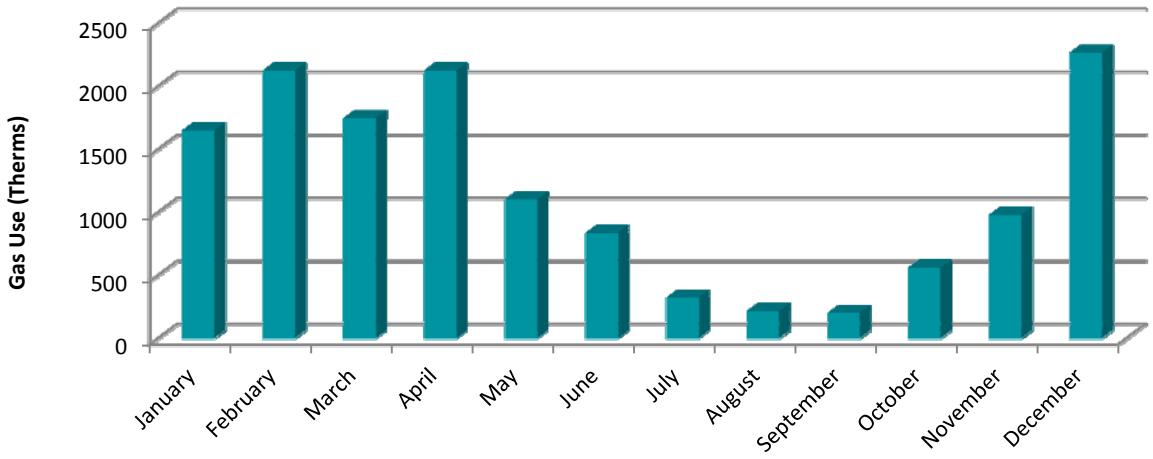
Table 3.2-39: Public School #39 Seasonal Peak Demands

Season	Peak Demand (kW)
Summer	117
Winter	138

Refer to Table 3.3-1, in Section 3.3 for the average electrical aggregate cost. These tariffs are subject to change quite frequently. Refer to Appendix A for a complete Historical Data Analysis.

Figure 3.2-76 illustrates the monthly average natural gas consumption at Public School #39 from May 2010 through April 2011.

Figure 3.2-76: Public School #39 Gas Usage



The oil is provided by Finch, a local supplier. The annual fuel oil consumption is 26,802 gallons.

3.3 Aggregate Costs

For the purposes of computing energy savings for all identified energy conservation and retrofit measures, aggregate unit costs for electrical energy and fuel, in terms of cost/kWh and cost/therm, were determined for each service location and utilized in the simple payback analyses discussed in subsequent sections. The aggregate unit cost accounts for all distribution and supply charges for each location. Table 3.3-1 and Table 3.3-2 summarize the aggregate costs for electrical energy consumption and therms utilized, respectively.

Aggregate costs for each utility type are provided for only the buildings that consume that utility.

Table 3.3-1: Electrical Aggregate Unit Costs

Service Location	Aggregated Cost $/kWh
Dickinson High School	$0.15
Ferris High School	$0.14
Lincoln High School	$0.11
McNair/Academic High School	$0.15
Snyder High School	$0.15
MS #40	$0.15
MS #41	$0.18
PS #15	$0.12
PS #22	$0.16
Academy 1	$0.12

Table 3.3-1: Electrical Aggregate Unit Costs (Continued)

Service Location	Aggregated Cost $/kWh
Administrative Building	$0.11
Cunningham Center ECC	$0.15
Infinity Institute	$0.15
Liberty High School	$0.15
Regional Day School	$0.17
MS #4	$0.13
MS #7	$0.00
PS #1	$0.15
PS #3	$0.12
PS #5	$0.12
PS #6	$0.19
PS #8	$0.15
PS #11	$0.15
PS #12	$0.11
PS #14	$0.11
PS #16	$0.15
PS #17	$0.11
PS #20	$0.15
PS #23	$0.15
PS #24	$0.14
PS #25	$0.15
PS #27	$0.15
PS #28	$0.13
PS #29	$0.17
PS #30	$0.17
PS #31	$0.17
PS #33	$0.11
PS #34	$0.16
PS #37	$0.13
PS #38	$0.13
PS #39	$0.16

Table 3.3-2: Natural Gas Aggregate Unit Costs

Service Location	Aggregated Cost $/Therm
Dickinson High School	$0.90
Ferris High School	$0.77
Lincoln High School	$0.53
McNair/Academic High School	$0.52
MS #40	$1.19
MS #41	$0.86
PS #15	$1.18
PS #22	$1.04
Cunningham Center ECC	$1.12
Liberty High School	$1.59
MS #4	$1.11
MS #7	$1.08
PS #1	$1.32
PS #3	$1.09
PS #5	$0.47
PS #6	$0.93
PS #8	$1.45
PS #11	$1.46
PS #14	$3.94
PS #16	$1.16
PS #17	$1.32
PS #23	$1.15
PS #24	$1.19
PS #25	$1.46
PS #31	$1.32
PS #33	$1.38
PS #34	$1.01
PS #37	$0.76
PS #39	$1.32

Table 3.3-3: Oil Aggregate Unit Costs

Service Location	Aggregated Cost $/Gallon
Dickinson High School	$2.17
Snyder High School	$2.16
MS #40	$2.33
MS #41	$2.17
Liberty High School	$2.07
PS #3	$2.15
PS #6	$2.09
PS #8	$2.13
PS #11	$2.16
PS #14	$2.13
PS #20	$2.15
PS #23	$2.14
PS #24	$2.16
PS #25	$2.11
PS #29	$2.18
PS #30	$2.17
PS #37	$2.09
PS #38	$2.17
PS #39	$2.17

3.4 Portfolio Manager

3.4.1 Portfolio Manager Overview

Portfolio Manager is an interactive energy management tool that allows the Board to track and assess energy consumption at the facilities in a secure online environment. Portfolio Manager can help the Board set investment priorities, verify efficiency improvements, and receive EPA recognition for superior energy performance.

3.4.2 Energy Performance Rating

For many facilities, you can rate their energy performance on a scale of 1–100 relative to similar facilities nationwide. Your facility is not compared to the other facilities entered into Portfolio Manager to determine your ENERGY STAR rating. Instead, statistically representative models are used to compare your facility against similar facilities from a national survey conducted by the Department of Energy's Energy Information Administration. This national survey, known as the Commercial Building Energy Consumption Survey (CBECS), is conducted every four years, and gathers data on building characteristics and energy use from thousands of facilities across the United States. Your facility's peer group of comparison is those

facilities in the CBECS survey that have similar facility and operating characteristics. A rating of 50 indicates that the facility, from an energy consumption standpoint, performs better than 50% of all similar facilities nationwide, while a rating of 75 indicates that the facility performs better than 75% of all similar facilities nationwide.

3.4.3 Portfolio Manager Account Information

A Portfolio Manager account has been established for the Board, which includes a profile for the 41 buildings. Information entered into this Portfolio Manager Facility profile, including electrical energy consumption and natural gas consumption has been used to establish a performance baseline.

It is recommended that the information be updated to track the buildings' energy usage.

Ratings provided by Portfolio Manager for each of the buildings are listed below. Results are a reflection of the information supplied. As a complete, comprehensive 12 consecutive months' worth of utility data was not available for the majority of the buildings, usages have been assumed for some months to complete an initial Portfolio Manager profile. Additionally, annual consumption values provided by the Board in the Facility Data Forms were included in the overall energy usage tracked by Portfolio Manager.

Building	Portfolio Manager Rating
Academy I	4
Cunningham Center ECC	27
Dickinson High School	75
Ferris High School	20
JCPS Administrative Facility	22
Infinity Institute	100
Liberty High School	27
Lincoln High School	52
McNair Academic High School	38
Middle School #4	2
Middle School #7	1
Middle School #40	18
Middle School #41	2
Public School #1	92
Public School #11	72
Public School #12	90
Public School #14	42
Public School #15	1
Public School #16	32

Building	Portfolio Manager Rating
Public School #17	1
Public School #20	46
Public School #22	21
Public School #23	3
Public School #24	41
Public School #25	19
Public School #27	1
Public School #28	7
Public School #29	70
Public School #3	1
Public School #30	22
Public School #31	16
Public School #33	55
Public School #34	53
Public School #37	53
Public School #38	61
Public School #39	52
Public School #5	82
Public School #6	63
Public School #8	76
Regional Day School	2
Snyder High School	62

The following website link, username and password shall be used to access the Portfolio Manager account and building profiles that has been established for the Board:

https://www.energystar.gov/istar/pmpam/

USERNAME: JerseyCitySchools

PASSWORD: JerseyCity

Section 4

Section 4
Energy Conservation and Retrofit Measures (ECRM)

The following is a summary of how Annual Return on Investment (AROI), Internal Rate of Return (IRR), and Net Present Value (NPV) will be broken down in the cost analysis for all ECRMs recommended in this report.

Included in the simplified payback analysis summary table is the 'Annual Return on Investment' (AROI) values. This value is a performance measure used to evaluate the efficiency of an investment and is calculated using the following equation:

$$AROI = \frac{AECS + OCS}{NET\ ECM\ Cost} - \frac{1}{Lifetime}$$

Where OCS = Operating Cost Savings, and AECS = Annual Energy Cost Savings.

Also included in the table are net present values for each option. The NPV calculates the present value of an investment's future cash flows based on the time value of money, which is accounted for by a discount rate (DR) (assume bond rate of 3%). NPV is calculated using the following equation:

$$NPV = \sum_{n=0}^{N} \frac{C_n}{(1+DR)^n}$$

Where Cn=Annual cash flow, and N = number of years.

The Internal Rate of Return (IRR) expresses an annual rate that results in a break-even point for the investment. If the Board is currently experiencing a lower return on their capital than the IRR, the project is financially advantageous. This measure also allows the Board to compare ECRM's against each other to determine the most appealing choices.

$$IRR \rightarrow 0 = \sum_{n=0}^{N} \frac{C_n}{(1+IRR)^n}$$

Where Cn=Annual cash flow, and N = number of years.

The lifetime energy savings represents the cumulative energy savings over the assumed life of the ECRM.

4.1 Building Lighting Systems

The goal of this section is to present any lighting energy conservation measures that may also be cost beneficial. It should be noted that replacing current bulbs with more energy-efficient equivalents will have a small effect on the building heating and cooling loads. The building cooling load will see a small decrease from an upgrade to more efficient bulbs and the heating load will see a small increase, as the more energy efficient bulbs give off less heat.

Two options are offered for most buildings, where both interior and exterior lighting upgrades are being proposed. The first option will be for upgrading existing interior lighting, if applicable. The second option will be for upgrading existing exterior lighting, if applicable. A total cost for upgrading both options at the same time will be presented. Retrofitting of existing fluorescent fixtures includes upgrading both ballasts and lamps for the fixture. For buildings only requiring interior or exterior upgrades, only the applicable upgrade option is listed. Refer to Appendix G for more information.

Please note that the Engineer's Estimate of Probable Construction Costs presented herein are estimates based on historic data compiled from similar installations and engineering opinions. Additional engineering will be required for each measure identified in this report and final scope of work and budget cost estimates will need to be confirmed prior to the coordination of project financing or the issuance of a Request for Proposal.

4.1.1 Jersey City Schools Lighting Improvements

It is recommended that the existing lighting systems at the following facilities be upgraded to high efficiency standards to create lighting uniformity throughout the building. In general, the recommended lighting upgrade, as presented in Appendix G, involves replacing existing inefficient bulbs, and installing new energy-efficient luminaires to the existing lighting systems.

The strategies included in this section focus on maximizing energy savings and maintaining or exceeding existing lighting levels, while also maintaining the existing look of each fixture; therefore, proposed lamp styles remain consistent with existing lamp styles. Please refer to Appendix D for a line-by-line proposed detailed lighting upgrades list.

The following table, Table 4.1-1, summarizes a simple payback analysis assuming the implementation of all recommended lighting system improvements at the Jersey City School Buildings.

Table 4.1-1
Jersey City Lighting System Improvements***

	Engineer's Opinion of Probable Cost	Rebate	Total Cost	Annual kW Savings	Annual kWh Savings	Annual Energy Savings	Annual Maintenance Cost Savings (AMCS)	Simple Payback	Annual Return on Investment (AROI)	Lifetime Energy Savings (15 years)**	Internal Rate of Return (IRR)	Net Present Value (NPV)
Dickinson High School - Interior Lighting	$71,672	($8,350)	$63,322	11	238,687	$35,803	$1,415	**1.7**	52.11%	$665,897	61.71%	$478,688
Dickinson High School - Exterior Lighting	$13,636	($1,260)	$12,376	3	13,797	$2,070	$21	**5.9**	10.23%	$38,491	17.57%	$18,069
Dickinson High School - Total	$85,308	($9,610)	$75,698	15	252,484	$37,873	$1,436	**1.9**	42.50%	$704,389	52.02%	$466,312
Ferris High School - Interior Lighting	$89,683	($6,060)	$83,623	13	204,388	$28,614	$803	**2.8**	28.51%	$532,196	37.73%	$344,790
Ferris High School - Exterior Lighting	$7,432	$0	$7,432	0	1,848	$259	$11	**27.6**	-3.04%	$4,813	-4.30%	($3,504)
Ferris High School - Total	$97,115	($6,060)	$91,055	13	206,237	$28,873	$814	**3.1**	25.94%	$537,009	35.04%	$341,286
Lincoln High School - Interior Lighting	$69,351	($5,280)	$64,071	17	229,055	$25,196	$1,188	**2.4**	34.51%	$468,619	43.91%	$320,170
Lincoln High School - Exterior Lighting	$18,580	$0	$18,580	1	5,037	$554	$27	**32**	-3.54%	$10,305	-5.78%	($10,112)
Lincoln High School - Total	$87,930	($5,280)	$82,650	18	234,092	$25,750	$1,216	**3.1**	25.96%	$478,924	35.07%	$310,058
McNair/Academic High School - Interior Lighting	$44,922	($3,530)	$41,392	6	147,705	$22,156	$29	**1.9**	46.93%	$412,073	56.50%	$281,685
McNair/Academic High School - Exterior Lighting	$11,148	$0	$11,148	1	3,022	$453	$16	**23.7**	-2.45%	$7,936	-2.73%	($4,307)
McNair/Academic High School - Total	$56,070	($3,530)	$52,540	6	150,727	$22,609	$45	**2.3**	36.45%	$420,504	45.89%	$277,378
Snyder High School - Interior Lighting	$93,813	($8,850)	$84,963	25	193,859	$29,079	$1,626	**2.8**	29.47%	$1,580,219	38.72%	$362,199
Snyder High School - Exterior Lighting	$20,616	($1,100)	$19,516	4	15,531	$2,329	$237	**7.6**	6.49%	$362,988	12.78%	$17,866
Snyder High School - Total	$114,429	($9,950)	$104,479	29	209,391	$31,408	$1,863	**3.1**	25.18%	$1,943,207	34.25%	$380,065
MS #40 - Interior Lighting	$130,599	($12,040)	$118,559	33	156,120	$23,418	$922	**4.9**	13.86%	$2,205,282	21.89%	$235,916
MS #40 - Exterior Lighting	$19,044	($560)	$18,484	9	11,738	$1,760	$304	**9**	4.51%	$343,782	10.00%	$11,590
MS #40 - Total	$149,643	($12,600)	$137,043	36	167,859	$25,178	$1,226	**5.2**	12.60%	$2,548,864	20.42%	$247,506
MS #41 - Interior Lighting	$18,715	($2,775)	$24,128	9	67,849	$12,213	$2,461	**1.6**	79.46%	$448,764	89.12%	$278,518
MS #41 - Exterior Lighting	$17,255	($520)	$16,735	2	9,609	$1,729	$301	**8.2**	-0.70%	$311,266	1.25%	($2,186)
MS #41 - Total	$44,159	($3,295)	$40,864	11	77,459	$13,942	$2,762	**2.9**	46.63%	$760,031	56.20%	$276,332
PS #15 - Interior Lighting	$56,338	($5,595)	$50,743	30	151,410	$18,169	$2,234	**2.5**	33.54%	$337,928	42.91%	$246,401
PS #15 - Exterior Lighting	$17,951	($560)	$17,391	15	9,355	$1,122	$26	**15.1**	-0.06%	$20,880	2.51%	($650)
PS #15 - Total	$74,289	($6,155)	$68,134	3	160,766	$19,291	$2,261	**3.2**	24.97%	$35,880	34.02%	$245,751
PS #22 - Interior Lighting	$385,186	($18,670)	$366,516	87	540,998	$86,560	$6,341	**3.9**	18.68%	$1,609,917	27.29%	$986,409
PS #22 - Exterior Lighting	$14,864	$0	$14,864	1	4,030	$645	$22	**22.3**	-2.18%	$11,991	-2.05%	($5,155)
PS #22 - Total	$400,050	($18,670)	$381,380	88	545,028	$87,204	$6,363	**4.1**	17.87%	$1,621,908	26.40%	$981,254
Academy 1 - Interior Lighting	$161,825	($12,895)	$148,930	29	156,052	$18,726	$4,798	**6.3**	9.13%	$2,769,938	1621.00%	$193,666
Academy 1 - Exterior Lighting	$13,492	($560)	$12,932	2	8,149	$977	$192	**11.1**	2.38%	$240,528	6.78%	$4,109
Academy 1 - Total	$175,317	($13,455)	$161,862	31	164,199	$19,703	$4,991	**6.6**	8.59%	$3,010,466	15.53%	$197,776
Administrative Building - Interior Lighting	$145,745	($12,455)	$133,290	23	170,916	$18,800	$1,981	**6.4**	8.92%	$2,479,043	15.95%	$169,357
Administrative Building - Exterior Lighting	$13,463	($900)	$12,563	2	7,016	$771	$227	**12.6**	1.29%	$233,669	4.95%	$1,986
Administrative Building - Total	$159,208	($13,355)	$145,853	25	177,932	$19,572	$2,208	**6.7**	8.27%	$2,712,723	15.12%	$171,343
Cunningham Center ECC - Interior	$799	($175)	$604	0	10,406	$1,561	$17	**0.4**	254.33%	$29,033	263.99%	$22,384

Table 4.1-1
Jersey City Lighting System Improvements***

	Engineer's Opinion of Probable Cost	Rebate	Total Cost	Annual kW Savings	Annual kWh Savings	Annual Energy Savings	Annual Maintenance Cost Savings (AMCS)	Simple Payback	Annual Return on Investment (AROI)	Lifetime Energy Savings (15 years)**	Internal Rate of Return (IRR)	Net Present Value (NPV)
Cunningham Center ECC - Exterior	$11,612	($560)	$11,052	2	9,723	$1,458	$6	**7.5**	6.59%	$25,533	12.92%	$10,283
Cunningham Center ECC - Total	$12,392	($735)	$11,657	2	20,130	$3,019	$24	**3.8**	19.44%	$56,160	28.12%	$32,667
Infinity Institute - Interior	$12,071	($1,575)	$10,496	6	25,370	$3,805	$696	**2.3**	36.23%	$70,779	45.66%	$55,074
Infinity Institute - Exterior	$13,463	($420)	$13,043	2	7,016	$1,052	$20	**12.2**	1.56%	$19,575	5.42%	$2,582
Infinity Institute - Total	$25,535	($1,995)	$23,540	7	32,387	$4,858	$717	**4.2**	17.02%	$90,355	25.46%	$57,657
Liberty High School - Interior	$5,618	($970)	$4,648	0	24,840	$3,726	$18	**1.2**	73.90%	$69,301	83.55%	$49,883
Liberty High School - Exterior	$4,545	($420)	$4,125	1	4,599	$690	$7	**5.9**	10.23%	$12,830	17.57%	$6,023
Liberty High School - Total	$10,163	($1,390)	$8,773	1	29,439	$4,416	$25	**2**	43.96%	$82,131	53.50%	$55,906
Regional Day School - Interior	$97,808	($5,260)	$92,548	14	84,942	$14,440	$1,242	**5.9**	10.28%	$268,570	17.64%	$135,832
Regional Day School - Exterior	$3,716	$0	$3,716	0	1,007	$171	$5	**21**	-1.91%	$2,998	-1.40%	($1,142)
Regional Day School - Total	$101,524	($5,260)	$96,264	14	85,949	$14,611	$1,247	**6.1**	9.81%	$271,755	17.06%	$134,690
MS #4 - Interior	$1,015	($40)	$975	0	9	$1	$0	**793.5**	-6.54%	$23	-28.78%	($957)
MS #4 - Exterior	$22,296	$0	$22,296	1	6,095	$792	$33	**27**	-5.68%	$8,994	-15.59%	($19,084)
MS #4 - Total	$23,311	($40)	$23,271	1	6,105	$794	$33	**28.2**	-3.12%	$9,510	-4.52%	($11,234)
MS #7 - Interior	$104,055	($8,160)	$95,895	21	148,244	$22,237	$110	**4.3**	16.64%	$413,577	25.03%	$229,548
MS #7 - Exterior	$11,148	$0	$11,148	1	3,022	$453	$16	**23.7**	-2.45%	$8,431	-2.73%	($4,307)
MS #7 - Total	$115,203	($8,160)	$107,043	22	151,266	$22,690	$127	**4.7**	14.65%	$422,008	22.79%	$225,242
PS #1 - Interior	$11,591	($1,785)	$9,806	2	80,343	$12,051	$53	**0.8**	116.77%	$224,143	126.44%	$166,474
PS #1 - Exterior	$6,061	($560)	$5,501	1	6,132	$920	$16	**5.9**	10.35%	$17,107	17.73%	$8,133
PS #1 - Total	$17,652	($2,345)	$15,307	3	86,475	$12,971	$69	**1.2**	78.53%	$241,250	88.19%	$174,606
PS #3 - Interior	$254	($20)	$234	0	231	$28	$0	**8.4**	5.21%	$516	11.02%	$170
PS #3 - Exterior	$14,864	$0	$14,864	1	4,030	$484	$22	**29.4**	-3.27%	$8,994	-4.96%	($7,503)
PS #3 - Total	$15,117	($20)	$15,097	1	4,261	$511	$22	**28.3**	-3.13%	$9,510	-4.57%	($7,332)
PS #5 - Interior	$163,376	($9,740)	$153,636	34	356,920	$42,830	$2,272	**3.4**	22.69%	$796,598	31.61%	$503,191
PS #5 - Exterior	$11,148	$0	$11,148	1	3,022	$363	$16	**29.4**	-3.27%	$6,745	-4.96%	($5,627)
PS #5 - Total	$174,524	($9,740)	$164,784	34	359,942	$43,193	$2,288	**3.6**	20.93%	$803,343	29.73%	$497,564
PS #6 - Interior	$49,402	($5,440)	$43,962	10	164,637	$31,281	$58	**1.4**	64.62%	$581,794	74.26%	$412,429
PS #6 - Exterior	$10,606	($980)	$9,626	2	10,731	$2,039	$65	**4.6**	15.19%	$37,921	23.41%	$21,019
PS #6 - Total	$60,008	($6,420)	$53,588	13	175,368	$33,320	$123	**1.6**	55.74%	$619,715	65.36%	$433,448
PS #8 - Interior	$14,817	($3,045)	$11,772	0	88,068	$13,210	$0	**0.9**	105.55%	$245,696	115.22%	$180,610
PS #8 - Exterior	$9,091	($840)	$8,251	2	9,198	$1,380	$14	**5.9**	10.23%	$25,661	17.57%	$12,046
PS #8 - Total	$23,908	($3,885)	$20,023	2	97,266	$14,590	$14	**1.4**	66.27%	$271,357	75.91%	$192,656
PS #11 - Interior	$21,312	($2,825)	$18,487	0	117,872	$17,681	$31	**1**	105.55%	$245,696	115.22%	$180,610
PS #11 - Exterior	$7,576	($700)	$6,876	2	7,665	$1,150	$12	**5.9**	10.23%	$25,661	17.57%	$12,046

Table 4.1-1
Jersey City Lighting System Improvements***

	Engineer's Opinion of Probable Cost	Rebate	Total Cost	Annual kW Savings	Annual kWh Savings	Annual Energy Savings	Annual Maintenance Cost Savings (AMCS)	Simple Payback	Annual Return on Investment (AROI)	Lifetime Energy Savings (15 years)**	Internal Rate of Return (IRR)	Net Present Value (NPV)
PS #11 - Total	$28,887	($3,525)	$25,362	2	125,537	$18,831	$42	**1.3**	66.27%	$271,357	75.91%	$192,656
PS #12 - Interior	$50,986	($3,910)	$47,076	10	77,522	$8,527	$233	**5.4**	11.94%	$158,600	19.64%	$80,496
PS #12 - Exterior	$7,432	$0	$7,432	0	1,905	$210	$11	**33.7**	-3.70%	$3,898	-6.30%	($4,220)
PS #12 - Total	$58,418	($3,910)	$54,508	11	79,427	$8,737	$244	**6.1**	9.81%	$162,498	17.06%	$76,276
PS #14 - Interior	$29,625	($2,220)	$27,405	1	76,103	$8,371	$4,147	**2.2**	39.01%	$155,698	48.49%	$154,904
PS #14 - Exterior	$7,432	$0	$7,432	0	1,958	$215	$266	**15.5**	-0.20%	$4,005	2.24%	($429)
PS #14 - Total	$37,057	($2,220)	$34,837	2	78,061	$8,587	$4,147	**2.7**	29.89%	$159,703	39.15%	$150,609
PS #16 - Interior	$21,136	($1,510)	$19,626	4	52,150	$7,823	$332	**2.4**	34.88%	$145,490	44.28%	$99,122
PS #16 - Exterior	$3,716	$0	$3,716	0	936	$140	$5	**25.5**	-2.74%	$2,612	-3.48%	($1,591)
PS #16 - Total	$24,852	($1,510)	$23,342	4	53,086	$7,963	$337	**2.8**	28.89%	$148,102	38.12%	$97,531
PS #17 - Interior	$335,151	($22,345)	$312,803	95	440,455	$48,450	$6,949	**5.6**	11.04%	$901,119	18.57%	$493,990
PS #17 - Exterior	$20,343	($980)	$19,363	3	14,935	$1,642	$30	**11.6**	1.97%	$30,556	6.11%	$4,999
PS #17 - Total	$355,494	($23,325)	$332,169	98	455,391	$50,093	$6,979	**5.8**	10.52%	$931,675	17.92%	$498,989
PS #20 - Interior	$156,270	($11,925)	$144,345	33	168,407	$25,261	$7,551	**4.4**	16.07%	$469,830	24.39%	$333,513
PS#20 - Exterior	$23,603	($280)	$23,323	1	5,185	$777	$5,185	**29.5**	-3.27%	$14,467	-498.00%	($11,796)
PS #20 - Total	$179,874	($12,205)	$167,669	34	173,593	$26,039	$173,593	**5**	13.38%	$484,298	21.32%	$321,717
PS #23 - Interior	$18,988	($3,190)	$15,798	1	92,706	$13,906	$1,492	**1**	90.80%	$258,635	100.46%	$208,439
PS #23 - Exterior	$9,091	($840)	$8,251	2	9,198	$1,380	$14	**5.9**	10.23%	$25,661	17.57%	$12,046
PS #23 - Total	$28,079	($4,030)	$24,049	3	101,904	$15,286	$1,506	**1.4**	63.16%	$284,296	72.79%	$220,485
PS #24 - Interior	$48,827	($5,805)	$43,022	9	223,463	$31,285	$71	**1.4**	66.22%	$581,863	75.86%	$413,611
PS #24 - Exterior	$9,848	($910)	$8,938	2	9,965	$1,395	$15	**6.3**	8.93%	$32,076	15.96%	$11,359
PS #24 - Total	$58,675	($6,715)	$51,960	11	233,427	$32,680	$86	**1.6**	56.39%	$198,914	66.01%	$425,210
PS #25 - Interior	$14,312	($2,775)	$11,537	0	59,802	$8,970	$69	**1.3**	20.70%	$166,837	29.48%	$34,446
PS #25 - Exterior	$11,363	($1,050)	$10,313	3	11,498	$1,725	$100	**5.7**	-1.04%	$32,076	0.54%	($1,856)
PS #25 - Total	$25,676	($3,825)	$21,851	3	71,299	$10,695	$169	**2**	10.44%	$198,914	17.83%	$32,590
PS #27 - Interior	$14,656	($2,985)	$11,671	0	77,932	$11,690	$3	**1**	93.52%	$217,418	103.18%	$158,606
PS #27 - Exterior	$4,545	($420)	$4,125	1	4,599	$690	$7	**5.9**	10.23%	$12,830	17.57%	$6,023
PS #27 - Total	$19,201	($3,405)	$15,796	1	82,531	$12,380	$10	**1.3**	71.76%	$230,249	81.41%	$164,629
PS #28 - Interior	$26,236	($3,820)	$22,416	3	147,065	$18,625	$46	**1.2**	76.63%	$346,400	86.28%	$249,487
PS #28 - Exterior	$6,061	($560)	$5,501	1	6,132	$797	$9	**6.8**	8.00%	$13,955	14.77%	$6,245
PS #28 - Total	$32,296	($4,380)	$27,916	5	153,197	$19,422	$55	**1.4**	63.10%	$361,226	72.74%	$255,731
PS #29 - Interior	$130,687	($9,740)	$120,957	25	135,650	$23,230	$4,321	**4.4**	16.11%	$2,249,490	24.45%	$280,292
PS #29 - Exterior	$14,584	($560)	$14,024	2	10,529	$1,790	$194	**7.1**	7.48%	$260,847	14.10%	$14,868
PS #29 - Total	$145,272	($10,300)	$132,972	27	147,179	$25,020	$4,515	**4.6**	15.22%	$2,510,338	23.43%	$295,161

Table 4.1-1
Jersey City Lighting System Improvements***

	Engineer's Opinion of Probable Cost	Rebate	Total Cost	Annual kW Savings	Annual kWh Savings	Annual Energy Savings	Annual Maintenance Cost Savings (AMCS)	Simple Payback	Annual Return on Investment (AROI)	Lifetime Energy Savings (15 years)**	Internal Rate of Return (IRR)	Net Present Value (NPV)
PS #30 - Interior	$167,210	($13,510)	$153,700	39	222,713	$37,861	$5,481	**3.5**	21.53%	$2,858,653	30.80%	$477,505
PS #30 - Exterior	$17,255	($420)	$16,835	2	9,609	$1,633	$301	**8.7**	8.58%	$313,126	15.52%	$20,547
PS #30 - Total	$184,465	($13,930)	$170,535	41	232,323	$39,495	$5,783	**3.8**	19.88%	$3,171,779	28.60%	$488,857
PS #31 - Interior	$5,303	($1,190)	$4,113	0	43,731	$7,434	$0	**0.6**	174.09%	$138,270	183.75%	$104,154
PS #31 - Exterior	$3,030	($280)	$2,750	1	3,066	$521	$5	**5.2**	12.45%	$9,694	20.25%	$4,908
PS #31 - Total	$8,333	($1,470)	$6,863	1	46,797	$7,956	$5	**0.9**	109.32%	$147,964	118.98%	$109,062
PS #33 - Interior	$4,547	($980)	$3,567	0	27,900	$3,069	$66	**1.1**	81.24%	$57,079	90.90%	$42,094
PS #33 - Exterior	$3,030	($280)	$2,750	1	3,066	$337	$5	**8**	5.77%	$6,273	11.80%	$2,229
PS #33 - Total	$7,577	($1,260)	$6,317	1	30,966	$3,406	$71	**1.8**	48.38%	$63,352	57.96%	$44,323
PS #34 - Interior	$15,065	($2,205)	$12,860	2	57,375	$9,180	$11	**1.4**	64.80%	$170,740	74.44%	$120,995
PS #34 - Exterior	$18,612	($1,120)	$17,495	4	16,381	$2,621	$21	**6.6**	8.44%	$48,747	12.34%	$20,989
PS #34 - Total	$33,678	($3,325)	$30,353	6	73,757	$11,801	$32	**2.6**	32.32%	$219,488	41.66%	$141,984
PS #37 - Interior	$21,210	($1,580)	$19,630	6	24,020	$3,123	$151	**6**	10.01%	$58,078	17.30%	$28,040
PS #37 - Exterior	$11,148	$0	$11,148	1	3,022	$393	$16	**27.2**	-2.99%	$7,307	-4.18%	($5,187)
PS #37 - Total	$32,358	($1,580)	$30,778	6	27,043	$3,516	$167	**8.4**	5.30%	$65,385	11.14%	$22,853
PS #38 - Interior	$44,909	($4,375)	$40,534	14	84,856	$11,031	$712	**3.5**	22.31%	$205,170	31.20%	$130,491
PS #38 - Exterior	$17,951	($560)	$17,391	2	9,355	$1,216	$26	**14**	-0.48%	$21,291	3.52%	$711
PS #38 - Total	$62,861	($4,935)	$57,926	16	94,211	$12,247	$739	**4.5**	15.75%	$227,791	24.04%	$131,203
PS #39 - Interior	$30,752	($3,780)	$26,972	6	83,484	$13,357	$0	**2**	42.86%	$248,434	52.38%	$167,554
PS #39 - Exterior	$7,576	($700)	$6,876	2	7,665	$1,226	$47	**5.4**	11.85%	$22,810	19.53%	$11,665
PS #39 - Total	$38,328	($4,480)	$33,848	8	91,149	$14,584	$47	**2.3**	36.56%	$271,244	45.99%	$179,219

4.2 HVAC Systems

The goal of this section is to present any heating and cooling energy reduction and cost saving measures that may also be cost beneficial. Where possible, measures will be presented with a life-cycle cost analysis. This analysis displays a payback period based on weighing the capital cost of the measure against predicted annual fiscal savings. To do this, the buildings have been modeled as accurately as possible to predict energy usage for space heating and cooling, as well as domestic hot water use.

Each building is modeled using software called eQuest, a Department of Energy-sponsored energy modeling program, to establish a baseline space heating and cooling energy usage. Climate data from Newark, NJ was used for analyses. From this, the model may be calibrated, using historical utility bills, to predict the impact of theoretical energy savings measures.

Once annual energy savings from a particular measure have been predicted and the initial capital cost has been estimated, payback periods may be approximated. Equipment cost estimate calculations are provided in Appendix H.

Equipment age can be an important factor in energy consumption, as well. Over several decades, ASHRAE has compiled data pertaining to service lives of most HVAC related equipment. From this, ASHRAE indicates a median service life (life until replacement) for HVAC related equipment that may be used as an estimate for the useful life of HVAC equipment currently in service. For example, ASHRAE indicates a window air conditioning unit has a median service life of 10 years. Therefore, if a window unit has been in service for more than 10 years, the owner may want to consider replacement. Not only will a replacement ensure minimal downtime between units (the unit is replaced before it ceases to function), but it will also maintain rated system efficiency, as efficiency tends to decrease with age.

All major equipment noted during CDM's on site audit is listed in Appendix O, along with estimated current ages and ASHRAE-expected service lives. It should be noted that only equipment that was observed at the time of the audit is included. Where equipment ages were not found on the equipment tags, they have been estimated based on the unit appearance or approximate renovation dates. In some cases, service locations may have been estimated based on unit proximity. Additionally, in cases where a unit's manufacturer and/or model could not be determined due to an unreadable, faded, destroyed, or lost tag, manufacturer and model number information has been represented as "unknown".

CDM also creates an inventory of observed domestic water heaters. This will attempt to inform the Board of any water heaters that are in need of replacement. Equipment observed to be in poor or aging condition would warrant replacement, as they are likely not operating at peak efficiency. This domestic water heater inventory may be seen Appendix O as well.

4.2.1 Jersey City Schools HVAC Improvements

4.2.1.1 Condensing Boiler Upgrade

Currently, the heating systems recommended for this measure utilize gas fired boilers. Due to the tendency of equipment efficiency decreasing with age, CDM estimates the boilers to range from 65% to 80% efficient. CDM recommends replacing these boilers with systems of high-efficiency, condensing boilers. The condensing boilers were sized according to the building models, and the current capacities of boilers. Condensing boilers are modeled with a full-load efficiency of ~92% and return water temperature of 100°F.

Fiscal savings from such an upgrade are then identified in Table 4.2-1 below. Lifetime savings calculations for all ECRMs may be found in Appendix I. It's important to note that these are estimates based on building models, and further investigation is warranted before pursuing boiler replacements.

Due to the improved automation and control within modern condensing boilers, their operation and maintenance costs tend to be less than those of typical cast iron, and firetube boilers. CDM estimates a cast iron, or fire tube boiler system will typically cost around $3,500 per year for regular preventative maintenance, whereas a condensing boiler system would cost around $2,000 per year. Therefore, replacing the existing boilers with condensing boilers should result in an operation and maintenance cost savings of $1,500 per year.

Table 4.2-1
Jersey City Condensing Boiler Upgrade

	Engineer's Opinion of Probable Cost	Rebate	Total Cost	Predicted Annual Savings (Therms)	Annual Energy Savings	Annual Maintenance Cost Savings (AMCS)	Simple Payback	Annual Return on Investment (AROI)	Lifetime Energy Savings (24 years)	Internal Rate of Return (IRR)	Net Present Value (NPV)
Public School #15	$410,076	($20,000)	$390,076	58,014	$68,457	$1,500	**5.6**	13.77%	$2,082,589	20.52%	$1,239,990
*Public School #17	$376,064	($18,000)	$358,064	16,859	$22,254	$1,500	**15.1**	2.47%	$677,008	6.94%	$195,427
PS #5	$72,622.50	($3,500)	$69,122	5,930	$2,787	$1,500	**16.1**	-0.13%	$95,950.02	2.49%	($4,182.19)

* These boilers were built in 1994, and in 2019 they will have reached their ASHRAE expected life. When they reach their expected life, the boilers condition should be evaluated to decide if it's financially feasible to upgrade to more efficient boilers. While the boilers should not be replaced now, a savings analysis was performed to show the expected savings.

4.2.1.2 Building Management System

Currently many HVAC systems at the schools are controlled pneumatically. Some schools have pneumatic actuators that are functional, while many have abandoned or bypassed the pneumatics. Some schools have been retrofitted to electronic. Many schools with bypassed pneumatic components have no operable automatic HVAC controls at all. It is recommended that a direct digital control (DDC) building management system (BMS) be implemented. A system like this would monitor and control all HVAC equipment, allowing maintenance staff to operate systems and adjust climate control in real time to maximize staff and customer comfort, while minimizing unnecessary heating and cooling.

Typically implementation of a BMS will save the owner 5-15% of the energy devoted to HVAC. As all systems are currently independently monitored and controlled, CDM conservatively estimates that incorporating the remaining HVAC equipment into the DDC BMS will allow the schools to save on average, 10% of the energy being used for HVAC. This measure involves installing a DDC controls system which will measure the space temperature of all the spaces, and control the heating and cooling equipment. The system will be able to vary the operation of the unit, outdoor air damper, and space temperature set points based upon outdoor air temperature and building occupancy. This will include building start up staging, and outdoor temperature shut down.

4.2.1.3 Demand Control Ventilation

It is recommended that Demand Control Ventilation (DCV) be implemented in spaces with varying occupancy loads, such as auditoriums and large gathering spaces. DCV saves energy by avoiding the heating, cooling, and dehumidification of more ventilation air than is needed through building automation. Building codes require that a minimum amount of fresh air be provided to ensure adequate air quality. To comply, ventilation systems often operate at a fixed rate based on an assumed occupancy. The result is there often is much more fresh air coming into buildings than is necessary. That air must be conditioned, resulting in higher energy consumption than is necessary with appropriate ventilation. With DCV, ventilation rates can be measured and controlled based on actual occupancy rather than assumed.

4.2.1.4 Night Setback

To model savings for implementation of an improved night setback control scheme, it was assumed that existing HVAC systems are generally set to 68°F during unoccupied periods, and 74°F during occupied periods in heating mode; and 82°F during unoccupied periods and 76°F during occupied periods in cooling mode. The proposed new setback control scheme would include setting systems to 60°F during unoccupied periods and 72°F during occupied periods in heating mode; and to 85°F during unoccupied periods and 76°F during occupied periods in cooling mode.

Table 4.2-2 demonstrates the potential payback for Building Management System and Control-related ECRMs.

Table 4.2-2
Jersey City Building Management System & Control ECRMs

	Engineer's Opinion of Probable Cost	Rebate	Total Cost	Predicted Annual Savings (Therms/Gallons/ kWh)	Annual Energy Savings	Annual Maintenance Cost Savings (AMCS)	Simple Payback	Annual Return on Investment (AROI)	Lifetime Energy Savings (15 years)	Internal Rate of Return (IRR)	Net Present Value (NPV)
Lincoln High School AHU night setback	$2,702	$0	$2,702	5,500 therms /38,100 kWh	$20,468	$0	**0.1**	380.60%	$380,323.56	390.27%	$149,686.35
PS #3 AHU night setback	$2,702	$0	$2,702	43600 kWh/5200 therms	$10,464	$0	**0.1**	380.60%	$187,219.48	390.27%	$149,686.35
Regional Day School AHU night setback	$ 14,930	$0	$14,930	82780 kWh	$14,072	$0	**1.0**	28.70%	$261,735.08	38.34%	$108,099.13
PS #3 Boiler OA Reset	$ 5,750	$0	$ 5,750	5300 kWh/ 1900 therms	$3284	$0	**1.8**	50.45%	$11,580.64	60.04%	$145,283.76
MS #4 Demand Control Ventilation	$ 2,791	$0	$2,791	1,200 therms / 2000 kWh	$1,468	$0	**1.9**	45.95%	$25,673.95	55.51%	$18,588.64
PS #22 Cafeteria AHU Controls	$ 1,430	$0	$1,430	3170 kWh	$507	$0	**2.8**	28.79%	$9,429.65	38.01%	$5,953.50
Ferris High School Economizer	$ 2,790	$0	$2,790	6,000 kWh/ 0 therms	$840	$0	**3.3**	23.44%	$15,623.09	32.41%	$9,443.01
Lincoln High School Boiler OA Reset	$ 5,750	$0	$5,750	2, 100 kWh/2,700 therms	$1,536	$0	**3.7**	20.05%	$26,699.77	29.61%	$30,040.29
PS #29 DDC BMS	$60,375	$0	$60,375	1,485 Gal/11,368 kWh	$5,170	$0	**11.7**	1.90%	$304,018	5.98%	$14,916
McNair High School Night Setback	$5,750.00	$0	$5,750	3100 kWh / 0 therms	$465.00	$0	**12.4**	1.42%	$8,648.49	5.18%	$1,021.84
Public School #15 DDC BMS	$241,500	$0	$241,500	14,165 Therm/ 20,710 kWh	$19,200	$0	**12.6**	1.28%	$127,074	4.95%	$38,112
PS #38 DDC BMS	$97,031	$0	$97,031	2,645 Gal/ 11,125 kWh	$7,186	$0	**13.5**	0.74%	$1,060,102	3.99%	$7,619
Academy #1 DDC BMS	$135,844	$0	$135,844	70,960 kWh	$8,515	$0	**16.0**	(.40%)	$285,930	1.85%	($11,839)
PS #30 DDC BMS	$97,031	$0	$97,031	1,772 Gal/ 9,095 kWh	$5,391	$0	**18.0**	(1.11%)	$125,150	0.39%	($18,521)
Snyder High School DDC BMS	$247,969	$0	$247,969	4,350 Gal/27,130 kWh	$13,466	$0	**18.4**	(1.24%)	$1,072,814	0.12%	($51,862)
Middle School #40 DDC BMS	$241,500	$0	$241,500	400 Gal/7592 Therm /12,895 kWh	$11,900	$0	**20.3**	(1.74%)	$363,952	(1.00%)	($68,199)
PS #20 DDC BMS	$97,031	$0	$97,031	1,166 Gal/7,771 kWh	$4,744	$0	**20.5**	(1.78%)	$323,524	(1.09%)	($27,944)
PS #22 Demand Control Ventilation	$ 19,501	$0	$ 19,501	3210 kWh	$514	$0	**37.9**	(4.03%)	$9,541.24	(0.69%)	($7,533.62)

4.2.1.5 Steam Boiler Replacement

Currently, the heating systems recommended for this measure utilize steam boilers. Due to the tendency of equipment efficiency to decrease with age CDM estimates the boilers to range from 65% to 70% efficient. The boilers have far exceeded their ASHRAE-expected lives. For this reason, an incremental payback analysis was used.

CDM recommends replacing these boilers with 83% efficient fire-tube steam boilers. The boilers were sized according to the building models, and the current capacities of boilers.

There may be an opportunity to save more energy and cost by reducing the size of the installed boilers. Building models created for this audit show that the boilers are sized for the building to be heated by a single boiler. Often, the buildings do not use their boilers' full heating capacities. These and other considerations are to be addressed when the new system is designed.

Fiscal savings from the replacement of existing steam boilers are identified in Table 4.2-3 below. Lifetime savings calculations for all ECRMs may be found in Appendix I. It's important to note that these are estimates based on building models, and further investigation is warranted before pursuing boiler replacements.

Table 4.2-3
Jersey City Steam Boiler Replacement*

	Engineer's Opinion of Probable Cost	Rebate	Total Cost	Predicted Annual Savings (Therms/Gal)	Annual Energy Savings	Annual Maintenance Cost Savings (AMCS)	Simple Payback	Annual Return on Investment (AROI)	Lifetime Energy Savings (25 years)	Internal Rate of Return (IRR)	Net Present Value (NPV)
*Snyder High School	$80,536	$0	$80,536	8,143 Gal	$17,589	$0	**4.6**	17.84%	$563,381	24.65%	$346,381
*Middle School #40	$152,231	$0	$152,231	15,628 Th/ 840 Gal	$20,554	$0	**7.4**	9.50%	$658,351	15.78%	$346,653
*Middle School #41	$161,252	$0	$161,252	8,857 Gal	$19,220	$0	**8.4**	7.92%	$615,622	13.97%	$305,253
*Public School #29	$109,106	$0	$109,106	2,651 Gal	$5,779	$0	**18.9**	1.30%	$185,103	5.09%	$31,161
*Public School #20	$198,303	$0	$198,303	3,479 Gal	$7,480	$0	**26.5**	(0.23%)	$239,587	2.31%	($16,750)
Public School #1	$160,856	$0	$160,856	1,256 Therms	$1,658	$0	**97.0**	(3.14%)	$50,439	(6.51%)	($122,223)
Public School #8	$436,138	$0	$436,138	4,845 Therms	$7,025	$0	**62.1**	(2.45%)	$227,556	(3.52%)	($261,847)
Public School #11	$219,794	$0	$219,794	13,731 Therms	$20,047	$0	**11.0**	4.95%	$609,867	6.89%	$247,321
Public School #23	$283,156	$0	$283,156	195 Therms	$224	$0	**1,262.7**	(6.67%)	$6,815	(18.64%)	($277,937)
Public School #24	$436,138	$0	$436,138	80,500 Therms	$95,795	$0	**4.6**	(6.67%)	$2,914,262	23.53%	$1,795,978
Public School #25	$219,794	$0	$219,794	731 Therms	$1,067	$0	**206.0**	(3.68%)	$32,460	(10.44%)	($194,932)
Public School #33	$219,794	$0	$219,794	5295 Therms	$7,307	$0	**30.1**	(0.84%)	$70,113	0.99%	($49,534)
Public School #39	$436,138	$0	$436,138	2115 Therms	$2,792	$0	**156.2**	(3.53%)	$222,012	(18.73%)	($371,082)
Liberty High School	$283,116	$0	$283,116	615 Therms	$978	$0	**289.5**	(6.67%)	$576,392	(12.08%)	($260,368)

*Savings was performed by difference between an 83% efficient Firetube boiler, and current boiler.

4.2.1.6 Operation and Maintenance Measures

Many building systems were not properly working. For plumbing systems, these included water leaks on faucets, toilets leaking or running. Repairing these fixtures saves water. Typically the hot water side of the faucet leaks first. If this is the case repairing the leak also saves the water heating fuel.

The HVAC systems had many other deficiencies. Exhaust fans were observed without fan belts. Many window air conditioners were observed to be missing covers, and had either dirty or missing air filters. Larger air conditioning equipment was frequently non-operational and abandoned in place. Repairing ventilation systems improves air quality in the space. The air conditioning systems use more energy as they age due to wear. This trend is only exacerbated by failing to clean the coils, replace filters and check the refrigerant charge.

The heating systems had many issues. Steam heated buildings did not have steam trap testing or replacement programs. Steam leaks lose heating energy and increase make up water to the boiler. Make up water contributes to the loss of boiler efficiency and also increases corrosion of the boiler, associated piping and equipment.

The controls need repair. Many controls have been deactivated. Controls that are functioning have many air leaks. This causes the air compressor to run excessively. Many of the controls were observed to be manually on or off. This may be due to school not being in session during the site visit. Controls shall be taken full advantage of to increase the comfort and reduce the energy wasted by the heating and cooling systems.

4.3 Alternative Energy Sources

4.3.1 Photovoltaic Solar Energy System Overview

Photovoltaic (PV) cells convert energy in sunlight directly into electrical energy through the use of silicon semi conductors, diodes and collection grids. Several PV cells are then linked together in a single frame of module to become a solar panel. PV cells are able to convert the energy from the sun into electricity. The angle of inclination of the PV cells, the amount of sunlight available, the orientation of the panels, the amount of physical space available and the efficiency of the individual panels are all factors that affect the amount of electricity that is generated.

Based on the estimated cumulative total available roof area, calculations determine that the installation of thirty seven (37) systems with a total rating of approximately 4.7 MW (dc) will be appropriate for the thirty seven (37) School Disctrict owned buildings listed below.

As part of this energy audit, a preliminary engineering feasibility study of the sites outlined above to support solar generation facilities was completed consisting of the following tasks:

- Site visit by CDM engineers.
- Satellite Image Analysis and Conceptual design and layout of the photovoltaic system
- Design and construction cost estimates
- Determine a preliminary design for the size and energy production of the solar system.

The total unobstructed available area of each section of the roof with southern exposure was evaluated. It is important to note the following:

- The structural integrity of the roofs was not confirmed during CDM's site visit. The Board owned buildings may require some degree of roofing work prior to the implementation of a solar system.

In the case of the flat areas, the PV system sizing and kWh production was calculated assuming the installation of a crystalline module facing south direction (180 Degree Azimuth) and tilted approximately 20 degrees to allow better rain water shedding and snow melting. Please note that the kWh production as well as system size may differ significantly based on final panel tilt selected during the RFP and design phase.

Blended electric rates were used based on actual utility bills and were applied for the facility.

The following is a preliminary study on the feasibility of installing PV solar systems at thirty seven (37) Board owned buildings to generate a portion of each facility's electricity requirements. Each system is designed to offset the electric purchased from the local utility and not as a backup or emergency source of power.

In order to determine the best location for the installation of the PV solar system, a satellite image analysis and site walkthrough of the buildings was performed during the week of August 14th, 2011.

Also, as part of the assessment, CDM investigated possible locations for electrical equipment that need to be installed such as combiner boxes, disconnect switches and DC to AC inverters. Consideration was also given to locations of interconnection between the solar system and building's electrical grid.

Table 4.3-1 provides a summary of all the proposed PV systems for the Jersey City Public Schools. The Project Team conducted facility walkthroughs and utilized satellite image analysis and to determine the estimated total available area, then calculated the potential capacity of a solar array system for each location. It should be noted that the interconnection point for the PV system will require a modification or replacement of the existing service entrance equipment wherein the PV system feeder connections will have to be made after the main circuit breaker, and protective relaying will also have to be implemented. Any connection points would have to meet NEC and local utility requirements. Further investigation and verification of existing electrical equipment at each location would be required prior to implementation of a PV system. See section 2 for a detailed description of each building's roof type.

Table 4.3-1
Proposed Solar System Summary

Location	Roof Type	Electrical Service Size	Proposed PV Array Size (kW DC)
Dickinson High School	Flat		335
Ferris High School	Flat	480V, 3000A	120
Lincoln High School	Flat	480V, 3000A	470
McNair/Academic High School	Flat	208Y120V, 2500A	180
Snyder High School	Flat	480V, 2000A	430
MS #40	Flat	480V, 1600A	330
MS #41	Flat	480V, 1600A	360
PS #15	Flat	480V, 3000A	610

Table 4.3-1
Proposed Solar System Summary

Location	Roof Type	Electrical Service Size	Proposed PV Array Size (kW DC)
PS #22	Flat	208Y120V, 1200A	300
Academy 1	Flat	208Y120V, 1200A	120
Administrative Building	Flat	480V, 3000A	40
Cunningham Center ECC	Flat/Pitched	208Y120V, 1200A	40
Infinity Institute	Flat	208Y120V, 1200A	130
Liberty High School	Flat		49
Regional Day School	Flat	480V, 600A	160
MS #4	Flat	480V, 3000A	NA
MS #7	Flat	208Y120V, 1200A	300
PS #1	Flat		6
PS #3	Flat	480V, 3000A	NA
PS #5	Flat	208Y120V, 2000A	150
PS #6	Flat		84
PS #11	Flat		357
PS #12	Flat	208Y120V, 1600A	200
PS #14	Flat	208Y120V, 1200A	200
PS #16	Flat	208Y120V, 800A	100
PS #17	Flat/Pitched	208Y120V, 2000A	280
PS #20	Flat/Pitched	208Y120V, 1600A	80
PS #23	Flat		204
PS #24	Flat		228
PS #25	Pitched (triangular)		273
PS #27	Flat		136
PS #28			
PS #29	Flat/Pitched	208Y120V, 1600A	40
PS #30	Flat	208Y120V, 1600A	120
PS #31			78
PS #33			48
PS #34	Flat	208Y120V, 1600A	120
PS #37	Flat	208Y120V, 2000A	200
PS #38	Flat	208Y120V, 1600A	170
PS #39			42

4.3.1.1 Basis for Design and Calculations



The proposed Photovoltaic (PV) Power systems outlined above for each facility are comprised of the PV arrays, inverter(s), combiner boxes, disconnect switches, and all of the necessary wiring and interconnection equipment. The solar panels will be mounted onto the roof. The array outputs will feed power into the DC to AC inverters. AC outputs will then be connected at each building's electrical service as outlined above. Pending further engineering analysis of the roofs, it is yet to be determined if the solar arrays will be installed using a self-ballasting system, or roof penetration system, or a combination of both.

The most common roof mounted system is referred to as a ("fixed tilt") system typically mounted to a metal rack that can be fixed at a specific angle. There are also ("tracking systems") or movable along one or two axes to follow the position of the sun during the day. For a roof-mounted PV system, tracking systems are very rarely installed and are usually used for ground-mounted systems only, as they require more complex racks and higher maintenance costs. For the "fixed" system, the tilt is determined based on the following factors: geographical location, total targeted kWh production, seasonal electricity requirements and weather conditions such as wind. Ideally, the module tilt for Bristol, CT should be 25-35 degrees with an azimuth as close as possible to 180 (south); however, experience has shown that PV systems are typically installed at a tilt of 20 degrees or lower in order to avoid any issues with wind and to maximize total system size.

The type of PV panels and equipment used to mount the system shall be determined based on the wind conditions and structural integrity of the roof determined during the design phase of the project. In general, penetration/tie-down systems, non-penetrating ballasted type systems, or a combination of the two should be considered.

4.3.1.2 Calculation of PV System Yield

An industry accepted software package PV Watts was used to calculate projected annual electrical production of the crystalline silicon PV system in its first year, as summarized in Table 4.3-2. The system was designed to provide maximum kWh production based on available roof space.

Table 4.3-2

Summary of Solar (PV) Systems

School	Square Footage Available (ft2)	Size (kW DC)	First Year Solar kWh	Energy Savings	RECs	AROI	IRR	NPV	Lifetime Savings
Dickinson High School	35,500	355	435,230.0	$65,285	$184,102	1.84%	1.43%	($587,141.71)	$2,380,224.8
Ferris High School	12,000	120	147,120	$20,597	$62,232	1.42%	0.57%	($314,863.05)	$750,944.2
Lincoln High School	47,000	470	576,220	$63,384	$243,741	1.46%	0.24%	($1,263,972.32)	$2,310,941.3
McNair/Academic High School	18,000	180	220,680	$33,102	$93,348	1.68%	1.14%	($359,325.38)	$1,206,874.6
Snyder High School	43,000	430	527,180	$79,077	$222,997	1.87%	1.48%	($684,777.29)	$2,883,089.2
MS #40	33,000	330	404,580	$60,687	$171,137	1.83%	1.40%	($554,596.52)	$2,212,603.4
MS #41	36,000	360	441,360	$79,444	$186,695	2.16%	2.26%	($290,835.57)	2,896,499.0
PS #15	61,000	610	747,860	$89,743	$316,345	1.60%	0.63%	($1,432,206.17)	3,271,971
PS #22	30,000	300	367,800	$58,848	$155,579	1.92%	1.66%	($431,426.96)	$2,145,554.8
Academy 1	12,000	120	147,120	$19,125	$62,232	1.32%	0.27%	($348,509.18)	697,305.3
Administrative Building	4,000	40	49,040	$5,394	$20,744	0.38%	(1.80%)	($221,933.81)	$196,675.9
Cunningham Center ECC	4,000	40	49,040	$7,356	$20,744	0.72%	(0.58%)	($177,072.31)	$268,194.3
Infinity Institute	13,000	130	159,380	$17,531	$67,418	1.15%	(0.32%)	($440,032.90)	$639,196.5
Liberty High School	4,900	49	60,074	$9,011	$25,411	0.91%	(0.21%)	($188,788.57)	$328,538.1
Regional Day School	16,000	160	196,160	$33,347	$82,976	1.84%	1.63%	($243,566.21)	$1,215,814.4
MS #7	30,000	300	367,800	$55,170	$155,579	1.81%	1.37%	($515,542.29)	$2,011,457.6
PS #1	613	6.1	7,515	$8,238.7	$21,781	0.85%	(0.21%)	($167,899.78)	$300,377.7
PS #5	15,000	150	183,900	$22,068	$77,790	1.31%	0.11%	($446,444.14)	$804,583.0
PS #6	8,400	84	102,984	$19,567	$43,562	1.71%	1.60%	($140,142.67)	$713,397.0
PS #11	35,736	357	438,123	$65,719	$185,326	1.84%	1.43%	($590,213.98)	$2,396,048
PS #12	20,000	200	245,200	$26,972	$103,720	1.30%	(0.05%)	($609,669.07)	$983,379.3
PS #14	20,000	200	245,200	$26,972	$103,7120	1.30%	(0.05%)	($609,669.07)	$983,379.3
PS #16	10,000	100	122,600	$18,390	$51,860	1.42%	0.71%	($255,180.76)	$670,485.9
PS #17	28,000	280	343,280	$41,193	$145,207	1.48%	0.43%	($725,029.06)	$1,501,888.4
PS #20	8,000	80	98,080	$10,788	$41,488	0.91%	(0.77%)	($318,867.63)	$393,351.7
PS #23	20,400	204	250,104	$37,516	$105,794	1.72%	1.21%	($390,568.76)	$1,367,791.2
PS #24	18,600	186	228,036	$31,925	$96,459	1.58%	0.87%	($419,287.73)	$1,163,963.5
PS #25	27,300	273	334,698	$50,205	$141,577	1.79%	1.34%	($480,393.49)	$1,830,426.4
PS #27	13,600	136	166,736	$25,010	$70,529	1.57%	0.96%	($302,045.84)	$911,860.8
PS #29	4,000	40	49,040	$7,356	$20,744	0.72%	(0.58%)	($177,072.31)	$268,194.3
PS #30	12,000	120	147,120	$25,010	$62,232	1.72%	1.42%	($213,924.65)	$911,860.8
PS #31	7,800	78	7,800	16,257	$40,451	1.47%	1.00%	($182,801.03)	$592,709.5
PS #33	4,800	48	4,800	$6,473	$24,893	0.54%	(1.47%)	($241,320.58)	$236,011.0
PS #34	12,000	120	147,120	$23,539	$62,232	1.62%	1.15%	($247,570.79)	$858,221.9
PS #37	20,000	200	245,200	$31,876	$103,720	1.50%	0.60%	($497,515.30)	$1,162,175.5
PS #38	17,000	170	208,420	$31,263	$ 88,162	1.66%	1.11%	($346,307.30)	$1,139,826.0
PS #39	4,200	42	51,492	$8,239	$21,781	0.85%	(0.21%)	($167,899.78)	$300,377.7

*3% yearly inflation on electricity costs

4.3.1.3 Total Costs

It should be noted that construction costs are only estimates based on historic data compiled from similar installations, and engineering opinion. Additional engineering and analysis is required to confirm the condition of the roofs, structural integrity of the roofs, the system type, sizing, costs and savings. Budget costs assume existing roofs are structurally sound, do not need to be replaced, and can accommodate a solar system. For illustration purposes, a draft financial analysis pro forma is attached outlining all project costs and revenues.

Table 4.3-3 Engineers Opinion of Probable Cost

Engineers Opinion of Probable Cost	**$84,141,125**

As stated above, the estimated installation costs are based on significant experience with the pricing of solar installations in New Jersey, and are intended to provide the Board with a realistic budget cost. A typical solar installation can vary in cost from $7.00 - $10.00 per watt depending on size, complexity of the system, labor rates, etc. Approximately 60-70% of that number is material costs while the balance is labor, engineering, etc. Like any installation, certain conditions can affect a price upward or downward. For purposes of this analysis the estimated installation cost does not include any roofing or structural work which may be required to maintain warranties or for additional structural support. CDM has included a budget of $9/watt for the solar system installation with an additional estimated budget of $100,000 for potential electric service work.

Refer to Section 7 for discussion on Solar Renewable Energy Certificates and other financing options for solar projects. The financial model in Appendix E provides an annual forecast illustration of project revenues and costs for 25 years.

4.3.2 Computer Power Management Software

Computer power management software controls the amount of time a group of desktop or laptop computers are powered up. The installation of power management software is simple, and only requires a small software package to be installed on each computer connected to a specific network. Software packages such as Night Watchman from 1e Software provide remote control of computers connected to a network, allowing for power down schedules to be setup, which can be used to optimize energy savings by turning off computers at a designated time. The power management software can also store energy/computer usage statistics in a database that can be used for energy usage analysis.

An energy savings analysis was performed based on the number of desktop computers provided by the Board. Laptops were omitted from the analysis based on the assumption that a laptop is powered down after use for transportation or storage, and is therefore not always connected to the Board's network. It was also assumed that the Board does not currently have a computer shut down/standby policy, and that the implementation of the power management software would reduce the daily operating time from 24, to 9.5 hours, eight months out of the year.

Table 4.3-4 includes a sample simple payback analysis. Refer to Appendix L for a more detailed PC power management software financing spreadsheet.

Table 4.3-4 Summary of PC Power Management Systems

Site	Engineers Opinion of Probable Cost	Annual Energy Savings	Lifetime Energy Savings (5 Years)*	Simple Payback (Years)	Annual Return On Investment (AROI)	Net Present Value (NPV)	Internal Rate of Return (IRR)
Sample Facility	$1,840	$3,205	$17,016	0.6	154%	$13,719	176%

*3% yearly inflation on electricity costs

**Refer to Appendix L for Computer Power Management Calculations

It should be noted that 1e also provides software to reduce the energy consumption of network devices and servers. Based on the daytime occupancy schedule and of a school building, the Board could also implement this additional power management software, and reduce the energy usage of the servers and network devices during the unoccupied afterschool and nighttime time periods. CDM recommends that the Board has further analysis performed, to access the feasibility of implementation of the additional PC power management software.

4.3.3 Geothermal Energy

Geothermal systems utilize the constant temperature of the earth throughout the year (at depths from 5 ft. to 1,000 ft. the earth temperature remains at 53 deg. F) as the primary source of energy for the heating/cooling and domestic hot water production. Additionally, since the earth is maintained at a constant temperature from heat absorbed from the sun this energy is considered a "renewable resource," and therefore is not as reliant on existing supplies of fossil fuels.

Even though this application requires significantly higher up-front costs, it has several advantages over conventional HVAC systems such as substantially lower operating and maintenance costs. The life span of the system is longer than conventional heating and cooling systems. Most loop fields are warranted for 25 to 50 years and are expected to last at least 50 to 100 years. However it is important to note that geothermal systems are more difficult to install in existing facilities and require higher capital cost due to having to complete significant infrastructure changes.

4.3.4 On-Site Wind Power Generation

On-site wind power generation typically utilizes a form of turbine, which is rotated with the flow of wind across it, this rotational force powers a generator, producing DC electricity. The DC electricity is then converted into AC electricity, which can be used for commercial power, or can be fed back into the power grid, reducing the overall electric demand. The size of the turbine is proportional to the amount of wind and concurrently the amount of energy it can produce.



CDM has determined that it is economically feasible for the Board to install wind turbine energy systems at its facilities. This is primarily due to an 18.6 year payback for electrical energy produced at average wind speeds. There are many other incentives that could possibly provide additional funding which would reduce the payback period further.

Utilizing NASA's Atmospheric Science Data Center online wind mapping tool, it was determined that the local average wind speeds for the Board ranged from 4.36 m/s to 6.3 m/s at 42.7 meters above the ground. In general, around 7mph of average wind speed, as determined over the course of a year, is necessary to "fuel" the turbine. These values fall within the range of feasibility for installation of a new wind turbine system.

For the purposes of this feasibility analysis, CDM chose a 35kW Endurance G-3120 wind turbine. Please refer to Appendix L for vendor information. This turbine size is used most often for small commercial applications. Power Curve data was determined through the use of the product specification sheets on vendor websites. Actual turbine size, height, location, and manufacturer should be determined upon design of a wind turbine system.

The estimated wind speed data, associated wind probability distribution function (weibull value), turbulence losses, and other relevant data were then incorporated into Wind Cad to estimate the annual output for the wind turbine. Refer to Appendix I for Wind Cad Modeling.

Table 4.3-6 includes a simple payback analysis for the installation of one wind turbine energy system. Refer to Appendix J for a more detailed wind turbine financing spreadsheet, including utility cost avoidance and REC's.

Table 4.3-6:

Simple Payback Analysis for Wind Turbine Energy System

Parameter	Wind Turbine (Minimum Site Wind Speed – 4.36 m/s)	Wind Turbine (Maximum Site Wind Speed – 6.3 m/s)	Wind Turbine (Average Site Wind Speed –5.41 m/s)
Engineer's Opinion of Probable Cost	$450,000	$450,000	$450,000
1st Year Production	74,405	154,347	120,107
Annual Estimated Electric Savings	$11,161	$23,152	$18,016
Annual Estimated REC Revenue	$1,860	$3,859	3,003
Project Simple Payback	32.1	13.8	18.6
Annual Return On Investment (AROI)	(0.48%)	4.19%	2.1%
Lifetime Energy Savings (25 years)	$406,913	$844,107	$656,852
Internal Rate of Return (IRR)	1%	8.5%	5.5%
Net Present Value (NPV)	($83,600)	$263,652	$114,920

*Refer to Appendix J for Wind Cad Modeling

It should be noted that CDM used only REC values in determining simple payback periods. As stated above, other incentives and financial programs such as Power Purchase Agreements are available to help finance this installation. For example, if a Power Purchase Agreement is completed, the private company financing the project would benefit from the 30% tax credit. Other incentives such as CREB's and first year usage incentives could be available to the Board in lowering the payback period. Refer to www.dsireusa.org for an extensive listing of possible incentives for New Jersey.

It should also be noted that the wind turbine represented above is for feasibility purposes only. If the Board decides to install a wind turbine system(s), different mounting heights, turbine sizes, and manufacturers should be considered. In addition, permits may be required for installation according to local zoning laws. The FAA must also be notified in order to give clearance for the tower, and for installation of aviation safety lights if necessary.

4.3.5 Additional Measures

It may be possible to reduce the plug load of the facilities even further with the implementation of smart strips and energy star appliances. Smart Strips save energy by electronically unplugging all of the devices that are plugged into the "Automatically Switched outlets" when the device plugged into the control outlet is turned off. It is important to note that CDM is not suggesting that computers be plugged into the automatically switched off outlets, as there would be potential for the computers to be shut off mid-operation. There are a vast amount of computer peripherals that are typically left on after a computer is shut off, including monitors, scanners, printers and DSL/Cable modems. These peripherals can be plugged into the automatic outlets.

A standard Smart Strip has one 'control' outlet, six (6) outlets that are automatically switched off when the control device is and three (3) outlets that are always hot. An example of how the Board can implement the use of Smart Strips office or library settings is to plug a computer into the control outlet, five (5) monitors and a personal printer (8 W in standby mode) into the automatic outlets and three (3) computers into the always hot outlets. An LCD monitor can use up to 34W; in standby mode the monitor utilizes 1 – 2W. A CRT monitor typically utilizes around 75W. The following table 4.3-7 summarizes the payback of a Smart Strip, assuming 5 LCD monitors and 1 printer are automatically powered down that would otherwise been left on 8 hours/day and in standby mode 16 hours/day, 5 days/week for 9 months.

Table 4.3-7: Simple Payback

Smart Strip Application Example	
Predicted Annual Savings – 5 LCD monitors, 1 printer (kWh)	308
*Total Annual Savings	$46.2
Initial Capital Cost	$40
Simple Payback (months)	10.4
Lifetime Energy Savings (15 years)	$693

*Based on aggregate cost of $0.15/kWh.

The following Table 4.3-8 summarizes other applications for the Smart Strip that may be applicable throughout the buildings:

Table 4.3-8 Applications for Smart Strips

Control Outlet	Switched Outlets
Computer	Monitors, printers, scanners, lamps
TV	VCR, DVD player, cable box
Lamp	Stereo, space heater

The Board should continue to implement Energy Star appliances. This is recommended on an 'as-needed' basis.

In addition to replacing old appliances with Energy Star appliances, the following two maintenance procedures can work to save the energy consumed by the refrigerators. One is cleaning dirty condenser coils, twice a year. A refrigerator's condenser coils and cooling fins are located either under the unit behind a grille in the front or on the back of the appliance. The coils can be cleaned with a brush or vacuum cleaner hose. The second source of wasted energy associated with a refrigerator is the door seal. Realigning the door or replacing a no longer airtight door seal will work to improve energy efficiency.

Section 5

Section 5
Evaluation of Energy Purchasing and Procurement Strategies

5.1 Energy Deregulation

In 1999, New Jersey State Legislature passed the Electric Discount & Energy Competition Act (EDECA) to restructure the electric power industry in New Jersey. This law, the deregulation of the market, allowed all consumers to shop for their electric supplier. The intent was to create a competitive market for electrical energy supply. As a result, utilities were allowed to charge Cost of Service and customers were given the ability to choose a third party supplier. Energy deregulation in New Jersey increased the energy buyers' options by separating the function of electricity distribution from that of electricity supply.

The Jersey City Board of Education already utilizes South Jersey Energy and HESS as an electricity supplier.

To sell electric generation service in New Jersey, electric power suppliers must be licensed by the New Jersey Board of Public Utilities (NJ BPU). They must also be registered with the local public utility (JCP&L) to sell electric service in that utility's service areas. The following suppliers are licensed with the NJ BPU and are registered to sell electric service in the JCP&L service territory:

- Amerada Hess Corp.
- BOC Energy Services
- Con Edison Solutions, Inc.
- Constellation New Energy, Inc.
- Direct Energy, LLC
- First Energy Solutions Corp.
- Glacial Energy
- Integrys Energy Service
- Liberty Power
- Pepco Energy Services, Inc.
- PP&L Energy Plus, LLC
- Reliant Energy Solutions East, LLC
- Sempra Energy Solutions

- South Jersey Energy
- Strategic Energy LLC
- Suez Energy Resources NA, Inc.
- UGI Energy Services

5.2 Demand Response Program

Demand Response is a program through which a business can make money on reducing their electricity use when wholesale electricity prices are high or when heavy demand causes instability on the electric grid, which can result in voltage fluctuations or grid failure. Demand Response is an energy management program that compensates the participant for reducing their energy consumption at critical times. Demand Response is a highly efficient and cost effective means of reducing the potential for electrical grid failure and price volatility and is one of the best solutions to the Mid-Atlantic region's current energy challenges.

The program provides at least two hours advance notice before curtailment is required. There is typically one event a year that lasts about three hours in the summer months, when demand for electricity is at its highest.

Participation in Demand Response is generally done through companies known as Curtailment Service Providers, or CSPs, who are members of PJM Interconnection. There is no cost to enroll in the program and participation is voluntary, for instance, you can choose when you want to participate. In most cases, there is no penalty for declining to reduce your electricity use when you're asked to do so. The event is managed remotely by notifying your staff of the curtailment request and then enacting curtailment through your Building Management System. CSPs will share in a percentage of your savings, which may differ among various CSPs, since there may be costs associated with the hardware and/or software required for participation, so it is recommended that a number of CSPs be contacted to review their offers.

Section 6

Section 6
Ranking of Energy Conservation and Retrofit Measures (ECRMs)

6.1 ECRMs

The main objective of this energy audit is to identify potential Energy Conservation and Retrofit Measures and to determine whether or not the identified ECRM's are economically feasible to warrant the cost for planning and implementation of each measure. Economic feasibility of each identified measure was evaluated through a simple payback analysis. The simple payback analysis consists of establishing the Engineer's Opinion of Probable Construction Cost estimates; O&M cost savings estimates, projected annual energy savings estimates and the potential value of New Jersey Clean Energy Rebates or Renewable Energy Credits, if applicable. The simple payback period is then determined as the amount of time (years) until the energy savings associated with each measure amounts to the capital investment cost.

As discussed in Section 3, aggregate unit costs for electrical energy delivery and usage and natural gas delivery and usage, which accounts for all demand and tariff charges at each complex, was determined and utilized in the simple payback analyses.

In general, ECRMs having a payback period of 20 years or less have been recommended and only those recommended ECRMs within Section 4 of the report have been ranked for possible implementation. The most attractive rankings are those with the lowest simple payback period.

Ranking of ECRMs has been broken down into the following categories:

- Lighting Systems
- HVAC Systems
- Solar Systems
- Computer Power Management Software
- Wind Systems

6.1.1 Lighting Systems

Table 6.1-1 includes the recommended ECRMs to provide energy savings for all building lighting systems, which include the installation of energy-efficient luminaires and occupancy sensors. A detailed discussion on building lighting systems is presented in Section 4.1.

Table 6.1-1

Jersey City Lighting System Improvements***

	Engineer's Opinion of Probable Cost	Rebate	Total Cost	Annual Energy Savings	Simple Payback
PS #31 - Total	$8,333	($1,470)	$6,863	$7,956	**0.9**
PS #1 - Total	$17,652	($2,345)	$15,307	$12,971	**1.2**
PS #11 - Total	$28,887	($3,525)	$25,362	$18,831	**1.3**
PS #27 - Total	$19,201	($3,405)	$15,796	$12,380	**1.3**
PS #8 - Total	$23,908	($3,885)	$20,023	$14,590	**1.4**
PS #23 - Total	$28,079	($4,030)	$24,049	$15,286	**1.4**
PS #28 - Total	$32,296	($4,380)	$27,916	$19,422	**1.4**
PS #6 - Total	$60,008	($6,420)	$53,588	$33,320	**1.6**
PS #24 - Total	$58,675	($6,715)	$51,960	$32,680	**1.6**
PS #33 - Total	$7,577	($1,260)	$6,317	$3,406	**1.8**
Dickinson High School - Total	$85,308	($9,610)	$75,698	$37,873	**1.9**
Liberty High School - Total	$10,163	($1,390)	$8,773	$4,416	**2**
PS #25 - Total	$25,676	($3,825)	$21,851	$10,695	**2**
McNair/Academic High School - Total	$56,070	($3,530)	$52,540	$22,609	2.3
PS #39 - Total	$38,328	($4,480)	$33,848	$14,584	**2.3**
PS #34 - Total	$33,678	($3,325)	$30,353	$11,801	**2.6**
PS #14 - Total	$37,057	($2,220)	$34,837	$8,587	**2.7**
PS #16 - Total	$24,852	($1,510)	$23,342	$7,963	**2.8**
MS #41 - Total	$44,159	($3,295)	$40,864	$13,942	**2.9**
Ferris High School - Total	$97,115	($6,060)	$91,055	$28,873	**3.1**
Lincoln High School - Total	$87,930	($5,280)	$82,650	$25,750	**3.1**
Snyder High School - Total	$114,429	($9,950)	$104,479	$31,408	**3.1**
PS #15 - Total	$74,289	($6,155)	$68,134	$19,291	**3.2**
PS #5 - Total	$174,524	($9,740)	$164,784	$43,193	**3.6**
Cunningham Center ECC - Total	$12,392	($735)	$11,657	$3,019	**3.8**
PS #30 - Total	$184,465	($13,930)	$170,535	$39,495	**3.8**
PS #22 - Total	$400,050	($18,670)	$381,380	$87,204	**4.1**
Infinity Institute - Total	$25,535	($1,995)	$23,540	$4,858	**4.2**
PS #38 - Total	$62,861	($4,935)	$57,926	$12,247	**4.5**
PS #29 - Total	$145,272	($10,300)	$132,972	$25,020	**4.6**
MS #7 - Total	$115,203	($8,160)	$107,043	$22,690	**4.7**
PS #20 - Total	$179,874	($12,205)	$167,669	$26,039	**5**
MS #40 - Total	$149,643	($12,600)	$137,043	$25,178	**5.2**
PS #17 - Total	$355,494	($23,325)	$332,169	$50,093	**5.8**
Regional Day School - Total	$101,524	($5,260)	$96,264	$14,611	**6.1**
PS #12 - Total	$58,418	($3,910)	$54,508	$8,737	**6.1**
Academy 1 - Total	$175,317	($13,455)	$161,862	$19,703	**6.6**
Administrative Building - Total	$159,208	($13,355)	$145,853	$19,572	**6.7**
PS #37 - Total	$32,358	($1,580)	$30,778	$3,516	**8.4**

6.1.2 HVAC Systems

Table 6.1-2 includes the recommended ECRM to provide energy savings for building HVAC systems, which provide a simple payback of less than 20 years. A detailed discussion on building HVAC systems is presented in Section 4.2.

Table 6.1-2

Ranking of Energy Savings Measures Summary – HVAC System Upgrade

Building Measure	Retrofit Cost	Incentives	Total Cost	Annual Fiscal Savings	Simple Payback (Years)
Lincoln High School - AHU night setback	$2,702	$0	$2,702	$20,468	**0.1**
PS #3 - AHU night setback	$2,702	$0	$2,702	$10,464	**0.1**
Regional Day School - AHU night setback	$14,930	$0	$14,930	$14,072	**1**
PS #3 - Boiler OA Reset	$ 5,750	0	$5,750	$3284	**1.75**
MS #4 - Demand Control Ventilation	$2,791	$0	$2,791	$1,468	**1.9**
PS #22 - Cafeteria AHU controls	$1,430	$0	$1,430	$507	**2.8**
Ferris High School – Economizer	$2,790	$0	$2,790	$840	**3.3**
Lincoln High School - Boiler OA Reset	$5,750	$0	$5,750	$1,536	**3.7**
Snyder High School – Steam Boiler Replacement	$80,536	$0	$80,536	$17,589	**4.6**
PS #15 – Condensing Boiler Upgrade	$410,076	($20,000)	$390,076	$69,957	**5.6**
MS #40 – Steam Boiler Replacement	$152,231	$0	$152,231	$20,554	**7.4**
MS #41 – Steam Boiler Replacement	$161,252	$0	$161,252	$19,220	**8.4**
PS #29 – Building Management System	$60,375	$0	$60,375	$5,170	**11.7**
McNair High School - Night Setback	$5,750.00	$0	$2,790	$465.00	**12.4**
PS #15 – Building Management System	$241,500	$0	$241,500	$19,200	**12.6**
PS #38 – Building Management System	$97,031	$0	$97,031	$7,186	**13.5**
PS #17 – Condensing Boiler Upgrade	$376,064	($18,000)	$358,064	$23,754	**15.1**
Academy #1 – Building Management System	$135,844	$0	$135,844	$8,515	**16.0**
PS #5 – Condensing Boilers	$72,622	($3,500)	$69,122	$4,287	**16.1**
PS #30 – Building Management System	$97,031	$0	$97,031	$5,391	**18.0**
Snyder High School – Building Management System	$247,969	$0	$247,969	$13,466	**18.4**
PS #29 – Steam Boiler Replacement	$109,106	$0	$109,106	$5,779	**18.9**
MS #40 – Building Management System	$241,500	$0	$241,500	$11,900	**20.3**
PS #20 – Building Management System	$97,031	$0	$97,031	$4,744	**20.5**
PS #20 – Steam Boiler Replacement	$198,303	$0	$198,303	$7,480	**26.5**
PS #22 - Demand Control Ventilation	$19,501	$0	$19,501	$513.60	**37.9**

6.1.3 Solar Energy

Implementation of new solar energy systems has been evaluated to determine the economic feasibility for furnishing and installing such systems. Based on the simple payback modeling performed, it would benefit the District to further investigate installing the solar energy systems. This is primarily based on the initial upfront capital investment required for a solar energy system installation and an acceptable payback period. Table 6.1-3, includes a ranking of the solar energy ECRMs evaluated for the District.

Table 6.1-3

Ranking of Energy Savings Measures Summary – Solar Energy Systems

Building	Retrofit Cost	Annual SREC Credit	Annual Fiscal Savings	Simple Payback (Years)
PS #1	$193,625	$21,781	$8,239	6.45
MS #41	$4,175,000	$186,695	$79,444	15.69
PS #22	$3,500,000	$155,580	$58,848	16.32
Snyder High School	$4,962,500	$222,997	$79,077	16.43
PS #11	$4,141,250	$185,326	$65,719	16.50
Dickinson High School	$4,118,750	$184,102	$65,285	16.52
Regional Day School	$1,925,000	$82,976	$33,347	16.55
MS #40	$3,837,500	$171,137	$60,687	16.55
MS #7	$3,500,000	$155,579	$55,170	16.61
PS #25	$3,196,250	$141,577	$50,205	16.67
PS #23	$2,420,000	$105,794	$37,516	16.89
PS #30	$1,475,000	$62,232	$25,010	16.91
PS #6	$1,070,000	$43,562	$19,567	16.95
McNair/Academic High School	$2,150,000	$93,348	$33,102	17.00
PS #38	$2,037,500	$88,162	$31,263	17.06
PS #34	$1,475,000	$62,232	$23,539	17.20
PS #15	$6,987,500	$316,345	$89,743	17.21
PS #24	$2,217,500	$96,459	$31,925.00	17.27
PS #27	$1,655,000	$70,529	$25,010	17.32
PS #37	$2,375,000	$103,720	$31,876	17.52
PS #17	$3,275,000	$145,207	$41,193	17.57
Lincoln High School	$5,412,500	$243,741	$63,384	17.62
PS #31	$1,002,500	$40,451	$16,257	17.68
PS #16	$1,250,000	$51,860	$18,390	17.79
Ferris High School	$1,475,000	$62,232	$20,597	17.81
Academy 1	$1,475,000	$62,232	$19,125	18.13
PS #5	$1,812,500	$77,790	$22,068	18.15
PS #12	$2,375,000	$103,720	$26,972	18.17
PS #14	$2,375,000	$103,720	$26,972	18.17
Infinity Institute	$1,587,500	$67,418	$17,531	18.69
PS #20	$1,025,000	$41,488	$10,788	19.61
Liberty High School	$676,250	$25,411	$9,011	19.65
PS #39	$597,500	$21,781	$8,239	19.90

6.1.4 Computer Power Management Software

Below is a sample simple payback analysis for the district. Once an inventory has been completed to determine the actual number of computers in the district, a more detailed analysis can be completed.

Table 6.1-4 includes a typical simple payback analysis for the installation of the computer power management software at six of the District facilities. Refer to Appendix L for a more detailed computer power management software financing spreadsheet.

Table 6.1-4

PC Power Management System

Site	Engineers Opinion of Probable Cost	Annual Energy Savings	Lifetime Energy Savings (5 Years)*	Simple Payback (Years)	Annual Return On Investment (AROI)	Net Present Value (NPV)	Internal Rate of Return (IRR)
Sample Facility	$1,840	$3,205	$17,016	0.6	154%	$13,719	176%

6.1.5 Wind Energy

Implementation of new wind energy systems has been evaluated to determine the economic feasibility for furnishing and installing such systems. Based on the simple payback modeling performed, it would benefit the District to further investigate installing the wind energy systems. This is primarily based on the initial upfront capital investment required for a wind energy system installation and an acceptable payback period. Table 6.1-5, includes a ranking of the wind energy ECRMs evaluated for the District.

Table 6.1-5

Ranking of Energy Savings Measures Summary – Wind Turbine Energy System

Parameter	Wind Turbine (Minimum Site Wind Speed – 4.36 m/s)	Wind Turbine (Maximum Site Wind Speed – 6.3 m/s)	Wind Turbine (Average Site Wind Speed –5.41 m/s)
Engineer's Opinion of Probable Cost	$450,000	$450,000	$450,000
Renewable Energy Incentive Program	($80,403)	($120,374)	($103,254)
Total Cost	$369,598	$329,627	$346,747
1st Year Production	$74,405	$154,347	$120,107
Annual Estimated Electric Savings	$11,161	$23,152	$18,016
Annual Estimated REC Revenue	$1,860	$3,859	$3,003
Project Simple Payback (Years)	**32.1**	**13.8**	**18.6**

Section 7

Section 7
Grants, Incentives and Funding Sources

7.1 Renewable Energy

7.1.1 Renewable Energy Certificates (NJ BPU)

As part of New Jersey's Renewable Portfolio Standards (RPS), electric suppliers are required to have an annually-increasing percentage of their retail sales generated by renewable energy. Electric suppliers fulfill this obligation by purchasing renewable energy certificates (RECs) from the owners of solar generating systems. One REC is created for every 1,000 kWh (1 MWh) of renewable electricity generated. Although solar systems generate electricity and SRECs in tandem, the two are independent commodities and sold separately. The RPS, and creation of RECs, is intended to provide additional revenue flow and financial support for renewable energy projects in New Jersey. Class I RECs, which include electricity generation from wind, wave, tidal, geothermal and sustainable biomass typically trade at around $25/MWh. RECs generated from solar electricity, or SRECs, trade at $550/MWh due to supplemental funding from NJ PBU. The supplemental funding will decrease over time to $350/MWh.

7.1.2 Clean Energy Solutions Capital Investment Loan/Grant (NJ EDA)

NJ EDA in cooperation with NJ DEP is offering interest-free loans and grants for energy efficiency, combined heat and power (CHP) and renewable energy projects with total project capital equipment costs of at least $1 million. The interest-free loans are available for up to $5 million, a portion of which may be issued as a grant. The most recent round was closed as of October 2009, but new CESCI program updates will be posted at www.njeda.com. For additional information, contact CESCI@njeda.com or call 866-534-7789.

7.1.3 Renewable Energy Incentive Program (NJ BPU)

The Renewable Energy Incentive Program (REIP) provides rebates for installing solar, wind, and sustainable biomass systems in Smart Growth regions. Rebates of $1.00 per watt are available for solar electricity projects up to 50 kW in capacity. Wind systems can receive rebates up to $3.20 per expected kWh produced. Sustainable biomass rebates start at $4.00 per watt installed with a maximum incentive amount of 30 percent of project costs. REIP will give out $53.25 million in rebates from 2009 - 2012. Project owners must complete the Pay for Performance Program, Direct Install or Local Municipal audit, or the rebate will be reduced by $0.10 per watt. For more information on REIP, please see www.njcleanenergy.com.

7.1.4 Grid Connected Renewables Program (NJ BPU)

The New Jersey Grid Connected Renewables Program offers competitive incentives for wind and sustainable biomass electricity generation projects larger than 1 Megawatt (MW). Applications for the most recent round of funding, which totaled $6 million, were due January 8, 2010. Requests for Proposals (RFPs) for the next round will be posted at www.njcleanenergy.com and www.state.nj.us/bpu. A total of roughly $16 million is available for incentives under this program during 2010. Most of the incentives offered under this program will take the form of a payment for energy production ($/MWh) once the project is operating. Incentives range up to $58.49/MWh for publicly-owned wastewater biogas projects. Up to 10% of the incentive may be requested in the form of a lump grant to cover up-front costs such as financing fees, interconnection fees, project design, permitting, and construction costs.

7.1.5 Utility Financing Programs

All four Electric Distribution Companies (EDCs) in New Jersey have developed long term contracting or financing programs for the development of solar energy systems. In all of the programs, Solar Renewable Energy Credits (SRECs) generated by the solar energy systems will be sold at auction to energy suppliers who are required to purchase a certain quantity of SRECs to meet their Renewable Portfolio Standard requirements.

7.1.6 Renewable Energy Manufacturing Incentive (NJ BPU)

New Jersey's Renewable Energy Manufacturing Incentive (REMI) program provides rebates to purchase and install solar panels, inverters, and racking systems manufactured in New Jersey. Rebates for panels start at $0.25 per watt and rebates for racking systems and inverters start at $0.15 per watt for solar projects up to 500 kW in capacity. To be eligible for REMI, applicants must apply to either the Renewable Energy Incentive Program (REIP) or the SREC Registration Program (SRP).

7.1.7 Clean Renewable Energy Bonds (IRS)

CREBs are 0% interest bonds typically issued for up to approximately $3.0 million administered by the Internal Revenue Service (IRS). Last year, $2.2 billion in CREBs was allocated to municipal entities to fund 610 renewable energy projects. IRS has been allocating funding for CREBs annually since 2005. Last year, IRS solicited applications starting in April, which were due in August. The IRS is expected to receive additional funding for CREBs and release another round of solicitations in 2010.

7.1.8 Qualified Energy Conservation Bonds (IRS)

These IRS 0% interest bonds are very similar to CREBs except they are allocated based on state and county population. New Jersey was allocated $90 million as part of the ARRA stimulus fund. QECBs are typically distributed through municipal bond banks or state economic development agencies.

7.1.9 Global Climate Change Mitigation Incentive Fund (US EDA)

The Economic Development Agency (part of the U.S. Department of Commerce) administers the GCCMIF to public works projects that reduce greenhouse gas emissions and creates new jobs. In FY 2009, $15 million was allocated to the fund, and additional funding is expected to be allocated in FY 2010. Applications are due on a rolling basis. The program does not have a maximum grant amount but does limit the grant to 50 percent of the project cost.

7.1.10 Private Tax-Exempt Financing

Similar to traditional municipal bond financing, there are many private financial service companies that offer a myriad of options for tax-exempt financing of municipal projects. The providers of these services suggest that this capital can be offered at competitive rates in an expedited timeframe and with fewer complications when compared to traditional municipal financing methods. Though these factors would need to be compared on a case-by-case basis, the one distinct advantage to private financing on the current project would likely be the flexibility to structure payments to meet budget needs with consideration given to the terms and conditions of existing loan and/or bond agreements. For example, this mechanism could be used to limit the initial debt payments when the current bond debt is the greatest and the operations savings of the project has yet to be fully realized. It should also be noted that, in many cases, the construction and long term financing can be rolled into a single private financing agreement. Also, in some instances, equipment manufacturers have the ability to offer competitive financing terms (e.g. Siemens Financial Services Corporation), though financing from these sources is generally contingent upon a substantial portion of the project cost (~20% to 30%) being for their respective equipment.

7.1.11 Performance Based Contracts (ESCOs)

A second financing alternative for a project of this nature would be to enter into a Performance Based Contract with an Energy Services Company (ESCO). The premise of this type of contract is that it requires no initial municipal capital contributions in order to implement the project - instead relying on future operations cost savings and/or energy production, to fund the annual payments. Prior to entering into an agreement for the funding of the project, an ESCO would perform an energy audit and/or conceptual studies to confirm future energy cost savings or energy production inherent with the projects implementation and operation. The contract would then be formulated based on some measurable parameter(s) (energy production, etc.) which would be verified by measurement throughout the contract duration. The savings in energy costs or energy production would then be used to pay back the capital investment of the project over the contract time period (typically on the order of 10-years or less). The ESCO would guarantee the agreed upon energy savings or energy production. If the project does not meet energy savings or production commitments, the ESCO pays the owner the equivalent difference.

With this funding alternative, the ownership and operation of the facility would be maintained by the original owner. A performance contract may also include ESCO operation and maintenance of the energy-related facilities if that were deemed appropriate. Significant ESCO's with experience in this area include Siemens Building Technologies, Chevron and Johnson Controls. CDM has functioned in several roles on performance based contracts including being the owner's representative and, on different contracts, providing design-build services (as a subcontractor to the ESCO). CDM can provide additional experience-based information upon request.

7.1.12 Power Purchase Agreements (SPCs)

A Power Purchase Agreement (PPA) also delivers a project with no initial capital contribution by the original owner. In this model, a Special Purpose Company (SPC) created by a developer, would own the energy production facilities. Within the framework of a PPA, a SPC will typically lease property from the owners for construction and operation of the new facilities. The funding and construction of the new facilities would be performed by the SPC who would then own and operate the facilities for the duration of the contract (typically 20 to 30 years). Throughout that period of time, the original owner would purchase power from the SPC at a pre-negotiated rate which would take into account the initial capital cost, operation and maintenance of the constructed facility, ancillary benefits of the project and investor returns on investment. For renewable energy, financial incentives may enable this financing approach to compete

favorably with utility power tariffs. Incentives include state and local tax credits, renewable energy credits, and Federal energy production tax credits or energy investment tax credits. It is expected that a number of experienced companies and developers may be interested in a PPA for New Jersey municipal renewable energy projects.

7.2 Energy Efficiency

7.2.1 Introduction

New Jersey's Clean Energy Program (NJ CEP) promotes increased energy efficiency and the use of clean, renewable sources of energy including solar, wind, geothermal, and sustainable biomass. The results for New Jersey are a stronger economy, less pollution, lower costs, and reduced demand for electricity. NJCEP offers financial incentives, programs, and services for residential, commercial, and municipal customers.

NJCEP reduces the need to generate electricity and burn natural gas which eliminates the pollution that would have been caused by such electric generation or natural gas usage. The benefits of these programs continue for the life of the measures installed, which on average is about 15 years. Thus, the public receives substantial environmental and public health benefits from programs that also lower energy bills and benefit the economy.

7.2.2 New Jersey Smart Start Buildings Program (NJ BPU)

The New Jersey Smart Start Buildings Program offers rebate incentives for several qualifying equipment such as high efficient premium motors and lighting, and lighting controls.

Incentive information and incentive calculation worksheets are provided for the various new equipment installation identified in this report and are included in Appendix G.

7.2.3 Pay for Performance Program (NJ BPU)

Another program offered through the New Jersey Smart Start Program, is the Pay for Performance Program. Commercial, industrial and institutional buildings are eligible for participation if not already receiving Energy Efficiency and Conservation Block Grants.

Incentives are available for buildings that are able to present an Energy Reduction Plans that reduce the building's current energy consumption by 15% or more, in addition to incentives for installing the recommended measures and incentives for presenting the energy savings in a post-construction benchmarking report. No more than 50% of the total energy savings may be derived from lighting retrofits. In addition, the total energy savings of 15% may not come from the implementation of one energy savings measure. The incentive structure is provided in Appendix F.

The recommended ECRM's presented in this report are expected to warrant participation in this program.

7.2.4 Direct Install (NJ BPU)

Owners of existing small to mid-size commercial and industrial facilities with a peak electric demand that did not exceed 200 kW in any of the preceding 12 months are eligible to participate in Direct Install. Buildings must be located in New Jersey and served by one of the state's public, regulated electric or natural gas utility companies.

This program will cover up to 80% of the retro-fitting costs associated with the use of new energy efficient equipment. Lighting, HVAC, refrigeration, motors, natural gas systems, and variable frequency drives are covered under the Direct Install program.

The buildings covered under this audit that are potentially eligible for participation in the Direct Install Program, based on the requirement to have not exceeded a peak demand of 200 kW in the preceding 12 months, are: Middle School #40, Middle School #41, Academy 1, Cunningham Center ECC, Infinity Institute, Public School #14, Public School #16, Public School #20, Public School #29, Public School #31, Public School #39. The Direct Install Program is designed to fast-track project implementation so energy savings can be realized sooner rather than later. The steps for participation are to contact the contractor assigned and trained to provide Direct Install services in your County and schedule an Energy Assessment with this contractor. The contractor will assist in completing the Program Application and Participation Agreement.

The Energy Assessment with the participating contractor will work to determine which conservation measures qualify and the resulting project cost. Following this assessment, a scope of work will be finalized and installation will be arranged. Following completion of the installation a 'project completion form' must be submitted to the program representative assigned to the project.

The contractor for Hudson County is:

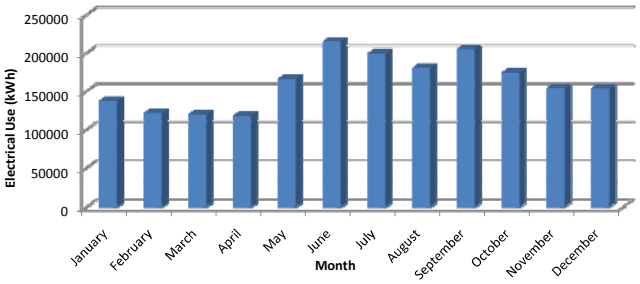
Lime Energy
Tony McCoy
Phone: 732-791-5380
Email: tmccoy@lime-energy.com

Any additional information on the Direct Install Program can be obtained by calling 866-NJSMART or by e-mail to DirectInstall@trcsolutions.com

Appendix A

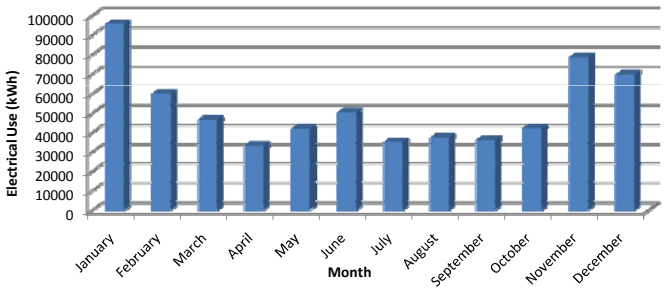
Energy Audit Building	Snyder High School	
Account:		
Account Number:	4200089718	
Meter Number	778015175	

2010											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	7	Feb	6			$ -					
Feb	7	Mar	6			$ -					
Mar	7	Apr	6			$ -					
Apr	7	May	6			$ -					
May	7	June	1			$ -					
June	2	July	1	$ 11,183.88	$ 22,533.24	$ 33,717.12	110886	103905	214791	477.8	
July	2	Aug	1	$ 9,983.31	$ 20,307.04	$ 30,290.35	87765	111198	198963	376.8	
Aug	2	Sept	1	$ 9,040.99	$ 18,687.37	$ 27,728.36	81001	99185	180186	334.2	
Sept	2	Oct	1	$ 11,315.52	$ 22,561.54	$ 33,877.06	107971	96827	204798	472.7	
Oct	2	Nov	1	$ 6,566.38	$ 17,067.74	$ 23,634.12	89338	84720	174058	450.0	
Nov	2	Dec	1	$ 5,906.19	$ 15,394.21	$ 21,300.40	81819	71997	153816	409.3	
Dec	2	Jan	1	$ 5,846.39	$ 15,469.71	$ 21,316.10	82701	70711	153412	395.0	
2011											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	2	Feb	27			$ -	75279	62092	137370		
Feb	28	Mar	7	$ 4,553.41	$ 14,233.22	$ 18,786.63	67856	53472	121328	344.2	
Mar	8	Apr	1			$ -	65917	53704	119621		ASSUMED
Apr	2	May	1	$ 4,688.70	$ 12,884.27	$ 17,572.97	63978	53935	117913	336..2	
May	2	June	4			$ -	87432	78920	166352		ASSUMED
June	5	July	4			$ -			0		
July	5	Aug	4			$ -			0		
Aug	5	Sept	4			$ -			0		
Sept	5	Oct	4			$ -			0		
Oct	5	Nov	4			$ -			0		
Nov	5	Dec	4			$ -			0		
Dec	5	Jan	6						0		



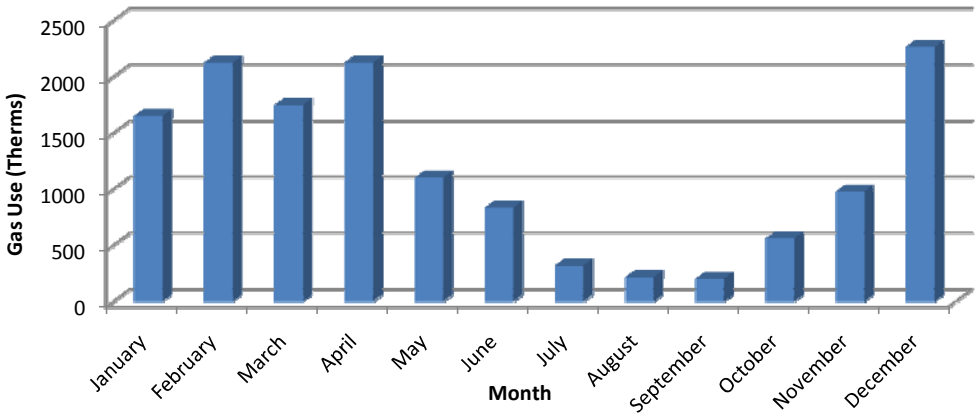
Energy Audit Building	Regonal Day School	
Account:		
Account Number:	42-005-905-06	
Meter Number	728003314,778011044	

2010										
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW
Jan	7	Feb	6			$ -				
Feb	7	Mar	6			$ -				
Mar	7	Apr	6			$ -				
Apr	7	May	6			$ -				
May	7	June	6			$ -				
June	7	July	6	$ 3,551.03	$ 5,967.99	$ 9,519.02			50400	168.0
July	7	Aug	1	$ 2,847.84	$ 4,433.48	$ 7,281.32			34960	144.0
Aug	2	Sept	1	$ 2,919.34	$ 4,858.60	$ 7,777.94			37200	143.2
Sept	2	Oct	1	$ 1,691.46	$ 4,291.16	$ 5,982.62			36240	142.4
Oct	2	Nov	1	$ 1,904.53	$ 4,630.20	$ 6,534.73			42320	157.6
Nov	2	Dec	1	$ 3,009.92	$ 7,605.74	$ 10,615.66			78640	220.0
Dec	2	Jan	1	$ 2,669.35	$ 7,009.73	$ 9,679.08			69760	227.2
2011										
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW
Jan	2	Feb	1	$ 3,418.86	$ 10,075.34	$ 13,494.20			95600	237.6
Feb	2	Mar	1	$ 2,378.22	$ 6,683.53	$ 9,061.75			60000	208.0
Mar	2	Apr	1	$ 1,985.62	$ 5,368.74	$ 7,354.36			46600	208.0
Apr	2	May	1	$ 1,593.02	$ 4,053.95	$ 5,646.97			33200	132.8
May	2	June	4	$ 2,572.03	$ 5,010.97	$ 7,583.00			41800	132.8
June	5	July	4			$ -				
July	5	Aug	4			$ -				
Aug	5	Sept	4			$ -				
Sept	5	Oct	4			$ -				
Oct	5	Nov	4			$ -				
Nov	5	Dec	4			$ -				
Dec	5	Jan	6			$ -				



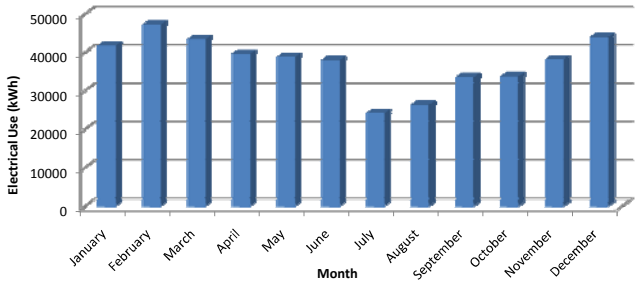
Energy Audit Building	PS-39	
Account:		
Account Number:	4200446901	
Meter Number	1826485,1604240	

2010								
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms	
Jan	7	Feb	6			$ -	0.0	
Feb	7	Mar	6			$ -	0.0	
Mar	7	Apr	6			$ -	0.0	
Apr	7	May	6			$ -	0.0	
May	7	June	3	$ 367.33		$ 367.33	1101.8	ASSUMED
June	4	July	6	$ 274.54		$ 274.54	835.1	
July	7	Aug	4	$ 116.21		$ 116.21	320.5	
Aug	5	Sept	2	$ 82.54		$ 82.54	215.8	
Sept	3	Oct	4	$ 77.51		$ 77.51	200.4	
Oct	5	Nov	3	$ 197.97		$ 197.97	560.7	
Nov	4	Dec	3	$ 367.28		$ 367.28	978.3	
Dec	4	Jan	5	$ 914.79		$ 914.79	2264.9	
2011								
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms	
Jan	6	Feb	3	$ 658.03		$ 658.03	1648.6	
Feb	4	Mar	7	$ 856.43		$ 856.43	2124.4	
Mar	8	Apr	4	$ 658.28		$ 658.28	1746.4	ASSUMED
Apr	5	May	5	$ 460.12		$ 460.12	1368.50	
May	6	June	22			$ -		
June	23	July	22			$ -		
July	23	Aug	22			$ -		
Aug	23	Sept	22			$ -		
Sept	23	Oct	4			$ -		
Oct	5	Nov	4			$ -		
Nov	5	Dec	22			$ -		
Dec	23	Jan	6					



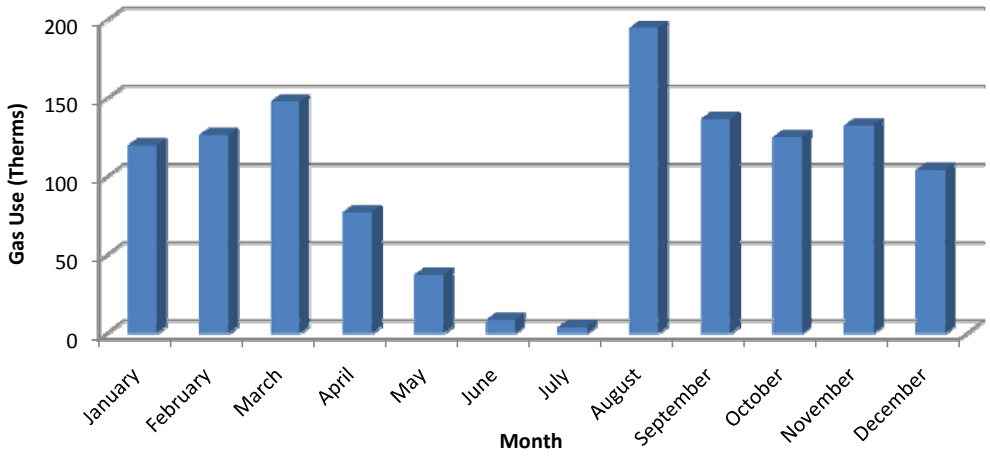
Energy Audit Building	PS-39	
Account:		
Account Number:	4200446901	
Meter Number	778015072	

2010											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	7	Feb	6			$ -					
Feb	7	Mar	6			$ -					
Mar	7	Apr	6			$ -					
Apr	7	May	6			$ -					
May	7	June	3	$ 2,062.03	$ 4,244.70	$ 6,306.73			38800	117	ASSUMED
June	4	July	6	$ 2,439.13	$ 4,271.69	$ 6,710.82	19600	18400	38000	110.0	
July	7	Aug	4	$ 1,623.58	$ 2,899.81	$ 4,523.39	11000	13200	24200	60.0	
Aug	5	Sept	2	$ 1,709.59	$ 3,120.08	$ 4,829.67	12200	14200	26400	62.0	
Sept	3	Oct	4	$ 1,505.08	$ 4,047.12	$ 5,552.20	19600	14000	33600	116.0	
Oct	5	Nov	3	$ 1,514.84	$ 3,667.25	$ 5,182.09	20200	13600	33800	118.0	
Nov	4	Dec	3	$ 1,656.61	$ 4,009.77	$ 5,666.38	22000	16200	38200	128.0	
Dec	4	Jan	5	$ 1,817.18	$ 4,499.46	$ 6,316.64	24200	19800	44000	138.0	
2011											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	6	Feb	3	$ 1,664.24	$ 4,412.49	$ 6,076.73	23000	18800	41800	128.0	
Feb	4	Mar	7	$ 1,797.64	$ 5,251.40	$ 7,049.04	25800	21400	47200	128.0	
Mar	8	Apr	4	$ 1,741.28	$ 4,734.56	$ 6,475.84			43400	126	ASSUMED
Apr	5	May	5	$ 1,684.92	$ 4,217.71	$ 5,902.63	22200	17400	39600	124.0	
May	6	June	4			$ -			0		
June	5	July	4			$ -			0		
July	5	Aug	4			$ -			0		
Aug	5	Sept	4			$ -			0		
Sept	5	Oct	4			$ -			0		
Oct	5	Nov	4			$ -			0		
Nov	5	Dec	4			$ -			0		
Dec	5	Jan	6						0		



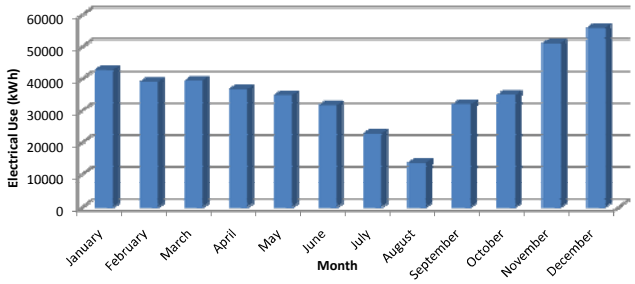
Energy Audit Building	PS 38	
Account:		
Account Number:	66-190-122-05, 69-560-851-00	
Meter Number	2049565,1989909	

2010								
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms	
Jan	7	Feb	6			$ -	0.0	
Feb	7	Mar	6			$ -	0.0	
Mar	7	Apr	6			$ -	0.0	
Apr	7	May	6			$ -	0.0	
May	7	June	6			$ -	31.6	ASSUMED
June	7	July	6	$ 11.43		$ 11.43	3.1	
July	7	Aug	6	$ 11.91		$ 11.91	4.2	
Aug	7	Sept	6	$ 91.05		$ 91.05	240.9	
Sept	7	Oct	6	$ 48.35		$ 48.35	113.2	
Oct	7	Nov	6	$ 57.43		$ 57.43	127.5	
Nov	7	Dec	6	$ 72.69		$ 72.69	135.4	
Dec	7	Jan	6	$ 53.55		$ 53.55	96.1	
2011								
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms	
Jan	7	Feb	7			$ -	130.0	ASSUMED
Feb	8	Mar	14	$ 77.58		$ 77.58	163.8	
Mar	15	Apr	6			$ -	111.9	ASSUMED
Apr	7	May	6	$ 30.27		$ 30.27	60.11	
May	7	June	22			$ -		
June	23	July	22			$ -		
July	23	Aug	22			$ -		
Aug	23	Sept	22			$ -		
Sept	23	Oct	4			$ -		
Oct	5	Nov	4			$ -		
Nov	5	Dec	22			$ -		
Dec	23	Jan	6					



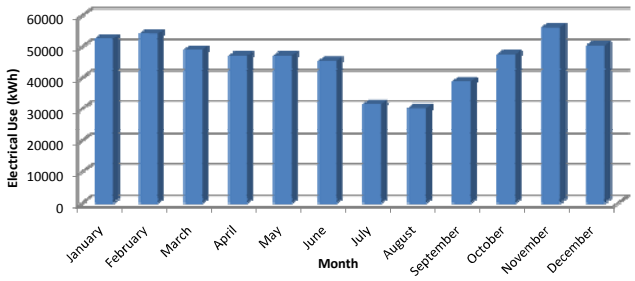
Energy Audit Building	PS 38
Account:	
Account Number:	66-190-122-05, 69-560-851-00
Meter Number	678001909,726023984

2010											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	7	Feb	6			$ -					
Feb	7	Mar	6			$ -					
Mar	7	Apr	6			$ -					
Apr	7	May	6			$ -					
May	7	June	6			$ -			33967		ASSUMED
June	7	July	6	$ 2,608.65		$ 2,608.65			31323	122.2	
July	7	Aug	6	$ 2,211.50		$ 2,211.50			20410	122.2	
Aug	7	Sept	6	$ 2,189.31		$ 2,189.31			11850	118.5	
Sept	7	Oct	6	$ 1,663.98		$ 1,663.98			37039	124.8	
Oct	7	Nov	6	$ 1,576.21		$ 1,576.21			34076	124.8	
Nov	7	Dec	6	$ 2,651.05		$ 2,651.05			55447	189.9	
Dec	7	Jan	6	$ 2,651.05		$ 2,651.05			55447	189.9	
2011											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	7	Feb	6	$ 1,687.20		$ 1,687.20			39681	129.9	
Feb	7	Mar	6	$ 1,689.11	$ 4,289.25	$ 5,978.36			39733	130.0	
Mar	7	Apr	6			$ -			38172		ASSUMED
Apr	7	May	6	$ 1,623.50	$ 3,496.91	$ 5,120.41			36611	117.4	
May	7	June	4			$ -			0		
June	5	July	4			$ -			0		
July	5	Aug	4			$ -			0		
Aug	5	Sept	4			$ -			0		
Sept	5	Oct	4			$ -			0		
Oct	5	Nov	4			$ -			0		
Nov	5	Dec	4			$ -			0		
Dec	5	Jan	6						0		



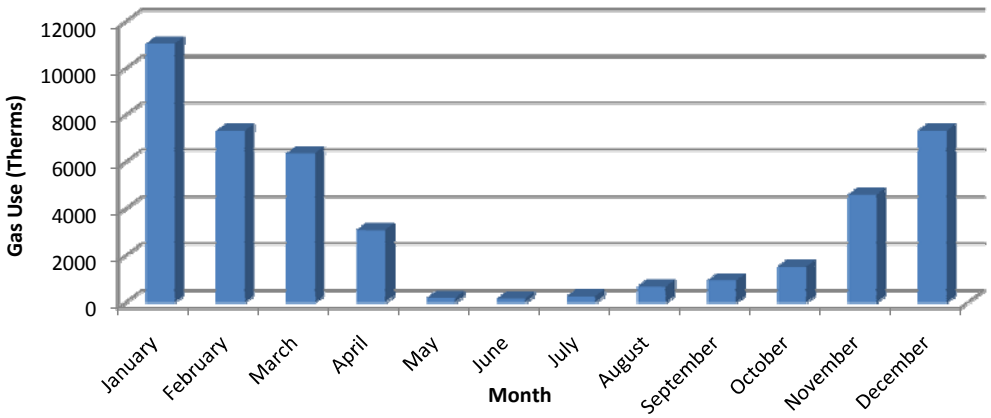
Energy Audit Building	PS-37	
Account:		
Account Number:	4200182106	
Meter Number	778016865	

2010											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	7	Feb	6			$ -					
Feb	7	Mar	6			$ -					
Mar	7	Apr	6			$ -					
Apr	7	May	6			$ -					
May	7	June	6	$ 2,318.31	$ 3,782.03	$ 6,100.34	25683	21454	47136	162	ASSUMED
June	7	July	6	$ 2,924.90	$ 3,627.92	$ 6,552.82	20098	25217	45315	147.5	
July	7	Aug	6	$ 2,026.43	$ 2,516.21	$ 4,542.64	14239	17190	31429	88.9	
Aug	7	Sept	6	$ 2,751.43	$ 2,409.01	$ 5,160.44	16899	13191	30090	170.9	
Sept	7	Oct	6	$ 2,217.23	$ 3,105.25	$ 5,322.48	22425	16362	38787	194	ASSUMED
Oct	7	Nov	6	$ 1,683.03	$ 3,801.49	$ 5,484.52	27950	19533	47483	217.5	
Nov	7	Dec	6	$ 1,909.88	$ 4,498.33	$ 6,408.21	33149	23038	56187	182.2	
Dec	7	Jan	6	$ 1,656.71	$ 4,029.34	$ 5,686.05	29688	20641	50329	187.9	
2011											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	7	Feb	6	$ 1,700.47	$ 4,205.63	$ 5,906.10	31831	20700	52531	181.4	
Feb	7	Mar	6	$ 1,741.44	$ 4,336.21	$ 6,077.65	32614	21548	54162	186.5	
Mar	7	Apr	6	$ 1,711.72	$ 3,936.14	$ 5,647.86	31267	17690	48957	176.4	
Apr	7	May	6	$ 2,318.31	$ 3,782.03	$ 6,100.34	25683	21454	47136	162	ASSUMED
May	7	June	4			$ -			0		
June	5	July	4			$ -			0		
July	5	Aug	4			$ -			0		
Aug	5	Sept	4			$ -			0		
Sept	5	Oct	4			$ -			0		
Oct	5	Nov	4			$ -			0		
Nov	5	Dec	4			$ -			0		
Dec	5	Jan	6						0		



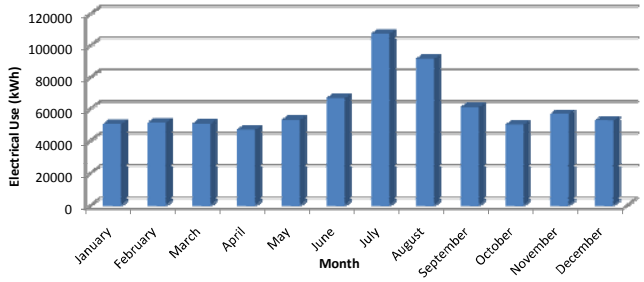
Energy Audit Building	PS-34 Gas	
Account:		
Account Number:	66-090-802-08, 69-577-034-01	
Meter Number	2809030	

2010								
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms	
Jan	7	Feb	6			$ -	0.0	
Feb	7	Mar	6			$ -	0.0	
Mar	7	Apr	6			$ -	0.0	
Apr	7	May	6			$ -	0.0	
May	24	June	23			$ -	**172.8**	
June	24	July	23			$ -	**172.8**	ASSUMED
July	24	Aug	23			$ -	**572.5**	ASSUMED
Aug	24	Sept	23			$ -	**972.1**	ASSUMED
Sept	24	Oct	25	$ 241.79	$ 609.91	$ 851.70	972.1	
Oct	26	Nov	23	$ 2,023.38	$ 2,225.03	$ 4,248.41	3746.4	
Nov	24	Dec	30	$ 1,931.24	$ 5,809.21	$ 7,740.45	8599.8	
Dec	31	Jan	26	$ 3,239.41	$ 7,044.71	$ 10,284.12	10091.7	
2011								
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms	
Jan	27	Feb	25	$ 2,824.04	$ 5,677.92	$ 8,501.96	8023.5	
Feb	26	Mar	28	$ 2,552.42	$ 4,374.70	$ 6,927.12	6670.2	
Mar	29	Apr	27			$ -	**3421.5**	ASSUMED
Apr	28	May	26	$ 121.98	$ 117.68	$ 239.66	172.83	
May	27	June	22			$ -		
June	23	July	22			$ -		
July	23	Aug	22			$ -		
Aug	23	Sept	22			$ -		
Sept	23	Oct	4			$ -		
Oct	5	Nov	4			$ -		
Nov	5	Dec	22			$ -		
Dec	23	Jan	6					



Energy Audit Building	PS-34	
Account:		
Account Number:	4200772108	
Meter Number	778009568	

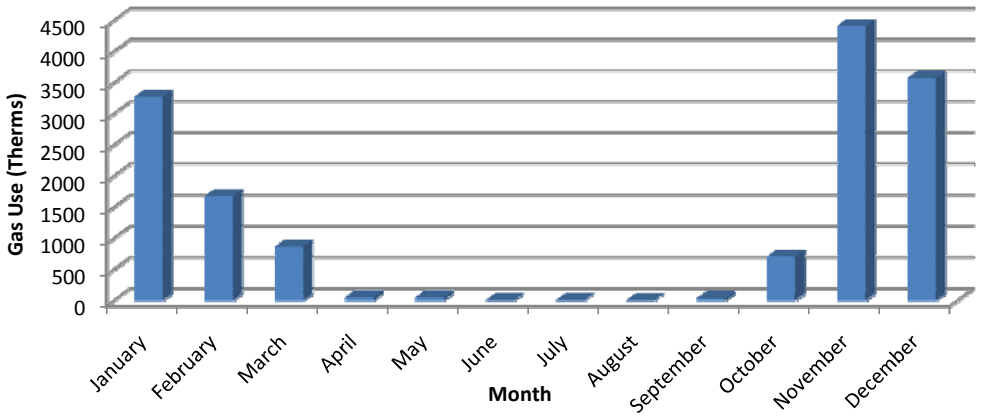
2010											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	7	Feb	6			$ -					
Feb	7	Mar	6			$ -					
Mar	7	Apr	6			$ -					
Apr	7	May	6			$ -					
May	7	June	6			$ -			58000		ASSUMED
June	7	July	6	$ 4,105.05	$ 7,390.06	$ 11,495.11	31200	38200	69400	164.0	
July	7	Aug	6	$ 7,912.36	$ 13,154.23	$ 21,066.59	57400	58400	115800	176.0	
Aug	7	Sept	6						85700		ASSUMED
Sept	7	Oct	6	$ 2,485.55	$ 5,981.74	$ 8,467.29	29600	26000	55600	182.0	
Oct	7	Nov	6	$ 2,190.19	$ 5,210.25	$ 7,400.44	26200	22000	48200	152.0	
Nov	7	Dec	3	$ 2,306.78	$ 5,707.69	$ 8,014.47	28500	24700	53200	80.0	
Dec	4	Jan	4	$ 2,306.78	$ 5,707.69	$ 8,014.47	28500	24700	53200	80.0	
2011											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	5	Feb	4	$ 2,145.10	$ 5,955.27	$ 8,100.37	27400	22800	50200	154.0	
Feb	5	Mar	4	$ 2,194.51	$ 6,128.41	$ 8,322.92	28000	24200	52200	154.0	
Mar	5	Apr	4			$ -			49400		ASSUMED
Apr	5	May	4	$ 2,112.70	$ 5,260.17	$ 7,372.87	26600	20000	46600	142.0	
May	5	June	4			$ -			0		
June	5	July	4			$ -			0		
July	5	Aug	4			$ -			0		
Aug	5	Sept	4			$ -			0		
Sept	5	Oct	4			$ -			0		
Oct	5	Nov	4			$ -			0		
Nov	5	Dec	4			$ -			0		
Dec	5	Jan	6						0		



Energy Audit Building	PS-33 Gas	
Account:		
Account Number:	66-524-016-06, 69-557-371-04	
Meter Number	3164333,3164329	

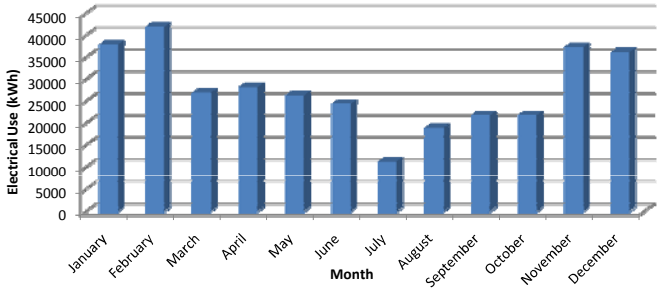
2010							
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms
Jan	7	Feb	6			$ -	0.0
Feb	7	Mar	6			$ -	0.0
Mar	7	Apr	6			$ -	0.0
Apr	7	May	6			$ -	0.0
May	7	June	7			$ -	53.0
June	25	July	28	$ 20.80		$ -	4
July	29	Aug	25	$ 22.42		$ 22.42	4
Aug	26	Sept	24	$ 22.08		$ 22.08	3.045
Sept	25	Oct	25	$ 32.49		$ 32.49	34
Oct	26	Nov	23	$ 324.08		$ 324.08	705
Nov	24	Dec	30	$ 1,969.90		$ 1,969.90	4410
Dec	31	Jan	26	$ 1,558.85		$ 1,558.85	3572
2011							
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms
Jan	27	Feb	25	$ 1,428.89		$ 1,428.89	3271
Feb	26	Mar	28	$ 742.61		$ 742.61	1677
Mar	29	Apr	27			$ -	**865**
Apr	28	May	26	$ 38.40		$ 38.40	53
May	10	June	22			$ -	
June	23	July	22			$ -	
July	23	Aug	22			$ -	
Aug	23	Sept	22			$ -	
Sept	23	Oct	4			$ -	
Oct	5	Nov	4			$ -	
Nov	5	Dec	22			$ -	
Dec	23	Jan	6				

ASSUMED



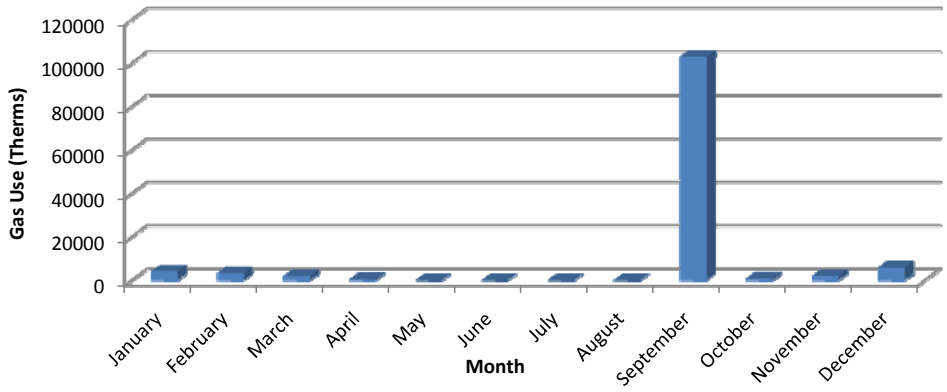
Energy Audit Building	Public School No. 33	
Account:		
Account Number:	65-151-311-00, 69-563-444-08	
Meter Number	226005810	

2010										
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW
Jan	7	Feb	6			$ -				
Feb	7	Mar	6			$ -				
Mar	7	Apr	6			$ -				
Apr	7	May	6			$ -				
May	7	June	1	$ 1,731.43	$ 879.16	$ 2,610.59			26266	118.7
June	2	July	1	$ 2,207.36	$ 1,082.46	$ 3,289.82			24360	119.8
July	2	Aug	1	$ 1,533.16	$ 585.35	$ 2,118.50			11260	97.8
Aug	2	Sept	1	$ 1,757.80	$ 673.79	$ 2,431.60			18912	101.2
Sept	2	Oct	1	$ 1,050.67	$ 690.14	$ 1,740.81			21814	106.3
Oct	2	Nov	1	$ 1,205.64	$ 855.42	$ 2,061.06			21790	160.7
Nov	2	Dec	1	$ 1,886.92	$ 2,844.51	$ 4,731.43			37266	279.2
Dec	2	Jan	1	$ 1,337.65	$ 1,472.40	$ 2,810.05			36104	162.6
2011										
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW
Jan	2	Feb	1	$ 1,872.41	$ 3,730.66	$ 5,603.07			37876	164.8
Feb	2	Mar	1	$ 1,382.71	$ 1,754.29	$ 3,137.00			41942	164.9
Mar	2	Apr	1	$ 1,218.99	$ 1,215.08	$ 2,434.07			26912	141.2
Apr	2	May	1	$ 1,421.09	$ 675.86	$ 2,096.95			28172	117.5
May	2	June	4	$ -		$ -			0	
June	5	July	4			$ -			0	
July	5	Aug	4			$ -			0	
Aug	5	Sept	4			$ -			0	
Sept	5	Oct	4			$ -			0	
Oct	5	Nov	4			$ -			0	
Nov	5	Dec	4			$ -			0	
Dec	5	Jan	6						0	



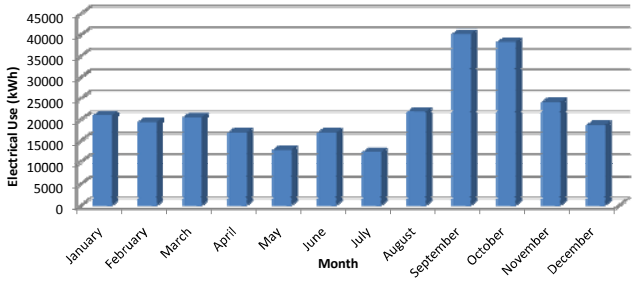
Energy Audit Building	PS-31	
Account:		
Account Number:	66-498-045-09, 69-563-072-00	
Meter Number	1785482	

2010							
Month	**Day**	**Month**	**Day**	**Delivery Charge**	**Supply Charge**	**Total Charge**	**Therms**
Jan	7	Feb	6			$ -	0.0
Feb	7	Mar	6			$ -	0.0
Mar	7	Apr	6			$ -	0.0
Apr	7	May	6			$ -	0.0
May	7	June	8			$ -	0.0
June	9	July	12	$ 94.72		$ 94.72	0.0
July	13	Aug	9	$ 98.35		$ 98.35	7.3
Aug	10	Sept	7	$ 353.43		$ 353.43	1.4
Sept	8	Oct	6	$ 11,227.99		$ 11,227.99	102893.9
Oct	7	Nov	9	$ 1,283.18		$ 1,283.18	729.6
Nov	10	Dec	7	$ 831.13		$ 831.13	1900.1
Dec	8	Jan	10	$ 1,521.80		$ 1,521.80	5813.1
2011							
Month	**Day**	**Month**	**Day**	**Delivery Charge**	**Supply Charge**	**Total Charge**	**Therms**
Jan	11	Feb	8	$ 1,157.18		$ 1,157.18	3988.9
Feb	9	Mar	12	$ 1,010.66		$ 1,010.66	3263.3
Mar	13	Apr	10			$ -	**1813.2** **ASSUMED**
Apr	11	May	10	$ 149.17		$ 149.17	363.06
May	11	June	22			$ -	
June	23	July	22			$ -	
July	23	Aug	22			$ -	
Aug	23	Sept	22			$ -	
Sept	23	Oct	4			$ -	
Oct	5	Nov	4			$ -	
Nov	5	Dec	22			$ -	
Dec	23	Jan	6				



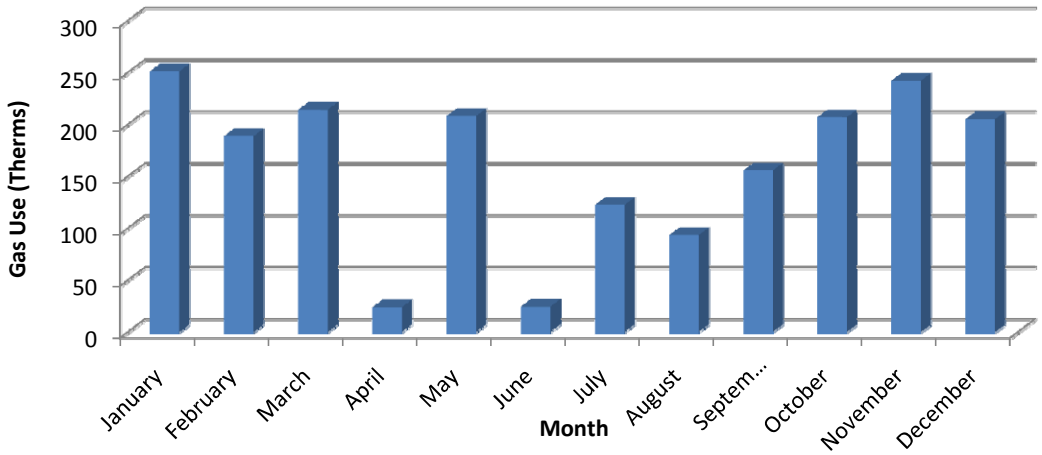
Energy Audit Building	PS-31	
Account:		
Account Number:	66-498-045-09, 69-563-072-00	
Meter Number	278002473	

2010											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	7	Feb	6			$ -					
Feb	7	Mar	6			$ -					
Mar	7	Apr	6			$ -					
Apr	7	May	6			$ -					
May	7	June	8			$ -			16815	72.8	ASSUMED
June	9	July	9	$ 1,569.38	$ 2,157.09	$ 3,726.47			18000	77.7	
July	10	Aug	9	$ 822.70	$ 1,368.06	$ 2,190.76			9840	38.4	
Aug	10	Sept	7			$ -			24938	77.9	ASSUMED
Sept	8	Oct	4	$ 1,895.29	$ 4,432.48	$ 6,327.77			40035	117.5	
Oct	5	Nov	5	$ 1,829.50	$ 4,242.03	$ 6,071.53			38265	108.2	
Nov	6	Dec	3	$ 969.65	$ 2,182.13	$ 3,151.78			20280	149.7	
Dec	4	Jan	10	$ 997.94	$ 2,404.86	$ 3,402.80			22350	76.2	
2011											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	11	Feb	8	$ 908.27	$ 2,240.23	$ 3,148.50			20820	73.2	
Feb	9	Mar	12	$ 955.49	$ 2,534.24	$ 3,489.73			21810	77.7	
Mar	13	Apr	10			$ -			18720	72.8	ASSUMED
Apr	11	May	10	$ 769.12	$ 1,488.13	$ 2,257.25			15630	67.8	
May	11	June	4			$ -			0		
June	5	July	4			$ -			0		
July	5	Aug	4			$ -			0		
Aug	5	Sept	4			$ -			0		
Sept	5	Oct	4			$ -			0		
Oct	5	Nov	4			$ -			0		
Nov	5	Dec	4			$ -			0		
Dec	5	Jan	6						0		



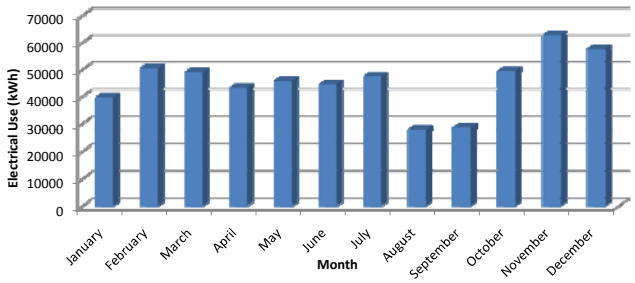
Energy Audit Building	PS-30 Gas	
Account:		
Account Number:	4200865203	
Meter Number	2045269	

2010							
Month	**Day**	**Month**	**Day**	**Delivery Charge**	**Supply Charge**	**Total Charge**	**Therms**
Jan	7	Feb	6			$ -	0.0
Feb	7	Mar	6			$ -	0.0
Mar	7	Apr	6			$ -	0.0
Apr	7	May	6			$ -	0.0
May	7	June	24			$ -	0.0
June	25	July	28	$ 55.71		$ 55.71	138.9
July	29	Aug	27	$ 37.81		$ 37.81	81.9
Aug	28	Sept	24	$ 56.69		$ 56.69	138.1
Sept	25	Oct	25	$ 75.08		$ 75.08	193.1
Oct	26	Nov	23	$ 104.57		$ 104.57	247.7
Nov	24	Dec	30	$ 101.48		$ 101.48	242.8
Dec	31	Jan	26	$ 96.34		$ 96.34	226.5
2011							
Month	**Day**	**Month**	**Day**	**Delivery Charge**	**Supply Charge**	**Total Charge**	**Therms**
Jan	27	Feb	25	$ 83.26		$ 83.26	199.2
Feb	26	Mar	28	$ 99.26		$ 99.26	237.3
Mar	29	Apr	27			$ -	
Apr	28	May	26	$ 86.78		$ 86.78	232.13
May	27	June	22			$ -	
June	23	July	22			$ -	
July	23	Aug	22			$ -	
Aug	23	Sept	22			$ -	
Sept	23	Oct	4			$ -	
Oct	5	Nov	4			$ -	
Nov	5	Dec	22			$ -	
Dec	23	Jan	6				



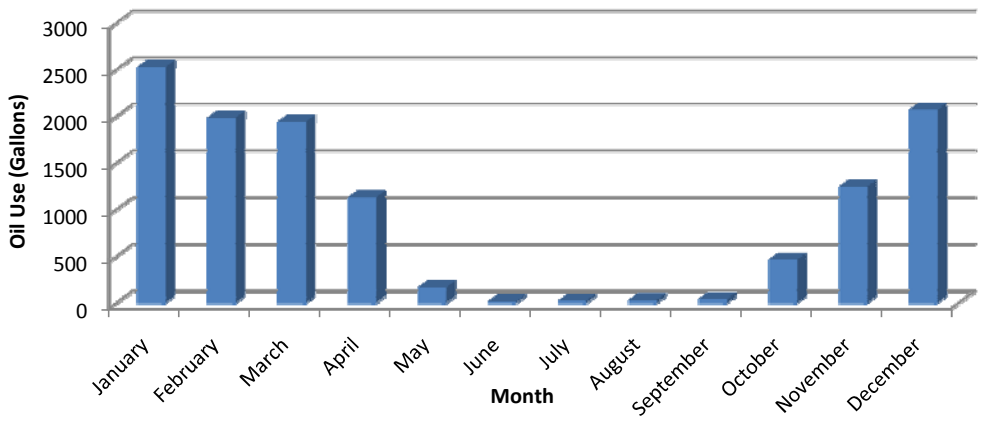
Energy Audit Building	PS #30	
Account:		
Account Number:	4200865203	
Meter Number	778015834	

2010											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	7	Feb	6			$ -					
Feb	7	Mar	6			$ -					
Mar	7	Apr	6			$ -					
Apr	7	May	6			$ -					
May	25	June	24			$ -	23300	15533	38833	111	
June	25	July	9	$ 3,123.13	$ 3,839.91	$ 6,963.04	19200	17067	36267	58.7	
July	10	Aug	9	$ 3,123.13	$ 3,839.91	$ 6,963.04	19200	17067	36267	58.7	
Aug	10	Sept	24	$ 3,123.13	$ 3,839.91	$ 6,963.04	19200	17067	36267	58.7	
Sept	25	Oct	25	$ 2,052.73	$ 5,810.70	$ 7,863.43	29600	20200	49800	174.0	
Oct	26	Nov	23	$ 1,974.21	$ 5,292.64	$ 7,266.85	27800	17400	45200	194.0	
Nov	24	Dec	8	$ 2,255.38	$ 6,088.10	$ 8,343.48	33600	23900	57500	97.0	
Dec	9	Jan	26	$ 2,255.38	$ 6,088.10	$ 8,343.48	33600	23900	57500	97.0	
2011											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	27	Feb	25	$ 2,112.37	$ 5,802.22	$ 7,914.59	32600	22200	54800	192.0	
Feb	26	Mar	27			$ -	**30000**	**18100**	**48100**	**178**	**ASSUMED**
Mar	28	Apr	27			$ -	**28700**	**16050**	**44750**	**171**	**ASSUMED**
Apr	28	May	26	$ 1,812.53	$ 5,112.14	$ 6,924.67	27400	14000	41400	164.0	
May	27	June	4			$ -			0		
June	5	July	4			$ -			0		
July	5	Aug	4			$ -			0		
Aug	5	Sept	4			$ -			0		
Sept	5	Oct	4			$ -			0		
Oct	5	Nov	4			$ -			0		
Nov	5	Dec	4			$ -			0		
Dec	5	Jan	6						0		



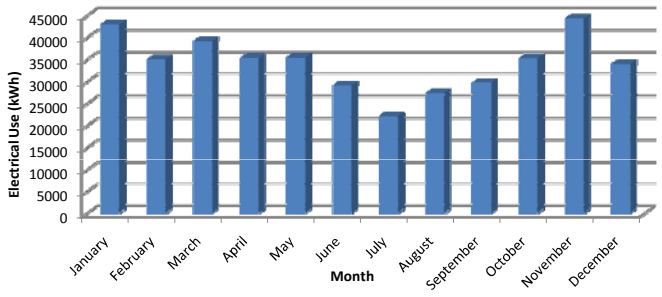
Energy Audit Building	PS-29	
Account:		
Account Number:	65-856-599-02, 69-573-808-07	
Meter Number	2412877	

2010								
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms	
Jan	7	Feb	6			$ -	0.0	
Feb	7	Mar	6			$ -	0.0	
Mar	20	Apr	6	$ 760.43	$ 1,032.80	$ 1,793.23	1532.7	ASSUMED
Apr	7	May	6	$ 429.11	$ 522.99	$ 952.09	775.7	
May	7	June	16	$ 97.78	$ 13.17	$ 110.95	18.64	ASSUMED
June	17	July	19	$ 97.78	$ 13.17	$ 110.95	18.6	
July	20	Aug	6	$ 97.78	$ 13.17	$ 110.95	18.6	ASSUMED
Aug	7	Sept	15	$ 101.55	$ 23.36	$ 124.91	36.3	ASSUMED
Sept	16	Oct	15	$ 105.31	$ 33.55	$ 138.86	54.0	
Oct	16	Nov	15	$ 632.80	$ 514.44	$ 1,147.24	845.4	
Nov	16	Dec	16	$ 709.90	$ 1,112.01	$ 1,821.91	1731.4	
Dec	17	Jan	18	$ 944.85	$ 1,802.67	$ 2,747.52	2587.7	
2011								
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms	
Jan	19	Feb	16	$ 952.36	$ 1,753.54	$ 2,705.90	2489.2	
Feb	17	Mar	18	$ 760.43	$ 1,032.80	$ 1,793.23	1532.7	
Mar	19	Apr	6			$ -		
Apr	7	May	9			$ -		
May	10	June	22			$ -		
June	23	July	22			$ -		
July	23	Aug	22			$ -		
Aug	23	Sept	22			$ -		
Sept	23	Oct	4			$ -		
Oct	5	Nov	4			$ -		
Nov	5	Dec	22			$ -		
Dec	23	Jan	6					



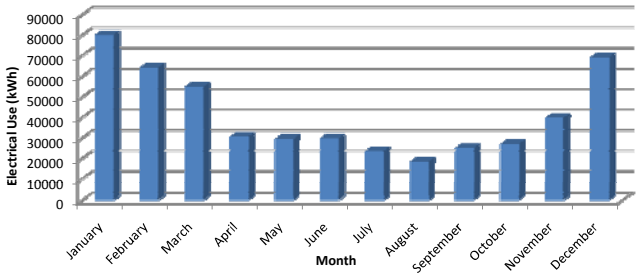
Energy Audit Building	Public School No. 29	
Account:		
Account Number:		
Meter Number		

2010										
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW
Jan	7	Feb	6			$ -				
Feb	7	Mar	6			$ -				
Mar	7	Apr	6			$ -				
Apr	7	May	6			$ -				
May	7	June	4	$ 2,295.17	$ 3,529.13	$ 5,824.29			34418	130.9
June	5	July	6	$ 2,517.85	$ 3,217.49	$ 5,735.34			29988	126.5
July	7	Aug	4	$ 2,027.24	$ 3,055.07	$ 5,082.31			19224	116.4
Aug	5	Sept	2	$ 1,670.88	$ 3,401.12	$ 5,072.00			26600	97.2
Sept	3	Oct	4	$ 1,521.62	$ 3,435.61	$ 4,957.23			31906	126.5
Oct	5	Nov	2	$ 1,621.59	$ 3,614.25	$ 5,235.84			33580	137.3
Nov	3	Dec	3	$ 2,061.13	$ 5,007.44	$ 7,068.57			46504	250.9
Dec	4	Jan	5	$ 1,611.64	$ 3,741.87	$ 5,353.51			34834	141.6
2011										
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW
Jan	6	Feb	3	$ 1,868.51	$ 4,522.48	$ 6,390.99			42053	155.0
Feb	4	Mar	7	$ 1,732.85	$ 4,231.42	$ 5,964.27			39321	141.3
Mar	8	Apr	5	$ 1,684.36	$ 3,764.35	$ 5,448.70			37000	136.7
Apr	6	May	5	$ 1,636.90	$ 3,312.67	$ 4,949.57			34732	132.5
May	6	June	4			$ -			0	
June	5	July	4			$ -			0	
July	5	Aug	4			$ -			0	
Aug	5	Sept	4			$ -			0	
Sept	5	Oct	4			$ -			0	
Oct	5	Nov	4			$ -			0	
Nov	5	Dec	4			$ -			0	
Dec	5	Jan	6						0	



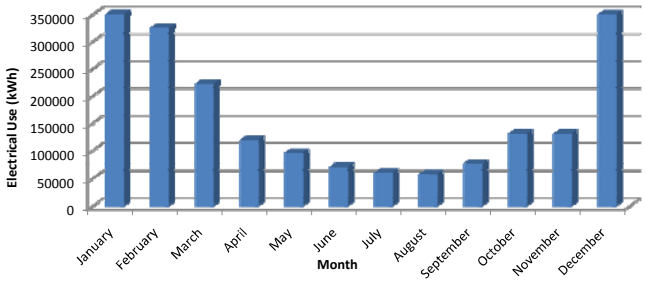
Energy Audit Building	PS-28	
Account:		
Account Number:	42-006-553-06	
Meter Number	758000678	

2010										
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW
Jan	7	Feb	6			$ -				
Feb	7	Mar	6			$ -				
Mar	7	Apr	6			$ -				
Apr	7	May	6			$ -				
May	7	June	9	$ 6,240.21	$ 10,918.11	$ 17,158.32			115651	455.1
June	10	July	9	$ 8,502.56	$ 13,411.21	$ 21,913.77			126160	459.2
July	10	Aug	9	$ 5,670.32	$ 8,238.28	$ 13,908.60			79589	296.0
Aug	10	Sept	8	$ 5,199.23	$ 6,514.25	$ 11,713.48			68959	277.1
Sept	9	Oct	7	$ 4,108.29	$ 8,858.16	$ 12,966.45			107725	502.6
Oct	8	Nov	5	$ 3,842.15	$ 6,956.38	$ 10,798.52			98896	469.0
Nov	6	Dec	8	$ 6,591.70	$ 12,670.39	$ 19,262.09			187276	692.5
Dec	9	Jan	10	$ 10,565.52	$ 29,014.18	$ 39,579.70			332735	831.4
2011										
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW
Jan	11	Feb	8	$ 9,265.25	$ 25,778.21	$ 35,043.46			302695	799.0
Feb	9	Mar	10	$ 8,235.47	$ 18,352.90	$ 26,588.37			260689	793.2
Mar	11	Apr	8	$ 6,106.67	$ 13,388.95	$ 19,495.62			182915	622.1
Apr	9	May	10	$ 3,977.86	$ 8,425.00	$ 12,402.86			105141	450.9
May	11	June	4			$ -			0	
June	5	July	4			$ -			0	
July	5	Aug	4			$ -			0	
Aug	5	Sept	4			$ -			0	
Sept	5	Oct	4			$ -			0	
Oct	5	Nov	4			$ -			0	
Nov	5	Dec	4			$ -				
Dec	5	Jan	6			$ -				



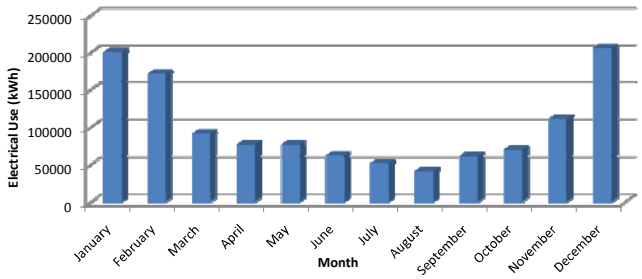
Energy Audit Building	Public School No. 27	
Account:		
Account Number:		
Meter Number		

2010										
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW
Jan	7	Feb	6			$ -				
Feb	7	Mar	6			$ -				
Mar	7	Apr	6			$ -				
Apr	7	May	6			$ -				
May	7	June	8	$ 4,734.19	$ 10,045.46	$ 14,779.65			95109	350.4
June	9	July	9	$ 4,803.04	$ 8,422.65	$ 13,225.69			70673	237.9
July	10	Aug	9	$ 3,823.61	$ 7,434.52	$ 11,258.13			60032	154.9
Aug	10	Sept	8	$ 4,109.76	$ 7,080.54	$ 11,190.30			57455	189.0
Sept	9	Oct	7	$ 3,150.24	$ 9,019.79	$ 12,170.03			75787	268.4
Oct	8	Nov	5	$ 4,937.71	$ 12,954.27	$ 17,891.98			130432	423.1
Nov	6	Dec	8	$ 4,838.34	$ 13,028.17	$ 17,866.51			129927	486.7
Dec	9	Jan	10	$ 11,139.22	$ 31,179.54	$ 42,318.76			349324	693.3
2011										
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW
Jan	11	Feb	8	$ 10,821.89	$ 32,418.29	$ 43,240.18			349964	786.1
Feb	9	Mar	11	$ 10,041.18	$ 32,069.20	$ 42,110.38			325144	720.9
Mar	12	Apr	10	$ 7,326.17	$ 21,842.76	$ 29,168.93			222145	593.9
Apr	11	May	10	$ 4,611.16	$ 11,616.31	$ 16,227.47			119145	466.8
May	11	June	4			$ -			0	
June	5	July	4			$ -			0	
July	5	Aug	4			$ -			0	
Aug	5	Sept	4			$ -			0	
Sept	5	Oct	4			$ -			0	
Oct	5	Nov	4			$ -			0	
Nov	5	Dec	4			$ -			0	
Dec	5	Jan	6						0	



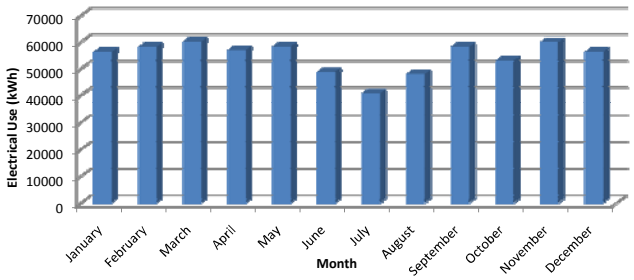
Energy Audit Building	PS-25	
Account:		
Account Number:	4200846500	
Meter Number	778014244	

2010											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	7	Feb	6			$ -					
Feb	7	Mar	6			$ -					
Mar	7	Apr	6			$ -					
Apr	7	May	6			$ -					
May	7	June	2	$ 4,013.55	$ 7,587.13	$ 11,600.68			77000	250.0	ASSUMED
June	3	July	2	$ 4,140.10	$ 6,606.91	$ 10,747.01	32400	30000	62400	192.0	
July	3	Aug	3	$ 3,137.18	$ 5,505.76	$ 8,642.94	22400	29600	52000	120.0	
Aug	4	Sept	1	$ 2,643.39	$ 4,404.61	$ 7,048.00	18400	23200	41600	100.0	
Sept	2	Oct	1	$ 2,666.32	$ 6,522.21	$ 9,188.53	33200	28400	61600	188.0	
Oct	2	Nov	1	$ 3,285.17	$ 7,453.95	$ 10,739.12	35200	35200	70400	300.0	
Nov	2	Dec	2	$ 4,686.87	$ 11,816.21	$ 16,503.08	54400	57200	111600	384.0	
Dec	3	Jan	4	$ 7,316.73	$ 21,811.28	$ 29,128.01	92400	113600	206000	428.0	
2011											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	5	Feb	3	$ 6,958.01	$ 21,218.35	$ 28,176.36	90800	109600	200400	476.0	
Feb	4	Mar	4	$ 6,058.64	$ 18,126.66	$ 24,185.30	77200	94000	171200	424.0	
Mar	5	Apr	10	$ 3,887.00	$ 8,567.35	$ 12,454.35	44800	46800	91600	308.0	
Apr	11	May	11	$ 4,013.55	$ 7,587.13	$ 11,600.68			77000	250	ASSUMED
May	12	June	4			$ -			0		
June	5	July	4			$ -			0		
July	5	Aug	4			$ -			0		
Aug	5	Sept	4			$ -			0		
Sept	5	Oct	4			$ -			0		
Oct	5	Nov	4			$ -			0		
Nov	5	Dec	4			$ -			0		
Dec	5	Jan	6						0		



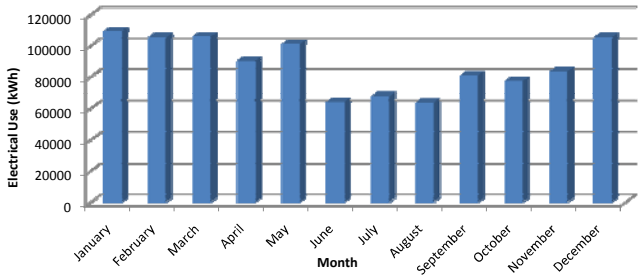
Energy Audit Building	Public School No. 24	
Account:		
Account Number:	4200237008	
Meter Number	778011042	

2010											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	7	Feb	6			$ -					
Feb	7	Mar	6			$ -					
Mar	7	Apr	6			$ -					
Apr	7	May	6			$ -					
May	7	June	6			$ -					
June	7	July	6	$ 3,356.78	$ 5,780.48	$ 9,137.26	24847	26618	51465	140.2	
July	7	Aug	6	$ 2,370.50	$ 3,977.49	$ 6,347.99	17796	19770	37566	86.0	
Aug	7	Sept	6	$ 3,869.22	$ 6,105.88	$ 9,975.10	29258	21122	50380	185.5	
Sept	7	Oct	6	$ 2,623.32	$ 6,404.54	$ 9,027.86	32972	27607	60579	183.4	
Oct	7	Nov	6	$ 2,371.50	$ 5,365.79	$ 7,737.29	29475	21203	50678	185.6	
Nov	7	Dec	6	$ 2,683.20	$ 6,632.01	$ 9,315.21	34492	28145	62637	182.5	
Dec	7	Jan	6	$ 2,347.71	$ 5,741.16	$ 8,088.87	30619	23631	54250	180.9	
2011											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	7	Feb	6	$ 2,378.80	$ 6,413.26	$ 8,792.06	32222	24500	56722	175.2	
Feb	7	Mar	6	$ 2,454.52	$ 6,659.05	$ 9,113.57	32876	27202	60078	173.1	
Mar	7	Apr	6			$ -	**32464**	**26091**	**58554**	**170.6**	**ASSUMED**
Apr	7	May	6	$ 2,481.58	$ 5,911.17	$ 8,392.75	32051	24979	57030	168.1	
May	7	June	4			$ -	**28449**	**25799**	**54248**	**154.2**	**ASSUMED**
June	5	July	4			$ -			0		
July	5	Aug	4			$ -			0		
Aug	5	Sept	4			$ -			0		
Sept	5	Oct	4			$ -			0		
Oct	5	Nov	4			$ -			0		
Nov	5	Dec	4			$ -			0		
Dec	5	Jan	6						0		



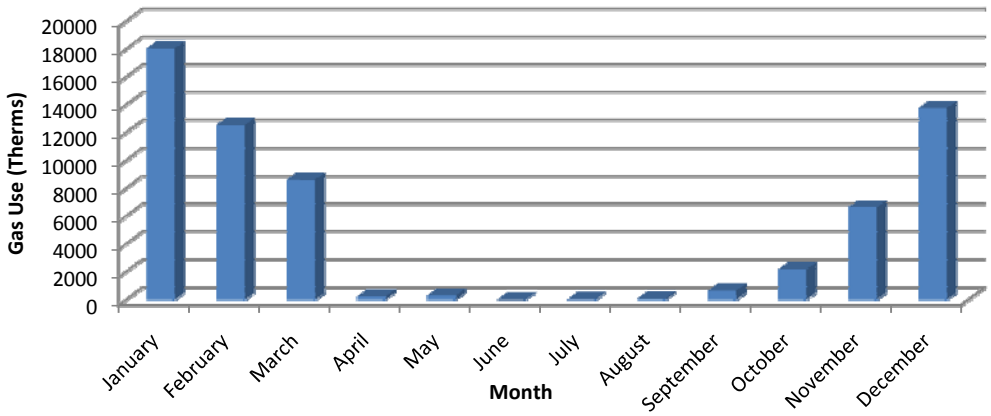
Energy Audit Building	PS-23	
Account:		
Account Number:	4200812606	
Meter Number	778011103	

2010											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	7	Feb	6			$ -					
Feb	7	Mar	6			$ -					
Mar	7	Apr	6			$ -					
Apr	7	May	6			$ -					
May	7	June	9			$ -					
June	10	July	12	$ 4,762.60		$ 4,762.60	40800	38000	78800	206.0	
July	13	Aug	30	$ 5,914.87		$ 5,914.87	46400	54000	100400	136.0	
Aug	31	Sept	9	$ 1,570.11		$ 1,570.11	11000	10800	21800	252.0	
Sept	10	Oct	8	$ 3,514.84		$ 3,514.84	47600	36800	84400	258.0	
Oct	9	Nov	8	$ 3,140.56		$ 3,140.56	38200	34400	72600	240.0	
Nov	9	Dec	9	$ 3,723.27		$ 3,723.27	48600	42400	91000	264.0	
Dec	10	Jan	11	$ 3,935.82		$ 3,935.82	51000	51400	102400	258.0	
2011											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	12	Feb	9	$ 3,962.49		$ 3,962.49	53400	55400	108800	262.0	
Feb	10	Mar	11	$ 4,016.83		$ 4,016.83	58000	53000	111000	262.0	
Mar	12	Apr	10	$ 3,782.36		$ 3,782.36	52300	47400	99700	248	
Apr	11	May	11	$ 3,547.88		$ 3,547.88	46600	41800	88400	234.0	
May	12	June	4			$ -	43700	39900	83600	220	ASSUMED
June	5	July	4			$ -			0		
July	5	Aug	4			$ -			0		
Aug	5	Sept	4			$ -			0		
Sept	5	Oct	4			$ -			0		
Oct	5	Nov	4			$ -			0		
Nov	5	Dec	4			$ -			0		
Dec	5	Jan	6						0		



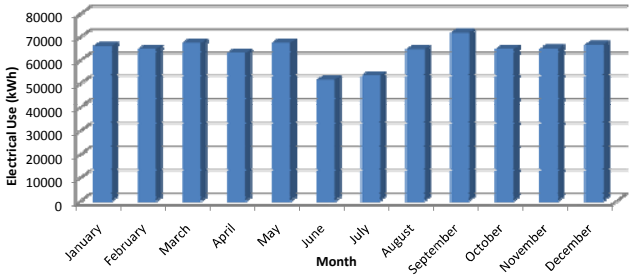
Energy Audit Building	PS-22	
Account:		
Account Number:	65-820-601-04, 69-577-033-04	
Meter Number	3128143	

2010							
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms
Jan	7	Feb	6			$ -	0.0
Feb	7	Mar	6			$ -	0.0
Mar	7	Apr	6			$ -	0.0
Apr	7	May	6			$ -	0.0
May	7	June	7			$ -	0.0
June	8	July	10			$ -	
July	11	Aug	24			$ -	
Aug	25	Sept	24	$ 130.52	$ 142.05	$ 272.57	223.6
Sept	25	Oct	25	$ 264.07	$ 736.42	$ 1,000.49	1173.8
Oct	26	Nov	23	$ 2,941.02	$ 2,549.20	$ 5,490.22	4292.2
Nov	24	Dec	27	$ 4,599.75	$ 9,240.02	$ 13,839.77	13720.5
Dec	28	Jan	26	$ 5,770.51	$ 12,237.78	$ 18,008.29	17539.3
2011							
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms
Jan	27	Feb	25	$ 5,003.81	$ 9,707.00	$ 14,710.81	13717.0
Feb	26	Mar	28	$ 4,050.76	$ 5,882.65	$ 9,933.41	8969.5
Mar	29	Apr	6			$ -	
Apr	7	May	9			$ -	
May	10	June	22			$ -	
June	23	July	22			$ -	
July	23	Aug	22			$ -	
Aug	23	Sept	22			$ -	
Sept	23	Oct	4			$ -	
Oct	5	Nov	4			$ -	
Nov	5	Dec	22			$ -	
Dec	23	Jan	6				



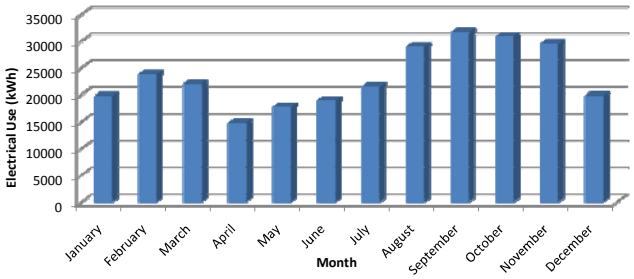
Energy Audit Building	PS #22	
Account:		
Account Number:	4201006905	
Meter Number	778014336	

2010											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	7	Feb	6			$ -					
Feb	7	Mar	6			$ -					
Mar	7	Apr	6			$ -					
Apr	7	May	6			$ -					
May	7	June	6			$ -					
June	7	July	6	$ 4,297.16	$ 7,302.59	$ 11,599.75	30000	34400	64400	192.0	
July	7	Aug	6	$ 2,909.41	$ 5,959.45	$ 8,868.86	22800	27200	50000	104.0	
Aug	7	Sept	6	$ 4,646.33	$ 8,137.47	$ 12,783.80	37200	30800	68000	212.0	
Sept	7	Oct	6	$ 3,099.35	$ 7,918.73	$ 11,018.08	40800	32400	73200	224.0	
Oct	7	Nov	6	$ 2,738.20	$ 6,808.96	$ 9,547.16	36400	25600	62000	204.0	
Nov	7	Dec	6	$ 2,802.88	$ 6,988.08	$ 9,790.96	38200	27800	66000	104.0	
Dec	7	Jan	6	$ 2,802.88	$ 6,988.08	$ 9,790.96	38200	27800	66000	104.0	
2011											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	7	Feb	6	$ 2,802.88	$ 6,988.08	$ 9,790.96	38200	27800	66000	104.0	ASSUMED
Feb	7	Mar	6	$ 2,802.88	$ 6,988.08	$ 9,790.96	38200	27800	66000	104.0	ASSUMED
Mar	7	Apr	6	$ 2,802.88	$ 6,988.08	$ 9,790.96	38200	27800	66000	104.0	ASSUMED
Apr	7	May	6	$ 2,786.52	$ 7,028.47	$ 9,814.99	38400	24400	62800	212.0	
May	7	June	4			$ -	34200	29400	63600	202	ASSUMED
June	5	July	4			$ -			0		
July	5	Aug	4			$ -			0		
Aug	5	Sept	4			$ -			0		
Sept	5	Oct	4			$ -			0		
Oct	5	Nov	4			$ -			0		
Nov	5	Dec	4			$ -			0		
Dec	5	Jan	6						0		



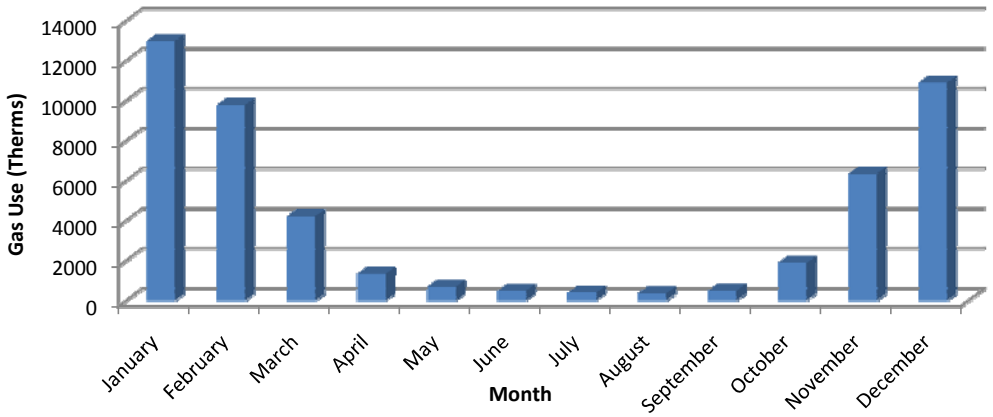
Energy Audit Building	PS-20	
Account:		
Account Number:	66-149-355-18, 69-566-059-02	
Meter Number	727000081	

2010											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	7	Feb	6			$ -					
Feb	7	Mar	6			$ -					
Mar	7	Apr	6			$ -					
Apr	7	May	6			$ -					
May	7	June	6			$ -					
June	7	July	6	$ 342.65	$ 378.75	$ 721.40			3520	23.6	
July	7	Aug	6	$ 435.94	$ 636.99	$ 1,072.93			5920	23.2	
Aug	7	Sept	6	$ 529.23	$ 895.23	$ 1,424.46			8320	24.0	
Sept	7	Oct	6	$ 148.95	$ 387.36	$ 536.31			3600	26.4	
Oct	7	Nov	6	$ 234.31	$ 636.99	$ 871.30			5920	36.8	
Nov	7	Dec	6	$ 631.36	$ 1,928.20	$ 2,559.56			17920	91.2	
Dec	7	Jan	6	$ 293.28	$ 817.76	$ 1,111.04			7600	54.4	
2011											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	7	Feb	6	$ 352.66	$ 1,041.57	$ 1,394.23			9680	54.4	
Feb	7	Mar	6	$ 508.51	$ 1,669.95	$ 2,178.46			15520	44.8	
Mar	7	Apr	6	$ 318.21	$ 979.70	$ 1,297.90			9280	34.0	
Apr	7	May	6	$ 127.90	$ 289.44	$ 417.34			3040	23.2	
May	7	June	4			$ -			3000		ASSUMED
June	7	July	4			$ -			0		
July	5	Aug	4			$ -			0		
Aug	5	Sept	4			$ -			0		
Sept	5	Oct	4			$ -			0		
Oct	5	Nov	4			$ -			0		
Nov	5	Dec	4			$ -			0		
Dec	5	Jan	6						0		



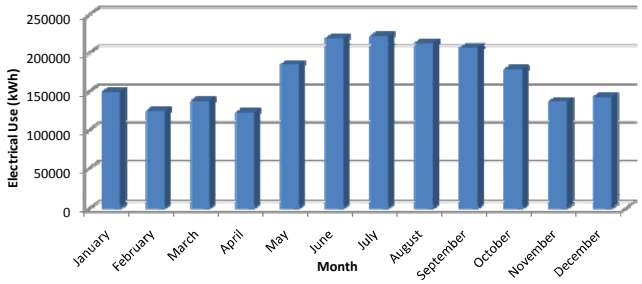
Energy Audit Building	PS-17	
Account:		
Account Number:	4200451409	
Meter Number	1810144,2808269	

2010								
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms	
Jan	7	Feb	6			$ -	0.0	
Feb	7	Mar	6			$ -	0.0	
Mar	7	Apr	6			$ -	0.0	
Apr	7	May	6			$ -	0.0	
May	7	June	3			$ -	532.8	ASSUMED
June	4	July	6	$ 273.22		$ 273.22	532.8	
July	7	Aug	4	$ 221.33		$ 221.33	344.9	
Aug	5	Sept	2	$ 219.64		$ 219.64	335.0	
Sept	3	Oct	4	$ 285.24		$ 285.24	546.3	
Oct	5	Nov	3	$ 2,006.97		$ 2,006.97	2018.2	
Nov	4	Dec	3	$ 2,953.04		$ 2,953.04	6814.0	
Dec	4	Jan	5	$ 3,927.06		$ 3,927.06	12024.7	
2011								
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms	
Jan	6	Feb	2	$ 4,149.28		$ 4,149.28	12003.4	
Feb	3	Mar	9			$ -	12003.4	ASSUMED
Mar	10	Apr	4			$ -	1333.2	ASSUMED
Apr	5	May	5	$ 403.29		$ 403.29	1333.18	
May	6	June	22			$ -		
June	23	July	22			$ -		
July	23	Aug	22			$ -		
Aug	23	Sept	22			$ -		
Sept	23	Oct	4			$ -		
Oct	5	Nov	4			$ -		
Nov	5	Dec	22			$ -		
Dec	23	Jan	6					



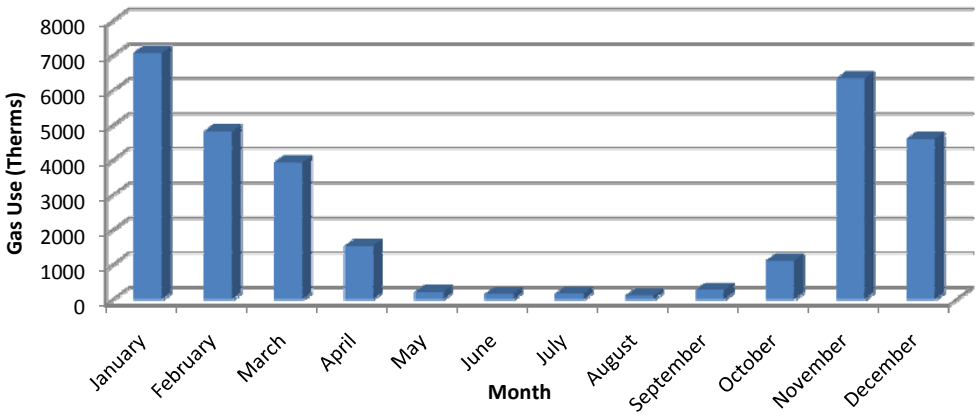
Energy Audit Building	PS-17	
Account:		
Account Number:	4200451409	
Meter Number	778015183	

2010											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	7	Feb	6			$ -					
Feb	7	Mar	6			$ -					
Mar	7	Apr	6			$ -					
Apr	7	May	6			$ -					
May	7	June	3			$ -			184400		ASSUMED
June	4	July	6	$ 12,082.12	$ 25,914.57	$ 37,996.69	119200	124400	243600	556.0	
July	7	Aug	26	$ 18,517.19	$ 39,092.40	$ 57,609.59	173600	189200	362800	480.0	
Aug	27	Sept	2	$ 2,155.98	$ 4,421.88	$ 6,577.86	18400	20800	39200	432.0	
Sept	3	Oct	4	$ 7,359.11	$ 24,985.54	$ 32,344.65	116400	107600	224000	504.0	
Oct	5	Nov	3	$ 5,910.83	$ 17,791.03	$ 23,701.86	93600	74000	167600	532.0	
Nov	4	Dec	3	$ 4,684.51		$ 4,684.51	74000	59600	133600		
Dec	4	Jan	5	$ 5,149.44		$ 5,149.44	79600	73200	152800		
2011											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	6	Feb	3	$ 4,603.82		$ 4,603.82	76000	65200	141200		
Feb	4	Mar	7			$ -			141200		ASSUMED
Mar	8	Apr	4			$ -			125200		ASSUMED
Apr	5	May	5	$ 4,423.25	$ 14,654.58	$ 19,077.83	70000	55200	125200	348.0	
May	6	June	4			$ -			0		
June	5	July	4			$ -			0		
July	5	Aug	4			$ -			0		
Aug	5	Sept	4			$ -			0		
Sept	5	Oct	4			$ -			0		
Oct	5	Nov	4			$ -			0		
Nov	5	Dec	4			$ -			0		
Dec	5	Jan	6						0		



Energy Audit Building	PS #16	
Account:		
Account Number:	65-354-903-00, 69-558-428-03	
Meter Number	2413261	

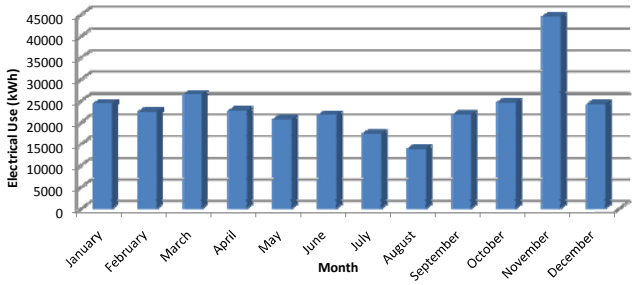
2010								
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms	
Jan	7	Feb	6			$ -	0.0	
Feb	7	Mar	6			$ -	0.0	
Mar	7	Apr	6			$ -	0.0	
Apr	7	May	6			$ -	0.0	
May	7	June	3			$ -	172.4	ASSUMED
June	4	July	6	$ 114.59		$ 114.59	172.4	
July	7	Aug	4	$ 120.44		$ 120.44	162.9	
Aug	5	Sept	2	$ 111.28		$ 111.28	94.4	
Sept	3	Oct	4	$ 142.82		$ 142.82	306.3	
Oct	5	Nov	3	$ 894.26		$ 894.26	1198.2	
Nov	4	Dec	3	$ 2,459.71	$ 1,227.34	$ 3,687.05	6915.9	
Dec	4	Jan	5	$ 1,559.20		$ 1,559.20	4621.7	
2011								
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms	
Jan	6	Feb	3	$ 2,440.44		$ 2,440.44	7110.6	
Feb	4	Mar	7	$ 2,060.75		$ 2,060.75	5229.0	
Mar	8	Apr	4			$ -	3252.6	ASSUMED
Apr	5	May	5	$ 267.40		$ 267.40	1276.09	
May	6	June	22			$ -		
June	23	July	22			$ -		
July	23	Aug	22			$ -		
Aug	23	Sept	22			$ -		
Sept	23	Oct	4			$ -		
Oct	5	Nov	4			$ -		
Nov	5	Dec	22			$ -		
Dec	23	Jan	6					



Energy Audit Building	PS #16	
Account:		
Account Number:	65-354-903-00, 69-558-428-03	
Meter Number	278006149	

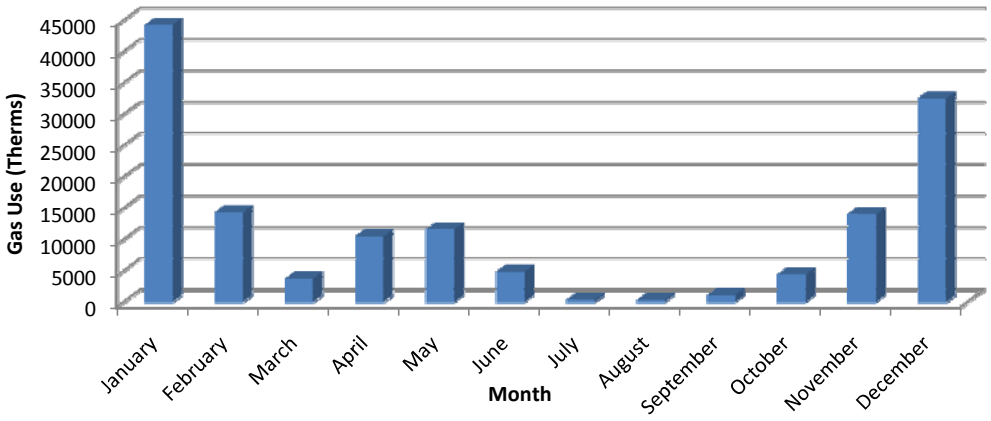
2010										
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW
Jan	7	Feb	6			$ -				
Feb	7	Mar	6			$ -				
Mar	7	Apr	6			$ -				
Apr	7	May	6			$ -				
May	7	June	3	$ 1,039.50	$ 2,354.87	$ 3,394.36			23205	
June	4	July	6	$ 1,649.76	$ 2,527.52	$ 4,177.28			23490	68.7
July	7	Aug	4	$ 1,049.77	$ 1,825.32	$ 2,875.09			15240	40.8
Aug	5	Sept	2	$ 874.07	$ 1,583.07	$ 2,457.14			12690	33.6
Sept	3	Oct	4	$ 1,051.30	$ 2,572.72	$ 3,624.02			23910	74.7
Oct	5	Nov	3	$ 1,055.90	$ 2,431.86	$ 3,487.76			24090	74.4
Nov	4	Dec	3	$ 2,026.19	$ 4,727.58	$ 6,753.77			46800	173.6
Dec	4	Jan	5	$ 995.55	$ 2,321.43	$ 3,316.98			23070	37.1
2011										
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW
Jan	6	Feb	3	$ 971.71	$ 2,514.61	$ 3,486.32			23370	70.8
Feb	4	Mar	7	$ 1,046.65	$ 2,776.08	$ 3,822.73			25800	72.0
Mar	8	Apr	4	$ 1,037.94	$ 2,479.15	$ 3,517.08			24360	
Apr	5	May	5	$ 1,029.22	$ 2,182.21	$ 3,211.43			22920	76.2
May	6	June	4			$ -			0	
June	5	July	4			$ -			0	
July	5	Aug	4			$ -			0	
Aug	5	Sept	4			$ -			0	
Sept	5	Oct	4			$ -			0	
Oct	5	Nov	4			$ -			0	
Nov	5	Dec	4			$ -			0	
Dec	5	Jan	6						0	

ASSUMED



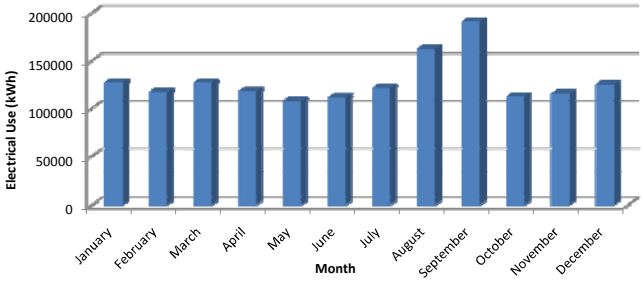
Energy Audit Building	PS 15	
Account:		
Account Number:	4200539306	
Meter Number	2589009	

2010							
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms
Jan	7	Feb	6			$ -	0.0
Feb	7	Mar	6			$ -	0.0
Mar	7	Apr	6			$ -	0.0
Apr	7	May	6			$ -	0.0
May	7	June	20			$ -	0.0
June	21	July	21	$ 156.42		$ 156.42	464.6
July	22	Aug	20	$ 98.20		$ 98.20	6.2
Aug	21	Sept	20	$ 206.95		$ 206.95	737.7
Sept	21	Oct	21	$ 322.05		$ 322.05	1729.5
Oct	22	Nov	17	$ 2,766.91		$ 2,766.91	8647.4
Nov	18	Dec	20	$ 6,521.84		$ 6,521.84	21747.1
Dec	21	Jan	21	$ 13,450.45		$ 13,450.45	56229.9
2011							
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms
Jan	22	Feb	19	$ 6,445.21		$ 6,445.21	21131.7
Feb	20	Mar	22	$ 3,443.97		$ 3,443.97	1627.2
Mar	23	Apr	19			$ -	8000.0 ASSUMED
Apr	20	May	20	$ 1,554.26		$ 1,554.26	14332.78
May	21	June	22			$ -	7000.0 ASSUMED
June	23	July	22			$ -	
July	23	Aug	22			$ -	
Aug	23	Sept	22			$ -	
Sept	23	Oct	4			$ -	
Oct	5	Nov	4			$ -	
Nov	5	Dec	22			$ -	
Dec	23	Jan	6				



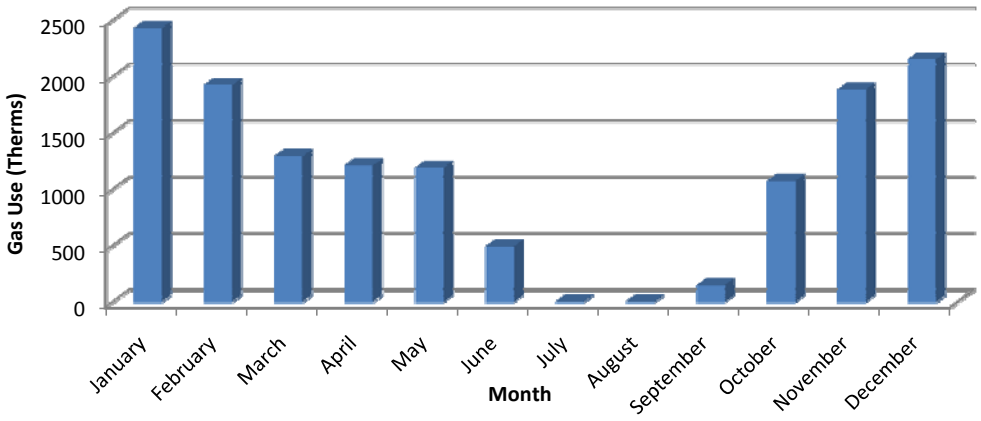
Energy Audit Building	PS 15	
Account:		
Account Number:	4200539306	
Meter Number	778015018	

2010											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	7	Feb	6			$ -					
Feb	7	Mar	6			$ -					
Mar	7	Apr	6			$ -					
Apr	7	May	6			$ -					
May	22	June	21			$ -			112337	268	ASSUMED
June	22	July	21			$ -			117140	272	ASSUMED
July	22	Aug	21	$ 5,974.14	$ 12,653.43	$ 18,627.57	57307	64637	121944	275.3	
Aug	22	Sept	19	$ 11,615.58	$ 24,191.60	$ 35,807.18	102800	128534	231334	464.6	
Sept	20	Oct	19	$ 3,804.29	$ 11,153.24	$ 14,957.53	56502	50719	107221	284.0	
Oct	20	Nov	17	$ 3,960.28	$ 10,589.44	$ 14,549.72	56811	50553	107364	356.6	
Nov	18	Dec	20	$ 4,549.12	$ 12,686.81	$ 17,235.93	66991	66444	133435	298.0	
Dec	21	Jan	20	$ 4,127.43	$ 7,479.93	$ 11,607.36	61797	62819	124616	294.4	
2011											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	21	Feb	18	$ 3,999.72	$ 12,763.84	$ 16,763.56	61724	61302	123026	293.8	
Feb	19	Mar	22	$ 4,196.18	$ 13,726.91	$ 17,923.09	64730	66321	131051	292.9	
Mar	23	Apr	20			$ -			119292	279	ASSUMED
Apr	21	May	20	$ 3,782.14	$ 10,735.45	$ 14,517.59	56237	51296	107533	265.0	
May	21	June	4			$ -			0		
June	5	July	4			$ -			0		
July	5	Aug	4			$ -			0		
Aug	5	Sept	4			$ -			0		
Sept	5	Oct	4			$ -			0		
Oct	5	Nov	4			$ -			0		
Nov	5	Dec	4			$ -			0		
Dec	5	Jan	6						0		



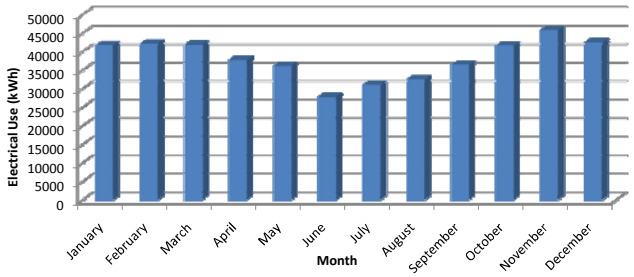
Energy Audit Building	PS-14	
Account:		
Account Number:	4201152308	
Meter Number	3008292,3008293	

2010								
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms	
Jan	7	Feb	6			$ -	0.0	
Feb	7	Mar	6			$ -	0.0	
Mar	7	Apr	6			$ -	0.0	
Apr	7	May	6			$ -	0.0	
May	7	June	24			$ -	0.0	
June	25	July	28	$ 12.10		$ 12.10	5.2	
July	29	Aug	27			$ -	5.2	ASSUMED
Aug	28	Sept	25	$ 12.60		$ 12.60	6.2	
Sept	26	Oct	25			$ -	851.9	ASSUMED
Oct	26	Nov	22			$ -	1697.6	ASSUMED
Nov	23	Dec	29	$ 684.83	$ 1,713.74	$ 2,398.57	2543.4	
Dec	30	Jan	28	$ 618.79	$ 1,660.60	$ 2,279.39	2378.8	
2011								
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms	
Jan	29	Feb	27	$ 561.34	$ 1,482.36	$ 2,043.70	2092.4	
Feb	28	Mar	28	$ 385.39	$ 790.04	$ 1,175.43	1215.3	
Mar	29	Apr	27			$ -	1209.2	ASSUMED
Apr	28	May	26	$ 260.22	$ 819.27	$ 1,079.49	1203.22	
May	27	June	22			$ -	604.2	ASSUMED
June	23	July	22			$ -		
July	23	Aug	22			$ -		
Aug	23	Sept	22			$ -		
Sept	23	Oct	4			$ -		
Oct	5	Nov	4			$ -		
Nov	5	Dec	22			$ -		
Dec	23	Jan	6					



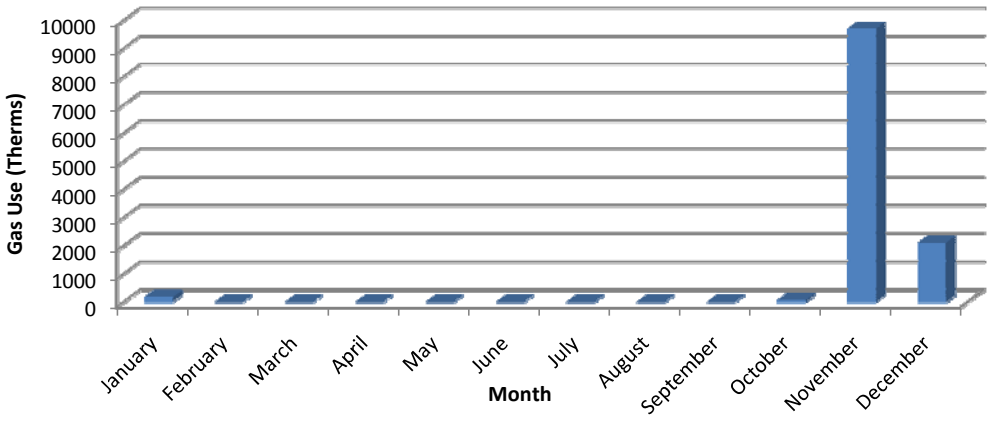
Energy Audit Building	PS #14	
Account:		
Account Number:	4201152308	
Meter Number	778015020	

2010											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	7	Feb	6			$ -					
Feb	7	Mar	6			$ -					
Mar	7	Apr	6			$ -					
Apr	7	May	6			$ -					
May	7	June	6			$ -					
June	7	July	6	$ 2,194.12	$ 3,568.55	$ 5,762.67	13415	15631	29046	90.8	
July	7	Aug	6	$ 50.19	$ 2,098.43	$ 2,148.62			31216		ASSUMED
Aug	7	Sept	6	$ 2,721.30	$ 4,201.13	$ 6,922.43	18441	14427	32868	126.7	
Sept	7	Oct	6			$ -			37587		
Oct	7	Nov	6			$ -			42305		ASSUMED
Nov	7	Dec	6	$ 2,109.54	$ 4,912.44	$ 7,021.98	24542	22482	47024	137.3	
Dec	7	Jan	6	$ 1,874.37	$ 4,360.21	$ 6,234.58	21675	19312	40987	138.9	
2011											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	7	Feb	6	$ 1,860.02	$ 4,766.80	$ 6,626.82	22448	19455	41903	130.6	
Feb	7	Mar	6	$ 1,930.03	$ 4,577.39	$ 6,507.42	22628	20347	43313	128.1	
Mar	7	Apr	6			$ -			40380		ASSUMED
Apr	7	May	6	$ 1,776.32	$ 4,034.29	$ 5,810.61	20843	16603	37446	115.4	
May	7	June	4			$ -			33246		ASSUMED
June	5	July	4			$ -			0		
July	5	Aug	4			$ -			0		
Aug	5	Sept	4			$ -			0		
Sept	5	Oct	4			$ -			0		
Oct	5	Nov	4			$ -			0		
Nov	5	Dec	4			$ -			0		
Dec	5	Jan	6						0		



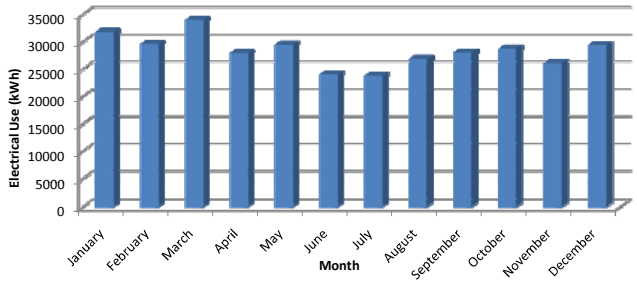
Energy Audit Building	PS 12	
Account:		
Account Number:	65-354-853-07, 69-573-747-18	
Meter Number	1863623,3637682	

2010							
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms
Jan	7	Feb	6			$ -	0.0
Feb	7	Mar	6			$ -	0.0
Mar	7	Apr	6			$ -	0.0
Apr	7	May	6			$ -	0.0
May	7	June	3			$ -	0.0
June	4	July	6	$ 10.20		$ 10.20	0.0
July	7	Aug	4	$ 10.49		$ 10.49	0.0
Aug	5	Sept	1			$ -	0.0
Sept	2	Oct	4	$ 10.52		$ 10.52	0.0
Oct	5	Nov	4	$ 26.27		$ 26.27	70.6
Nov	5	Dec	3	$ 3,798.77	$ 6,493.68	$ 10,292.45	10805.9
Dec	4	Jan	5	$ 338.77	$ 792.54	$ 1,131.31	1161.5
2011							
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms
Jan	6	Feb	3	$ 10.52		$ 10.52	0.0
Feb	4	Mar	7	$ 10.52		$ 10.52	0.0
Mar	8	Apr	4			$ -	0.0
Apr	5	May	5	$ 10.52		$ 10.52	0.00
May	6	June	22			$ -	0.0
June	23	July	22			$ -	
July	23	Aug	22			$ -	
Aug	23	Sept	22			$ -	
Sept	23	Oct	4			$ -	
Oct	5	Nov	4			$ -	
Nov	5	Dec	22			$ -	
Dec	23	Jan	6				



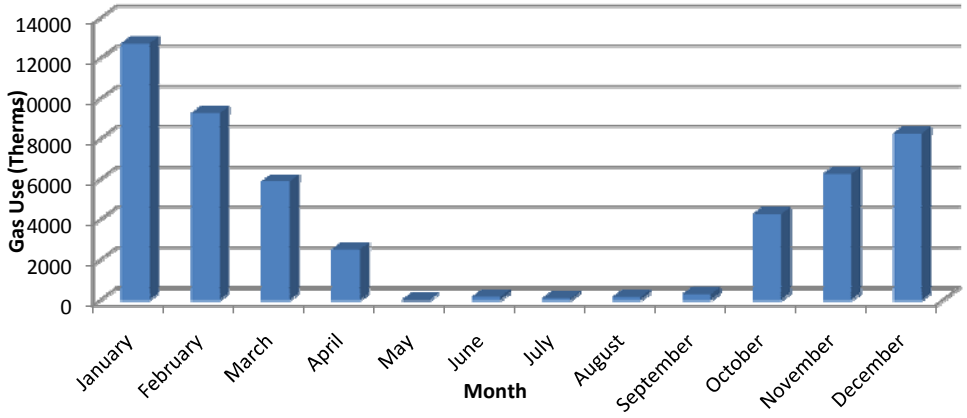
Energy Audit Building	PS 12	
Account:		
Account Number:	65-354-853-07, 69-573-747-18	
Meter Number	278004708	

2010											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	7	Feb	6			$ -					
Feb	7	Mar	6			$ -					
Mar	7	Apr	6			$ -					
Apr	7	May	6			$ -					
May	7	June	3			$ -					
June	4	July	6	$ 2,164.77	$ 4,823.71	$ 6,988.48			29400	94.5	
July	7	Aug	4	$ 1,566.56	$ 2,299.95	$ 3,866.51			21375	65.3	
Aug	5	Sept	2			$ -			25688	87	ASSUMED
Sept	3	Oct	4	$ 1,377.36	$ 3,228.00	$ 4,605.36			30000	108.0	
Oct	5	Nov	2	$ 2,541.64		$ 2,541.64			26813	98.3	
Nov	3	Dec	3	$ 2,541.64		$ 2,541.64			26813	98.3	
Dec	4	Jan	5	$ 2,056.69	$ 2,993.97	$ 5,050.66			31575	100.5	
2011											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	6	Feb	3	$ 1,290.47	$ 3,244.14	$ 4,534.61			30150	100.5	
Feb	4	Mar	7	$ 1,398.44	$ 3,647.64	$ 5,046.08			33900	100.5	
Mar	8	Apr	4			$ -			30975	101	ASSUMED
Apr	5	May	5	$ 1,288.78	$ 2,670.64	$ 3,959.42			28050	100.5	
May	6	June	4			$ -			28725	98	ASSUMED
June	5	July	4			$ -			0		
July	5	Aug	4			$ -			0		
Aug	5	Sept	4			$ -			0		
Sept	5	Oct	4			$ -			0		
Oct	5	Nov	4			$ -			0		
Nov	5	Dec	4			$ -			0		
Dec	5	Jan	6						0		



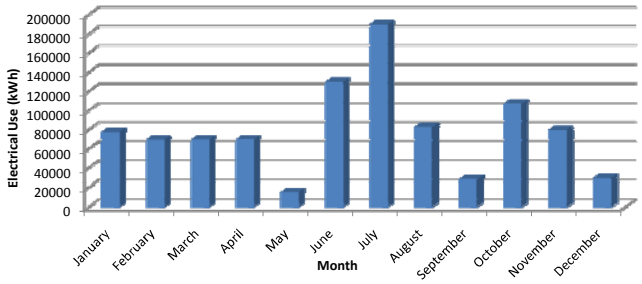
Energy Audit Building	PS - 11	
Account:		
Account Number:	4201205908	
Meter Number	3342229,3342223	

2010							
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms
Jan	7	Feb	6			$ -	0.0
Feb	7	Mar	6			$ -	0.0
Mar	7	Apr	6			$ -	0.0
Apr	7	May	6			$ -	0.0
May	7	June	14			$ -	0.0
June	15	July	15	$ 114.81		$ 114.81	158.2
July	16	Aug	16	$ 108.19		$ 108.19	74.7
Aug	17	Sept	15	$ 118.75		$ 118.75	144.3
Sept	16	Oct	13	$ 141.12		$ 141.12	294.9
Oct	14	Nov	13	$ 2,736.32		$ 2,736.32	4266.4
Nov	14	Dec	16	$ 3,135.11		$ 3,135.11	6257.3
Dec	17	Jan	14	$ 4,141.89		$ 4,141.89	8266.7
2011							
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms
Jan	15	Feb	15	$ 4,124.51		$ 4,124.51	12729.8
Feb	16	Mar	16	$ 3,431.03		$ 3,431.03	9262.3
Mar	17	Apr	14			$ -	5883.7 ASSUMED
Apr	15	May	16	$ 388.53		$ 388.53	2505.08
May	17	June	22			$ -	
June	23	July	22			$ -	
July	23	Aug	22			$ -	
Aug	23	Sept	22			$ -	
Sept	23	Oct	4			$ -	
Oct	5	Nov	4			$ -	
Nov	5	Dec	22			$ -	
Dec	23	Jan	6				



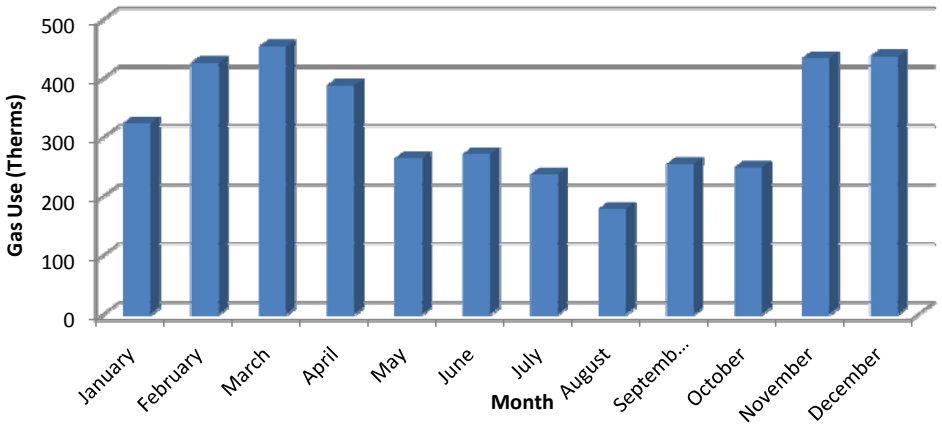
Energy Audit Building	PS - 11	
Account:		
Account Number:	4201205908	
Meter Number	778011059	

2010											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	7	Feb	6			$ -					
Feb	7	Mar	6			$ -					
Mar	7	Apr	6			$ -					
Apr	7	May	6			$ -					
May	7	June	2			$ -					
June	3	July	13			$ -	69000	60600	129600	259	ASSUMED
July	14	Aug	13	$ 11,677.32	$ 20,096.02	$ 31,773.34	100600	89200	189800	278.0	
Aug	14	Sept	13	$ 5,046.37	$ 8,724.51	$ 13,770.88	47800	34600	82400	240.0	
Sept	14	Oct	13	$ 984.11	$ 3,090.89	$ 4,075.00	15800	12400	28200	286.0	
Oct	14	Nov	13	$ 3,833.84	$ 11,307.98	$ 15,141.82	59400	47400	106800	424.0	
Nov	14	Dec	13	$ 2,615.88	$ 8,385.70	$ 11,001.58	41400	37800	79200	208.0	
Dec	14	Jan	13	$ 969.12	$ 3,112.87	$ 4,081.99	17800	11600	29400	186.0	
2011											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	14	Feb	13	$ 2,399.61	$ 8,696.78	$ 11,096.39	40200	37200	77400	202.0	
Feb	14	Mar	13	$ 2,198.14	$ 8,319.85	$ 10,517.99	38400	30800	69200	204.0	
Mar	14	Apr	13			$ -	37900	31400	69300	222	ASSUMED
Apr	14	May	13	$ 2,368.06	$ 6,490.98	$ 8,859.04	37400	32000	69400	240.0	
May	14	June	4			$ -			0		
June	5	July	4			$ -			0		
July	5	Aug	4			$ -			0		
Aug	5	Sept	4			$ -			0		
Sept	5	Oct	4			$ -			0		
Oct	5	Nov	4			$ -			0		
Nov	5	Dec	4			$ -			0		
Dec	5	Jan	6						0		



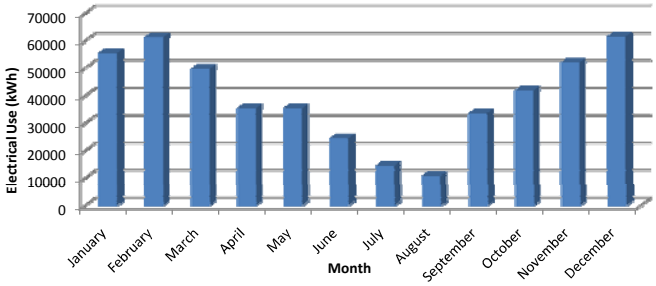
Energy Audit Building	PS-8	
Account:		
Account Number:		
Meter Number		

2010							
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms
Jan	7	Feb	6			$ -	324
Feb	7	Mar	6			$ -	427
Mar	7	Apr	6			$ -	454
Apr	7	May	6			$ -	388
May	7	June	25			$ -	265
June	26	July	6			$ -	272
July	7	Aug	8			$ -	237
Aug	9	Sept	8				179
Sept	9	Oct	7				255
Oct	8	Nov	5				249
Nov	6	Dec	8				434
Dec	9	Jan	10				437
2011							
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms
Jan	11	Feb	8				
Feb	9	Mar	11				
Mar	12	Apr	10				
Apr	11	May	10				
May	11	June	4			$ -	
June	5	July	4			$ -	
July	5	Aug	4			$ -	
Aug	5	Sept	4			$ -	
Sept	5	Oct	4			$ -	
Oct	5	Nov	4			$ -	
Nov	5	Dec	4			$ -	
Dec	5	Jan	6			$ -	



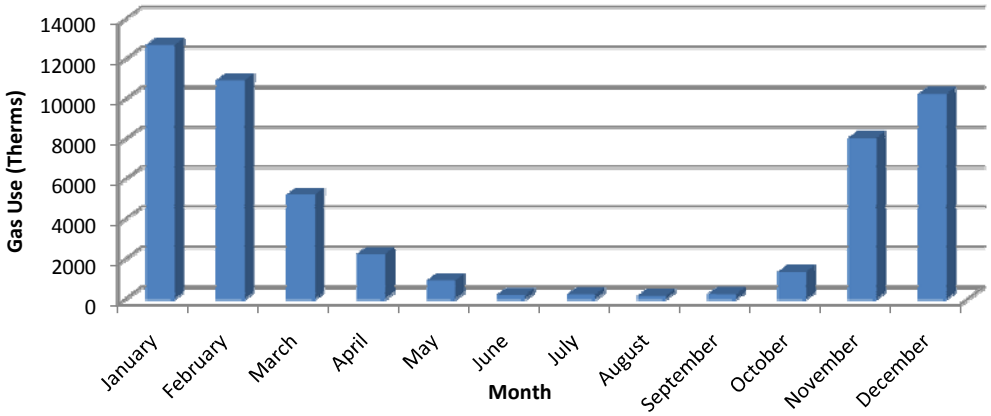
Energy Audit Building	PS-8	
Account:		
Account Number:	42-005-075-01 & 67-245-235-08, 69-566-754-04	
Meter Number	9197532 & 226016595	

2010										
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW
Jan	7	Feb	6			$ -			55488	241.0
Feb	7	Mar	6			$ -			61223	230.1
Mar	7	Apr	9			$ -			49688	225.0
Apr	10	May	10						35374	200.5
May	11	June	9						35362	208.6
June	10	July	9						24415	190.5
July	10	Aug	9						14470	73.9
Aug	10	Sept	8						10786	147.6
Sept	9	Oct	7						33455	24.8
Oct	8	Nov	5						41755	273.1
Nov	6	Dec	8						52043	230.9
Dec	9	Jan	10						61468	220.5
2011										
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW
Jan	11	Feb	8							
Feb	9	Mar	10							
Mar	11	Apr	8							
Apr	9	May	10							
May	11	June	4			$ -			0	
June	5	July	4			$ -			0	
July	5	Aug	4			$ -			0	
Aug	5	Sept	4			$ -			0	
Sept	5	Oct	4			$ -			0	
Oct	5	Nov	4			$ -			0	
Nov	5	Dec	4			$ -			0	
Dec	5	Jan	6			$ -			0	



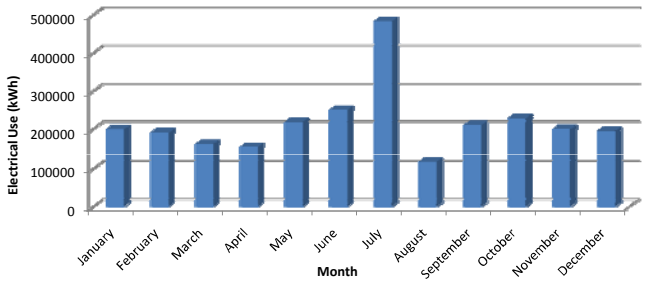
Energy Audit Building	PS-7	
Account:		
Account Number:	4200639009	
Meter Number	3166143	

2010								
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms	
Jan	7	Feb	6			$ -	0.0	
Feb	7	Mar	6			$ -	0.0	
Mar	7	Apr	6			$ -	0.0	
Apr	7	May	6			$ -	0.0	
May	7	June	8			$ -	436.3	ASSUMED
June	9	July	9	$ 146.29	$ 299.69	$ 445.98	436.3	
July	10	Aug	10	$ 167.23	$ 353.28	$ 520.51	481.8	
Aug	11	Sept	8	$ 128.54	$ 147.65	$ 276.19	210.2	
Sept	9	Oct	7	$ 178.59	$ 336.62	$ 515.21	546.9	
Oct	8	Nov	5	$ 4,627.97	$ 1,931.32	$ 6,559.29	3098.6	
Nov	6	Dec	3	$ 7,494.85	$ 10,638.61	$ 18,133.46	17413.3	
Dec	4	Jan	10	$ 9,071.25	$ 17,583.76	$ 26,655.01	25272.1	
2011								
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms	
Jan	11	Feb	8	$ 9,203.77	$ 18,168.91	$ 27,372.68	25906.3	
Feb	9	Mar	10	$ 7,788.69	$ 15,226.28	$ 23,014.97	22072.5	
Mar	11	Apr	10			$ -	4541.7	ASSUMED
Apr	11	May	10	$ 589.25	$ 3,051.62	$ 3,640.87	4541.67	
May	11	June	22			$ -		
June	23	July	22			$ -		
July	23	Aug	22			$ -		
Aug	23	Sept	22			$ -		
Sept	23	Oct	4			$ -		
Oct	5	Nov	4			$ -		
Nov	5	Dec	22			$ -		
Dec	23	Jan	6					



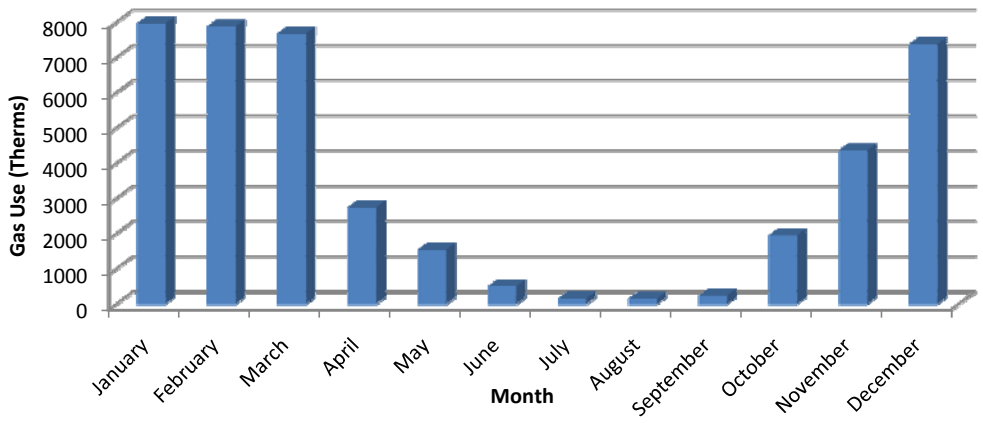
Energy Audit Building	PS-7	
Account:		
Account Number:	4200639009	
Meter Number	778015388	

2010											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	7	Feb	6			$ -					
Feb	7	Mar	6			$ -					
Mar	7	Apr	6			$ -					
Apr	7	May	6			$ -					
May	7	June	8			$ -	111600	107250	218850	521	ASSUMED
June	9	July	9	$ 13,061.29	$ 31,024.89	$ 44,086.18	144900	133500	278400	651.0	
July	10	Aug	4	$ 21,810.61	$ 52,604.57	$ 74,415.18	233100	243000	476100	555.0	
Aug	5	Sept	8	$ 2,915.24	$ 6,995.23	$ 9,910.47	29100	29700	58800	537.0	
Sept	9	Oct	7	$ 7,659.51	$ 29,483.41	$ 37,142.92	134400	125400	259800	633.0	
Oct	8	Nov	18	$ 8,645.41	$ 30,955.34	$ 39,600.75	141900	148200	290100	465.0	
Nov	19	Dec	8	$ 3,799.19	$ 13,714.36	$ 17,513.55	60000	66900	126900	393.0	
Dec	9	Jan	10	$ 6,041.60	$ 22,172.28	$ 28,213.88	98400	109200	207600	420.0	
2011											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	11	Feb	8	$ 5,260.24	$ 21,455.17	$ 26,715.41	94500	93900	188400	420.0	
Feb	9	Mar	7			$ -	86400	87450	188400	405	ASSUMED
Mar	8	Apr	10			$ -	82350	84225	159300	398	ASSUMED
Apr	11	May	10	$ 4,858.79	$ 18,496.61	$ 23,355.40	78300	81000	159300	390.0	
May	11	June	4			$ -			0		
June	5	July	4			$ -			0		
July	5	Aug	4			$ -			0		
Aug	5	Sept	4			$ -			0		
Sept	5	Oct	4			$ -			0		
Oct	5	Nov	4			$ -			0		
Nov	5	Dec	4			$ -			0		
Dec	5	Jan	6						0		



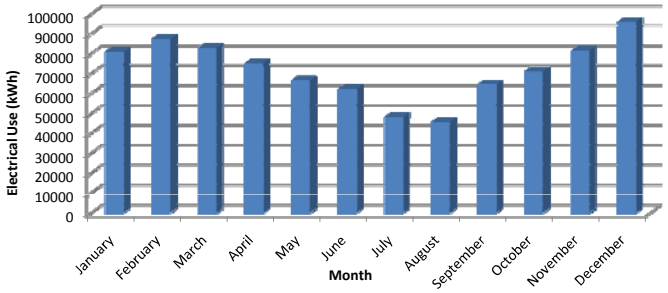
Energy Audit Building	PS-6	
Account:		
Account Number:		
Meter Number		

2010							
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms
Jan	7	Feb	6			$ -	7966.6
Feb	7	Mar	6			$ -	7880.6
Mar	7	Apr	6			$ -	7676.2
Apr	7	May	6			$ -	2735.7
May	7	June	7			$ -	1537.0
June	8	July	10			$ -	500.6
July	11	Aug	6			$ -	150.5
Aug	7	Sept	7			$ -	141.7
Sept	8	Oct	6			$ -	228.8
Oct	7	Nov	4			$ -	1943.4
Nov	5	Dec	7			$ -	4361.7
Dec	8	Jan	10			$ -	7371.1
2011							
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms
Jan	11	Feb	7			$ -	
Feb	8	Mar	9			$ -	
Mar	10	Apr	6			$ -	
Apr	7	May	9			$ -	
May	10	June	22			$ -	
June	23	July	22			$ -	
July	23	Aug	22			$ -	
Aug	23	Sept	22			$ -	
Sept	23	Oct	4			$ -	
Oct	5	Nov	4			$ -	
Nov	5	Dec	22			$ -	
Dec	23	Jan	6				



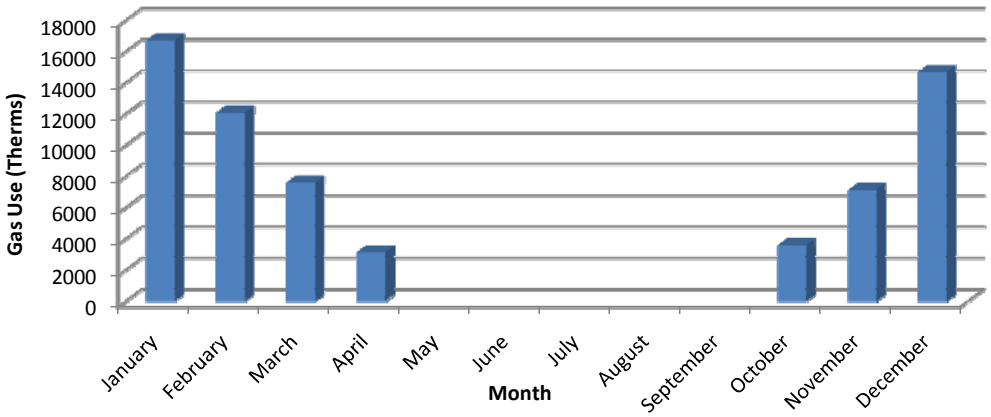
Energy Audit Building	PS-6	
Account:		
Account Number:		
Meter Number		

2010										
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW
Jan	7	Feb	6						80835	268.0
Feb	7	Mar	6						87183	245.6
Mar	7	Apr	6						82722	233.6
Apr	7	May	6						75001	227.0
May	7	June	8						66435	235.0
June	9	July	12						61961	251.2
July	13	Aug	9						47995	143.2
Aug	10	Sept	8						45430	175.2
Sept	9	Oct	7						64453	235.2
Oct	8	Nov	5						70869	261.6
Nov	6	Dec	8						81297	292.8
Dec	9	Jan	10						95833	275.2
2011										
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW
Jan	11	Feb	8							
Feb	9	Mar	12							
Mar	13	Apr	11							
Apr	12	May	5			$ -				
May	6	June	4			$ -				
June	5	July	4			$ -				
July	5	Aug	4			$ -				
Aug	5	Sept	4			$ -				
Sept	5	Oct	4			$ -				
Oct	5	Nov	4			$ -				
Nov	5	Dec	4			$ -				
Dec	5	Jan	6							



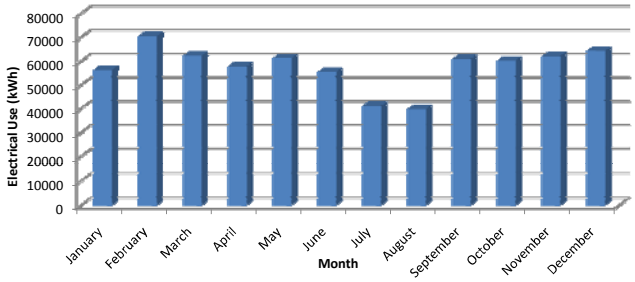
Energy Audit Building	PS-5	
Account:		
Account Number:		
Meter Number		

2010							
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms
Jan	7	Feb	6				
Feb	7	Mar	6				
Mar	7	Apr	6				
Apr	7	May	6				
May	7	June	7				
June	8	July	10				
July	11	Aug	6				
Aug	7	Sept	7				
Sept	8	Oct	5				
Oct	6	Nov	3	$ 2,612.48		$ 2,612.48	3594.8
Nov	4	Dec	3	$ 3,320.75		$ 3,320.75	7120.5
Dec	4	Jan	5	$ 4,990.96		$ 4,990.96	14699.5
2011							
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms
Jan	6	Feb	3	$ 5,593.12		$ 5,593.12	16717.2
Feb	4	Mar	7	$ 4,663.57		$ 4,663.57	12085.6
Mar	8	Apr	4			$ -	7615.0 ASSUMED
Apr	5	May	5	$ 451.54		$ 451.54	3144.35
May	6	June	22			$ -	
June	23	July	22			$ -	
July	23	Aug	22			$ -	
Aug	23	Sept	22			$ -	
Sept	23	Oct	4			$ -	
Oct	5	Nov	4			$ -	
Nov	5	Dec	22			$ -	
Dec	23	Jan	6				



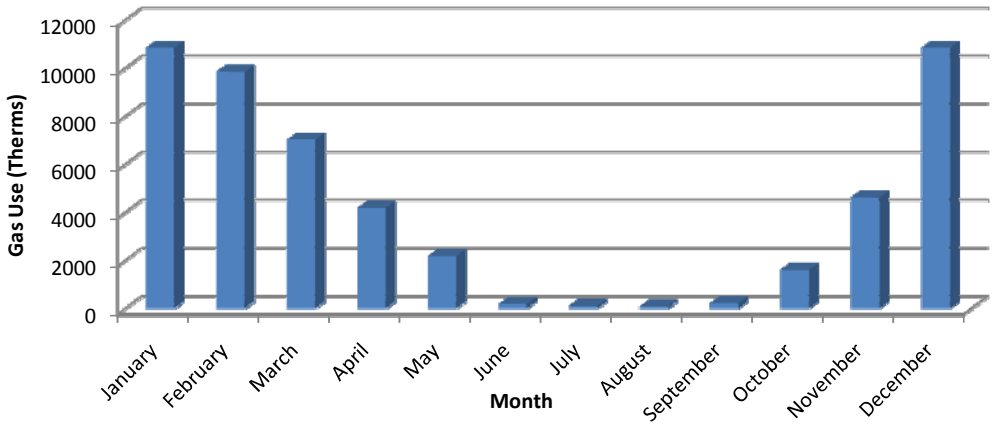
Energy Audit Building	PS-5	
Account:		
Account Number:	4200098806	
Meter Number	778007444	

Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
2010											
Jan	7	Feb	6	$ 2,215.21	$ 5,373.35	$ 7,588.56	37422	23340	60762	213.1	ASSUMED
Feb	7	Mar	6	$ 2,349.97	$ 4,771.45	$ 7,121.42	41008	25624	66632	207.4	ASSUMED
Mar	7	Apr	6	$ 2,228.76	$ 4,318.69	$ 6,547.45	33098	23687	56785	210.2	ASSUMED
Apr	7	May	6	$ 2,228.76	$ 4,318.69	$ 6,547.45	33098	23687	56785	210.2	ASSUMED
May	7	June	4	$ 3,843.21	$ 4,563.66	$ 8,406.87	31766	25237	57003	193.0	ASSUMED
June	5	July	6	$ 3,843.21	$ 4,563.66	$ 8,406.87	31766	25237	57003	193.0	
July	7	Aug	4	$ 2,233.82	$ 2,762.79	$ 4,996.61	15789	18720	34509	89.3	
Aug	5	Sept	2	$ 2,560.58	$ 2,979.27	$ 5,539.85	18711	18502	37213	112.3	
Sept	3	Oct	4	$ 2,485.85	$ 5,328.71	$ 7,814.56	37038	28521	65559	210.2	
Oct	5	Nov	2	$ 2,155.38	$ 4,358.07	$ 6,513.45	32265	22170	54435	204.5	
Nov	3	Dec	3	$ 2,326.95	$ 3,715.86	$ 6,042.81	37577	22526	60103	213.1	
Dec	4	Jan	5	$ 2,336.25	$ 5,899.99	$ 8,236.24	37002	24400	61402	210.2	
2011											
Jan	6	Feb	3	$ 2,215.21	$ 5,373.35	$ 7,588.56	37422	23340	60762	213.1	
Feb	4	Mar	7	$ 2,349.97	$ 4,771.45	$ 7,121.42	41008	25624	66632	207.4	
Mar	8	Apr	5			$ -			0		
Apr	6	May	5	$ 2,228.76	$ 4,318.69	$ 6,547.45	33098	23687	56785	210.2	
May	6	June	4			$ -			0		
June	5	July	4			$ -			0		
July	5	Aug	4			$ -			0		
Aug	5	Sept	4			$ -			0		
Sept	5	Oct	4			$ -			0		
Oct	5	Nov	4			$ -			0		
Nov	5	Dec	4			$ -			0		
Dec	5	Jan	6						0		



Energy Audit Building	PUBLIC SCHOOL NO.3	
Account:		
Account Number:	4200421208	
Meter Number	3227466,3227434	

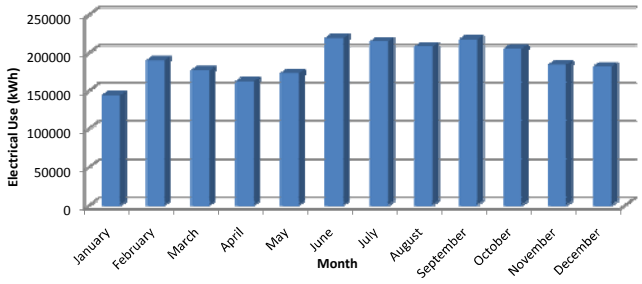
2010							
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms
Jan	7	Feb	6				
Feb	7	Mar	6				
Mar	7	Apr	6				
Apr	7	May	6				
May	7	June	3				
June	4	July	5	$ 116.34	$ 127.45	$ 243.79	187.4
July	6	Aug	3	$ 113.12	$ 81.79	$ 194.91	111.7
Aug	4	Sept	1	$ 108.65	$ 55.68	$ 164.33	76.6
Sept	2	Oct	3	$ 130.52	$ 137.10	$ 267.62	223.6
Oct	4	Nov	2	$ 1,573.10	$ 1,012.41	$ 2,585.51	1615.5
Nov	3	Dec	2	$ 2,176.94	$ 2,751.98	$ 4,928.92	4623.5
Dec	3	Jan	5	$ 3,428.30	$ 7,380.92	$ 10,809.22	10852.6
2011							
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms
Jan	6	Feb	3	$ 3,669.31	$ 7,590.05	$ 11,259.36	10852.6
Feb	4	Mar	7	$ 3,466.66	$ 6,860.79	$ 10,327.45	9849.8
Mar	8	Apr	4			$ -	7020.9 ASSUMED
Apr	5	May	5	$ 554.80	$ 2,805.26	$ 3,360.06	4192.10
May	6	June	22			$ -	2189.8 ASSUMED
June	23	July	22			$ -	
July	23	Aug	22			$ -	
Aug	23	Sept	22			$ -	
Sept	23	Oct	4			$ -	
Oct	5	Nov	4			$ -	
Nov	5	Dec	22			$ -	
Dec	23	Jan	6				



Energy Audit Building	PUBLIC SCHOOL NO.3	
Account:		
Account Number:	4200421208	
Meter Number	778013326	

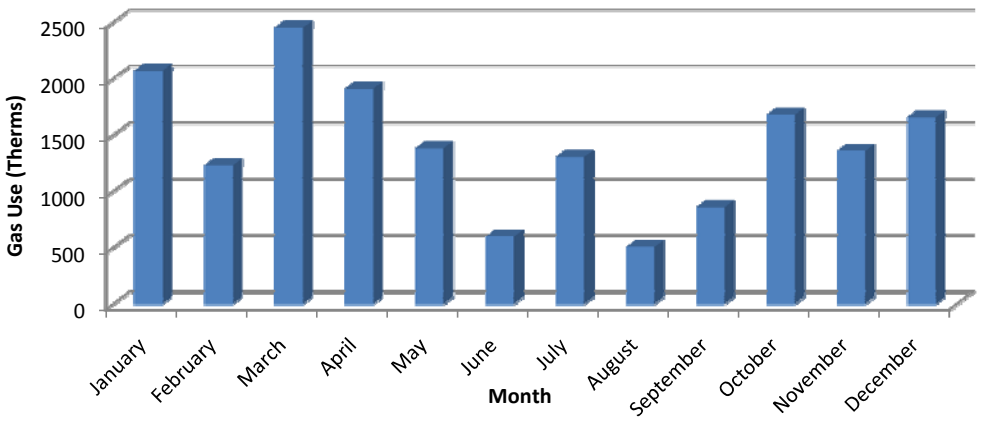
2010										
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW
Jan	7	Feb	6							
Feb	7	Mar	6							
Mar	7	Apr	6							
Apr	7	May	6							
May	7	June	4							
June	5	July	6	$ 13,165.78	$ 19,126.09	$ 32,291.87	133139	105758	238897	879.5
July	7	Aug	4	$ 9,590.17	$ 15,469.43	$ 25,059.60	111927	81296	193223	533.0
Aug	5	Sept	2	$ 10,642.82	$ 15,341.02	$ 25,983.84	114580	77039	191619	667.0
Sept	3	Oct	4	$ 5,736.71	$ 21,869.63	$ 27,606.34	133127	98004	231131	617.8
Oct	5	Nov	2	$ 4,527.84	$ 14,979.71	$ 19,507.55	109355	77751	187106	651.4
Nov	3	Dec	3	$ 4,695.53	$ 15,166.06	$ 19,861.59	103411	82608	186019	512.4
Dec	4	Jan	5	$ 4,729.01	$ 20,991.75	$ 25,720.76	90299	95553	185852	433.0
2011										
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW
Jan	6	Feb	3	$ 4,107.08	$ 18,722.05	$ 22,829.13	84026	88136	172162	394.8
Feb	4	Mar	7	$ 4,577.70	$ 17,016.17	$ 21,593.87	89908	100792	190700	382.2
Mar	8	Apr	5			$ -			175444	
Apr	6	May	5	$ 4,191.04	$ 15,440.70	$ 19,631.74	78222	81965	160187	354.1
May	6	June	4							
June	5	July	4							
July	5	Aug	4							
Aug	5	Sept	4							
Sept	5	Oct	4							
Oct	5	Nov	4							
Nov	5	Dec	4							
Dec	5	Jan	6							

ASSUMED



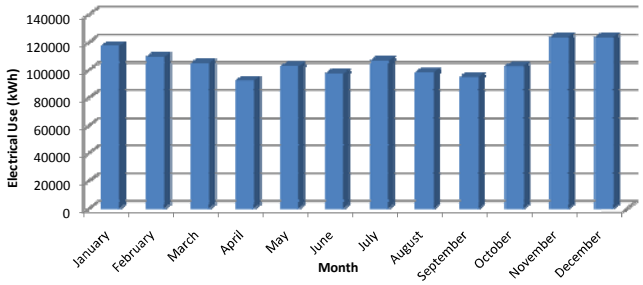
Energy Audit Building	MS - 41	
Account:		
Account Number:	4200684306	
Meter Number	2413074	

2010							
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms
Jan	7	Feb	6			$ -	0.0
Feb	7	Mar	6			$ -	0.0
Mar	7	Apr	6			$ -	0.0
Apr	7	May	6			$ -	0.0
May	7	June	24			$ -	0.0
June	25	July	26	$ 394.36		$ 394.36	1508.8
July	27	Aug	23	$ 161.76		$ 161.76	438.8
Aug	24	Sept	22	$ 177.55		$ 177.55	539.9
Sept	23	Oct	22	$ 322.83		$ 322.83	1737.1
Oct	23	Nov	19	$ 627.16		$ 627.16	1263.2
Nov	20	Dec	22	$ 665.44		$ 665.44	1501.8
Dec	23	Jan	26	$ 826.21		$ 826.21	2543.3
2011							
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms
Jan	27	Feb	23	$ 529.72		$ 529.72	997.9
Feb	24	Mar	25	$ 782.17		$ 782.17	2461.2
Mar	26	Apr	24			$ -	2000.0 ASSUME
Apr	25	May	25	$ 299.95		$ 299.95	1606.25
May	26	June	22			$ -	400.0 ASSUME
June	23	July	22			$ -	
July	23	Aug	22			$ -	
Aug	23	Sept	22			$ -	
Sept	23	Oct	4			$ -	
Oct	5	Nov	4			$ -	
Nov	5	Dec	22			$ -	
Dec	23	Jan	6				



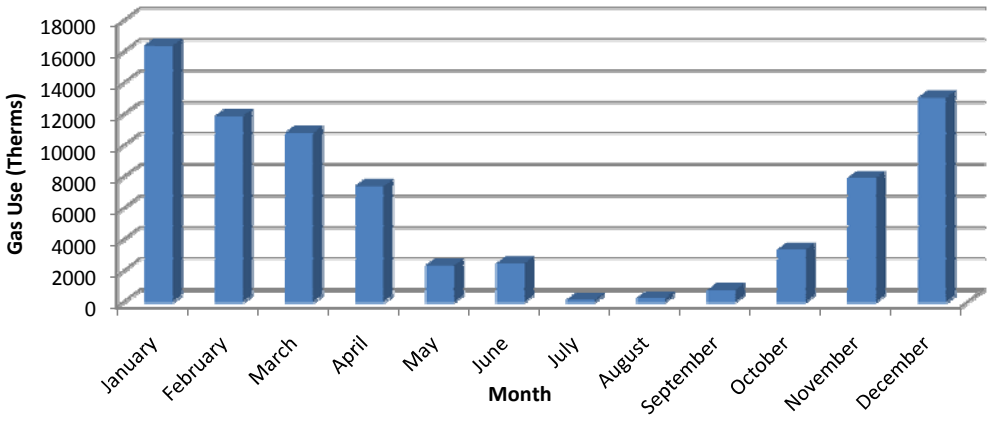
Energy Audit Building	MS-41	
Account:		
Account Number:	4200684306	
Meter Number	778015176	

2010											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	7	Feb	6			$ -					
Feb	7	Mar	6			$ -					
Mar	7	Apr	6			$ -					
Apr	7	May	6			$ -					
May	7	June	6			$ -					
June	7	July	6	$ 5,582.59	$ 11,137.09	$ 16,719.68	50999	54187	105186	279.8	
July	7	Aug	6	$ 5,309.85	$ 11,821.10	$ 17,130.95	49824	56832	106656	207.5	
Aug	7	Sept	6	$ 5,689.23	$ 11,631.41	$ 17,320.64	53811	42712	96523	269.9	
Sept	7	Oct	6	$ 3,446.51	$ 10,721.25	$ 14,167.76	54008	41657	95665	259.2	
Oct	7	Nov	6	$ 3,731.30	$ 10,926.77	$ 14,658.07	56471	47292	103763	289.2	
Nov	7	Dec	6	$ 4,462.82	$ 13,706.80	$ 18,169.62	68071	61385	129456	308.3	
Dec	7	Jan	6	$ 3,999.09	$ 12,303.64	$ 16,302.73	60215	60998	121213	284.5	
2011											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	7	Feb	6	$ 3,821.31	$ 12,356.51	$ 16,177.82	61888	54815	116703	282.6	
Feb	7	Mar	6	$ 3,677.42	$ 12,457.15	$ 16,134.57	60074	50740	110814	283.4	
Mar	7	Apr	6			$ -	55463	45589	101052	269	ASSUMED
Apr	7	May	6	$ 3,327.60	$ 9,874.65	$ 13,202.25	50852	40437	91289	253.8	
May	7	June	4			$ -	50926	47312	98238	267	ASSUMED
June	5	July	4			$ -			0		
July	5	Aug	4			$ -			0		
Aug	5	Sept	4			$ -			0		
Sept	5	Oct	4			$ -			0		
Oct	5	Nov	4			$ -			0		
Nov	5	Dec	4			$ -			0		
Dec	5	Jan	6						0		



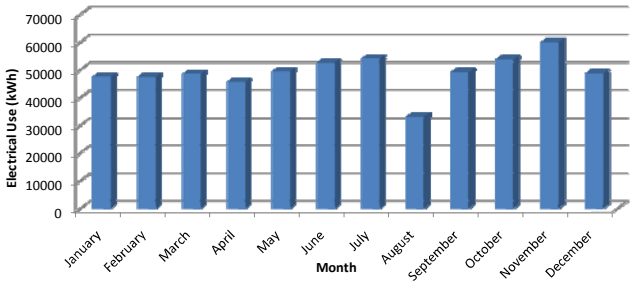
Energy Audit Building	MS 40	
Account:		
Account Number:	4200472201	
Meter Number	3166049	

2010								
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms	
Jan	7	Feb	6			$ -	0.0	
Feb	7	Mar	6			$ -	0.0	
Mar	7	Apr	6			$ -	0.0	
Apr	7	May	6			$ -	0.0	
May	7	June	24			$ -	0.0	
June	25	July	27	$ 111.63		$ 111.63	114.9	
July	28	Aug	25	$ 97.29		$ 97.29	200.0	ASSUMED
Aug	26	Sept	24	$ 144.54		$ 144.54	317.8	
Sept	25	Oct	25	$ 403.66		$ 403.66	2512.0	
Oct	26	Nov	23	$ 3,008.85		$ 3,008.85	6313.6	
Nov	24	Dec	30	$ 5,237.97		$ 5,237.97	15404.1	
Dec	31	Jan	26	$ 5,070.13		$ 5,070.13	14772.9	
2011								
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms	
Jan	27	Feb	25	$ 4,702.27		$ 4,702.27	12956.0	
Feb	26	Mar	28	$ 4,325.59		$ 4,325.59	11083.8	
Mar	29	Apr	27			$ -	8000.0	ASSUMED
Apr	28	May	26	$ 337.95		$ 337.95	1991.88	
May	27	June	22			$ -	3000.0	ASSUMED
June	23	July	22			$ -		
July	23	Aug	22			$ -		
Aug	23	Sept	22			$ -		
Sept	23	Oct	4			$ -		
Oct	5	Nov	4			$ -		
Nov	5	Dec	22			$ -		
Dec	23	Jan	6					



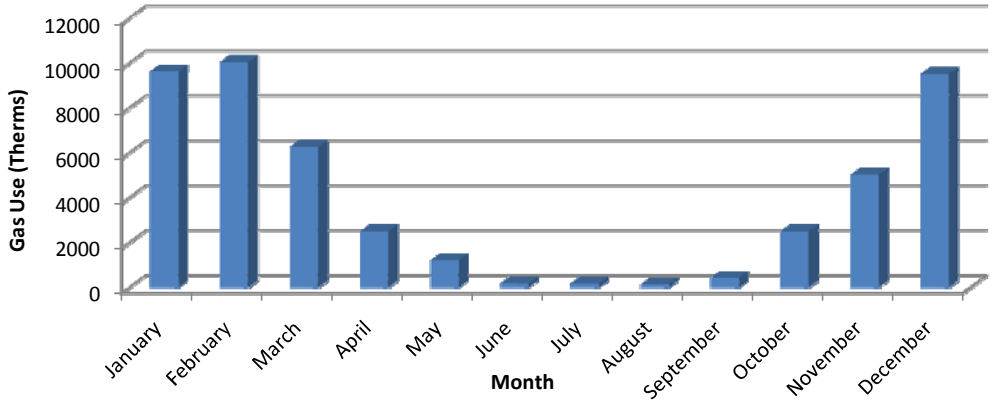
Energy Audit Building	MS #40	
Account:		
Account Number:	4200472201	
Meter Number	778011102	

2010											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	7	Feb	6			$ -					
Feb	7	Mar	6			$ -					
Mar	7	Apr	6			$ -					
Apr	7	May	6			$ -					
May	7	June	6	$ 3,071.52	$ 6,334.64	$ 9,406.16	28320	21760	50080	171.2	
June	7	July	6	$ 3,296.83	$ 6,747.59	$ 10,044.42	30240	23520	53760	172.8	
July	7	Aug	3	$ 3,387.86	$ 6,255.00	$ 9,642.86	27360	21280	48640	169.9	
Aug	4	Sept	6	$ 2,272.13	$ 4,461.85	$ 6,733.98	22080	12000	34080	200.0	
Sept	7	Oct	6	$ 2,218.61	$ 6,492.93	$ 8,711.54	32800	21280	54080	200.0	
Oct	7	Nov	6	$ 2,203.77	$ 6,266.89	$ 8,470.66	32320	21120	53440	198.4	
Nov	7	Dec	2	$ 2,137.36	$ 6,305.65	$ 8,443.01	31840	22000	53840	91.2	
Dec	3	Jan	6	$ 2,137.36	$ 6,305.65	$ 8,443.01	31840	22000	53840	91.2	
2011											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	7	Feb	6	$ 1,904.73	$ 6,179.72	$ 8,084.45	29120	18560	47680	176.0	
Feb	7	Mar	6	$ 1,929.23	$ 6,242.34	$ 8,171.57	28480	20320	48800	174.4	
Mar	7	Apr	6			$ -	28000	19280	47280	166	ASSUMED
Apr	7	May	6	$ 1,915.06	$ 5,587.57	$ 7,502.63	27520	18240	45760	156.8	
May	7	June	4			$ -			0		
June	5	July	4			$ -			0		
July	5	Aug	4			$ -			0		
Aug	5	Sept	4			$ -			0		
Sept	5	Oct	4			$ -			0		
Oct	5	Nov	4			$ -			0		
Nov	5	Dec	4			$ -			0		
Dec	5	Jan	6						0		



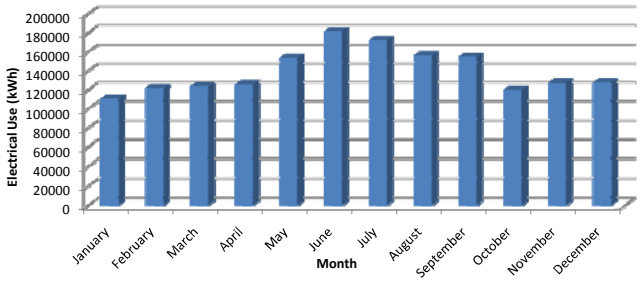
Energy Audit Building	MS-4 Gas	
Account:		
Account Number:	4200421100	
Meter Number	3274042,2283617	

2010								
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms	
Jan	7	Feb	6			$ -	0.0	
Feb	7	Mar	6			$ -	0.0	
Mar	7	Apr	6			$ -	0.0	
Apr	7	May	6			$ -	0.0	
May	7	June	3			$ -	1341.4	ASSUMED
June	4	July	8	$ 115.48	$ 122.77	$ 238.25	179.8	
July	9	Aug	4	$ 122.84	$ 129.10	$ 251.94	176.3	
Aug	5	Sept	2	$ 116.75	$ 95.64	$ 212.39	131.4	
Sept	3	Oct	4	$ 160.99	$ 262.71	$ 423.70	428.5	
Oct	5	Nov	3	$ 1,694.20	$ 1,567.39	$ 3,261.59	2501.0	
Nov	4	Dec	3	$ 2,200.25	$ 2,988.04	$ 5,188.29	5020.2	
Dec	4	Jan	5	$ 3,116.90	$ 6,719.72	$ 9,836.62	9517.9	ASSUMED
2011								
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms	
Jan	6	Feb	3	$ 3,254.48	$ 6,730.33	$ 9,984.81	9623.3	
Feb	4	Mar	7	$ 3,335.87	$ 6,995.83	$ 10,331.70	10043.6	
Mar	8	Apr	4			$ -	6273.3	ASSUMED
Apr	5	May	5	$ 388.24	$ 1,674.35	$ 2,062.59	2503.11	
May	6	June	22			$ -		
June	23	July	22			$ -		
July	23	Aug	22			$ -		
Aug	23	Sept	22			$ -		
Sept	23	Oct	4			$ -		
Oct	5	Nov	4			$ -		
Nov	5	Dec	22			$ -		
Dec	23	Jan	6					



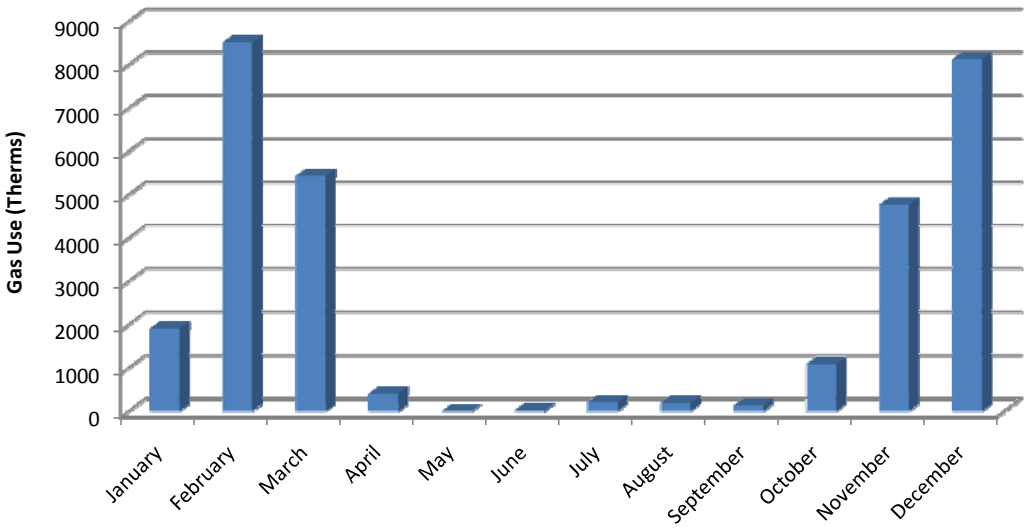
Energy Audit Building	MS-4	
Account:		
Account Number:	4200421100	
Meter Number	778009611	

2010											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	7	Feb	6			$ -					
Feb	7	Mar	6			$ -					
Mar	7	Apr	6			$ -					
Apr	7	May	6			$ -					
May	7	June	4			$ -			153670		ASSUMED
June	5	July	6	$ 9,875.61	$ 14,535.29	$ 24,410.90	110752	70803	181555	540.5	
July	7	Aug	4	$ 9,907.98	$ 13,798.26	$ 23,706.24	108996	63353	172349	543.9	
Aug	5	Sept	2	$ 8,832.91	$ 12,504.73	$ 21,337.64	95621	60571	156192	468.3	
Sept	3	Oct	4	$ 4,573.80	$ 12,397.13	$ 16,970.93	93766	61082	154848	466.2	
Oct	5	Nov	2	$ 3,626.62	$ 9,588.95	$ 13,215.57	70524	49248	119772	372.1	
Nov	3	Dec	3	$ 3,832.02	$ 9,804.87	$ 13,636.89	72127	55261	127388	308.7	
Dec	4	Jan	5	$ 3,795.14	$ 14,019.83	$ 17,814.97	68525	59129	127654	286.4	
2011											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	6	Feb	3	$ 3,147.74	$ 12,112.06	$ 15,259.80	61654	49111	110765	280.1	
Feb	4	Mar	7	$ 3,420.64	$ 11,107.68	$ 14,528.32	67450	54300	121750	298.2	
Mar	8	Apr	5			$ -	69857	53911	123768	374	ASSUMED
Apr	6	May	5	$ 3,804.71	$ 11,802.17	$ 15,606.88	72263	53522	125785	450.7	
May	6	June	4			$ -			0		
June	5	July	4			$ -			0		
July	5	Aug	4			$ -			0		
Aug	5	Sept	4			$ -			0		
Sept	5	Oct	4			$ -			0		
Oct	5	Nov	4			$ -			0		
Nov	5	Dec	4			$ -			0		
Dec	5	Jan	6						0		



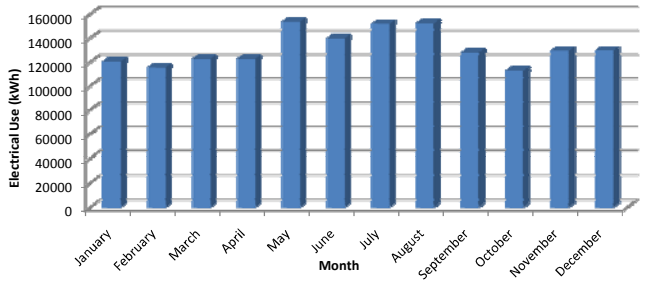
Energy Audit Building	McNair HS	
Account:		
Account Number:	4200478501	
Meter Number	2643852	

2010							
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms
Jan	7	Feb	6			$ -	0.0
Feb	7	Mar	6			$ -	0.0
Mar	7	Apr	6			$ -	0.0
Apr	7	May	6			$ -	0.0
May	7	June	27			$ -	0.0
June	28	July	27	$ 122.74		$ 122.74	193.9
July	28	Aug	25	$ 127.85		$ 127.85	207.7
Aug	26	Sept	24	$ 104.07		$ 104.07	45.6
Sept	25	Oct	25	$ 166.52		$ 166.52	465.7
Oct	26	Nov	23	$ 2,178.43		$ 2,178.43	3450.3
Nov	24	Dec	28	$ 3,520.62		$ 3,520.62	10158.2
Dec	29	Jan	25			$ -	
2011							
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms
Jan	26	Feb	25	$ 3,404.83		$ 3,404.83	9847.2
Feb	26	Mar	28	$ 2,619.31		$ 2,619.31	5964.1
Mar	29	Apr	28	$ 161.58		$ 161.58	450.0
Apr	29	May	9			$ -	
May	10	June	22			$ -	
June	23	July	22			$ -	
July	23	Aug	22			$ -	
Aug	23	Sept	22			$ -	
Sept	23	Oct	4			$ -	
Oct	5	Nov	4			$ -	
Nov	5	Dec	22			$ -	
Dec	23	Jan	6				



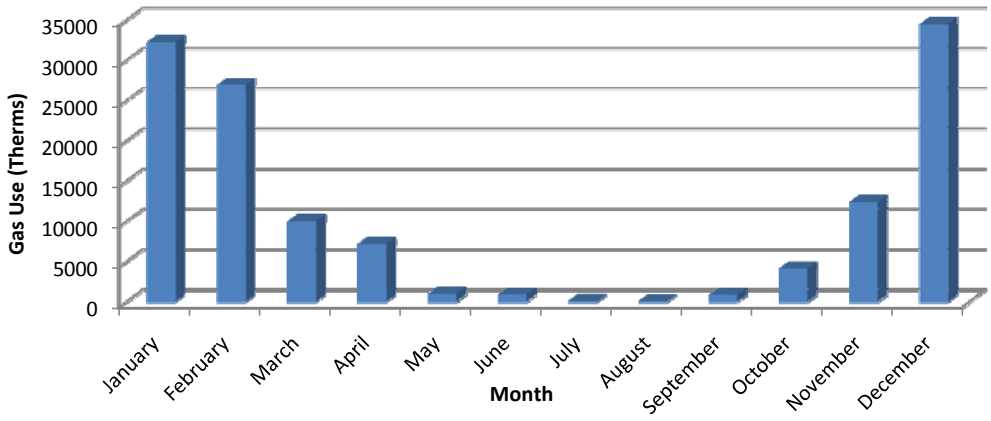
Energy Audit Building	McNair HS	
Account:		
Account Number:	4200478501	
Meter Number	778020511	

2010											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	7	Feb	6			$ -					
Feb	7	Mar	6			$ -					
Mar	7	Apr	6			$ -					
Apr	7	May	6			$ -					
May	7	June	6			$ -					
June	7	July	6	$ 8,350.85	$ 18,488.24	$ 26,839.09	86543	88072	174615	387.7	
July	7	Aug	6	$ 7,274.10	$ 15,345.19	$ 22,619.29	82089	62841	144930	350.6	
Aug	7	Sept	6	$ 8,087.20	$ 19,715.96	$ 27,803.16	93582	60631	154213	413.3	
Sept	7	Oct	6	$ 3,873.40	$ 15,120.72	$ 18,994.12	70455	52006	122461	414.7	
Oct	7	Nov	6	$ 3,484.32	$ 13,544.45	$ 17,028.77	64620	44725	109345	322.6	
Nov	7	Dec	6	$ 4,185.77	$ 14,322.49	$ 18,508.26	77886	57385	135271	328.3	
Dec	7	Jan	6			$ -	74012	53070	127082	327	
2011											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	7	Feb	6	$ 3,492.32	$ 15,134.84	$ 18,627.16	70137	48755	118892	326.6	
Feb	7	Mar	6	$ 3,459.20	$ 12,463.13	$ 15,922.33	68419	49291	117710	319.3	
Mar	7	Apr	6			$ -	**72924**	**47945**	**120868**	**364**	ASSUMED
Apr	7	May	6	$ 4,512.04	$ 14,712.04	$ 19,224.08	77428	46598	124026	408.6	
May	7	June	4			$ -	**81986**	**67335**	**149321**	**398**	ASSUMED
June	5	July	4			$ -			0		
July	5	Aug	4			$ -			0		
Aug	5	Sept	4			$ -			0		
Sept	5	Oct	4			$ -			0		
Oct	5	Nov	4			$ -			0		
Nov	5	Dec	4			$ -			0		
Dec	5	Jan	6						0		



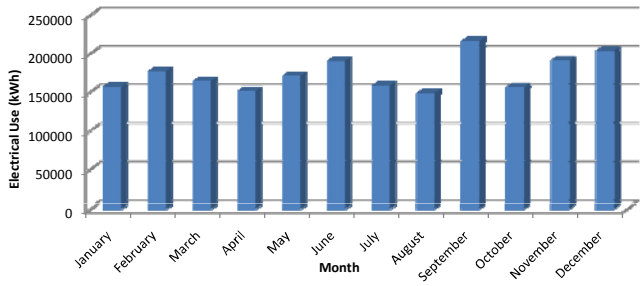
Energy Audit Building	Lincoln HS	
Account:		
Account Number:	4200014904	
Meter Number	2805147,2933905	

2010								
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms	
Jan	7	Feb	6	$ 11,757.87		$ 11,757.87	32254.6	
Feb	7	Mar	6	$ 9,755.49		$ 9,755.49	26933.3	
Mar	7	Apr	6			$ -	10000.0	ASSUMED
Apr	7	May	6	$ 941.58		$ 941.58	7193.36	
May	7	June	10			$ -	1000.0	ASSUMED
June	11	July	13	$ 246.31		$ 246.31	900.4	
July	14	Aug	11	$ 154.87		$ 154.87	111.0	
Aug	12	Sept	10	$ 150.31		$ 150.31	95.7	
Sept	11	Oct	12	$ 283.81		$ 283.81	862.2	
Oct	13	Nov	9	$ 6,451.81		$ 6,451.81	4145.8	
Nov	10	Dec	10	$ 8,130.30		$ 8,130.30	12373.7	
Dec	11	Jan	12	$ 12,218.58		$ 12,218.58	34490.9	
2011								
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms	
Jan	13	Feb	10	$ 86.21		$ 86.21	177.9	
Feb	11	Mar	14	$ 172.90		$ 172.90	385.8	
Mar	15	Apr	11			$ -		
Apr	12	May	12	$ 120.95		$ 120.95	304.10	
May	13	June	22			$ -		
June	23	July	22			$ -		
July	23	Aug	22			$ -		
Aug	23	Sept	22			$ -		
Sept	23	Oct	4			$ -		
Oct	5	Nov	4			$ -		
Nov	5	Dec	22			$ -		
Dec	23	Jan	6					



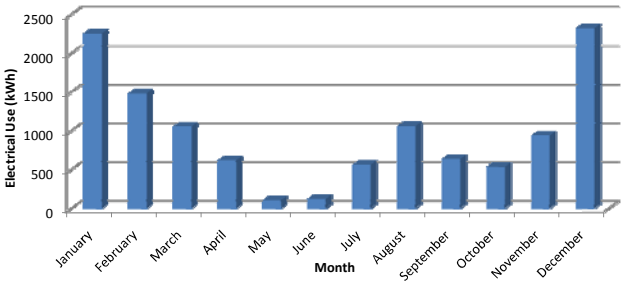
Energy Audit Building	Lincoln HS	
Account:		
Account Number:	4200014904	
Meter Number	778008971	

2010											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	7	Feb	6	$ 5,470.57		$ 5,470.57	88560	68600	157160		
Feb	7	Mar	6	$ 6,031.51		$ 6,031.51	98040	79000	177040		
Mar	7	Apr	6			$ -			164260		ASSUMED
Apr	7	May	6	$ 5,672.21		$ 5,672.21	83320	68160	151480		
May	7	June	10			$ -			170981		ASSUMED
June	11	July	13	$ 10,653.57	$ 8,037.80	$ 18,691.37	89960	92360	190482	316.0	
July	14	Aug	11	$ 8,229.52	$ 7,521.14	$ 15,750.66	66680	70960	158239	176.0	
Aug	12	Sept	10	$ 9,751.74	$ 6,156.85	$ 15,908.59	64520	64000	148479		
Sept	11	Oct	12	$ 6,100.73	$ 5,411.56	$ 11,512.29	85280	68040	216090		
Oct	13	Nov	9	$ 6,082.01	$ 5,328.31	$ 11,410.32	80080	67800	156471		
Nov	10	Dec	10	$ 7,026.00	$ 305.54	$ 7,331.54	98120	80120	191151		
Dec	11	Jan	12	$ 7,294.90	$ 140.19	$ 7,435.09	96720	82120	203485	284.0	
2011											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	13	Feb	10	$ 3,085.24		$ 3,085.24	52800	35600	88400		
Feb	11	Mar	14	$ 3,545.92		$ 3,545.92	60000	44800	104800		
Mar	15	Apr	11			$ -			0		
Apr	12	May	12	$ 3,645.20		$ 3,645.20	60400	40800	101200		
May	13	June	4			$ -			0		
June	5	July	4			$ -			0		
July	5	Aug	4			$ -			0		
Aug	5	Sept	4			$ -			0		
Sept	5	Oct	4			$ -			0		
Oct	5	Nov	4			$ -			0		
Nov	5	Dec	4			$ -			0		
Dec	5	Jan	6						0		



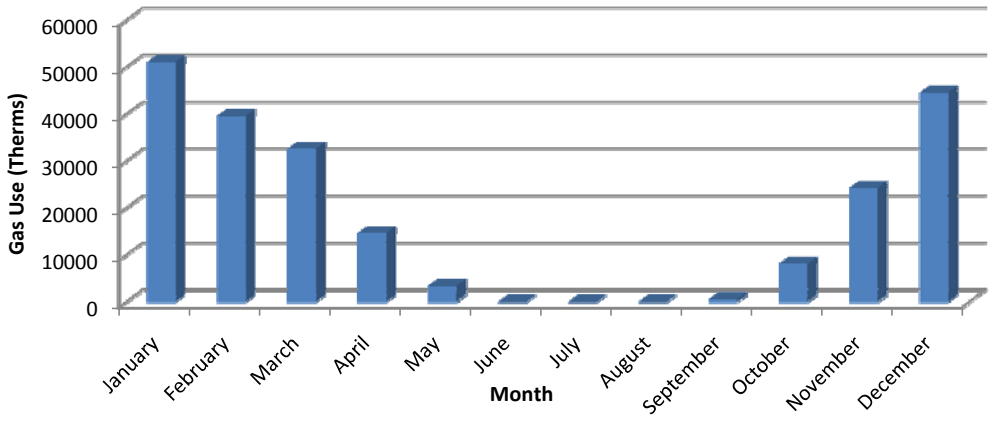
Energy Audit Building	Infinity	
Account:		
Account Number:	66-873-417-07, 69-329-141-07	
Meter Number	727000115	

2010											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	7	Feb	6			$ -					
Feb	7	Mar	6			$ -					
Mar	7	Apr	6			$ -					
Apr	7	May	6			$ -					
May	7	June	6			$ -					
June	7	July	6	$ 67.51	$ 17.22	$ 84.73			160	15.2	
July	7	Aug	6			$ -			662	14	ASSUMED
Aug	7	Sept	6	$ 179.67	$ 216.43	$ 396.10			1163	12.6	
Sept	7	Oct	6	$ 56.92	$ 103.37	$ 160.29			520	8.8	
Oct	7	Nov	6	$ 57.68	$ 103.16	$ 160.84			543	8.8	
Nov	7	Dec	6	$ 68.80	$ 146.93	$ 215.73			1050	7.7	
Dec	7	Jan	6	$ 113.86	$ 284.42	$ 398.28			2625	7.8	
2011											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	7	Feb	6	$ 99.20	$ 260.10	$ 359.30			2169	7.8	
Feb	7	Mar	6			$ -			1359	8	ASSUMED
Mar	7	Apr	6			$ -			954	8	ASSUMED
Apr	7	May	6	$ 54.54	$ 102.68	$ 157.22			549	8.0	
May	7	June	4			$ -					
June	5	July	4			$ -					
July	5	Aug	4			$ -					
Aug	5	Sept	4			$ -					
Sept	5	Oct	4			$ -					
Oct	5	Nov	4			$ -					
Nov	5	Dec	4			$ -					
Dec	5	Jan	6			$ -					



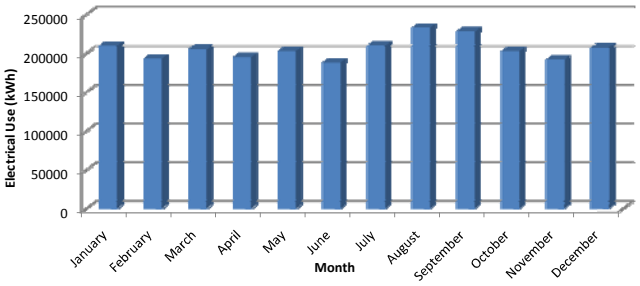
Energy Audit Building	Ferris HS	
Account:		
Account Number:	4200188902	
Meter Number	2415486	

2010							
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms
Jan	7	Feb	6			$ -	0.0
Feb	7	Mar	6			$ -	0.0
Mar	7	Apr	6			$ -	0.0
Apr	7	May	6			$ -	0.0
May	7	June	7			$ -	0.0
June	8	July	10			$ -	
July	11	Aug	6			$ -	
Aug	7	Sept	7	$ 100.06	$ 11.35	$ 111.41	18.6
Sept	8	Oct	6	$ 205.87	$ 455.94	$ 661.81	730.5
Oct	7	Nov	4	$ 6,727.83	$ 5,731.92	$ 12,459.75	9252.9
Nov	5	Dec	7	$ 10,725.69	$ 18,083.17	$ 28,808.86	29181.9
Dec	8	Jan	7	$ 15,880.18	$ 34,423.33	$ 50,303.51	49497.2
2011							
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	Therms
Jan	8	Feb	7	$ 16,519.70	$ 36,087.84	$ 52,607.54	51506.6
Feb	8	Mar	9	$ 14,208.36	$ 27,657.27	$ 41,865.63	39981.5
Mar	10	Apr	6			$ -	26210.2 ASSUMED
Apr	7	May	9	$ 1,367.61		$ 1,367.61	12438.98
May	10	June	22			$ -	
June	23	July	22			$ -	
July	23	Aug	22			$ -	
Aug	23	Sept	22			$ -	
Sept	23	Oct	4			$ -	
Oct	5	Nov	4			$ -	
Nov	5	Dec	22			$ -	
Dec	23	Jan	6				



Energy Audit Building	Ferris High School	
Account:		
Account Number:	4200554704	
Meter Number	778014145	

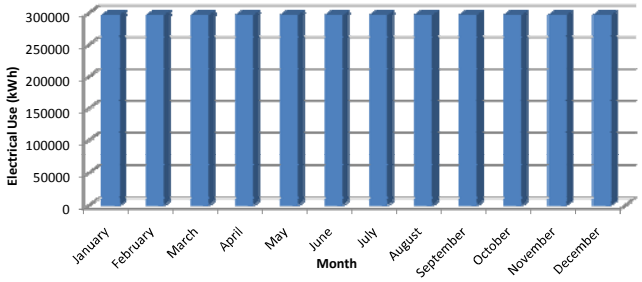
2010											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	7	Feb	6			$ -					
Feb	7	Mar	6			$ -					
Mar	7	Apr	6			$ -					
Apr	7	May	6			$ -					
May	7	June	8			$ -					
June	9	July	8	$ 14,205.03	$ 27,124.29	$ 41,329.32	132351	124450	256801	634.9	
July	9	Aug	6	$ 9,642.94	$ 19,155.28	$ 28,798.22	79069	99921	178990	392.9	
Aug	7	Sept	7	$ 12,446.60	$ 25,889.04	$ 38,335.64	110470	140743	251213	463.7	
Sept	8	Oct	6	$ 8,026.68	$ 24,077.72	$ 32,104.40	113348	105959	219307	523.6	
Oct	7	Nov	4	$ 6,928.37	$ 18,474.84	$ 25,403.21	94417	88421	182838	486.4	
Nov	5	Dec	7	$ 7,725.17	$ 20,683.73	$ 28,408.90	104287	107522	211809	486.1	
Dec	8	Jan	7	$ 7,560.15	$ 20,792.24	$ 28,352.39	105790	104330	210120	481.9	
2011											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	8	Feb	7	$ 7,219.04	$ 21,250.59	$ 28,469.63	99056	110746	209802	484.4	
Feb	8	Mar	9	$ 7,101.99	$ 22,612.86	$ 29,714.85	106964	98848	205812	479.0	
Mar	10	Apr	7			$ -	102172	102225	204397	472	ASSUMED
Apr	8	May	9	$ 7,410.73	$ 20,355.20	$ 27,765.93	97379	105602	202981	465.4	
May	10	June	4			$ -			0		
June	5	July	4			$ -			0		
July	5	Aug	4			$ -			0		
Aug	5	Sept	4			$ -			0		
Sept	5	Oct	4			$ -			0		
Oct	5	Nov	4			$ -			0		
Nov	5	Dec	4			$ -			0		
Dec	5	Jan	6						0		



Splitting Bills into Even Months Spreadsheet

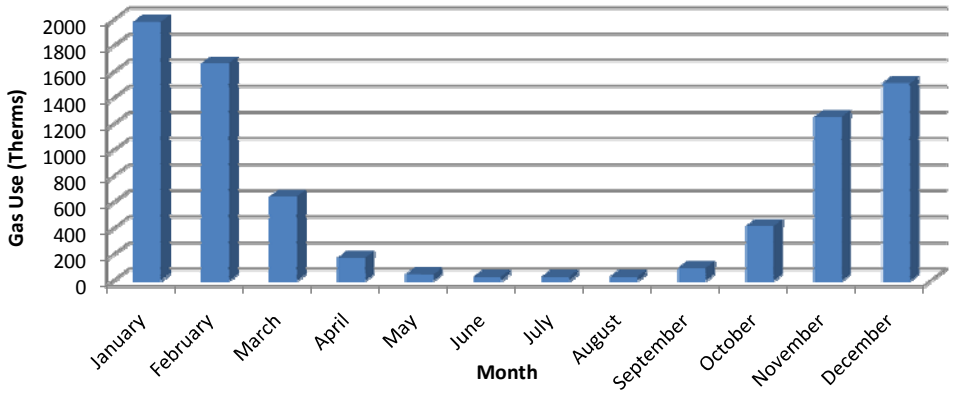
Energy Audit Building	Dickinson HS	
Account:		
Account Number:	4200846500	
Meter Number	778014244	

2010											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	7	Feb	6			$ -					
Feb	7	Mar	6			$ -					
Mar	7	Apr	6			$ -					
Apr	7	May	6	$ -	$ -	$ -					
May	7	June	2	$ 16,443.48	$ 4,762.00	$ 21,205.48			296725	0.0	ASSUMED
June	3	July	2	$ 16,443.48	$ 4,762.00	$ 21,205.48			296725	0.0	ASSUMED
July	3	Aug	3	$ 16,443.48	$ 4,762.00	$ 21,205.48			296725	0.0	ASSUMED
Aug	4	Sept	1	$ 16,443.48	$ 4,762.00	$ 21,205.48			296725	0.0	ASSUMED
Sept	2	Oct	1	$ 16,443.48	$ 4,762.00	$ 21,205.48			296725	0.0	ASSUMED
Oct	2	Nov	1	$ 16,443.48	$ 4,762.00	$ 21,205.48			296725	0.0	ASSUMED
Nov	2	Dec	2	$ 16,443.48	$ 4,762.00	$ 21,205.48			296725	0.0	ASSUMED
Dec	3	Jan	4	$ 16,443.48	$ 4,762.00	$ 21,205.48			296725	0.0	ASSUMED
2011											ASSUMED
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	ASSUMED
Jan	5	Feb	3	$ 16,443.48	$ 4,762.00	$ 21,205.48			296725	0.0	ASSUMED
Feb	4	Mar	4	$ 16,443.48	$ 4,762.00	$ 21,205.48			296725	0.0	ASSUMED
Mar	5	Apr	10	$ 16,443.48	$ 4,762.00	$ 21,205.48			296725	0.0	ASSUMED
Apr	11	May	11	$ 16,443.48	$ 4,762.00	$ 21,205.48			296725	0.0	ASSUMED
May	12	June	4	$ 16,443.48	$ 4,762.00	$ 21,205.48			296725	0.0	ASSUMED
June	5	July	4	$ -	$ -	$ -			0		
July	5	Aug	4	$ -	$ -	$ -			0		
Aug	5	Sept	4			$ -			0		
Sept	5	Oct	4			$ -			0		
Oct	5	Nov	4			$ -			0		
Nov	5	Dec	4			$ -			0		
Dec	5	Jan	6						0		



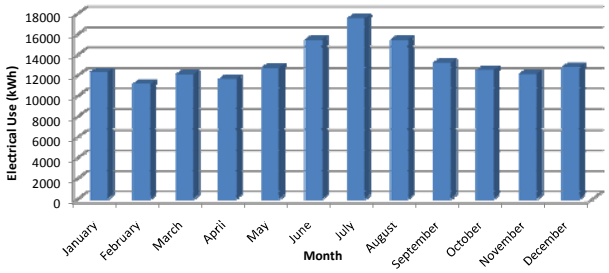
Energy Audit Building	Cunningham	
Account:		
Account Number:	67-272-769-00, 69-569-536-09	
Meter Number	2915480	

2010							
Month	**Day**	**Month**	**Day**	**Delivery Charge**	**Supply Charge**	**Total Charge**	**Therms**
Jan	7	Feb	6			$ -	0.0
Feb	7	Mar	6			$ -	0.0
Mar	7	Apr	6			$ -	0.0
Apr	7	May	6			$ -	0.0
May	7	June	14			$ -	0.0
June	15	July	14	$ 20.81	$ 23.03	$ 43.84	32.1
July	15	Aug	14	$ 20.86	$ 22.90	$ 43.76	31.1
Aug	15	Sept	14	$ 21.28	$ 20.70	$ 41.98	32.2
Sept	15	Oct	14	$ 62.93	$ 98.11	$ 161.04	156.8
Oct	15	Nov	14	$ 279.52	$ 379.55	$ 659.07	632.1
Nov	15	Dec	14	$ 792.85	$ 1,212.71	$ 2,005.56	1822.8
Dec	15	Jan	14	$ 528.46	$ 844.46	$ 1,372.92	1211.1
2011							
Month	**Day**	**Month**	**Day**	**Delivery Charge**	**Supply Charge**	**Total Charge**	**Therms**
Jan	15	Feb	14	$ 1,136.61	$ 1,854.12	$ 2,990.73	2622.8
Feb	15	Mar	14	$ 421.93	$ 635.72	$ 1,057.65	962.7
Mar	15	Apr	14			$ -	**300.0** Assumed
Apr	15	May	14	$ 35.03	$ 50.70	$ 85.73	74.61
May	10	June	22			$ -	**30.0** Assumed
June	23	July	22			$ -	
July	23	Aug	22			$ -	
Aug	23	Sept	22			$ -	
Sept	23	Oct	4			$ -	
Oct	5	Nov	4			$ -	
Nov	5	Dec	22			$ -	
Dec	23	Jan	6				



Energy Audit Building	Cunningham	
Account:		
Account Number:	67-272-769-00, 69-569-536-09	
Meter Number	728011076	

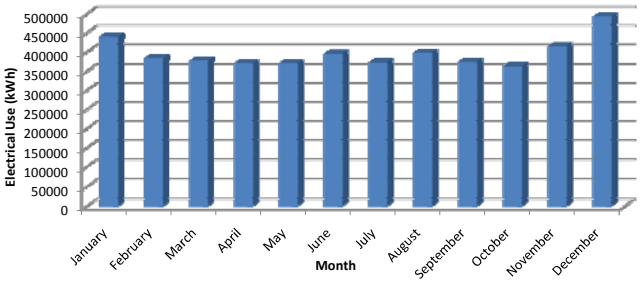
2010											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	7	Feb	6			$ -					
Feb	7	Mar	6			$ -					
Mar	7	Apr	6			$ -					
Apr	7	May	6			$ -					
May	7	June	14			$ -					
June	15	July	14	$ 1,178.48	$ 2,021.75	$ 3,200.23			17920	57.2	
July	15	Aug	14	$ 1,003.83	$ 1,799.07	$ 2,802.90			16720	42.4	
Aug	15	Sept	14	$ 1,009.13	$ 1,545.14	$ 2,554.27			14360	52.4	
Sept	15	Oct	14	$ 460.60	$ 1,360.06	$ 1,820.66			12640	52.4	
Oct	15	Nov	14	$ 445.17	$ 1,295.50	$ 1,740.67			12040	54.0	
Nov	15	Dec	14	$ 449.06	$ 1,351.46	$ 1,800.52			12560	70.4	
Dec	15	Jan	14	$ 422.80	$ 1,364.37	$ 1,787.17			12680	36.0	
2011											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	15	Feb	14	$ 396.40	$ 1,291.20	$ 1,687.60			12000	36.4	
Feb	15	Mar	14	$ 382.58	$ 1,239.55	$ 1,622.13			11520	36.4	
Mar	15	Apr	14	$ 412.05	$ 1,100.63	$ 1,512.68			11560	39.6	
Apr	15	May	14			$ -			12000	36.4	Assumed
May	15	June	14			$ -			13000	40.0	Assumed
June	15	July	14			$ -			0		
July	5	Aug	4			$ -			0		
Aug	5	Sept	4			$ -			0		
Sept	5	Oct	4			$ -			0		
Oct	5	Nov	4			$ -			0		
Nov	5	Dec	4			$ -			0		
Dec	5	Jan	6						0		



Splitting Bills into Even Months Spreadsheet

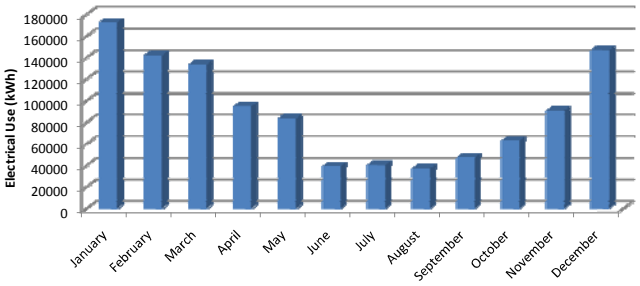
Energy Audit Building	Administrative Building	
Account:		
Account Number:	4200719908	
Meter Number	778012832	

2010											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	7	Feb	6			$ -					
Feb	7	Mar	6			$ -					
Mar	7	Apr	6			$ -					
Apr	7	May	6			$ -					
May	7	June	13			$ -					
June	14	July	13	$ 16,967.29	$ 31,630.10	$ 48,597.39	179045	216035	395080	693.6	
July	14	Aug	13	$ 16,526.63	$ 29,827.23	$ 46,353.86	174273	198288	372561	688.6	
Aug	14	Sept	13	$ 17,613.94	$ 31,840.58	$ 49,454.52	188875	208834	397709	725.0	
Sept	14	Oct	13	$ 10,427.62	$ 29,931.23	$ 40,358.85	172892	200968	373860	691.9	
Oct	14	Nov	13	$ 10,157.20	$ 29,072.19	$ 39,229.39	156523	206607	363130	649.4	
Nov	14	Dec	13	$ 11,572.88	$ 33,173.74	$ 44,746.62	191886	222475	414361	785.5	
Dec	14	Jan	13	$ 13,094.69	$ 39,437.16	$ 52,531.85	207341	285254	492595	793.9	
2011											
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW	
Jan	14	Feb	13	$ 11,327.52	$ 35,220.64	$ 46,548.16	191429	248499	439928	834.2	
Feb	14	Mar	13	$ 9,937.56	$ 30,725.67	$ 40,663.23	175148	208635	383783	767.8	
Mar	14	Apr	13			$ -			377011		ASSUMED
Apr	14	May	13	$ 10,350.45	$ 29,767.14	$ 40,117.59	170273	199965	370238	714.0	
May	14	June	4			$ -			370238		ASSUMED
June	5	July	4			$ -			0		
July	5	Aug	4			$ -			0		
Aug	5	Sept	4			$ -			0		
Sept	5	Oct	4			$ -			0		
Oct	5	Nov	4			$ -			0		
Nov	5	Dec	4			$ -			0		
Dec	5	Jan	6						0		



Energy Audit Building	Academy #1	
Account:		
Account Number:	4200738309	
Meter Number	778017426	

2010										
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW
Jan	7	Feb	6			$ -				
Feb	7	Mar	6			$ -				
Mar	7	Apr	6			$ -				
Apr	7	May	6			$ -				
May	7	June	11			$ -				
June	12	July	13	$ 3,315.27	$ 4,872.73	$ 8,188.00	23010	24940	47950	187.6
July	14	Aug	11	$ 2,446.59	$ 3,799.12	$ 6,245.71	15800	18146	33946	127.8
Aug	12	Sept	10	$ 2,751.71	$ 3,199.03	$ 5,950.74	19066	18016	37082	150.8
Sept	11	Oct	11	$ 1,864.64	$ 4,150.20	$ 6,014.84	28361	26407	54768	180.0
Oct	12	Nov	9	$ 2,117.28	$ 4,124.72	$ 6,242.00	34122	29430	63552	263.9
Nov	10	Dec	10	$ 3,250.76	$ 7,164.72	$ 10,415.48	53360	51930	105290	351.4
Dec	11	Jan	12	$ 5,057.45	$ 14,929.51	$ 19,986.96	77879	100219	178098	347.0
2011										
Month	Day	Month	Day	Delivery Charge	Supply Charge	Total Charge	On Peak kWh	Off Peak kWh	Total kWh	KW
Jan	13	Feb	10	$ 4,495.70	$ 13,650.92	$ 18,146.62	75431	89426	164857	391.3
Feb	11	Mar	14	$ 4,158.18	$ 9,688.76	$ 13,846.94	66589	84904	151493	339.8
Mar	15	Apr	12	$ 3,337.00	$ 7,648.49	$ 10,985.49	52003	63142	115145	288
Apr	13	May	12	$ 2,515.82	$ 5,608.22	$ 8,124.04	37417	41379	78796	235.8
May	13	June	4	$ 2,915.55	$ 5,240.48	$ 8,156.02	30214	33160	63373	212
June	5	July	4			$ -			0	
July	5	Aug	4			$ -			0	
Aug	5	Sept	4			$ -			0	
Sept	5	Oct	4			$ -			0	
Oct	5	Nov	4			$ -			0	
Nov	5	Dec	4			$ -			0	
Dec	5	Jan	6						0	



Appendix B

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
Regional Day School

Building ID: 2900458
For 12-month Period Ending: May 31, 2011[1]
Date SEP becomes ineligible: N/A

Date SEP Generated: April 24, 2012

Facility
Regional Day School
425 Johnson Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 1981
Gross Floor Area (ft²): 30,587

Energy Performance Rating[2] (1-100) 2

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	2,146,042
Natural Gas - (kBtu)[4]	0
Total Energy (kBtu)	2,146,042

Energy Intensity[4]

Site (kBtu/ft²/yr)	70
Source (kBtu/ft²/yr)	234

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	304

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	35
National Median Source EUI	117
% Difference from National Median Source EUI	100%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
1. Application for the ENERGY STAR must be submitted to EPA within 4 months of the Period Ending date. Award of the ENERGY STAR is not final until approval is received from EPA.
2. The EPA Energy Performance Rating is based on total source energy. A rating of 75 is the minimum to be eligible for the ENERGY STAR.
3. Values represent energy consumption, annualized to a 12-month period.
4. Values represent energy intensity, annualized to a 12-month period.
5. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

The government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, Licensed Professional facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S., EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460.

ENERGY STAR® Data Checklist for Commercial Buildings

In order for a building to qualify for the ENERGY STAR, a Professional Engineer (PE) or a Registered Architect (RA) must validate the accuracy of the data underlying the building's energy performance rating. This checklist is designed to provide an at-a-glance summary of a property's physical and operating characteristics, as well as its total energy consumption, to assist the PE or RA in double-checking the information that the building owner or operator has entered into Portfolio Manager.

Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	Regional Day School	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	425 Johnson Ave., Jersey City, NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
Regional Day School (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	30,587 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	52	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	No	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity		
Meter: Electric 42-005-905-06 (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
04/07/2011	05/06/2011	33,200.00
03/07/2011	04/06/2011	46,600.00
02/07/2011	03/06/2011	60,000.00
01/07/2011	02/06/2011	95,600.00
12/07/2010	01/06/2011	69,760.00
11/07/2010	12/06/2010	78,640.00
10/07/2010	11/06/2010	42,320.00
09/07/2010	10/06/2010	36,240.00
08/07/2010	09/06/2010	37,200.00
07/07/2010	08/06/2010	34,960.00
06/07/2010	07/06/2010	50,400.00
Electric 42-005-905-06 Consumption (kWh (thousand Watt-hours))		**584,920.00**
Electric 42-005-905-06 Consumption (kBtu (thousand Btu))		**1,995,747.04**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**1,995,747.04**
Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?		☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
Regional Day School
425 Johnson Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

Regional Day School	
Gross Floor Area Excluding Parking: (ft^2)	30,587
Year Built	1981
For 12-month Evaluation Period Ending Date:	May 31, 2011

Facility Space Use Summary

Regional Day School	
Space Type	K-12 School
Gross Floor Area (ft^2)	30,587
Open Weekends?	Yes
Number of PCs	52
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months °	N/A
High School?	No
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 05/31/2011)	**Baseline** (Ending Date 05/31/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	2	2	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	70	70	27	N/A	35
Source ($kBtu/ft^2$)	234	234	91	N/A	117
Energy Cost					
$/year	N/A	N/A	N/A	N/A	N/A
$/$ft^2$/year	N/A	N/A	N/A	N/A	N/A
Greenhouse Gas Emissions					
$MtCO_2e$/year	304	304	119	N/A	152
$kgCO_2e/ft^2$/year	10	10	4	N/A	5

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

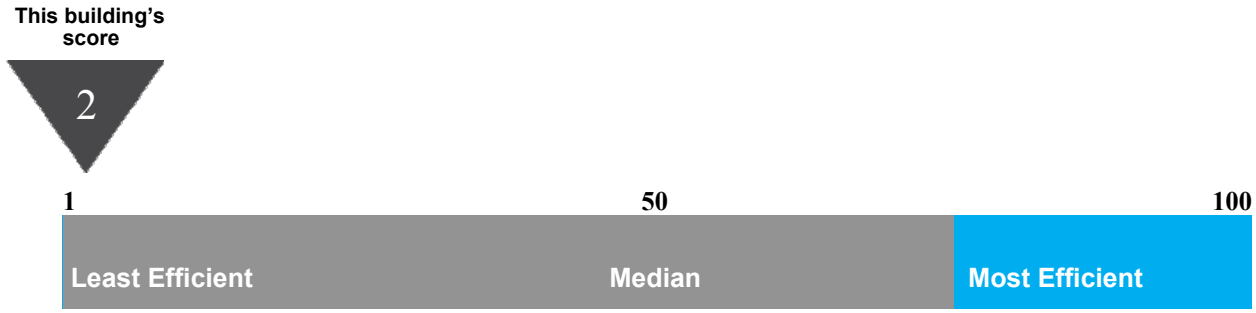
Statement of Energy Performance

2011

Regional Day School
425 Johnson Ave.
Jersey City, NJ 07305

Portfolio Manager Building ID: 2900458

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 234 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending May 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/24/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
P.S. #39

Building ID: 2900457
For 12-month Period Ending: April 30, 2011[1]
Date SEP becomes ineligible: N/A

Date SEP Generated: April 24, 2012

Facility
P.S. #39
214 Plainfield Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 1963
Gross Floor Area (ft²): 126,429

Energy Performance Rating[2] (1-100) 52

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	1,532,893
Fuel Oil (No. 2) (kBtu)	3,716,320
Natural Gas (kBtu)[4]	1,409,032
Total Energy (kBtu)	6,658,245

Energy Intensity[4]

Site (kBtu/ft²/yr)	53
Source (kBtu/ft²/yr)	82

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	565

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	54
National Median Source EUI	84
% Difference from National Median Source EUI	-2%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
1. Application for the ENERGY STAR must be submitted to EPA within 4 months of the Period Ending date. Award of the ENERGY STAR is not final until approval is received from EPA.
2. The EPA Energy Performance Rating is based on total source energy. A rating of 75 is the minimum to be eligible for the ENERGY STAR.
3. Values represent energy consumption, annualized to a 12-month period.
4. Values represent energy intensity, annualized to a 12-month period.
5. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

The government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, Licensed Professional facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S., EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460.

ENERGY STAR® Data Checklist for Commercial Buildings

In order for a building to qualify for the ENERGY STAR, a Professional Engineer (PE) or a Registered Architect (RA) must validate the accuracy of the data underlying the building's energy performance rating. This checklist is designed to provide an at-a-glance summary of a property's physical and operating characteristics, as well as its total energy consumption, to assist the PE or RA in double-checking the information that the building owner or operator has entered into Portfolio Manager.

Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	P.S. #39	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	214 Plainfield Ave., Jersey City, NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
PS #39 (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	126,429 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	129	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	No	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity

Meter: Electric 42-004-469-01 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/07/2011	04/06/2011	43,400.00
02/07/2011	03/06/2011	47,200.00
01/07/2011	02/06/2011	41,800.00
12/07/2010	01/06/2011	44,000.00
11/07/2010	12/06/2010	38,200.00
10/07/2010	11/06/2010	33,800.00
09/07/2010	10/06/2010	33,600.00
08/07/2010	09/06/2010	26,400.00
07/07/2010	08/06/2010	24,200.00
06/07/2010	07/06/2010	38,800.00
05/07/2010	06/06/2010	38,800.00
Electric 42-004-469-01 Consumption (kWh (thousand Watt-hours))		**410,200.00**
Electric 42-004-469-01 Consumption (kBtu (thousand Btu))		**1,399,602.40**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**1,399,602.40**
Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?		☐

Fuel Type: Natural Gas

Meter: Hess Natural Gas (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
03/07/2011	04/06/2011	65.00
02/07/2011	03/06/2011	65.00
01/07/2011	02/06/2011	65.00
12/07/2010	01/06/2011	65.00
11/07/2010	12/06/2010	65.00
10/07/2010	11/06/2010	65.00
09/07/2010	10/06/2010	65.00
08/07/2010	09/06/2010	65.00
07/07/2010	08/06/2010	65.00
06/07/2010	07/06/2010	65.00
05/07/2010	06/06/2010	65.00

Hess Natural Gas Consumption (therms)	**715.00**
Hess Natural Gas Consumption (kBtu (thousand Btu))	**71,500.00**

Meter: Natural Gas 42-004-469-01 (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
03/07/2011	04/06/2011	1,746.40
02/07/2011	03/06/2011	2,124.40
01/07/2011	02/06/2011	1,648.60
12/07/2010	01/06/2011	2,264.90
11/07/2010	12/06/2010	978.30
10/07/2010	11/06/2010	560.70
09/07/2010	10/06/2010	200.40
08/07/2010	09/06/2010	215.80
07/07/2010	08/06/2010	320.50
06/07/2010	07/06/2010	835.10
05/07/2010	06/06/2010	1,101.80

Natural Gas 42-004-469-01 Consumption (therms)	**11,996.90**
Natural Gas 42-004-469-01 Consumption (kBtu (thousand Btu))	**1,199,690.00**
Total Natural Gas Consumption (kBtu (thousand Btu))	**1,271,190.00**
Is this the total Natural Gas consumption at this building including all Natural Gas meters?	☐

Fuel Type: Fuel Oil (No. 2)

Meter: Oil (Gallons)
Space(s): Entire Facility

Start Date	End Date	Energy Use (Gallons)
03/07/2011	04/06/2011	2,233.50
02/07/2011	03/06/2011	2,233.50
01/07/2011	02/06/2011	2,233.50
12/07/2010	01/06/2011	2,233.50
11/07/2010	12/06/2010	2,233.50
10/07/2010	11/06/2010	2,233.50
09/07/2010	10/06/2010	2,233.50
08/07/2010	09/06/2010	2,233.50
07/07/2010	08/06/2010	2,233.50
06/07/2010	07/06/2010	2,233.50
05/07/2010	06/06/2010	2,233.50

Oil Consumption (Gallons)	**24,568.50**
Oil Consumption (kBtu (thousand Btu))	**3,407,417.55**
Total Fuel Oil (No. 2) Consumption (kBtu (thousand Btu))	**3,407,417.55**
Is this the total Fuel Oil (No. 2) consumption at this building including all Fuel Oil (No. 2) meters?	☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
P.S. #39
214 Plainfield Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

P.S. #39	
Gross Floor Area Excluding Parking: (ft^2)	126,429
Year Built	1963
For 12-month Evaluation Period Ending Date:	April 30, 2011

Facility Space Use Summary

PS #39	
Space Type	K-12 School
Gross Floor Area (ft^2)	126,429
Open Weekends?	Yes
Number of PCs	129
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months °	N/A
High School?	No
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 04/30/2011)	**Baseline** (Ending Date 04/30/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	52	52	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	53	53	42	N/A	54
Source ($kBtu/ft^2$)	82	82	66	N/A	84
Energy Cost					
$/year	N/A	N/A	N/A	N/A	N/A
$/$ft^2$/year	N/A	N/A	N/A	N/A	N/A
Greenhouse Gas Emissions					
$MtCO_2e$/year	565	565	454	N/A	580
$kgCO_2e/ft^2$/year	4	4	3	N/A	4

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

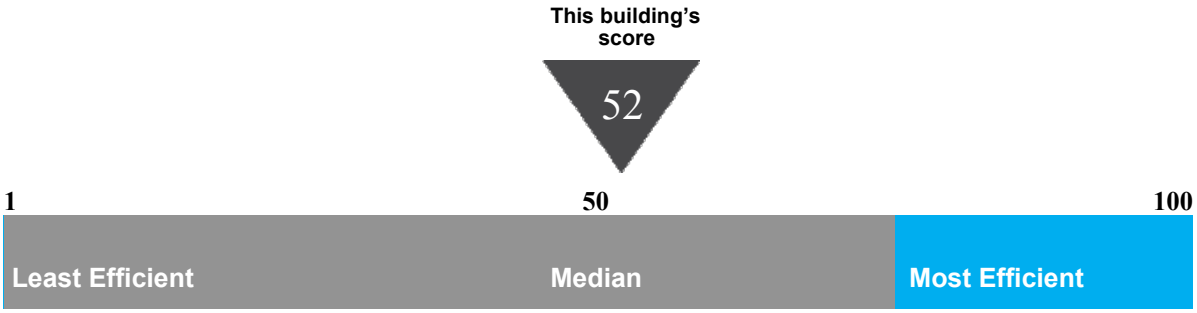
Statement of Energy Performance

2011

P.S. #39
214 Plainfield Ave.
Jersey City, NJ 07305

Portfolio Manager Building ID: 2900457

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 82 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending April 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/24/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
P.S. #38

Building ID: 2900489
For 12-month Period Ending: April 30, 2011[1]
Date SEP becomes ineligible: N/A

Date SEP Generated: April 24, 2012

Facility
P.S. #38
339 Stegman St.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 1953
Gross Floor Area (ft²): 120,940

Energy Performance Rating[2] (1-100) 61

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	1,895,861
Fuel Oil (No. 2) (kBtu)	3,667,068
Natural Gas (kBtu)[4]	122,594
Total Energy (kBtu)	5,685,523

Energy Intensity[4]

Site (kBtu/ft²/yr)	47
Source (kBtu/ft²/yr)	84

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	545

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	52
National Median Source EUI	93
% Difference from National Median Source EUI	-10%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
1. Application for the ENERGY STAR must be submitted to EPA within 4 months of the Period Ending date. Award of the ENERGY STAR is not final until approval is received from EPA.
2. The EPA Energy Performance Rating is based on total source energy. A rating of 75 is the minimum to be eligible for the ENERGY STAR.
3. Values represent energy consumption, annualized to a 12-month period.
4. Values represent energy intensity, annualized to a 12-month period.
5. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

The government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, Licensed Professional facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S., EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460.

ENERGY STAR® Data Checklist for Commercial Buildings

In order for a building to qualify for the ENERGY STAR, a Professional Engineer (PE) or a Registered Architect (RA) must validate the accuracy of the data underlying the building's energy performance rating. This checklist is designed to provide an at-a-glance summary of a property's physical and operating characteristics, as well as its total energy consumption, to assist the PE or RA in double-checking the information that the building owner or operator has entered into Portfolio Manager.

Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	P.S. #38	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	339 Stegman St., Jersey City, NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
PS #38 (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	120,940 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	235	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	No	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity		
Meter: Electric 66-190-122-05 (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
03/07/2011	04/06/2011	38,172.00
02/07/2011	03/06/2011	39,733.00
01/07/2011	02/06/2011	39,681.00
12/07/2010	01/06/2011	55,447.00
11/07/2010	12/06/2010	55,447.00
10/07/2010	11/06/2010	34,076.00
09/07/2010	10/06/2010	37,039.00
08/07/2010	09/06/2010	11,850.00
07/07/2010	08/06/2010	20,410.00
06/07/2010	07/06/2010	31,323.00
05/07/2010	06/06/2010	33,967.00
Electric 66-190-122-05 Consumption (kWh (thousand Watt-hours))		**397,145.00**
Electric 66-190-122-05 Consumption (kBtu (thousand Btu))		**1,355,058.74**
Meter: Electric 66-451-480-03 (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
03/07/2011	04/06/2011	1,104.00
02/07/2011	03/06/2011	1,009.00
01/07/2011	02/06/2011	794.00
12/07/2010	01/06/2011	893.00
11/07/2010	12/06/2010	439.00
10/07/2010	11/06/2010	757.00
09/07/2010	10/06/2010	1,075.00
08/07/2010	09/06/2010	6,035.00
07/07/2010	08/06/2010	830.00
06/07/2010	07/06/2010	2,693.00
05/07/2010	06/06/2010	3,850.00
Electric 66-451-480-03 Consumption (kWh (thousand Watt-hours))		**19,479.00**
Electric 66-451-480-03 Consumption (kBtu (thousand Btu))		**66,462.35**

Meter: Electric 66-834-583-08 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/07/2011	04/06/2011	14,680.00
02/07/2011	03/06/2011	26,160.00
01/07/2011	02/06/2011	7,200.00
12/07/2010	01/06/2011	6,160.00
11/07/2010	12/06/2010	11,040.00
10/07/2010	11/06/2010	10,320.00
09/07/2010	10/06/2010	3,920.00
08/07/2010	09/06/2010	5,360.00
07/07/2010	08/06/2010	4,400.00
06/07/2010	07/06/2010	4,160.00
05/07/2010	06/06/2010	3,680.00
Electric 66-834-583-08 Consumption (kWh (thousand Watt-hours))		**97,080.00**
Electric 66-834-583-08 Consumption (kBtu (thousand Btu))		**331,236.96**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**1,752,758.05**
Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?		☐

Fuel Type: Natural Gas

Meter: Natural Gas 66-190-122-05 (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
03/07/2011	04/06/2011	111.90
02/07/2011	03/06/2011	163.80
01/07/2011	02/06/2011	130.00
12/07/2010	01/06/2011	96.10
11/07/2010	12/06/2010	135.40
10/07/2010	11/06/2010	127.50
09/07/2010	10/06/2010	113.20
08/07/2010	09/06/2010	240.90
07/07/2010	08/06/2010	4.20
06/07/2010	07/06/2010	3.10
05/07/2010	06/06/2010	31.60
Natural Gas 66-190-122-05 Consumption (therms)		**1,157.70**
Natural Gas 66-190-122-05 Consumption (kBtu (thousand Btu))		**115,770.00**
Total Natural Gas Consumption (kBtu (thousand Btu))		**115,770.00**
Is this the total Natural Gas consumption at this building including all Natural Gas meters?		☐

Fuel Type: Fuel Oil (No. 2)

Meter: Oil (Gallons)
Space(s): Entire Facility

Start Date	End Date	Energy Use (Gallons)
03/07/2011	04/06/2011	2,203.90

02/07/2011	03/06/2011	2,203.90
01/07/2011	02/06/2011	2,203.90
12/07/2010	01/06/2011	2,203.90
11/07/2010	12/06/2010	2,203.90
10/07/2010	11/06/2010	2,203.90
09/07/2010	10/06/2010	2,203.90
08/07/2010	09/06/2010	2,203.90
07/07/2010	08/06/2010	2,203.90
06/07/2010	07/06/2010	2,203.90
05/07/2010	06/06/2010	2,203.90
Oil Consumption (Gallons)		**24,242.90**
Oil Consumption (kBtu (thousand Btu))		**3,362,259.92**
Total Fuel Oil (No. 2) Consumption (kBtu (thousand Btu))		**3,362,259.92**
Is this the total Fuel Oil (No. 2) consumption at this building including all Fuel Oil (No. 2) meters?		☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
P.S. #38
339 Stegman St.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

P.S. #38	
Gross Floor Area Excluding Parking: (ft^2)	120,940
Year Built	1953
For 12-month Evaluation Period Ending Date:	April 30, 2011

Facility Space Use Summary

PS #38	
Space Type	K-12 School
Gross Floor Area (ft^2)	120,940
Open Weekends?	Yes
Number of PCs	235
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months °	N/A
High School?	No
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 04/30/2011)	**Baseline** (Ending Date 04/30/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	61	61	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	47	47	41	N/A	52
Source ($kBtu/ft^2$)	84	84	73	N/A	93
Energy Cost					
$/year	N/A	N/A	N/A	N/A	N/A
$/$ft^2$/year	N/A	N/A	N/A	N/A	N/A
Greenhouse Gas Emissions					
$MtCO_2e$/year	545	545	474	N/A	606
$kgCO_2e/ft^2$/year	5	5	4	N/A	6

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

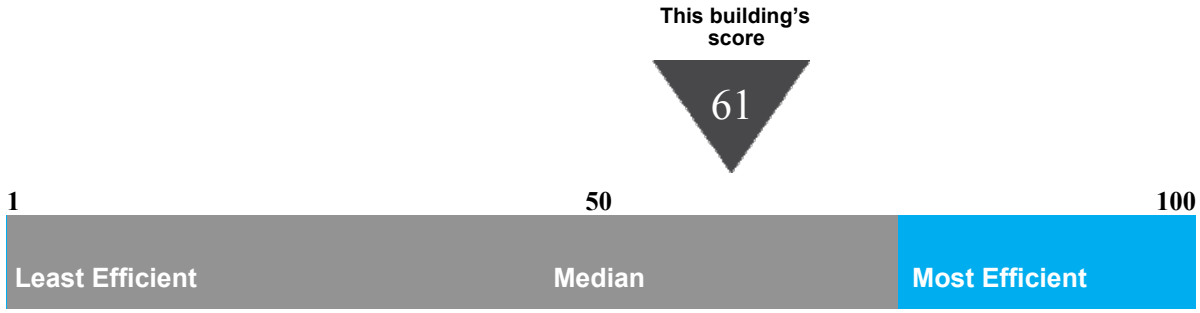
Statement of Energy Performance

2011

P.S. #38
339 Stegman St.
Jersey City, NJ 07305

Portfolio Manager Building ID: 2900489

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 84 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending April 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/24/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
P.S. #37

Building ID: 2900456
For 12-month Period Ending: April 30, 2011[1]
Date SEP becomes ineligible: N/A

Date SEP Generated: April 24, 2012

Facility
P.S. #37
158 Erie St.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 1925
Gross Floor Area (ft²): 135,534

Energy Performance Rating[2] (1-100) 53

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	1,873,672
Fuel Oil (No. 2) (kBtu)	4,856,374
Natural Gas (kBtu)[4]	38,151
Total Energy (kBtu)	6,768,197

Energy Intensity[4]

Site (kBtu/ft²/yr)	50
Source (kBtu/ft²/yr)	83

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	625

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	52
National Median Source EUI	86
% Difference from National Median Source EUI	-3%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
1. Application for the ENERGY STAR must be submitted to EPA within 4 months of the Period Ending date. Award of the ENERGY STAR is not final until approval is received from EPA.
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3. Values represent energy consumption, annualized to a 12-month period.
4. Values represent energy intensity, annualized to a 12-month period.
5. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

The government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, Licensed Professional facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S., EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460.

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Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	P.S. #37	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	158 Erie St., Jersey City, NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
PS #37 (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	135,534 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	181	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	No	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity

Meter: Electric 42-001-821-06 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/07/2011	04/06/2011	48,957.00
02/07/2011	03/06/2011	54,162.00
01/07/2011	02/06/2011	52,531.00
12/07/2010	01/06/2011	50,329.00
11/07/2010	12/06/2010	56,187.00
10/07/2010	11/06/2010	47,483.00
09/07/2010	10/06/2010	38,787.00
08/07/2010	09/06/2010	30,090.00
07/07/2010	08/06/2010	31,429.00
06/07/2010	07/06/2010	45,315.00
05/07/2010	06/06/2010	47,136.00
Electric 42-001-821-06 Consumption (kWh (thousand Watt-hours))		**502,406.00**
Electric 42-001-821-06 Consumption (kBtu (thousand Btu))		**1,714,209.27**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**1,714,209.27**
Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?		☐

Fuel Type: Natural Gas

Meter: Natural Gas 66-859-759-03 (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
03/07/2011	04/06/2011	31.80
02/07/2011	03/06/2011	31.80
01/07/2011	02/06/2011	31.80
12/07/2010	01/06/2011	31.80
11/07/2010	12/06/2010	31.80
10/07/2010	11/06/2010	31.80
09/07/2010	10/06/2010	31.80
08/07/2010	09/06/2010	31.80
07/07/2010	08/06/2010	31.80
06/07/2010	07/06/2010	31.80
05/07/2010	06/06/2010	31.80

Natural Gas 66-859-759-03 Consumption (therms)	**349.80**
Natural Gas 66-859-759-03 Consumption (kBtu (thousand Btu))	**34,980.00**
Total Natural Gas Consumption (kBtu (thousand Btu))	**34,980.00**
Is this the total Natural Gas consumption at this building including all Natural Gas meters?	☐

Fuel Type: Fuel Oil (No. 2)

Meter: Oil (Gallons)
Space(s): Entire Facility

Start Date	End Date	Energy Use (Gallons)
03/07/2011	04/06/2011	2,918.67
02/07/2011	03/06/2011	2,918.67
01/07/2011	02/06/2011	2,918.67
12/07/2010	01/06/2011	2,918.67
11/07/2010	12/06/2010	2,918.67
10/07/2010	11/06/2010	2,918.67
09/07/2010	10/06/2010	2,918.67
08/07/2010	09/06/2010	2,918.67
07/07/2010	08/06/2010	2,918.67
06/07/2010	07/06/2010	2,918.67
05/07/2010	06/06/2010	2,918.67

Oil Consumption (Gallons)	**32,105.37**
Oil Consumption (kBtu (thousand Btu))	**4,452,709.82**
Total Fuel Oil (No. 2) Consumption (kBtu (thousand Btu))	**4,452,709.82**
Is this the total Fuel Oil (No. 2) consumption at this building including all Fuel Oil (No. 2) meters?	☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
P.S. #37
158 Erie St.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

P.S. #37	
Gross Floor Area Excluding Parking: (ft^2)	135,534
Year Built	1925
For 12-month Evaluation Period Ending Date:	April 30, 2011

Facility Space Use Summary

PS #37	
Space Type	K-12 School
Gross Floor Area (ft^2)	135,534
Open Weekends?	Yes
Number of PCs	181
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months °	N/A
High School?	No
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 04/30/2011)	**Baseline** (Ending Date 04/30/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	53	53	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	50	50	40	N/A	52
Source ($kBtu/ft^2$)	83	83	67	N/A	86
Energy Cost					
$/year	N/A	N/A	N/A	N/A	N/A
$/$ft^2$/year	N/A	N/A	N/A	N/A	N/A
Greenhouse Gas Emissions					
$MtCO_2e$/year	625	625	506	N/A	648
$kgCO_2e/ft^2$/year	5	5	4	N/A	5

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

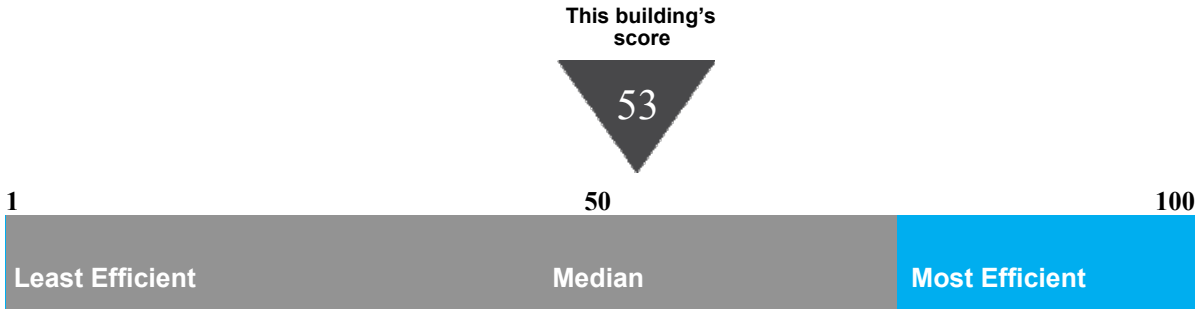
Statement of Energy Performance

2011

P.S. #37
158 Erie St.
Jersey City, NJ 07305

Portfolio Manager Building ID: 2900456

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 83 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending April 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/24/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
P.S. #34

Building ID: 2900487
For 12-month Period Ending: April 30, 2011[1]
Date SEP becomes ineligible: N/A

Date SEP Generated: April 24, 2012

Facility
P.S. #34
1830 Kennedy Blvd.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 1911
Gross Floor Area (ft²): 141,086

Energy Performance Rating[2] (1-100) 53

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	2,526,075
Natural Gas (kBtu)[4]	4,428,158
Total Energy (kBtu)	6,954,233

Energy Intensity[4]

Site (kBtu/ft²/yr)	49
Source (kBtu/ft²/yr)	93

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	593

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	51
National Median Source EUI	96
% Difference from National Median Source EUI	-3%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
1. Application for the ENERGY STAR must be submitted to EPA within 4 months of the Period Ending date. Award of the ENERGY STAR is not final until approval is received from EPA.
2. The EPA Energy Performance Rating is based on total source energy. A rating of 75 is the minimum to be eligible for the ENERGY STAR.
3. Values represent energy consumption, annualized to a 12-month period.
4. Values represent energy intensity, annualized to a 12-month period.
5. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

The government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, Licensed Professional facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S., EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460.

ENERGY STAR® Data Checklist for Commercial Buildings

In order for a building to qualify for the ENERGY STAR, a Professional Engineer (PE) or a Registered Architect (RA) must validate the accuracy of the data underlying the building's energy performance rating. This checklist is designed to provide an at-a-glance summary of a property's physical and operating characteristics, as well as its total energy consumption, to assist the PE or RA in double-checking the information that the building owner or operator has entered into Portfolio Manager.

Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	P.S. #34	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	1830 Kennedy Blvd., Jersey City, NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
PS #34 (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	141,086 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	350	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	No	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity

Meter: Electric 42-007-721-08 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/07/2011	04/06/2011	49,400.00
02/07/2011	03/06/2011	52,200.00
01/07/2011	02/06/2011	50,200.00
12/07/2010	01/06/2011	53,200.00
11/07/2010	12/06/2010	53,200.00
10/07/2010	11/06/2010	48,200.00
09/07/2010	10/06/2010	55,600.00
08/07/2010	09/06/2010	85,700.00
07/07/2010	08/06/2010	115,800.00
06/07/2010	07/06/2010	69,400.00
05/07/2010	06/06/2010	58,000.00
Electric 42-007-721-08 Consumption (kWh (thousand Watt-hours))		**690,900.00**
Electric 42-007-721-08 Consumption (kBtu (thousand Btu))		**2,357,350.80**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**2,357,350.80**
Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?		☐

Fuel Type: Natural Gas

Meter: Natural Gas 66-090-802-08 (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
03/07/2011	04/06/2011	3,421.50
02/07/2011	03/06/2011	6,670.20
01/07/2011	02/06/2011	8,023.50
12/07/2010	01/06/2011	10,091.70
11/07/2010	12/06/2010	8,599.80
10/07/2010	11/06/2010	3,746.40
09/07/2010	10/06/2010	972.10
08/07/2010	09/06/2010	972.10
07/07/2010	08/06/2010	572.50
06/07/2010	07/06/2010	172.80
05/07/2010	06/06/2010	172.80

Natural Gas 66-090-802-08 Consumption (therms)	**43,415.40**
Natural Gas 66-090-802-08 Consumption (kBtu (thousand Btu))	**4,341,540.00**
Total Natural Gas Consumption (kBtu (thousand Btu))	**4,341,540.00**
Is this the total Natural Gas consumption at this building including all Natural Gas meters?	☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
P.S. #34
1830 Kennedy Blvd.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

P.S. #34	
Gross Floor Area Excluding Parking: (ft^2)	141,086
Year Built	1911
For 12-month Evaluation Period Ending Date:	April 30, 2011

Facility Space Use Summary

PS #34	
Space Type	K-12 School
Gross Floor Area (ft^2)	141,086
Open Weekends?	Yes
Number of PCs	350
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months °	N/A
High School?	No
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 04/30/2011)	**Baseline** (Ending Date 04/30/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	53	53	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	49	49	40	N/A	51
Source ($kBtu/ft^2$)	93	93	75	N/A	96
Energy Cost					
$/year	N/A	N/A	N/A	N/A	N/A
$/$ft^2$/year	N/A	N/A	N/A	N/A	N/A
Greenhouse Gas Emissions					
$MtCO_2e$/year	593	593	478	N/A	611
$kgCO_2e/ft^2$/year	4	4	3	N/A	4

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

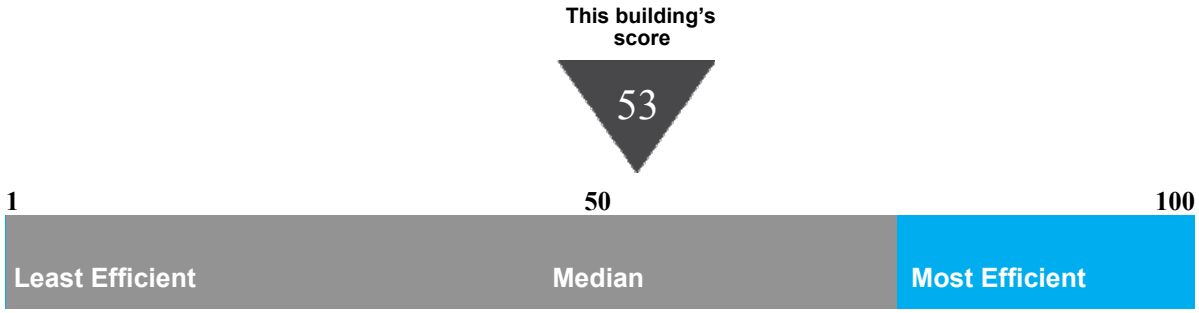
Statement of Energy Performance

2011

P.S. #34
1830 Kennedy Blvd.
Jersey City, NJ 07305

Portfolio Manager Building ID: 2900487

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 93 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending April 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/24/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
P.S. #33

Building ID: 2900455
For 12-month Period Ending: April 30, 2011[1]
Date SEP becomes ineligible: N/A

Date SEP Generated: April 24, 2012

Facility
P.S. #33
362 Union St.
Jersey City , NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 1906
Gross Floor Area (ft²): 30,607

Energy Performance Rating[2] (1-100) 55

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	1,134,996
Natural Gas (kBtu)[4]	140,539
Total Energy (kBtu)	1,275,535

Energy Intensity[4]

Site (kBtu/ft²/yr)	42
Source (kBtu/ft²/yr)	129

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	168

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	44
National Median Source EUI	135
% Difference from National Median Source EUI	-4%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
1. Application for the ENERGY STAR must be submitted to EPA within 4 months of the Period Ending date. Award of the ENERGY STAR is not final until approval is received from EPA.
2. The EPA Energy Performance Rating is based on total source energy. A rating of 75 is the minimum to be eligible for the ENERGY STAR.
3. Values represent energy consumption, annualized to a 12-month period.
4. Values represent energy intensity, annualized to a 12-month period.
5. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

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ENERGY STAR® Data Checklist for Commercial Buildings

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Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	P.S. #33	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	362 Union St., Jersey City , NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
PS #33 (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	30,607 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	111	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	No	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity		
Meter: Electric 65-151-311-00 (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
03/02/2011	04/01/2011	3,312.00
02/02/2011	03/01/2011	4,812.00
01/02/2011	02/01/2011	9,876.00
12/02/2010	01/01/2011	3,506.00
11/02/2010	12/01/2010	11,016.00
10/02/2010	11/01/2010	3,000.00
09/02/2010	10/01/2010	2,244.00
08/02/2010	09/01/2010	2,052.00
07/02/2010	08/01/2010	1,860.00
06/02/2010	07/01/2010	6,480.00
05/02/2010	06/01/2010	4,146.00
Electric 65-151-311-00 Consumption (kWh (thousand Watt-hours))		**52,304.00**
Electric 65-151-311-00 Consumption (kBtu (thousand Btu))		**178,461.25**
Meter: Electric 66-451-295-05 (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
03/02/2011	04/01/2011	2,420.00
02/02/2011	03/01/2011	3,440.00
01/02/2011	02/01/2011	5,440.00
12/02/2010	01/01/2011	5,220.00
11/02/2010	12/01/2010	5,000.00
10/02/2010	11/01/2010	1,780.00
09/02/2010	10/01/2010	1,080.00
08/02/2010	09/01/2010	1,240.00
07/02/2010	08/01/2010	1,400.00
06/02/2010	07/01/2010	1,400.00
05/02/2010	06/01/2010	1,400.00
Electric 66-451-295-05 Consumption (kWh (thousand Watt-hours))		**29,820.00**
Electric 66-451-295-05 Consumption (kBtu (thousand Btu))		**101,745.84**

Meter: Electric 66-524-016-06 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/02/2011	04/01/2011	15,040.00
02/02/2011	03/01/2011	17,600.00
01/02/2011	02/01/2011	17,600.00
12/02/2010	01/01/2011	16,960.00
11/02/2010	12/01/2010	18,080.00
10/02/2010	11/01/2010	13,920.00
09/02/2010	10/01/2010	15,360.00
08/02/2010	09/01/2010	13,440.00
07/02/2010	08/01/2010	4,000.00
06/02/2010	07/01/2010	12,480.00
05/02/2010	06/01/2010	12,480.00
Electric 66-524-016-06 Consumption (kWh (thousand Watt-hours))		**156,960.00**
Electric 66-524-016-06 Consumption (kBtu (thousand Btu))		**535,547.52**

Meter: Electric 67-527-019-03 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/02/2011	04/01/2011	6,140.00
02/02/2011	03/01/2011	16,090.00
01/02/2011	02/01/2011	4,960.00
12/02/2010	01/01/2011	10,420.00
11/02/2010	12/01/2010	3,170.00
10/02/2010	11/01/2010	3,090.00
09/02/2010	10/01/2010	3,130.00
08/02/2010	09/01/2010	2,180.00
07/02/2010	08/01/2010	4,000.00
06/02/2010	07/01/2010	4,000.00
05/02/2010	06/01/2010	8,240.00
Electric 67-527-019-03 Consumption (kWh (thousand Watt-hours))		**65,420.00**
Electric 67-527-019-03 Consumption (kBtu (thousand Btu))		**223,213.04**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**1,038,967.65**
Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?		☐

Fuel Type: Natural Gas

Meter: Hess Natural Gas (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
03/02/2011	04/01/2011	117.12
02/02/2011	03/01/2011	117.12
01/02/2011	02/01/2011	117.12
12/02/2010	01/01/2011	117.12

11/02/2010	12/01/2010	117.12
10/02/2010	11/01/2010	117.12
09/02/2010	10/01/2010	117.12
08/02/2010	09/01/2010	117.12
07/02/2010	08/01/2010	117.12
06/02/2010	07/01/2010	117.12
05/02/2010	06/01/2010	117.12
Hess Natural Gas Consumption (therms)		**1,288.32**
Hess Natural Gas Consumption (kBtu (thousand Btu))		**128,832.00**
Total Natural Gas Consumption (kBtu (thousand Btu))		**128,832.00**
Is this the total Natural Gas consumption at this building including all Natural Gas meters?		☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
P.S. #33
362 Union St.
Jersey City , NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

P.S. #33	
Gross Floor Area Excluding Parking: (ft^2)	30,607
Year Built	1906
For 12-month Evaluation Period Ending Date:	April 30, 2011

Facility Space Use Summary

PS #33	
Space Type	K-12 School
Gross Floor Area (ft^2)	30,607
Open Weekends?	Yes
Number of PCs	111
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months °	N/A
High School?	No
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 04/30/2011)	**Baseline** (Ending Date 04/30/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	55	55	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	42	42	34	N/A	44
Source ($kBtu/ft^2$)	129	129	105	N/A	135
Energy Cost					
$/year	N/A	N/A	N/A	N/A	N/A
$/$ft^2$/year	N/A	N/A	N/A	N/A	N/A
Greenhouse Gas Emissions					
$MtCO_2e$/year	168	168	138	N/A	176
$kgCO_2e/ft^2$/year	5	5	4	N/A	5

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

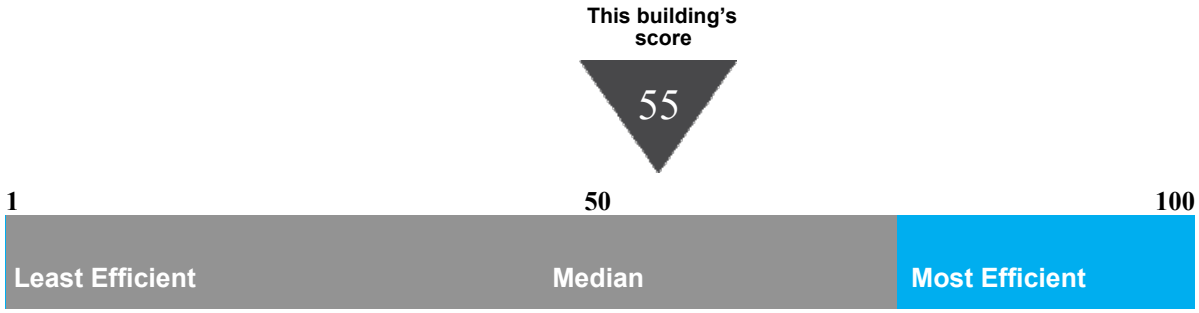
Statement of Energy Performance

2011

P.S. #33
362 Union St.
Jersey City , NJ 07305

Portfolio Manager Building ID: 2900455

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 129 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending April 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/24/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
P.S. #31

Building ID: 2899980
For 12-month Period Ending: April 30, 2011[1]
Date SEP becomes ineligible: N/A

Date SEP Generated: April 24, 2012

Facility
P.S. #31
3055 Kennedy Blvd.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 1906
Gross Floor Area (ft²): 36,973

Energy Performance Rating[2] (1-100) 16

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	918,633
Natural Gas (kBtu)[4]	1,998,229
Total Energy (kBtu)	2,916,862

Energy Intensity[4]

Site (kBtu/ft²/yr)	79
Source (kBtu/ft²/yr)	140

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	236

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	57
National Median Source EUI	100
% Difference from National Median Source EUI	40%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
1. Application for the ENERGY STAR must be submitted to EPA within 4 months of the Period Ending date. Award of the ENERGY STAR is not final until approval is received from EPA.
2. The EPA Energy Performance Rating is based on total source energy. A rating of 75 is the minimum to be eligible for the ENERGY STAR.
3. Values represent energy consumption, annualized to a 12-month period.
4. Values represent energy intensity, annualized to a 12-month period.
5. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

The government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, Licensed Professional facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S., EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460.

ENERGY STAR® Data Checklist for Commercial Buildings

In order for a building to qualify for the ENERGY STAR, a Professional Engineer (PE) or a Registered Architect (RA) must validate the accuracy of the data underlying the building's energy performance rating. This checklist is designed to provide an at-a-glance summary of a property's physical and operating characteristics, as well as its total energy consumption, to assist the PE or RA in double-checking the information that the building owner or operator has entered into Portfolio Manager.

Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	P.S. #31	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	3055 Kennedy Blvd., Jersey City, NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
PS #31 (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	36,973 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	10	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	No	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity

Meter: Electric 66-498-045-09 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/09/2011	04/08/2011	18,720.00
02/09/2011	03/08/2011	21,810.00
01/09/2011	02/08/2011	20,820.00
12/09/2010	01/08/2011	22,350.00
11/09/2010	12/08/2010	20,280.00
10/09/2010	11/08/2010	38,265.00
09/09/2010	10/08/2010	40,035.00
08/09/2010	09/08/2010	24,938.00
07/09/2010	08/08/2010	9,840.00
06/09/2010	07/08/2010	18,000.00
05/09/2010	06/08/2010	16,815.00
Electric 66-498-045-09 Consumption (kWh (thousand Watt-hours))		**251,873.00**
Electric 66-498-045-09 Consumption (kBtu (thousand Btu))		**859,390.68**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**859,390.68**
Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?		☐

Fuel Type: Natural Gas

Meter: Natural Gas 66-498-045-09 (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
03/09/2011	04/08/2011	1,813.20
02/09/2011	03/08/2011	3,263.30
01/09/2011	02/08/2011	3,988.90
12/09/2010	01/08/2011	5,813.10
11/09/2010	12/08/2010	1,900.10
10/09/2010	11/08/2010	729.60
09/09/2010	10/08/2010	0.00
08/09/2010	09/08/2010	1.40
07/09/2010	08/08/2010	7.30
06/09/2010	07/08/2010	0.00
05/09/2010	06/08/2010	0.00

Natural Gas 66-498-045-09 Consumption (therms)	**17,516.90**
Natural Gas 66-498-045-09 Consumption (kBtu (thousand Btu))	**1,751,690.00**

Meter: Hess Natural Gas (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
03/09/2011	04/08/2011	150.10
02/09/2011	03/08/2011	150.10
01/09/2011	02/08/2011	150.10
12/09/2010	01/08/2011	150.10
11/09/2010	12/08/2010	150.10
10/09/2010	11/08/2010	150.10
09/09/2010	10/08/2010	150.10
08/09/2010	09/08/2010	150.10
07/09/2010	08/08/2010	150.10
06/09/2010	07/08/2010	150.10
05/09/2010	06/08/2010	150.10

Hess Natural Gas Consumption (therms)	**1,651.10**
Hess Natural Gas Consumption (kBtu (thousand Btu))	**165,110.00**
Total Natural Gas Consumption (kBtu (thousand Btu))	**1,916,800.00**
Is this the total Natural Gas consumption at this building including all Natural Gas meters?	☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
P.S. #31
3055 Kennedy Blvd.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

P.S. #31	
Gross Floor Area Excluding Parking: (ft^2)	36,973
Year Built	1906
For 12-month Evaluation Period Ending Date:	April 30, 2011

Facility Space Use Summary

PS #31	
Space Type	K-12 School
Gross Floor Area (ft^2)	36,973
Open Weekends?	Yes
Number of PCs	10
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months °	N/A
High School?	No
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 04/30/2011)	**Baseline** (Ending Date 04/30/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	16	16	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	79	79	44	N/A	57
Source ($kBtu/ft^2$)	140	140	78	N/A	100
Energy Cost					
$/year	N/A	N/A	N/A	N/A	N/A
$/$ft^2$/year	N/A	N/A	N/A	N/A	N/A
Greenhouse Gas Emissions					
$MtCO_2e$/year	236	236	132	N/A	169
$kgCO_2e/ft^2$/year	6	6	3	N/A	4

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

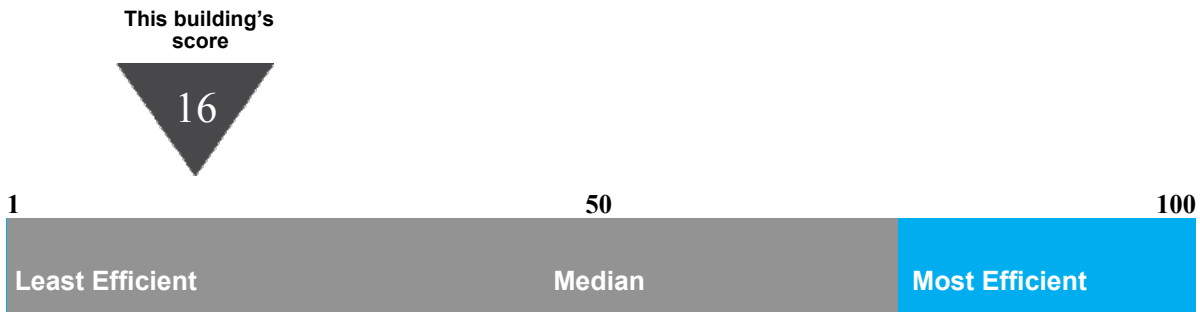
Statement of Energy Performance

2011

P.S. #31
3055 Kennedy Blvd.
Jersey City, NJ 07305

Portfolio Manager Building ID: 2899980

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 140 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending April 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/24/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
P.S. #30

Building ID: 2899957
For 12-month Period Ending: April 30, 2011[1]
Date SEP becomes ineligible: N/A

Date SEP Generated: April 24, 2012

Facility
P.S. #30
171 Seaview Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 1906
Gross Floor Area (ft²): 93,129

Energy Performance Rating[2] (1-100) 22

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	2,904,747
Fuel Oil (No. 2) (kBtu)	2,456,914
Natural Gas (kBtu)[4]	381,271
Total Energy (kBtu)	5,742,932

Energy Intensity[4]

Site (kBtu/ft²/yr)	62
Source (kBtu/ft²/yr)	135

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	612

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	48
National Median Source EUI	105
% Difference from National Median Source EUI	29%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
1. Application for the ENERGY STAR must be submitted to EPA within 4 months of the Period Ending date. Award of the ENERGY STAR is not final until approval is received from EPA.
2. The EPA Energy Performance Rating is based on total source energy. A rating of 75 is the minimum to be eligible for the ENERGY STAR.
3. Values represent energy consumption, annualized to a 12-month period.
4. Values represent energy intensity, annualized to a 12-month period.
5. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

The government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, Licensed Professional facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S., EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460.

ENERGY STAR® Data Checklist for Commercial Buildings

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Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	P.S. #30	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	171 Seaview Ave., Jersey City, NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
PS #30 (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	93,129 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	245	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	No	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity		
Meter: Electric 66-834-541-08 (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
03/07/2011	04/06/2011	4,350.00
02/07/2011	03/06/2011	6,460.00
01/07/2011	02/06/2011	7,190.00
12/07/2010	01/06/2011	5,060.00
11/07/2010	12/06/2010	9,600.00
10/07/2010	11/06/2010	4,170.00
09/07/2010	10/06/2010	3,640.00
08/07/2010	09/06/2010	10,900.00
07/07/2010	08/06/2010	1,470.00
06/07/2010	07/06/2010	2,280.00
05/07/2010	06/06/2010	2,260.00
Electric 66-834-541-08 Consumption (kWh (thousand Watt-hours))		**57,380.00**
Electric 66-834-541-08 Consumption (kBtu (thousand Btu))		**195,780.56**
Meter: Electric 66-496-992-09 (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
03/07/2011	04/06/2011	3,580.00
02/07/2011	03/06/2011	4,480.00
01/07/2011	02/06/2011	5,100.00
12/07/2010	01/06/2011	3,680.00
11/07/2010	12/06/2010	7,880.00
10/07/2010	11/06/2010	4,050.00
09/07/2010	10/06/2010	1,840.00
08/07/2010	09/06/2010	4,830.00
07/07/2010	08/06/2010	4,830.00
06/07/2010	07/06/2010	3,755.00
05/07/2010	06/06/2010	2,680.00
Electric 66-496-992-09 Consumption (kWh (thousand Watt-hours))		**46,705.00**
Electric 66-496-992-09 Consumption (kBtu (thousand Btu))		**159,357.46**

Meter: Electric 66-752-652-02 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/07/2011	04/06/2011	4,950.00
02/07/2011	03/06/2011	6,570.00
01/07/2011	02/06/2011	9,720.00
12/07/2010	01/06/2011	11,820.00
11/07/2010	12/06/2010	6,630.00
10/07/2010	11/06/2010	4,500.00
09/07/2010	10/06/2010	4,800.00
08/07/2010	09/06/2010	5,820.00
07/07/2010	08/06/2010	10,290.00
06/07/2010	07/06/2010	6,000.00
05/07/2010	06/06/2010	4,665.00
Electric 66-752-652-02 Consumption (kWh (thousand Watt-hours))		**75,765.00**
Electric 66-752-652-02 Consumption (kBtu (thousand Btu))		**258,510.18**

Meter: South Jersey Electric (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/07/2011	04/06/2011	55,160.00
02/07/2011	03/06/2011	55,160.00
01/07/2011	02/06/2011	55,160.00
12/07/2010	01/06/2011	55,160.00
11/07/2010	12/06/2010	55,160.00
10/07/2010	11/06/2010	55,160.00
09/07/2010	10/06/2010	55,160.00
08/07/2010	09/06/2010	55,160.00
07/07/2010	08/06/2010	55,160.00
06/07/2010	07/06/2010	55,160.00
05/07/2010	06/06/2010	55,160.00
South Jersey Electric Consumption (kWh (thousand Watt-hours))		**606,760.00**
South Jersey Electric Consumption (kBtu (thousand Btu))		**2,070,265.12**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**2,683,913.32**
Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?		☐

Fuel Type: Natural Gas

Meter: Natural Gas 66-834-541-08 (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
03/07/2011	04/06/2011	296.50
02/07/2011	03/06/2011	296.50
01/07/2011	02/06/2011	296.50
12/07/2010	01/06/2011	296.50

11/07/2010	12/06/2010	296.50
10/07/2010	11/06/2010	296.50
09/07/2010	10/06/2010	296.50
08/07/2010	09/06/2010	296.50
07/07/2010	08/06/2010	296.50
06/07/2010	07/06/2010	296.50
05/07/2010	06/06/2010	296.50
Natural Gas 66-834-541-08 Consumption (therms)		**3,261.50**
Natural Gas 66-834-541-08 Consumption (kBtu (thousand Btu))		**326,150.00**

Meter: Hess Natural Gas (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
03/07/2011	04/06/2011	21.30
02/07/2011	03/06/2011	21.30
01/07/2011	02/06/2011	21.30
12/07/2010	01/06/2011	21.30
11/07/2010	12/06/2010	21.30
10/07/2010	11/06/2010	21.30
09/07/2010	10/06/2010	21.30
08/07/2010	09/06/2010	21.30
07/07/2010	08/06/2010	21.30
06/07/2010	07/06/2010	21.30
05/07/2010	06/06/2010	21.30
Hess Natural Gas Consumption (therms)		**234.30**
Hess Natural Gas Consumption (kBtu (thousand Btu))		**23,430.00**
Total Natural Gas Consumption (kBtu (thousand Btu))		**349,580.00**
Is this the total Natural Gas consumption at this building including all Natural Gas meters?		☐

Fuel Type: Fuel Oil (No. 2)

Meter: Oil (Gallons)
Space(s): Entire Facility

Start Date	End Date	Energy Use (Gallons)
03/07/2011	04/06/2011	1,476.60
02/07/2011	03/06/2011	1,476.60
01/07/2011	02/06/2011	1,476.60
12/07/2010	01/06/2011	1,476.60
11/07/2010	12/06/2010	1,476.60
10/07/2010	11/06/2010	1,476.60
09/07/2010	10/06/2010	1,476.60
08/07/2010	09/06/2010	1,476.60
07/07/2010	08/06/2010	1,476.60
06/07/2010	07/06/2010	1,476.60
05/07/2010	06/06/2010	1,476.60
Oil Consumption (Gallons)		**16,242.60**

Oil Consumption (kBtu (thousand Btu))	**2,252,694.32**
Total Fuel Oil (No. 2) Consumption (kBtu (thousand Btu))	**2,252,694.32**
Is this the total Fuel Oil (No. 2) consumption at this building including all Fuel Oil (No. 2) meters?	☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
P.S. #30
171 Seaview Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

P.S. #30	
Gross Floor Area Excluding Parking: (ft^2)	93,129
Year Built	1906
For 12-month Evaluation Period Ending Date:	April 30, 2011

Facility Space Use Summary

PS #30	
Space Type	K-12 School
Gross Floor Area (ft^2)	93,129
Open Weekends?	Yes
Number of PCs	245
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months °	N/A
High School?	No
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 04/30/2011)	**Baseline** (Ending Date 04/30/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	22	22	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	62	62	37	N/A	48
Source ($kBtu/ft^2$)	135	135	82	N/A	105
Energy Cost					
$/year	N/A	N/A	N/A	N/A	N/A
$/$ft^2$/year	N/A	N/A	N/A	N/A	N/A
Greenhouse Gas Emissions					
$MtCO_2e$/year	612	612	371	N/A	474
$kgCO_2e/ft^2$/year	7	7	4	N/A	5

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

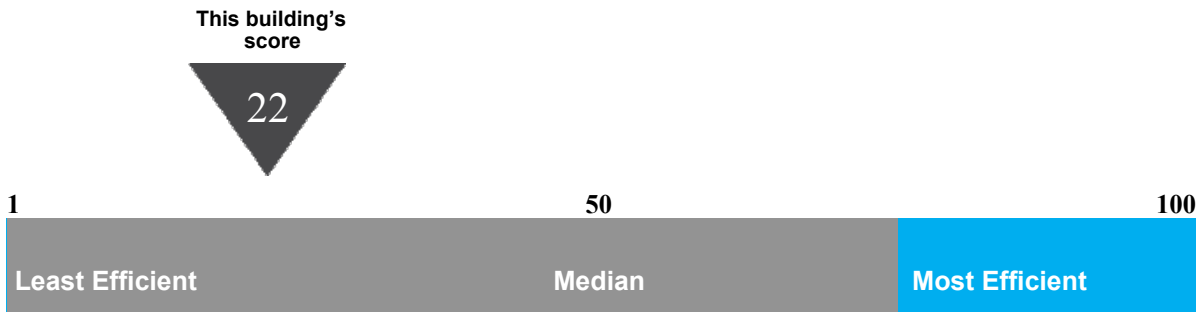
Statement of Energy Performance

2011

P.S. #30
171 Seaview Ave.
Jersey City, NJ 07305

Portfolio Manager Building ID: 2899957

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 135 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending April 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/24/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
P.S. #29

Building ID: 2899973
For 12-month Period Ending: April 30, 2011[1]
Date SEP becomes ineligible: N/A

Date SEP Generated: April 24, 2012

Facility
P.S. #29
123 Claremont Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 1901
Gross Floor Area (ft²): 66,180

Energy Performance Rating[2] (1-100) 70

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	1,136,587
Fuel Oil (No. 2) (kBtu)	2,059,076
Natural Gas (kBtu)[4]	47,029
Total Energy (kBtu)	3,242,692

Energy Intensity[4]

Site (kBtu/ft²/yr)	49
Source (kBtu/ft²/yr)	90

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	315

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	60
National Median Source EUI	109
% Difference from National Median Source EUI	-18%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
1. Application for the ENERGY STAR must be submitted to EPA within 4 months of the Period Ending date. Award of the ENERGY STAR is not final until approval is received from EPA.
2. The EPA Energy Performance Rating is based on total source energy. A rating of 75 is the minimum to be eligible for the ENERGY STAR.
3. Values represent energy consumption, annualized to a 12-month period.
4. Values represent energy intensity, annualized to a 12-month period.
5. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

The government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, Licensed Professional facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S., EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460.

ENERGY STAR® Data Checklist for Commercial Buildings

In order for a building to qualify for the ENERGY STAR, a Professional Engineer (PE) or a Registered Architect (RA) must validate the accuracy of the data underlying the building's energy performance rating. This checklist is designed to provide an at-a-glance summary of a property's physical and operating characteristics, as well as its total energy consumption, to assist the PE or RA in double-checking the information that the building owner or operator has entered into Portfolio Manager.

Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	P.S. #29	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	123 Claremont Ave., Jersey City, NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
PS #29 (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	66,180 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	160	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	No	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity		
Meter: Electric 66-916-315-01 (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
03/07/2011	04/06/2011	28,800.00
02/07/2011	03/06/2011	30,960.00
01/07/2011	02/06/2011	33,440.00
12/07/2010	01/06/2011	26,320.00
11/07/2010	12/06/2010	37,520.00
10/07/2010	11/06/2010	26,080.00
09/07/2010	10/06/2010	24,000.00
08/07/2010	09/06/2010	19,840.00
07/07/2010	08/06/2010	15,680.00
06/07/2010	07/06/2010	25,760.00
05/07/2010	06/06/2010	26,200.00
Electric 66-916-315-01 Consumption (kWh (thousand Watt-hours))		**294,600.00**
Electric 66-916-315-01 Consumption (kBtu (thousand Btu))		**1,005,175.20**
Meter: Electric 66-846-896-05 (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
03/07/2011	04/06/2011	1,216.00
02/07/2011	03/06/2011	1,269.00
01/07/2011	02/06/2011	1,203.00
12/07/2010	01/06/2011	990.00
11/07/2010	12/06/2010	494.00
10/07/2010	11/06/2010	534.00
09/07/2010	10/06/2010	700.00
08/07/2010	09/06/2010	958.00
07/07/2010	08/06/2010	958.00
06/07/2010	07/06/2010	1,216.00
05/07/2010	06/06/2010	1,216.00
Electric 66-846-896-05 Consumption (kWh (thousand Watt-hours))		**10,754.00**
Electric 66-846-896-05 Consumption (kBtu (thousand Btu))		**36,692.65**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**1,041,867.85**

Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?	☐

Fuel Type: Natural Gas

Meter: Natural Gas PSE&G &Hess (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
03/07/2011	04/06/2011	39.20
02/07/2011	03/06/2011	39.20
01/07/2011	02/06/2011	39.20
12/07/2010	01/06/2011	39.20
11/07/2010	12/06/2010	39.20
10/07/2010	11/06/2010	39.20
09/07/2010	10/06/2010	39.20
08/07/2010	09/06/2010	39.20
07/07/2010	08/06/2010	39.20
06/07/2010	07/06/2010	39.20
05/07/2010	06/06/2010	39.20

Natural Gas PSE&G &Hess Consumption (therms)	**431.20**
Natural Gas PSE&G &Hess Consumption (kBtu (thousand Btu))	**43,120.00**
Total Natural Gas Consumption (kBtu (thousand Btu))	**43,120.00**
Is this the total Natural Gas consumption at this building including all Natural Gas meters?	☐

Fuel Type: Fuel Oil (No. 2)

Meter: Oil (Gallons)
Space(s): Entire Facility

Start Date	End Date	Energy Use (Gallons)
03/07/2011	04/06/2011	1,237.50
02/07/2011	03/06/2011	1,237.50
01/07/2011	02/06/2011	1,237.50
12/07/2010	01/06/2011	1,237.50
11/07/2010	12/06/2010	1,237.50
10/07/2010	11/06/2010	1,237.50
09/07/2010	10/06/2010	1,237.50
08/07/2010	09/06/2010	1,237.50
07/07/2010	08/06/2010	1,237.50
06/07/2010	07/06/2010	1,237.50
05/07/2010	06/06/2010	1,237.50

Oil Consumption (Gallons)	**13,612.50**
Oil Consumption (kBtu (thousand Btu))	**1,887,924.43**
Total Fuel Oil (No. 2) Consumption (kBtu (thousand Btu))	**1,887,924.43**
Is this the total Fuel Oil (No. 2) consumption at this building including all Fuel Oil (No. 2) meters?	☐

Additional Fuels

Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
P.S. #29
123 Claremont Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

P.S. #29	
Gross Floor Area Excluding Parking: (ft^2)	66,180
Year Built	1901
For 12-month Evaluation Period Ending Date:	April 30, 2011

Facility Space Use Summary

PS #29	
Space Type	K-12 School
Gross Floor Area (ft^2)	66,180
Open Weekends?	Yes
Number of PCs	160
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months °	N/A
High School?	No
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 04/30/2011)	**Baseline** (Ending Date 04/30/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	70	70	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	49	49	47	N/A	60
Source ($kBtu/ft^2$)	90	90	85	N/A	109
Energy Cost					
$/year	N/A	N/A	N/A	N/A	N/A
$/$ft^2$/year	N/A	N/A	N/A	N/A	N/A
Greenhouse Gas Emissions					
$MtCO_2e$/year	315	315	300	N/A	384
$kgCO_2e/ft^2$/year	5	5	5	N/A	6

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

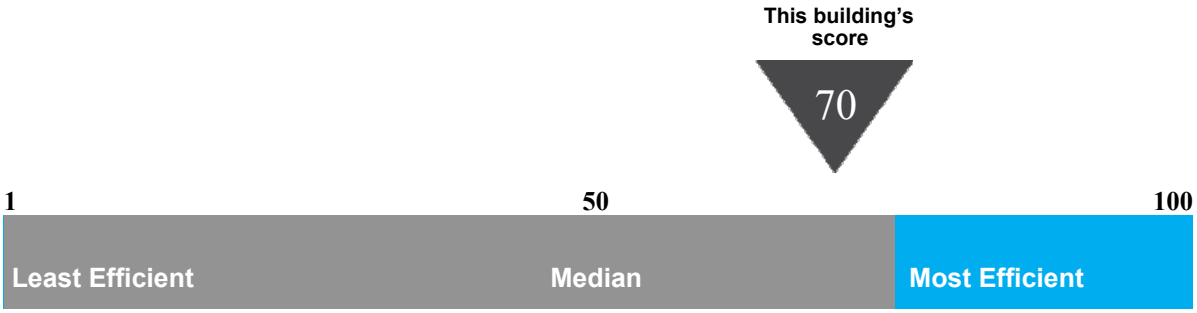
Statement of Energy Performance

2011

P.S. #29
123 Claremont Ave.
Jersey City, NJ 07305

Portfolio Manager Building ID: 2899973

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 90 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending April 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/24/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
P.S. #28

Building ID: 2899968
For 12-month Period Ending: April 30, 2011[1]
Date SEP becomes ineligible: N/A

Date SEP Generated: April 24, 2012

Facility
P.S. #28
167 Hancock Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 1990
Gross Floor Area (ft²): 126,761

Energy Performance Rating[2] (1-100) 7

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	6,768,984
Natural Gas - (kBtu)[4]	0
Total Energy (kBtu)	6,768,984

Energy Intensity[4]

Site (kBtu/ft²/yr)	53
Source (kBtu/ft²/yr)	178

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	959

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	33
National Median Source EUI	110
% Difference from National Median Source EUI	63%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
1. Application for the ENERGY STAR must be submitted to EPA within 4 months of the Period Ending date. Award of the ENERGY STAR is not final until approval is received from EPA.
2. The EPA Energy Performance Rating is based on total source energy. A rating of 75 is the minimum to be eligible for the ENERGY STAR.
3. Values represent energy consumption, annualized to a 12-month period.
4. Values represent energy intensity, annualized to a 12-month period.
5. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

The government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, Licensed Professional facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S., EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460.

ENERGY STAR® Data Checklist for Commercial Buildings

In order for a building to qualify for the ENERGY STAR, a Professional Engineer (PE) or a Registered Architect (RA) must validate the accuracy of the data underlying the building's energy performance rating. This checklist is designed to provide an at-a-glance summary of a property's physical and operating characteristics, as well as its total energy consumption, to assist the PE or RA in double-checking the information that the building owner or operator has entered into Portfolio Manager.

Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	P.S. #28	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	167 Hancock Ave., Jersey City, NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
PS #28 (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	126,761 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	481	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	No	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity		
Meter: Electric 42-006-553-06 (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
03/09/2011	04/08/2011	176,840.00
02/09/2011	03/08/2011	251,119.00
01/09/2011	02/08/2011	294,475.00
12/09/2010	01/08/2011	319,325.00
11/09/2010	12/08/2010	183,886.00
10/09/2010	11/08/2010	96,136.00
09/09/2010	10/08/2010	105,595.00
08/09/2010	09/08/2010	67,459.00
07/09/2010	08/08/2010	76,739.00
06/09/2010	07/08/2010	122,740.00
05/09/2010	06/08/2010	112,651.00
Electric 42-006-553-06 Consumption (kWh (thousand Watt-hours))		**1,806,965.00**
Electric 42-006-553-06 Consumption (kBtu (thousand Btu))		**6,165,364.58**
Meter: Electric 66-093-030-02 (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
03/09/2011	04/08/2011	6,075.00
02/09/2011	03/08/2011	9,570.00
01/09/2011	02/08/2011	8,220.00
12/09/2010	01/08/2011	13,410.00
11/09/2010	12/08/2010	3,390.00
10/09/2010	11/08/2010	2,760.00
09/09/2010	10/08/2010	2,130.00
08/09/2010	09/08/2010	1,500.00
07/09/2010	08/08/2010	2,850.00
06/09/2010	07/08/2010	3,420.00
05/09/2010	06/08/2010	3,000.00
Electric 66-093-030-02 Consumption (kWh (thousand Watt-hours))		**56,325.00**
Electric 66-093-030-02 Consumption (kBtu (thousand Btu))		**192,180.90**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**6,357,545.48**

Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?	☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
P.S. #28
167 Hancock Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

P.S. #28	
Gross Floor Area Excluding Parking: (ft^2)	126,761
Year Built	1990
For 12-month Evaluation Period Ending Date:	April 30, 2011

Facility Space Use Summary

PS #28	
Space Type	K-12 School
Gross Floor Area (ft^2)	126,761
Open Weekends?	Yes
Number of PCs	481
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months °	N/A
High School?	No
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 04/30/2011)	**Baseline** (Ending Date 04/30/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	7	7	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	53	53	26	N/A	33
Source ($kBtu/ft^2$)	178	178	86	N/A	110
Energy Cost					
$/year	N/A	N/A	N/A	N/A	N/A
$/$ft^2$/year	N/A	N/A	N/A	N/A	N/A
Greenhouse Gas Emissions					
$MtCO_2e$/year	959	959	462	N/A	590
$kgCO_2e/ft^2$/year	8	8	4	N/A	5

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

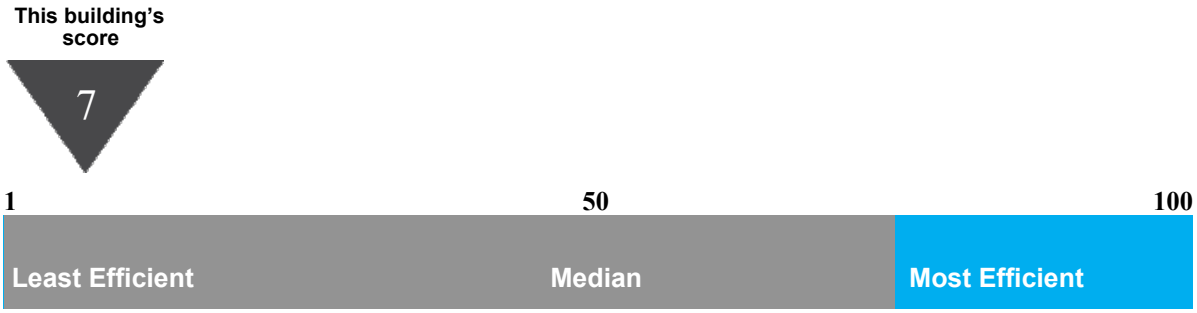
Statement of Energy Performance

2011

P.S. #28
167 Hancock Ave.
Jersey City, NJ 07305

Portfolio Manager Building ID: 2899968

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 178 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending April 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/24/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
P.S. #27

Building ID: 2899949
For 12-month Period Ending: April 30, 2011[1]
Date SEP becomes ineligible: N/A

Date SEP Generated: April 24, 2012

Facility
P.S. #27
201 North St.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 1966
Gross Floor Area (ft²): 94,611

Energy Performance Rating[2] (1-100) 1

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	6,812,839
Natural Gas - (kBtu)[4]	0
Total Energy (kBtu)	6,812,839

Energy Intensity[4]

Site (kBtu/ft²/yr)	72
Source (kBtu/ft²/yr)	241

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	965

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	31
National Median Source EUI	105
% Difference from National Median Source EUI	130%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
1. Application for the ENERGY STAR must be submitted to EPA within 4 months of the Period Ending date. Award of the ENERGY STAR is not final until approval is received from EPA.
2. The EPA Energy Performance Rating is based on total source energy. A rating of 75 is the minimum to be eligible for the ENERGY STAR.
3. Values represent energy consumption, annualized to a 12-month period.
4. Values represent energy intensity, annualized to a 12-month period.
5. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

The government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, Licensed Professional facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S., EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460.

ENERGY STAR® Data Checklist for Commercial Buildings

In order for a building to qualify for the ENERGY STAR, a Professional Engineer (PE) or a Registered Architect (RA) must validate the accuracy of the data underlying the building's energy performance rating. This checklist is designed to provide an at-a-glance summary of a property's physical and operating characteristics, as well as its total energy consumption, to assist the PE or RA in double-checking the information that the building owner or operator has entered into Portfolio Manager.

Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	P.S. #27	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	201 North St., Jersey City, NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
PS #27 (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	94,611 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	250	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	No	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity		
Meter: Electric 42-001-278-06 (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
03/09/2011	04/08/2011	200,700.00
02/09/2011	03/08/2011	292,800.00
01/09/2011	02/08/2011	307,800.00
12/09/2010	01/08/2011	305,100.00
11/09/2010	12/08/2010	106,500.00
10/09/2010	11/08/2010	118,500.00
09/09/2010	10/08/2010	63,300.00
08/09/2010	09/08/2010	42,600.00
07/09/2010	08/08/2010	43,800.00
06/09/2010	07/08/2010	53,400.00
05/09/2010	06/08/2010	81,000.00
Electric 42-001-278-06 Consumption (kWh (thousand Watt-hours))		**1,615,500.00**
Electric 42-001-278-06 Consumption (kBtu (thousand Btu))		**5,512,086.00**
Meter: Electric 66-964-131-03 (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
03/09/2011	04/08/2011	6,125.00
02/09/2011	03/08/2011	10,584.00
01/09/2011	02/08/2011	14,004.00
12/09/2010	01/08/2011	12,384.00
11/09/2010	12/08/2010	6,867.00
10/09/2010	11/08/2010	2,412.00
09/09/2010	10/08/2010	2,007.00
08/09/2010	09/08/2010	1,575.00
07/09/2010	08/08/2010	2,232.00
06/09/2010	07/08/2010	3,753.00
05/09/2010	06/08/2010	2,709.00
Electric 66-964-131-03 Consumption (kWh (thousand Watt-hours))		**64,652.00**
Electric 66-964-131-03 Consumption (kBtu (thousand Btu))		**220,592.62**

Meter: Electric 67-206-568-05 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/09/2011	04/08/2011	2,840.00
02/09/2011	03/08/2011	4,240.00
01/09/2011	02/08/2011	5,360.00
12/09/2010	01/08/2011	6,400.00
11/09/2010	12/08/2010	2,880.00
10/09/2010	11/08/2010	1,760.00
09/09/2010	10/08/2010	1,600.00
08/09/2010	09/08/2010	2,240.00
07/09/2010	08/08/2010	2,240.00
06/09/2010	07/08/2010	1,840.00
05/09/2010	06/08/2010	1,440.00
Electric 67-206-568-05 Consumption (kWh (thousand Watt-hours))		**32,840.00**
Electric 67-206-568-05 Consumption (kBtu (thousand Btu))		**112,050.08**

Meter: Electric 66-964-288-01 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/09/2011	04/08/2011	2,840.00
02/09/2011	03/08/2011	3,920.00
01/09/2011	02/08/2011	4,960.00
12/09/2010	01/08/2011	5,520.00
11/09/2010	12/08/2010	3,120.00
10/09/2010	11/08/2010	1,920.00
09/09/2010	10/08/2010	1,840.00
08/09/2010	09/08/2010	2,480.00
07/09/2010	08/08/2010	2,800.00
06/09/2010	07/08/2010	2,960.00
05/09/2010	06/08/2010	2,360.00
Electric 66-964-288-01 Consumption (kWh (thousand Watt-hours))		**34,720.00**
Electric 66-964-288-01 Consumption (kBtu (thousand Btu))		**118,464.64**

Meter: Electric 65-917-210-02 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/09/2011	04/08/2011	3,480.00
02/09/2011	03/08/2011	5,280.00
01/09/2011	02/08/2011	6,720.00
12/09/2010	01/08/2011	7,120.00
11/09/2010	12/08/2010	3,840.00
10/09/2010	11/08/2010	2,080.00
09/09/2010	10/08/2010	2,480.00

08/09/2010	09/08/2010	2,400.00
07/09/2010	08/08/2010	2,720.00
06/09/2010	07/08/2010	2,720.00
05/09/2010	06/08/2010	2,200.00
Electric 65-917-210-02 Consumption (kWh (thousand Watt-hours))		**41,040.00**
Electric 65-917-210-02 Consumption (kBtu (thousand Btu))		**140,028.48**

Meter: Electric 66-967-566-04 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/09/2011	04/08/2011	6,160.00
02/09/2011	03/08/2011	8,320.00
01/09/2011	02/08/2011	11,120.00
12/09/2010	01/08/2011	12,800.00
11/09/2010	12/08/2010	6,720.00
10/09/2010	11/08/2010	3,760.00
09/09/2010	10/08/2010	4,560.00
08/09/2010	09/08/2010	6,160.00
07/09/2010	08/08/2010	6,240.00
06/09/2010	07/08/2010	6,000.00
05/09/2010	06/08/2010	5,000.00
Electric 66-967-566-04 Consumption (kWh (thousand Watt-hours))		**76,840.00**
Electric 66-967-566-04 Consumption (kBtu (thousand Btu))		**262,178.08**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**6,365,399.90**
Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?		☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
P.S. #27
201 North St.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

P.S. #27	
Gross Floor Area Excluding Parking: (ft^2)	94,611
Year Built	1966
For 12-month Evaluation Period Ending Date:	April 30, 2011

Facility Space Use Summary

PS #27	
Space Type	K-12 School
Gross Floor Area (ft^2)	94,611
Open Weekends?	Yes
Number of PCs	250
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months °	N/A
High School?	No
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 04/30/2011)	**Baseline** (Ending Date 04/30/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	1	1	75	N/A	50
Energy Intensity					
Site (kBtu/ft^2)	72	72	24	N/A	31
Source (kBtu/ft^2)	241	241	82	N/A	105
Energy Cost					
$/year	N/A	N/A	N/A	N/A	N/A
$/$ft^2$/year	N/A	N/A	N/A	N/A	N/A
Greenhouse Gas Emissions					
$MtCO_2e$/year	965	965	328	N/A	419
$kgCO_2e/ft^2$/year	10	10	3	N/A	4

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

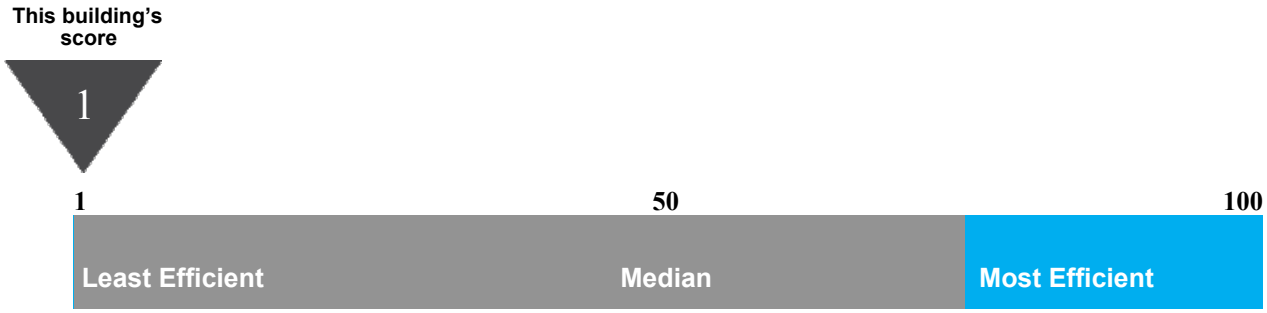
Statement of Energy Performance

2011

P.S. #27
201 North St.
Jersey City, NJ 07305

Portfolio Manager Building ID: 2899949

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 241 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending April 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/24/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
P.S. #25

Building ID: 2899946
For 12-month Period Ending: April 30, 2011[1]
Date SEP becomes ineligible: N/A

Date SEP Generated: April 24, 2012

Facility
P.S. #25
3386 Kennedy Blvd.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 1892
Gross Floor Area (ft²): 132,860

Energy Performance Rating[2] (1-100) 19

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	4,188,501
Fuel Oil (No. 2) (kBtu)	1,876,180
Natural Gas (kBtu)[4]	99,805
Total Energy (kBtu)	6,164,486

Energy Intensity[4]

Site (kBtu/ft²/yr)	46
Source (kBtu/ft²/yr)	120

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	736

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	35
National Median Source EUI	90
% Difference from National Median Source EUI	33%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
1. Application for the ENERGY STAR must be submitted to EPA within 4 months of the Period Ending date. Award of the ENERGY STAR is not final until approval is received from EPA.
2. The EPA Energy Performance Rating is based on total source energy. A rating of 75 is the minimum to be eligible for the ENERGY STAR.
3. Values represent energy consumption, annualized to a 12-month period.
4. Values represent energy intensity, annualized to a 12-month period.
5. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

The government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, Licensed Professional facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S., EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460.

ENERGY STAR® Data Checklist for Commercial Buildings

In order for a building to qualify for the ENERGY STAR, a Professional Engineer (PE) or a Registered Architect (RA) must validate the accuracy of the data underlying the building's energy performance rating. This checklist is designed to provide an at-a-glance summary of a property's physical and operating characteristics, as well as its total energy consumption, to assist the PE or RA in double-checking the information that the building owner or operator has entered into Portfolio Manager.

Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	P.S. #25	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	3386 Kennedy Blvd., Jersey City, NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
PS #25 (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	132,860 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	237	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	No	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity

Meter: Electric (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/07/2011	04/06/2011	91,600.00
02/07/2011	03/06/2011	171,200.00
01/07/2011	02/06/2011	200,400.00
12/07/2010	01/06/2011	206,000.00
11/07/2010	12/06/2010	111,600.00
10/07/2010	11/06/2010	70,400.00
09/07/2010	10/06/2010	61,600.00
08/07/2010	09/06/2010	41,600.00
07/07/2010	08/06/2010	52,000.00
06/07/2010	07/06/2010	62,400.00
05/07/2010	06/06/2010	77,000.00
Electric Consumption (kWh (thousand Watt-hours))		**1,145,800.00**
Electric Consumption (kBtu (thousand Btu))		**3,909,469.60**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**3,909,469.60**
Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?		☐

Fuel Type: Natural Gas

Meter: Natural Gas 42-008-465-00 (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
03/07/2011	04/06/2011	51.90
02/07/2011	03/06/2011	59.10
01/07/2011	02/06/2011	59.00
12/07/2010	01/06/2011	53.70
11/07/2010	12/06/2010	44.50
10/07/2010	11/06/2010	40.50
09/07/2010	10/06/2010	31.10
08/07/2010	09/06/2010	13.50
07/07/2010	08/06/2010	11.40
06/07/2010	07/06/2010	45.40
05/07/2010	06/06/2010	45.00

Natural Gas 42-008-465-00 Consumption (therms)	**455.10**
Natural Gas 42-008-465-00 Consumption (kBtu (thousand Btu))	**45,510.00**

Meter: Hess Natural Gas (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
03/07/2011	04/06/2011	51.90
02/07/2011	03/06/2011	59.10
01/07/2011	02/06/2011	59.00
12/07/2010	01/06/2011	53.70
11/07/2010	12/06/2010	44.50
10/07/2010	11/06/2010	40.50
09/07/2010	10/06/2010	31.10
08/07/2010	09/06/2010	13.50
07/07/2010	08/06/2010	11.40
06/07/2010	07/06/2010	45.40
05/07/2010	06/06/2010	45.00

Hess Natural Gas Consumption (therms)	**455.10**
Hess Natural Gas Consumption (kBtu (thousand Btu))	**45,510.00**
Total Natural Gas Consumption (kBtu (thousand Btu))	**91,020.00**
Is this the total Natural Gas consumption at this building including all Natural Gas meters?	☐

Fuel Type: Fuel Oil (No. 2)

Meter: Oil (Gallons)
Space(s): Entire Facility

Start Date	End Date	Energy Use (Gallons)
03/07/2011	04/06/2011	1,127.58
02/07/2011	03/06/2011	1,127.58
01/07/2011	02/06/2011	1,127.58
12/07/2010	01/06/2011	1,127.58
11/07/2010	12/06/2010	1,127.58
10/07/2010	11/06/2010	1,127.58
09/07/2010	10/06/2010	1,127.58
08/07/2010	09/06/2010	1,127.58
07/07/2010	08/06/2010	1,127.58
06/07/2010	07/06/2010	1,127.58
05/07/2010	06/06/2010	1,127.58

Oil Consumption (Gallons)	**12,403.38**
Oil Consumption (kBtu (thousand Btu))	**1,720,230.97**
Total Fuel Oil (No. 2) Consumption (kBtu (thousand Btu))	**1,720,230.97**
Is this the total Fuel Oil (No. 2) consumption at this building including all Fuel Oil (No. 2) meters?	☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
P.S. #25
3386 Kennedy Blvd.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

P.S. #25	
Gross Floor Area Excluding Parking: (ft^2)	132,860
Year Built	1892
For 12-month Evaluation Period Ending Date:	April 30, 2011

Facility Space Use Summary

PS #25	
Space Type	K-12 School
Gross Floor Area (ft^2)	132,860
Open Weekends?	Yes
Number of PCs	237
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months °	N/A
High School?	No
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 04/30/2011)	**Baseline** (Ending Date 04/30/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	19	19	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	46	46	27	N/A	35
Source ($kBtu/ft^2$)	120	120	71	N/A	90
Energy Cost					
$/year	N/A	N/A	N/A	N/A	N/A
$/$ft^2$/year	N/A	N/A	N/A	N/A	N/A
Greenhouse Gas Emissions					
$MtCO_2e$/year	736	736	431	N/A	552
$kgCO_2e/ft^2$/year	6	6	4	N/A	5

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

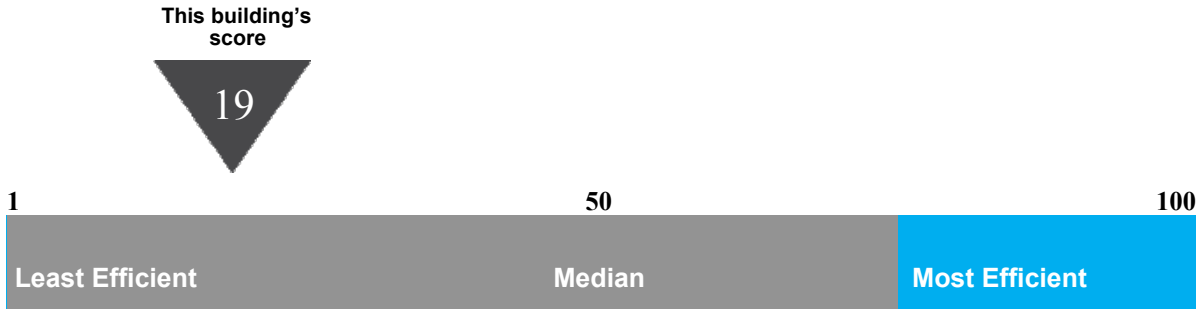
Statement of Energy Performance

2011

P.S. #25
3386 Kennedy Blvd.
Jersey City, NJ 07305

Portfolio Manager Building ID: 2899946

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 120 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending April 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/24/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
P.S. #24

Building ID: 2899944
For 12-month Period Ending: May 31, 2011[1]
Date SEP becomes ineligible: N/A

Date SEP Generated: April 24, 2012

Facility
P.S. #24
220 Virginia Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 1920
Gross Floor Area (ft²): 118,240

Energy Performance Rating[2] (1-100) 41

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	2,232,968
Fuel Oil (No. 2) (kBtu)	4,038,828
Natural Gas (kBtu)[4]	143,847
Total Energy (kBtu)	6,415,643

Energy Intensity[4]

Site (kBtu/ft²/yr)	54
Source (kBtu/ft²/yr)	99

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	621

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	50
National Median Source EUI	91
% Difference from National Median Source EUI	8%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
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4. Values represent energy intensity, annualized to a 12-month period.
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Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	P.S. #24	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	220 Virginia Ave., Jersey City, NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
PS #24 (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	118,240 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	198	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	No	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity

Meter: Electric 42-002-370-08 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
04/07/2011	05/06/2011	57,030.00
03/07/2011	04/06/2011	58,554.00
02/07/2011	03/06/2011	60,078.00
01/07/2011	02/06/2011	56,722.00
12/07/2010	01/06/2011	54,250.00
11/07/2010	12/06/2010	62,637.00
10/07/2010	11/06/2010	50,678.00
09/07/2010	10/06/2010	60,579.00
08/07/2010	09/06/2010	50,380.00
07/07/2010	08/06/2010	37,566.00
06/07/2010	07/06/2010	51,465.00
Electric 42-002-370-08 Consumption (kWh (thousand Watt-hours))		**599,939.00**
Electric 42-002-370-08 Consumption (kBtu (thousand Btu))		**2,046,991.87**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**2,046,991.87**
Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?		☐

Fuel Type: Natural Gas

Meter: Hess Natural Gas (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
04/07/2011	05/06/2011	9.95
03/07/2011	04/06/2011	9.95
02/07/2011	03/06/2011	9.95
01/07/2011	02/06/2011	9.95
12/07/2010	01/06/2011	9.95
11/07/2010	12/06/2010	9.95
10/07/2010	11/06/2010	9.95
09/07/2010	10/06/2010	9.95
08/07/2010	09/06/2010	9.95
07/07/2010	08/06/2010	9.95
06/07/2010	07/06/2010	9.95

Hess Natural Gas Consumption (therms)	**109.45**
Hess Natural Gas Consumption (kBtu (thousand Btu))	**10,945.00**

Meter: Natural Gas 42-002-370-08 (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
04/07/2011	05/06/2011	55.96
03/07/2011	04/06/2011	123.00
02/07/2011	03/06/2011	188.60
01/07/2011	02/06/2011	298.70
12/07/2010	01/06/2011	190.30
11/07/2010	12/06/2010	177.70
10/07/2010	11/06/2010	96.40
09/07/2010	10/06/2010	100.70
08/07/2010	09/06/2010	38.40
07/07/2010	08/06/2010	2.10
06/07/2010	07/06/2010	2.10

Natural Gas 42-002-370-08 Consumption (therms)	**1,273.96**
Natural Gas 42-002-370-08 Consumption (kBtu (thousand Btu))	**127,396.00**
Total Natural Gas Consumption (kBtu (thousand Btu))	**138,341.00**
Is this the total Natural Gas consumption at this building including all Natural Gas meters?	☐

Fuel Type: Fuel Oil (No. 2)

Meter: Oil (Gallons)
Space(s): Entire Facility

Start Date	End Date	Energy Use (Gallons)
04/07/2011	05/06/2011	2,426.00
03/07/2011	04/06/2011	2,426.00
02/07/2011	03/06/2011	2,426.00
01/07/2011	02/06/2011	2,426.00
12/07/2010	01/06/2011	2,426.00
11/07/2010	12/06/2010	2,426.00
10/07/2010	11/06/2010	2,426.00
09/07/2010	10/06/2010	2,426.00
08/07/2010	09/06/2010	2,426.00
07/07/2010	08/06/2010	2,426.00
06/07/2010	07/06/2010	2,426.00

Oil Consumption (Gallons)	**26,686.00**
Oil Consumption (kBtu (thousand Btu))	**3,701,094.68**
Total Fuel Oil (No. 2) Consumption (kBtu (thousand Btu))	**3,701,094.68**
Is this the total Fuel Oil (No. 2) consumption at this building including all Fuel Oil (No. 2) meters?	☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
P.S. #24
220 Virginia Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

P.S. #24	
Gross Floor Area Excluding Parking: (ft^2)	118,240
Year Built	1920
For 12-month Evaluation Period Ending Date:	May 31, 2011

Facility Space Use Summary

PS #24	
Space Type	K-12 School
Gross Floor Area (ft^2)	118,240
Open Weekends?	Yes
Number of PCs	198
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months °	N/A
High School?	No
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 05/31/2011)	**Baseline** (Ending Date 05/31/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	41	41	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	54	54	39	N/A	50
Source ($kBtu/ft^2$)	99	99	71	N/A	91
Energy Cost					
$/year	N/A	N/A	N/A	N/A	N/A
$/$ft^2$/year	N/A	N/A	N/A	N/A	N/A
Greenhouse Gas Emissions					
$MtCO_2e$/year	621	621	449	N/A	574
$kgCO_2e/ft^2$/year	5	5	4	N/A	5

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

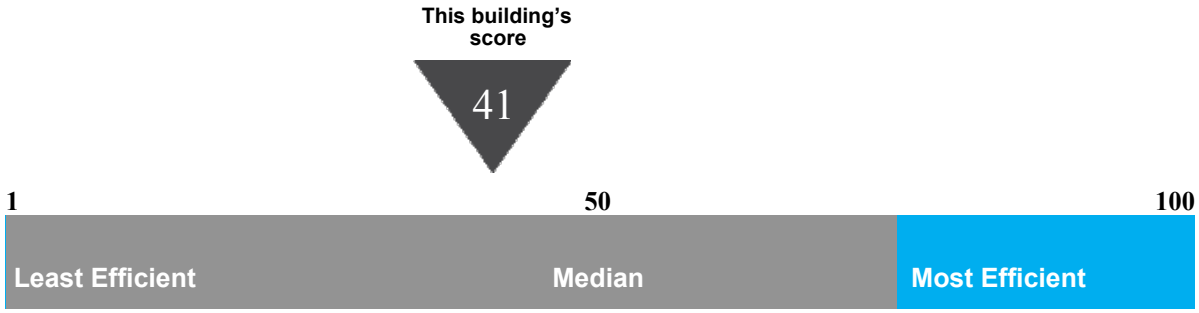
Statement of Energy Performance

2011

P.S. #24
220 Virginia Ave.
Jersey City, NJ 07305

Portfolio Manager Building ID: 2899944

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 99 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending May 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/24/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
P.S. #23

Building ID: 2899964
For 12-month Period Ending: April 30, 2011[1]
Date SEP becomes ineligible: N/A

Date SEP Generated: April 24, 2012

Facility
P.S. #23
143 Romaine Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 1922
Gross Floor Area (ft²): 177,028

Energy Performance Rating[2] (1-100) 3

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	5,384,222
Fuel Oil (No. 2) (kBtu)	4,396,498
Natural Gas (kBtu)[4]	401,677
Total Energy (kBtu)	10,182,397

Energy Intensity[4]

Site (kBtu/ft²/yr)	58
Source (kBtu/ft²/yr)	129

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	1,107

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	31
National Median Source EUI	70
% Difference from National Median Source EUI	85%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
1. Application for the ENERGY STAR must be submitted to EPA within 4 months of the Period Ending date. Award of the ENERGY STAR is not final until approval is received from EPA.
2. The EPA Energy Performance Rating is based on total source energy. A rating of 75 is the minimum to be eligible for the ENERGY STAR.
3. Values represent energy consumption, annualized to a 12-month period.
4. Values represent energy intensity, annualized to a 12-month period.
5. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

The government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, Licensed Professional facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S., EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460.

ENERGY STAR® Data Checklist for Commercial Buildings

In order for a building to qualify for the ENERGY STAR, a Professional Engineer (PE) or a Registered Architect (RA) must validate the accuracy of the data underlying the building's energy performance rating. This checklist is designed to provide an at-a-glance summary of a property's physical and operating characteristics, as well as its total energy consumption, to assist the PE or RA in double-checking the information that the building owner or operator has entered into Portfolio Manager.

Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	P.S. #23	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	143 Romaine Ave., Jersey City, NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
PS #23 (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	177,028 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	28	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	No	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity

Meter: Electric 65-170-075-003 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/10/2011	04/09/2011	13,400.00
02/10/2011	03/09/2011	18,400.00
01/10/2011	02/09/2011	36,400.00
12/10/2010	01/09/2011	14,320.00
11/10/2010	12/09/2010	14,640.00
10/10/2010	11/09/2010	11,520.00
09/10/2010	10/09/2010	8,240.00
08/10/2010	09/09/2010	15,120.00
07/10/2010	08/09/2010	3,200.00
06/10/2010	07/09/2010	12,960.00
05/10/2010	06/09/2010	10,680.00
Electric 65-170-075-003 Consumption (kWh (thousand Watt-hours))		**158,880.00**
Electric 65-170-075-003 Consumption (kBtu (thousand Btu))		**542,098.56**

Meter: South Jersey Electric (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/10/2011	04/09/2011	75,350.00
02/10/2011	03/09/2011	75,350.00
01/10/2011	02/09/2011	75,350.00
12/10/2010	01/09/2011	75,350.00
11/10/2010	12/09/2010	75,350.00
10/10/2010	11/09/2010	75,350.00
09/10/2010	10/09/2010	75,350.00
08/10/2010	09/09/2010	75,350.00
07/10/2010	08/09/2010	75,350.00
06/10/2010	07/09/2010	75,350.00
05/10/2010	06/09/2010	75,350.00
South Jersey Electric Consumption (kWh (thousand Watt-hours))		**828,850.00**
South Jersey Electric Consumption (kBtu (thousand Btu))		**2,828,036.20**

Meter: Electric 42-008-126-06 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/10/2011	04/09/2011	47,400.00
02/10/2011	03/09/2011	53,000.00
01/10/2011	02/09/2011	55,400.00
12/10/2010	01/09/2011	51,400.00
11/10/2010	12/09/2010	42,400.00
10/10/2010	11/09/2010	34,400.00
09/10/2010	10/09/2010	36,800.00
08/10/2010	09/09/2010	10,800.00
07/10/2010	08/09/2010	54,000.00
06/10/2010	07/09/2010	38,000.00
05/10/2010	06/09/2010	39,900.00
Electric 42-008-126-06 Consumption (kWh (thousand Watt-hours))		**463,500.00**
Electric 42-008-126-06 Consumption (kBtu (thousand Btu))		**1,581,462.00**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**4,951,596.76**
Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?		☐

Fuel Type: Natural Gas

Meter: Natural Gas 42-008-126-06 (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
03/10/2011	04/09/2011	419.60
02/10/2011	03/09/2011	513.50
01/10/2011	02/09/2011	435.90
12/10/2010	01/09/2011	374.00
11/10/2010	12/09/2010	323.70
10/10/2010	11/09/2010	267.60
09/10/2010	10/09/2010	233.60
08/10/2010	09/09/2010	159.70
07/10/2010	08/09/2010	146.30
06/10/2010	07/09/2010	194.30
05/10/2010	06/09/2010	260.00
Natural Gas 42-008-126-06 Consumption (therms)		**3,328.20**
Natural Gas 42-008-126-06 Consumption (kBtu (thousand Btu))		**332,820.00**

Meter: Hess Natural Gas (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
03/10/2011	04/09/2011	30.90
02/10/2011	03/09/2011	30.90
01/10/2011	02/09/2011	30.90
12/10/2010	01/09/2011	30.90
11/10/2010	12/09/2010	30.90

10/10/2010	11/09/2010	30.90
09/10/2010	10/09/2010	30.90
08/10/2010	09/09/2010	30.90
07/10/2010	08/09/2010	30.90
06/10/2010	07/09/2010	30.90
05/10/2010	06/09/2010	30.90
Hess Natural Gas Consumption (therms)		**339.90**
Hess Natural Gas Consumption (kBtu (thousand Btu))		**33,990.00**
Total Natural Gas Consumption (kBtu (thousand Btu))		**366,810.00**
Is this the total Natural Gas consumption at this building including all Natural Gas meters?		☐

Fuel Type: Fuel Oil (No. 2)

Meter: Oil (Gallons)
Space(s): Entire Facility

Start Date	End Date	Energy Use (Gallons)
03/10/2011	04/09/2011	2,642.60
02/10/2011	03/09/2011	2,642.60
01/10/2011	02/09/2011	2,642.60
12/10/2010	01/09/2011	2,642.60
11/10/2010	12/09/2010	2,642.60
10/10/2010	11/09/2010	2,642.60
09/10/2010	10/09/2010	2,642.60
08/10/2010	09/09/2010	2,642.60
07/10/2010	08/09/2010	2,642.60
06/10/2010	07/09/2010	2,642.60
05/10/2010	06/09/2010	2,642.60
Oil Consumption (Gallons)		**29,068.60**
Oil Consumption (kBtu (thousand Btu))		**4,031,538.67**
Total Fuel Oil (No. 2) Consumption (kBtu (thousand Btu))		**4,031,538.67**
Is this the total Fuel Oil (No. 2) consumption at this building including all Fuel Oil (No. 2) meters?		☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
P.S. #23
143 Romaine Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

P.S. #23	
Gross Floor Area Excluding Parking: (ft^2)	177,028
Year Built	1922
For 12-month Evaluation Period Ending Date:	April 30, 2011

Facility Space Use Summary

PS #23	
Space Type	K-12 School
Gross Floor Area (ft^2)	177,028
Open Weekends?	Yes
Number of PCs	28
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months °	N/A
High School?	No
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 04/30/2011)	**Baseline** (Ending Date 04/30/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	3	3	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	58	58	24	N/A	31
Source ($kBtu/ft^2$)	129	129	54	N/A	70
Energy Cost					
$/year	N/A	N/A	N/A	N/A	N/A
$/$ft^2$/year	N/A	N/A	N/A	N/A	N/A
Greenhouse Gas Emissions					
$MtCO_2e$/year	1,107	1,107	467	N/A	598
$kgCO_2e/ft^2$/year	6	6	3	N/A	3

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

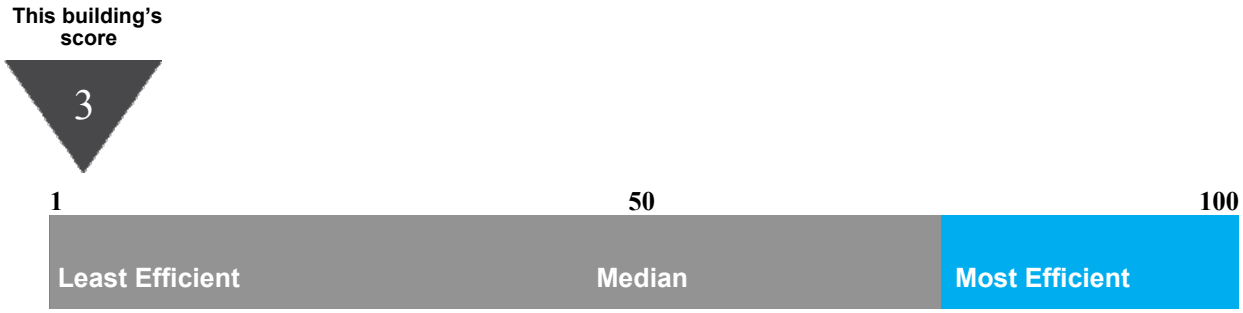
Statement of Energy Performance

2011

P.S. #23
143 Romaine Ave.
Jersey City, NJ 07305

Portfolio Manager Building ID: 2899964

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 129 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending April 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/24/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
P.S. #22

Building ID: 2899962
For 12-month Period Ending: April 30, 2011[1]
Date SEP becomes ineligible: N/A

Date SEP Generated: April 24, 2012

Facility
P.S. #22
264 Van Horn St.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 1931
Gross Floor Area (ft²): 157,134

Energy Performance Rating[2] (1-100) 21

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	2,640,352
Natural Gas (kBtu)[4]	7,909,641
Total Energy (kBtu)	10,549,993

Energy Intensity[4]

Site (kBtu/ft²/yr)	67
Source (kBtu/ft²/yr)	109

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	795

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	51
National Median Source EUI	83
% Difference from National Median Source EUI	31%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
1. Application for the ENERGY STAR must be submitted to EPA within 4 months of the Period Ending date. Award of the ENERGY STAR is not final until approval is received from EPA.
2. The EPA Energy Performance Rating is based on total source energy. A rating of 75 is the minimum to be eligible for the ENERGY STAR.
3. Values represent energy consumption, annualized to a 12-month period.
4. Values represent energy intensity, annualized to a 12-month period.
5. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

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Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	P.S. #22	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	264 Van Horn St., Jersey City, NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
PS #22 (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	157,134 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	213	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	No	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity

Meter: Electric 42-010-069-05 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/25/2011	04/24/2011	66,000.00
02/25/2011	03/24/2011	66,000.00
01/25/2011	02/24/2011	66,000.00
12/25/2010	01/24/2011	66,000.00
11/25/2010	12/24/2010	66,000.00
10/25/2010	11/24/2010	62,000.00
09/25/2010	10/24/2010	73,200.00
08/25/2010	09/24/2010	68,000.00
07/25/2010	08/24/2010	50,000.00
06/25/2010	07/24/2010	64,400.00
05/25/2010	06/24/2010	62,800.00
Electric 42-010-069-05 Consumption (kWh (thousand Watt-hours))		**710,400.00**
Electric 42-010-069-05 Consumption (kBtu (thousand Btu))		**2,423,884.80**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**2,423,884.80**
Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?		☐

Fuel Type: Natural Gas

Meter: Natural Gas 65-820-601-04 (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
03/25/2011	04/24/2011	4,596.50
02/25/2011	03/24/2011	8,969.50
01/25/2011	02/24/2011	13,717.00
12/25/2010	01/24/2011	17,539.30
11/25/2010	12/24/2010	13,720.50
10/25/2010	11/24/2010	4,292.20
09/25/2010	10/24/2010	1,173.80
08/25/2010	09/24/2010	223.60
07/25/2010	08/24/2010	223.60
06/25/2010	07/24/2010	223.60
05/25/2010	06/24/2010	1,316.80

Natural Gas 65-820-601-04 Consumption (therms)	**65,996.40**
Natural Gas 65-820-601-04 Consumption (kBtu (thousand Btu))	**6,599,640.00**

Meter: Hess Natural Gas (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
03/25/2011	04/24/2011	68.13
02/25/2011	03/24/2011	68.13
01/25/2011	02/24/2011	68.13
12/25/2010	01/24/2011	68.13
11/25/2010	12/24/2010	68.13
10/25/2010	11/24/2010	68.13
09/25/2010	10/24/2010	68.13
08/25/2010	09/24/2010	68.13
07/25/2010	08/24/2010	68.13
06/25/2010	07/24/2010	68.13
05/25/2010	06/24/2010	68.13
Hess Natural Gas Consumption (therms)		**749.43**
Hess Natural Gas Consumption (kBtu (thousand Btu))		**74,943.00**

Meter: Natural Gas 42-010-069-05 (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
03/25/2011	04/24/2011	852.90
02/25/2011	03/24/2011	601.10
01/25/2011	02/24/2011	601.10
12/25/2010	01/24/2011	1,102.50
11/25/2010	12/24/2010	1,128.30
10/25/2010	11/24/2010	711.90
09/25/2010	10/24/2010	630.30
08/25/2010	09/24/2010	457.90
07/25/2010	08/24/2010	0.00
06/25/2010	07/24/2010	80.80
05/25/2010	06/24/2010	359.60
Natural Gas 42-010-069-05 Consumption (therms)		**6,526.40**
Natural Gas 42-010-069-05 Consumption (kBtu (thousand Btu))		**652,640.00**
Total Natural Gas Consumption (kBtu (thousand Btu))		**7,327,223.00**
Is this the total Natural Gas consumption at this building including all Natural Gas meters?		☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
P.S. #22
264 Van Horn St.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

P.S. #22	
Gross Floor Area Excluding Parking: (ft^2)	157,134
Year Built	1931
For 12-month Evaluation Period Ending Date:	April 30, 2011

Facility Space Use Summary

PS #22	
Space Type	K-12 School
Gross Floor Area (ft^2)	157,134
Open Weekends?	Yes
Number of PCs	213
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months °	N/A
High School?	No
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 04/30/2011)	**Baseline** (Ending Date 04/30/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	21	21	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	67	67	40	N/A	51
Source ($kBtu/ft^2$)	109	109	65	N/A	83
Energy Cost					
$/year	N/A	N/A	N/A	N/A	N/A
$/$ft^2$/year	N/A	N/A	N/A	N/A	N/A
Greenhouse Gas Emissions					
$MtCO_2e$/year	795	795	474	N/A	607
$kgCO_2e/ft^2$/year	5	5	3	N/A	4

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

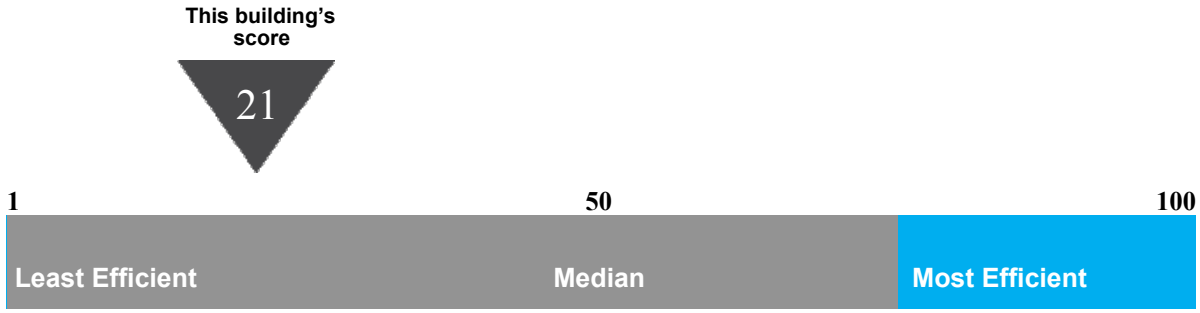
Statement of Energy Performance

2011

P.S. #22
264 Van Horn St.
Jersey City, NJ 07305

Portfolio Manager Building ID: 2899962

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 109 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending April 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/24/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
P.S. #20

Building ID: 2899959
For 12-month Period Ending: April 30, 2011[1]
Date SEP becomes ineligible: N/A

Date SEP Generated: April 23, 2012

Facility
P.S. #20
160 Danforth Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 1900
Gross Floor Area (ft²): 78,996

Energy Performance Rating[2] (1-100) 46

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	1,927,460
Fuel Oil (No. 2) (kBtu)	2,307,413
Natural Gas (kBtu)[4]	131,693
Total Energy (kBtu)	4,366,566

Energy Intensity[4]

Site (kBtu/ft²/yr)	55
Source (kBtu/ft²/yr)	113

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	450

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	54
National Median Source EUI	109
% Difference from National Median Source EUI	3%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
1. Application for the ENERGY STAR must be submitted to EPA within 4 months of the Period Ending date. Award of the ENERGY STAR is not final until approval is received from EPA.
2. The EPA Energy Performance Rating is based on total source energy. A rating of 75 is the minimum to be eligible for the ENERGY STAR.
3. Values represent energy consumption, annualized to a 12-month period.
4. Values represent energy intensity, annualized to a 12-month period.
5. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

The government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, Licensed Professional facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S., EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460.

ENERGY STAR® Data Checklist for Commercial Buildings

In order for a building to qualify for the ENERGY STAR, a Professional Engineer (PE) or a Registered Architect (RA) must validate the accuracy of the data underlying the building's energy performance rating. This checklist is designed to provide an at-a-glance summary of a property's physical and operating characteristics, as well as its total energy consumption, to assist the PE or RA in double-checking the information that the building owner or operator has entered into Portfolio Manager.

Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	P.S. #20	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	160 Danforth Ave., Jersey City, NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
PS #20 (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	78,996 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	221	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	No	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity		
Meter: Electric 67-244-667-09 (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
03/07/2011	04/06/2011	10,533.00
02/07/2011	03/06/2011	10,533.00
01/07/2011	02/06/2011	10,533.00
12/07/2010	01/06/2011	10,533.00
11/07/2010	12/06/2010	10,533.00
10/07/2010	11/06/2010	24,400.00
09/07/2010	10/06/2010	28,600.00
08/07/2010	09/06/2010	22,400.00
07/07/2010	08/06/2010	15,900.00
06/07/2010	07/06/2010	15,900.00
05/07/2010	06/06/2010	15,900.00
Electric 67-244-667-09 Consumption (kWh (thousand Watt-hours))		**175,765.00**
Electric 67-244-667-09 Consumption (kBtu (thousand Btu))		**599,710.18**
Meter: Electric 66-149-355-18 (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
03/07/2011	04/06/2011	9,280.00
02/07/2011	03/06/2011	15,520.00
01/07/2011	02/06/2011	9,680.00
12/07/2010	01/06/2011	7,600.00
11/07/2010	12/06/2010	17,920.00
10/07/2010	11/06/2010	5,920.00
09/07/2010	10/06/2010	3,600.00
08/07/2010	09/06/2010	8,320.00
07/07/2010	08/06/2010	5,920.00
06/07/2010	07/06/2010	3,520.00
05/07/2010	06/06/2010	3,040.00
Electric 66-149-355-18 Consumption (kWh (thousand Watt-hours))		**90,320.00**
Electric 66-149-355-18 Consumption (kBtu (thousand Btu))		**308,171.84**

Meter: South Jersey Electric (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
03/07/2011	04/06/2011	23,616.67
02/07/2011	03/06/2011	23,616.67
01/07/2011	02/06/2011	23,616.67
12/07/2010	01/06/2011	23,616.67
11/07/2010	12/06/2010	23,616.67
10/07/2010	11/06/2010	23,616.67
09/07/2010	10/06/2010	23,616.67
08/07/2010	09/06/2010	23,616.67
07/07/2010	08/06/2010	23,616.67
06/07/2010	07/06/2010	23,616.67
05/07/2010	06/06/2010	23,616.67
South Jersey Electric Consumption (kWh (thousand Watt-hours))		**259,783.37**
South Jersey Electric Consumption (kBtu (thousand Btu))		**886,380.86**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**1,794,262.88**
Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?		☐

Fuel Type: Natural Gas		
Meter: Natural Gas 67-244-667-09 (therms) **Space(s):** Entire Facility		
Start Date	**End Date**	**Energy Use (therms)**
03/07/2011	04/06/2011	100.32
02/07/2011	03/06/2011	100.32
01/07/2011	02/06/2011	100.32
12/07/2010	01/06/2011	100.32
11/07/2010	12/06/2010	100.32
10/07/2010	11/06/2010	100.32
09/07/2010	10/06/2010	100.32
08/07/2010	09/06/2010	100.32
07/07/2010	08/06/2010	100.32
06/07/2010	07/06/2010	100.32
05/07/2010	06/06/2010	100.32
Natural Gas 67-244-667-09 Consumption (therms)		**1,103.52**
Natural Gas 67-244-667-09 Consumption (kBtu (thousand Btu))		**110,352.00**
Meter: Hess Natural Gas (therms) **Space(s):** Entire Facility		
Start Date	**End Date**	**Energy Use (therms)**
03/07/2011	04/06/2011	9.45
02/07/2011	03/06/2011	9.45
01/07/2011	02/06/2011	9.45
12/07/2010	01/06/2011	9.45
11/07/2010	12/06/2010	9.45

10/07/2010	11/06/2010	9.45
09/07/2010	10/06/2010	9.45
08/07/2010	09/06/2010	9.45
07/07/2010	08/06/2010	9.45
06/07/2010	07/06/2010	9.45
05/07/2010	06/06/2010	9.45
Hess Natural Gas Consumption (therms)		**103.95**
Hess Natural Gas Consumption (kBtu (thousand Btu))		**10,395.00**
Total Natural Gas Consumption (kBtu (thousand Btu))		**120,747.00**
Is this the total Natural Gas consumption at this building including all Natural Gas meters?		☐

Fuel Type: Fuel Oil (No. 2)

Meter: Oil (Gallons)
Space(s): Entire Facility

Start Date	End Date	Energy Use (Gallons)
03/07/2011	04/06/2011	1,386.75
02/07/2011	03/06/2011	1,386.75
01/07/2011	02/06/2011	1,386.75
12/07/2010	01/06/2011	1,386.75
11/07/2010	12/06/2010	1,386.75
10/07/2010	11/06/2010	1,386.75
09/07/2010	10/06/2010	1,386.75
08/07/2010	09/06/2010	1,386.75
07/07/2010	08/06/2010	1,386.75
06/07/2010	07/06/2010	1,386.75
05/07/2010	06/06/2010	1,386.75
Oil Consumption (Gallons)		**15,254.25**
Oil Consumption (kBtu (thousand Btu))		**2,115,619.56**
Total Fuel Oil (No. 2) Consumption (kBtu (thousand Btu))		**2,115,619.56**
Is this the total Fuel Oil (No. 2) consumption at this building including all Fuel Oil (No. 2) meters?		☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
P.S. #20
160 Danforth Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

P.S. #20	
Gross Floor Area Excluding Parking: (ft^2)	78,996
Year Built	1900
For 12-month Evaluation Period Ending Date:	April 30, 2011

Facility Space Use Summary

PS #20	
Space Type	K-12 School
Gross Floor Area (ft^2)	78,996
Open Weekends?	Yes
Number of PCs	221
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months °	N/A
High School?	No
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 04/30/2011)	**Baseline** (Ending Date 04/30/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	46	46	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	55	55	42	N/A	54
Source ($kBtu/ft^2$)	113	113	86	N/A	109
Energy Cost					
$/year	N/A	N/A	N/A	N/A	N/A
$/$ft^2$/year	N/A	N/A	N/A	N/A	N/A
Greenhouse Gas Emissions					
$MtCO_2e$/year	450	450	341	N/A	436
$kgCO_2e/ft^2$/year	6	6	5	N/A	6

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

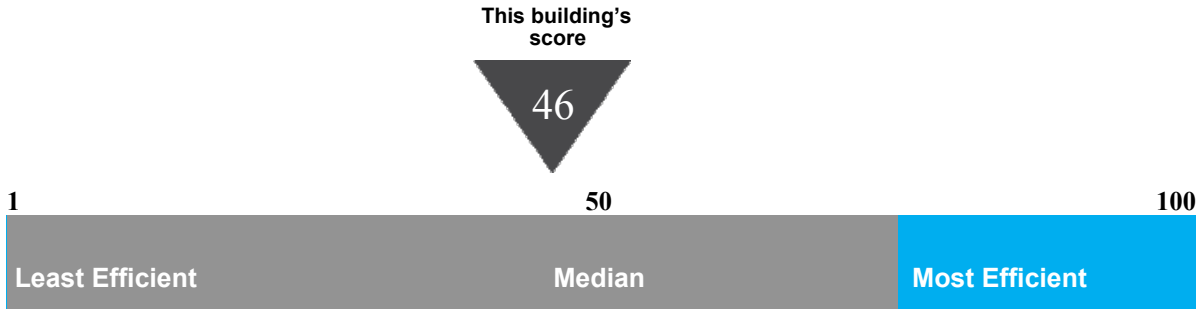
Statement of Energy Performance

2011

P.S. #20
160 Danforth Ave.
Jersey City, NJ 07305

Portfolio Manager Building ID: 2899959

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 113 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending April 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/23/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
P.S. #17

Building ID: 2899939
For 12-month Period Ending: April 30, 2011[1]
Date SEP becomes ineligible: N/A

Date SEP Generated: April 23, 2012

Facility
P.S. #17
600 Bergen Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 1996
Gross Floor Area (ft²): 153,864

Energy Performance Rating[2] (1-100) 1

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	7,380,471
Natural Gas (kBtu)[4]	5,010,036
Total Energy (kBtu)	12,390,507

Energy Intensity[4]

Site (kBtu/ft²/yr)	81
Source (kBtu/ft²/yr)	194

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	1,312

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	37
National Median Source EUI	89
% Difference from National Median Source EUI	118%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
1. Application for the ENERGY STAR must be submitted to EPA within 4 months of the Period Ending date. Award of the ENERGY STAR is not final until approval is received from EPA.
2. The EPA Energy Performance Rating is based on total source energy. A rating of 75 is the minimum to be eligible for the ENERGY STAR.
3. Values represent energy consumption, annualized to a 12-month period.
4. Values represent energy intensity, annualized to a 12-month period.
5. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

The government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, Licensed Professional facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S., EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460.

ENERGY STAR® Data Checklist for Commercial Buildings

In order for a building to qualify for the ENERGY STAR, a Professional Engineer (PE) or a Registered Architect (RA) must validate the accuracy of the data underlying the building's energy performance rating. This checklist is designed to provide an at-a-glance summary of a property's physical and operating characteristics, as well as its total energy consumption, to assist the PE or RA in double-checking the information that the building owner or operator has entered into Portfolio Manager.

Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	P.S. #17	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	600 Bergen Ave., Jersey City, NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
PS #17 (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	153,864 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	300	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	No	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity

Meter: Electric 42-004-514-09 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/04/2011	04/03/2011	125,200.00
02/04/2011	03/03/2011	141,200.00
01/04/2011	02/03/2011	141,200.00
12/04/2010	01/03/2011	152,800.00
11/04/2010	12/03/2010	133,600.00
10/04/2010	11/03/2010	167,600.00
09/04/2010	10/03/2010	224,000.00
08/04/2010	09/03/2010	39,200.00
07/04/2010	08/03/2010	362,800.00
06/04/2010	07/03/2010	243,600.00
05/04/2010	06/03/2010	184,400.00
Electric 42-004-514-09 Consumption (kWh (thousand Watt-hours))		**1,915,600.00**
Electric 42-004-514-09 Consumption (kBtu (thousand Btu))		**6,536,027.20**

Meter: Electric 66-066-907-06 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/04/2011	04/03/2011	2,394.00
02/04/2011	03/03/2011	3,624.00
01/04/2011	02/03/2011	3,660.00
12/04/2010	01/03/2011	3,894.00
11/04/2010	12/03/2010	1,986.00
10/04/2010	11/03/2010	1,158.00
09/04/2010	10/03/2010	1,074.00
08/04/2010	09/03/2010	798.00
07/04/2010	08/03/2010	1,206.00
06/04/2010	07/03/2010	1,452.00
05/04/2010	06/03/2010	1,308.00
Electric 66-066-907-06 Consumption (kWh (thousand Watt-hours))		**22,554.00**
Electric 66-066-907-06 Consumption (kBtu (thousand Btu))		**76,954.25**

Meter: Electric 66-451-974-03 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/04/2011	04/03/2011	5,120.00
02/04/2011	03/03/2011	7,680.00
01/04/2011	02/03/2011	8,080.00
12/04/2010	01/03/2011	8,960.00
11/04/2010	12/03/2010	3,840.00
10/04/2010	11/03/2010	2,240.00
09/04/2010	10/03/2010	2,640.00
08/04/2010	09/03/2010	1,600.00
07/04/2010	08/03/2010	3,120.00
06/04/2010	07/03/2010	3,200.00
05/04/2010	06/03/2010	2,880.00
Electric 66-451-974-03 Consumption (kWh (thousand Watt-hours))		**49,360.00**
Electric 66-451-974-03 Consumption (kBtu (thousand Btu))		**168,416.32**

Meter: Electric 65-012-760-04 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/04/2011	04/03/2011	2,320.00
02/04/2011	03/03/2011	6,960.00
01/04/2011	02/03/2011	6,960.00
12/04/2010	01/03/2011	6,640.00
11/04/2010	12/03/2010	4,000.00
10/04/2010	11/03/2010	2,000.00
09/04/2010	10/03/2010	2,480.00
08/04/2010	09/03/2010	800.00
07/04/2010	08/03/2010	2,880.00
06/04/2010	07/03/2010	2,320.00
05/04/2010	06/03/2010	2,320.00
Electric 65-012-760-04 Consumption (kWh (thousand Watt-hours))		**39,680.00**
Electric 65-012-760-04 Consumption (kBtu (thousand Btu))		**135,388.16**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**6,916,785.93**
Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?		☐

Fuel Type: Natural Gas

Meter: Natural Gas 42-004-514-09 (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
03/04/2011	04/03/2011	1,333.20
02/04/2011	03/03/2011	12,003.40
01/04/2011	02/03/2011	12,003.40
12/04/2010	01/03/2011	12,024.70

11/04/2010	12/03/2010	6,814.00
10/04/2010	11/03/2010	2,018.20
09/04/2010	10/03/2010	546.30
08/04/2010	09/03/2010	335.00
07/04/2010	08/03/2010	344.90
06/04/2010	07/03/2010	532.80
05/04/2010	06/03/2010	532.80
Natural Gas 42-004-514-09 Consumption (therms)		**48,488.70**
Natural Gas 42-004-514-09 Consumption (kBtu (thousand Btu))		**4,848,870.00**
Total Natural Gas Consumption (kBtu (thousand Btu))		**4,848,870.00**
Is this the total Natural Gas consumption at this building including all Natural Gas meters?		☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
P.S. #17
600 Bergen Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

P.S. #17	
Gross Floor Area Excluding Parking: (ft^2)	153,864
Year Built	1996
For 12-month Evaluation Period Ending Date:	April 30, 2011

Facility Space Use Summary

PS #17	
Space Type	K-12 School
Gross Floor Area (ft^2)	153,864
Open Weekends?	Yes
Number of PCs	300
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months °	N/A
High School?	No
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 04/30/2011)	**Baseline** (Ending Date 04/30/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	1	1	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	81	81	29	N/A	37
Source ($kBtu/ft^2$)	194	194	70	N/A	89
Energy Cost					
$/year	N/A	N/A	N/A	N/A	N/A
$/$ft^2$/year	N/A	N/A	N/A	N/A	N/A
Greenhouse Gas Emissions					
$MtCO_2e$/year	1,312	1,312	470	N/A	601
$kgCO_2e/ft^2$/year	9	9	3	N/A	4

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

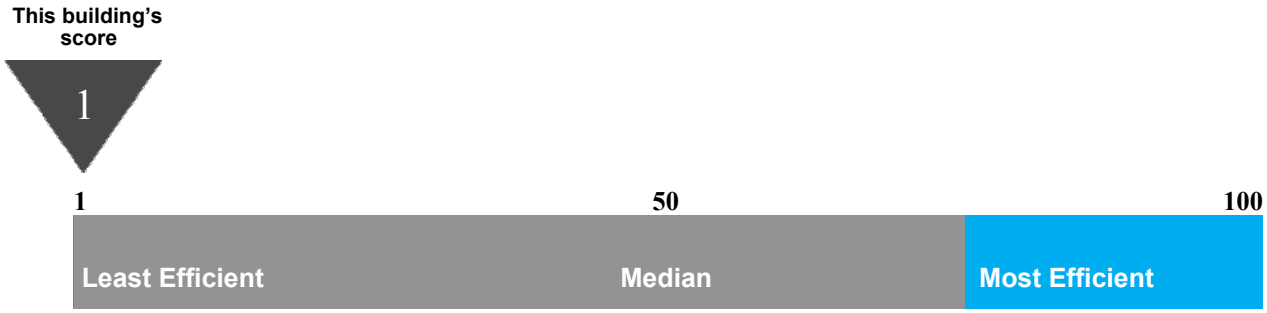
Statement of Energy Performance

2011

P.S. #17
600 Bergen Ave.
Jersey City, NJ 07305

Portfolio Manager Building ID: 2899939

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 194 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending April 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/23/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
P.S. #16

Building ID: 2899918
For 12-month Period Ending: April 30, 2011[1]
Date SEP becomes ineligible: N/A

Date SEP Generated: April 23, 2012

Facility
P.S. #16
96 Sussex St.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 1918
Gross Floor Area (ft²): 61,684

Energy Performance Rating[2] (1-100) 32

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	1,243,193
Natural Gas (kBtu)[4]	3,293,734
Total Energy (kBtu)	4,536,927

Energy Intensity[4]

Site (kBtu/ft²/yr)	74
Source (kBtu/ft²/yr)	123

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	351

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	63
National Median Source EUI	105
% Difference from National Median Source EUI	18%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
1. Application for the ENERGY STAR must be submitted to EPA within 4 months of the Period Ending date. Award of the ENERGY STAR is not final until approval is received from EPA.
2. The EPA Energy Performance Rating is based on total source energy. A rating of 75 is the minimum to be eligible for the ENERGY STAR.
3. Values represent energy consumption, annualized to a 12-month period.
4. Values represent energy intensity, annualized to a 12-month period.
5. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

The government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, Licensed Professional facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S., EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460.

ENERGY STAR® Data Checklist for Commercial Buildings

In order for a building to qualify for the ENERGY STAR, a Professional Engineer (PE) or a Registered Architect (RA) must validate the accuracy of the data underlying the building's energy performance rating. This checklist is designed to provide an at-a-glance summary of a property's physical and operating characteristics, as well as its total energy consumption, to assist the PE or RA in double-checking the information that the building owner or operator has entered into Portfolio Manager.

Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	P.S. #16	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	96 Sussex St., Jersey City, NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
PS #16 (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	61,684 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	112	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	No	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity		
Meter: Electric 65-354-903-00 (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
03/07/2011	04/06/2011	24,360.00
02/07/2011	03/06/2011	25,800.00
01/07/2011	02/06/2011	23,370.00
12/07/2010	01/06/2011	23,070.00
11/07/2010	12/06/2010	46,800.00
10/07/2010	11/06/2010	24,090.00
09/07/2010	10/06/2010	23,910.00
08/07/2010	09/06/2010	12,690.00
07/07/2010	08/06/2010	15,240.00
06/07/2010	07/06/2010	23,490.00
05/07/2010	06/06/2010	23,205.00
Electric 65-354-903-00 Consumption (kWh (thousand Watt-hours))		**266,025.00**
Electric 65-354-903-00 Consumption (kBtu (thousand Btu))		**907,677.30**
Meter: Electric 66-873-417-07 (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
03/07/2011	04/06/2011	2,740.00
02/07/2011	03/06/2011	2,740.00
01/07/2011	02/06/2011	2,740.00
12/07/2010	01/06/2011	2,740.00
11/07/2010	12/06/2010	2,740.00
10/07/2010	11/06/2010	2,740.00
09/07/2010	10/06/2010	2,740.00
08/07/2010	09/06/2010	2,740.00
07/07/2010	08/06/2010	2,740.00
06/07/2010	07/06/2010	2,740.00
05/07/2010	06/06/2010	2,740.00
Electric 66-873-417-07 Consumption (kWh (thousand Watt-hours))		**30,140.00**
Electric 66-873-417-07 Consumption (kBtu (thousand Btu))		**102,837.68**

Meter: Electric 66-454-022-01 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/07/2011	04/06/2011	3,188.00
02/07/2011	03/06/2011	3,188.00
01/07/2011	02/06/2011	3,188.00
12/07/2010	01/06/2011	3,188.00
11/07/2010	12/06/2010	3,188.00
10/07/2010	11/06/2010	3,188.00
09/07/2010	10/06/2010	3,188.00
08/07/2010	09/06/2010	3,188.00
07/07/2010	08/06/2010	3,188.00
06/07/2010	07/06/2010	3,188.00
05/07/2010	06/06/2010	3,188.00
Electric 66-454-022-01 Consumption (kWh (thousand Watt-hours))		**35,068.00**
Electric 66-454-022-01 Consumption (kBtu (thousand Btu))		**119,652.02**

Meter: South Jersey Electric (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/07/2011	04/06/2011	343.90
02/07/2011	03/06/2011	343.90
01/07/2011	02/06/2011	343.90
12/07/2010	01/06/2011	343.90
11/07/2010	12/06/2010	343.90
10/07/2010	11/06/2010	343.90
09/07/2010	10/06/2010	343.90
08/07/2010	09/06/2010	343.90
07/07/2010	08/06/2010	343.90
06/07/2010	07/06/2010	343.90
05/07/2010	06/06/2010	343.90
South Jersey Electric Consumption (kWh (thousand Watt-hours))		**3,782.90**
South Jersey Electric Consumption (kBtu (thousand Btu))		**12,907.25**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**1,143,074.25**
Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?		☐

Fuel Type: Natural Gas

Meter: Natural Gas 65-354-903-00 (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
03/07/2011	04/06/2011	3,252.60
02/07/2011	03/06/2011	5,229.00
01/07/2011	02/06/2011	7,110.60
12/07/2010	01/06/2011	4,621.70

11/07/2010	12/06/2010	6,915.90
10/07/2010	11/06/2010	1,198.20
09/07/2010	10/06/2010	306.30
08/07/2010	09/06/2010	94.40
07/07/2010	08/06/2010	162.90
06/07/2010	07/06/2010	172.40
05/07/2010	06/06/2010	172.40
Natural Gas 65-354-903-00 Consumption (therms)		**29,236.40**
Natural Gas 65-354-903-00 Consumption (kBtu (thousand Btu))		**2,923,640.00**
Meter: Natural Gas 491647 (therms) **Space(s):** Entire Facility		
Start Date	**End Date**	**Energy Use (therms)**
03/07/2011	04/06/2011	181.24
02/07/2011	03/06/2011	181.24
01/07/2011	02/06/2011	181.24
12/07/2010	01/06/2011	181.24
11/07/2010	12/06/2010	181.24
10/07/2010	11/06/2010	181.24
09/07/2010	10/06/2010	181.24
08/07/2010	09/06/2010	181.24
07/07/2010	08/06/2010	181.24
06/07/2010	07/06/2010	181.24
05/07/2010	06/06/2010	181.24
Natural Gas 491647 Consumption (therms)		**1,993.64**
Natural Gas 491647 Consumption (kBtu (thousand Btu))		**199,364.00**
Total Natural Gas Consumption (kBtu (thousand Btu))		**3,123,004.00**
Is this the total Natural Gas consumption at this building including all Natural Gas meters?		☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
P.S. #16
96 Sussex St.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

P.S. #16	
Gross Floor Area Excluding Parking: (ft^2)	61,684
Year Built	1918
For 12-month Evaluation Period Ending Date:	April 30, 2011

Facility Space Use Summary

PS #16	
Space Type	K-12 School
Gross Floor Area (ft^2)	61,684
Open Weekends?	Yes
Number of PCs	112
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months °	N/A
High School?	No
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 04/30/2011)	**Baseline** (Ending Date 04/30/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	32	32	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	74	74	49	N/A	63
Source ($kBtu/ft^2$)	123	123	82	N/A	105
Energy Cost					
$/year	N/A	N/A	N/A	N/A	N/A
$/$ft^2$/year	N/A	N/A	N/A	N/A	N/A
Greenhouse Gas Emissions					
$MtCO_2e$/year	351	351	234	N/A	299
$kgCO_2e/ft^2$/year	6	6	4	N/A	5

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

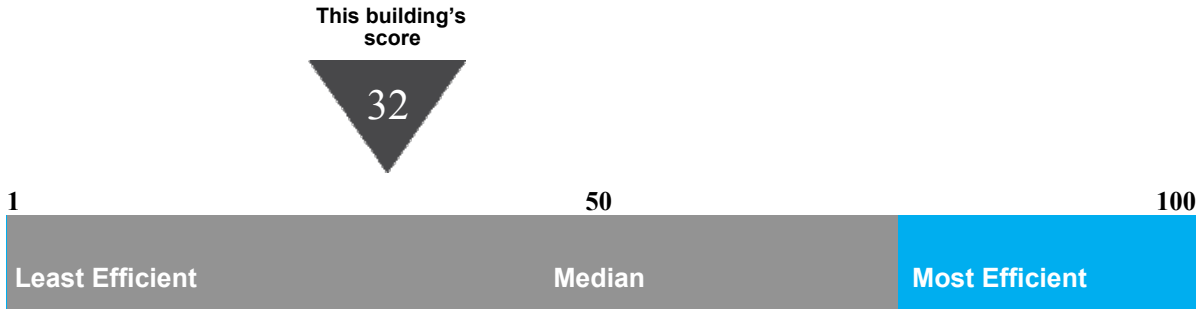
Statement of Energy Performance

2011

P.S. #16
96 Sussex St.
Jersey City, NJ 07305

Portfolio Manager Building ID: 2899918

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 123 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending April 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/23/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
P.S. #15

Building ID: 2899934
For 12-month Period Ending: April 30, 2011[1]
Date SEP becomes ineligible: N/A

Date SEP Generated: April 23, 2012

Facility
P.S. #15
135 Stegman St.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 1971
Gross Floor Area (ft²): 179,590

Energy Performance Rating[2] (1-100) 1

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	5,284,546
Natural Gas (kBtu)[4]	13,247,248
Total Energy (kBtu)	18,531,794

Energy Intensity[4]

Site (kBtu/ft²/yr)	103
Source (kBtu/ft²/yr)	176

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	1,453

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	40
National Median Source EUI	69
% Difference from National Median Source EUI	156%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
1. Application for the ENERGY STAR must be submitted to EPA within 4 months of the Period Ending date. Award of the ENERGY STAR is not final until approval is received from EPA.
2. The EPA Energy Performance Rating is based on total source energy. A rating of 75 is the minimum to be eligible for the ENERGY STAR.
3. Values represent energy consumption, annualized to a 12-month period.
4. Values represent energy intensity, annualized to a 12-month period.
5. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

The government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, Licensed Professional facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S., EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460.

ENERGY STAR® Data Checklist for Commercial Buildings

In order for a building to qualify for the ENERGY STAR, a Professional Engineer (PE) or a Registered Architect (RA) must validate the accuracy of the data underlying the building's energy performance rating. This checklist is designed to provide an at-a-glance summary of a property's physical and operating characteristics, as well as its total energy consumption, to assist the PE or RA in double-checking the information that the building owner or operator has entered into Portfolio Manager.

Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	P.S. #15	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	135 Stegman St., Jersey City, NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
PS #15 (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	179,590 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	10	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	No	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity

Meter: Electric 42-005-393-06 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/20/2011	04/19/2011	119,292.00
02/20/2011	03/19/2011	131,051.00
01/20/2011	02/19/2011	123,026.00
12/20/2010	01/19/2011	124,616.00
11/20/2010	12/19/2010	133,435.00
10/20/2010	11/19/2010	107,364.00
09/20/2010	10/19/2010	107,221.00
08/20/2010	09/19/2010	231,334.00
07/20/2010	08/19/2010	121,944.00
06/20/2010	07/19/2010	117,140.00
05/20/2010	06/19/2010	112,337.00
Electric 42-005-393-06 Consumption (kWh (thousand Watt-hours))		**1,428,760.00**
Electric 42-005-393-06 Consumption (kBtu (thousand Btu))		**4,874,929.12**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**4,874,929.12**
Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?		☐

Fuel Type: Natural Gas

Meter: Natural Gas (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
03/20/2011	04/19/2011	8,000.00
02/20/2011	03/19/2011	1,627.20
01/20/2011	02/19/2011	21,131.70
12/20/2010	01/19/2011	56,229.90
11/20/2010	12/19/2010	21,747.10
10/20/2010	11/19/2010	8,647.40
09/20/2010	10/19/2010	1,729.50
08/20/2010	09/19/2010	737.70
07/20/2010	08/19/2010	6.20
06/20/2010	07/19/2010	464.60
05/20/2010	06/19/2010	0.00

Natural Gas Consumption (therms)	**120,321.30**
Natural Gas Consumption (kBtu (thousand Btu))	**12,032,130.00**
Total Natural Gas Consumption (kBtu (thousand Btu))	**12,032,130.00**
Is this the total Natural Gas consumption at this building including all Natural Gas meters?	☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
P.S. #15
135 Stegman St.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

P.S. #15	
Gross Floor Area Excluding Parking: (ft^2)	179,590
Year Built	1971
For 12-month Evaluation Period Ending Date:	April 30, 2011

Facility Space Use Summary

PS #15	
Space Type	K-12 School
Gross Floor Area (ft^2)	179,590
Open Weekends?	Yes
Number of PCs	10
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months °	N/A
High School?	No
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 04/30/2011)	**Baseline** (Ending Date 04/30/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	1	1	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	103	103	31	N/A	40
Source ($kBtu/ft^2$)	176	176	54	N/A	69
Energy Cost					
$/year	N/A	N/A	N/A	N/A	N/A
$/$ft^2$/year	N/A	N/A	N/A	N/A	N/A
Greenhouse Gas Emissions					
$MtCO_2e$/year	1,453	1,453	443	N/A	567
$kgCO_2e/ft^2$/year	8	8	2	N/A	3

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

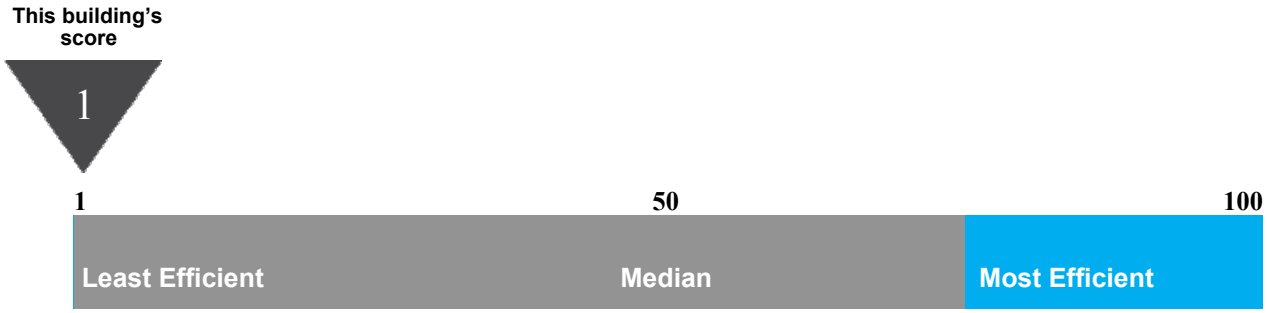
Statement of Energy Performance

2011

P.S. #15
135 Stegman St.
Jersey City, NJ 07305

Portfolio Manager Building ID: 2899934

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 176 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending April 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/23/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
P.S. #14

Building ID: 2899915
For 12-month Period Ending: May 31, 2011[1]
Date SEP becomes ineligible: N/A

Date SEP Generated: April 23, 2012

Facility
P.S. #14
153 Union St.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 1954
Gross Floor Area (ft²): 118,873

Energy Performance Rating[2] (1-100) 42

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	1,561,479
Fuel Oil (No. 2) (kBtu)	4,435,219
Natural Gas (kBtu)[4]	1,264,108
Total Energy (kBtu)	7,260,806

Energy Intensity[4]

Site (kBtu/ft²/yr)	61
Source (kBtu/ft²/yr)	93

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	615

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	57
National Median Source EUI	87
% Difference from National Median Source EUI	7%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
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4. Values represent energy intensity, annualized to a 12-month period.
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Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	P.S. #14	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	153 Union St., Jersey City, NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
PS #14 (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	118,873 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	142	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	No	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity

Meter: Electric 42-011-523-08 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
04/07/2011	05/06/2011	37,446.00
03/07/2011	04/06/2011	40,211.00
02/07/2011	03/06/2011	42,975.00
01/07/2011	02/06/2011	41,903.00
12/07/2010	01/06/2011	40,987.00
11/07/2010	12/06/2010	47,024.00
10/07/2010	11/06/2010	42,305.00
09/07/2010	10/06/2010	37,587.00
08/07/2010	09/06/2010	32,868.00
07/07/2010	08/06/2010	30,957.00
06/07/2010	07/06/2010	29,046.00
Electric 42-011-523-08 Consumption (kWh (thousand Watt-hours))		**423,309.00**
Electric 42-011-523-08 Consumption (kBtu (thousand Btu))		**1,444,330.31**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**1,444,330.31**
Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?		☐

Fuel Type: Natural Gas

Meter: Natural Gas 42-011-523-08 (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
04/07/2011	05/06/2011	1,203.22
03/07/2011	04/06/2011	1,215.30
02/07/2011	03/06/2011	1,215.30
01/07/2011	02/06/2011	2,092.40
12/07/2010	01/06/2011	2,378.80
11/07/2010	12/06/2010	2,543.40
10/07/2010	11/06/2010	1,274.80
09/07/2010	10/06/2010	6.20
08/07/2010	09/06/2010	6.20
07/07/2010	08/06/2010	5.20
06/07/2010	07/06/2010	5.20

Natural Gas 42-011-523-08 Consumption (therms)	**11,946.02**
Natural Gas 42-011-523-08 Consumption (kBtu (thousand Btu))	**1,194,602.00**
Total Natural Gas Consumption (kBtu (thousand Btu))	**1,194,602.00**
Is this the total Natural Gas consumption at this building including all Natural Gas meters?	☐

Fuel Type: Fuel Oil (No. 2)

Meter: Oil (Gallons)
Space(s): Entire Facility

Start Date	End Date	Energy Use (Gallons)
04/07/2011	05/06/2011	2,664.10
03/07/2011	04/06/2011	2,664.10
02/07/2011	03/06/2011	2,664.10
01/07/2011	02/06/2011	2,664.10
12/07/2010	01/06/2011	2,664.10
11/07/2010	12/06/2010	2,664.10
10/07/2010	11/06/2010	2,664.10
09/07/2010	10/06/2010	2,664.10
08/07/2010	09/06/2010	2,664.10
07/07/2010	08/06/2010	2,664.10
06/07/2010	07/06/2010	2,664.10

Oil Consumption (Gallons)	**29,305.10**
Oil Consumption (kBtu (thousand Btu))	**4,064,338.97**
Total Fuel Oil (No. 2) Consumption (kBtu (thousand Btu))	**4,064,338.97**
Is this the total Fuel Oil (No. 2) consumption at this building including all Fuel Oil (No. 2) meters?	☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
P.S. #14
153 Union St.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

P.S. #14	
Gross Floor Area Excluding Parking: (ft^2)	118,873
Year Built	1954
For 12-month Evaluation Period Ending Date:	May 31, 2011

Facility Space Use Summary

PS #14	
Space Type	K-12 School
Gross Floor Area (ft^2)	118,873
Open Weekends?	Yes
Number of PCs	142
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months °	N/A
High School?	No
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 05/31/2011)	**Baseline** (Ending Date 05/31/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	42	42	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	61	61	45	N/A	57
Source ($kBtu/ft^2$)	93	93	68	N/A	87
Energy Cost					
$/year	N/A	N/A	N/A	N/A	N/A
$/$ft^2$/year	N/A	N/A	N/A	N/A	N/A
Greenhouse Gas Emissions					
$MtCO_2e$/year	615	615	450	N/A	576
$kgCO_2e/ft^2$/year	5	5	4	N/A	5

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

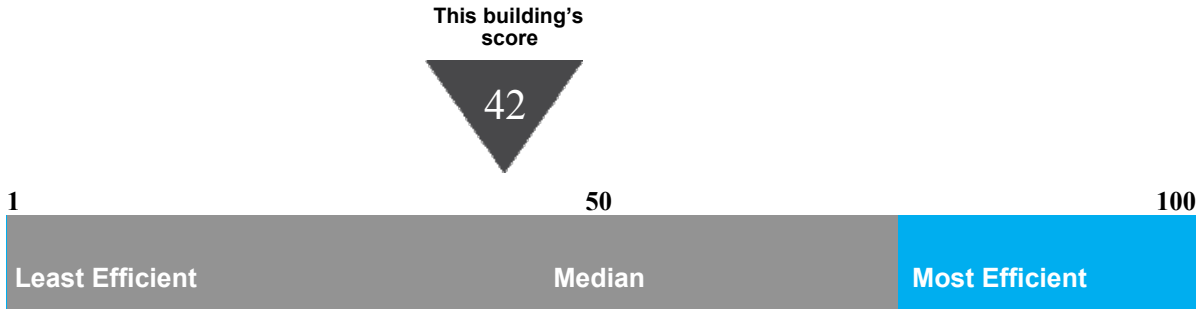
Statement of Energy Performance

2011

P.S. #14
153 Union St.
Jersey City, NJ 07305

Portfolio Manager Building ID: 2899915

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 93 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending May 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/23/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
P.S. #12

Building ID: 2899914
For 12-month Period Ending: April 30, 2011[1]
Date SEP becomes ineligible: N/A

Date SEP Generated: April 23, 2012

Facility
P.S. #12
91 Astor Place
Jersey City , NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 1954
Gross Floor Area (ft²): 86,375

Energy Performance Rating[2] (1-100) 90

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	1,171,982
Natural Gas (kBtu)[4]	1,203,655
Total Energy (kBtu)	2,375,637

Energy Intensity[4]

Site (kBtu/ft²/yr)	28
Source (kBtu/ft²/yr)	60

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	230

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	45
National Median Source EUI	97
% Difference from National Median Source EUI	-38%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
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ENERGY STAR® Data Checklist for Commercial Buildings

In order for a building to qualify for the ENERGY STAR, a Professional Engineer (PE) or a Registered Architect (RA) must validate the accuracy of the data underlying the building's energy performance rating. This checklist is designed to provide an at-a-glance summary of a property's physical and operating characteristics, as well as its total energy consumption, to assist the PE or RA in double-checking the information that the building owner or operator has entered into Portfolio Manager.

Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	P.S. #12	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	91 Astor Place, Jersey City , NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
PS #12 (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	86,375 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	146	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	No	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity

Meter: Electric- 65-354-853-07 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/05/2011	04/04/2011	30,975.00
02/05/2011	03/04/2011	33,900.00
01/05/2011	02/04/2011	30,150.00
12/05/2010	01/04/2011	31,575.00
11/05/2010	12/04/2010	26,813.00
10/05/2010	11/04/2010	26,813.00
09/05/2010	10/04/2010	30,000.00
08/05/2010	09/04/2010	25,688.00
07/05/2010	08/04/2010	21,375.00
06/05/2010	07/04/2010	29,400.00
05/05/2010	06/04/2010	28,725.00
Electric- 65-354-853-07 Consumption (kWh (thousand Watt-hours))		**315,414.00**
Electric- 65-354-853-07 Consumption (kBtu (thousand Btu))		**1,076,192.57**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**1,076,192.57**
Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?		☐

Fuel Type: Natural Gas

Meter: Gas- 65-354-853-07 (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
03/05/2011	04/04/2011	1,003.20
02/05/2011	03/04/2011	1,003.20
01/05/2011	02/04/2011	1,003.20
12/05/2010	01/04/2011	1,003.20
11/05/2010	12/04/2010	1,003.20
10/05/2010	11/04/2010	1,003.20
09/05/2010	10/04/2010	1,003.20
08/05/2010	09/04/2010	1,003.20
07/05/2010	08/04/2010	1,003.20
06/05/2010	07/04/2010	1,003.20
05/05/2010	06/04/2010	1,003.20

Gas- 65-354-853-07 Consumption (therms)	**11,035.20**
Gas- 65-354-853-07 Consumption (kBtu (thousand Btu))	**1,103,520.00**
Total Natural Gas Consumption (kBtu (thousand Btu))	**1,103,520.00**
Is this the total Natural Gas consumption at this building including all Natural Gas meters?	☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
P.S. #12
91 Astor Place
Jersey City , NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

P.S. #12	
Gross Floor Area Excluding Parking: (ft^2)	86,375
Year Built	1954
For 12-month Evaluation Period Ending Date:	April 30, 2011

Facility Space Use Summary

PS #12	
Space Type	K-12 School
Gross Floor Area (ft^2)	86,375
Open Weekends?	Yes
Number of PCs	146
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months °	N/A
High School?	No
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 04/30/2011)	**Baseline** (Ending Date 04/30/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	90	90	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	28	28	35	N/A	45
Source ($kBtu/ft^2$)	60	60	76	N/A	97
Energy Cost					
$/year	N/A	N/A	N/A	N/A	N/A
$/$ft^2$/year	N/A	N/A	N/A	N/A	N/A
Greenhouse Gas Emissions					
$MtCO_2e$/year	230	230	292	N/A	374
$kgCO_2e/ft^2$/year	3	3	4	N/A	5

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

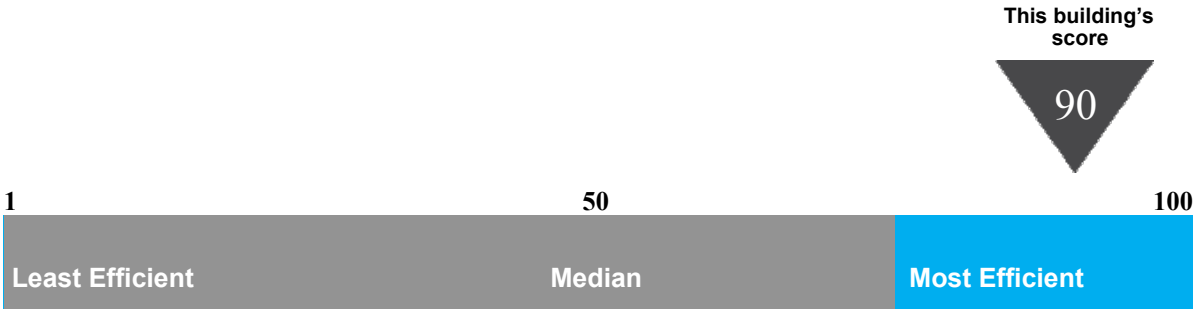
Statement of Energy Performance

2011

P.S. #12
91 Astor Place
Jersey City , NJ 07305

Portfolio Manager Building ID: 2899914

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 60 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending April 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/23/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
P.S. #11

Building ID: 2899924
For 12-month Period Ending: May 31, 2011[1]
Date SEP becomes ineligible: N/A

Date SEP Generated: April 23, 2012

Facility
P.S. #11
886 Bergen Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 1968
Gross Floor Area (ft²): 104,509

Energy Performance Rating[2] (1-100) 72

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	1,369,430
Fuel Oil (No. 2) (kBtu)	3,166,382
Natural Gas (kBtu)[4]	97,095
Total Energy (kBtu)	4,632,907

Energy Intensity[4]

Site (kBtu/ft²/yr)	44
Source (kBtu/ft²/yr)	75

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	432

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	55
National Median Source EUI	93
% Difference from National Median Source EUI	-19%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
1. Application for the ENERGY STAR must be submitted to EPA within 4 months of the Period Ending date. Award of the ENERGY STAR is not final until approval is received from EPA.
2. The EPA Energy Performance Rating is based on total source energy. A rating of 75 is the minimum to be eligible for the ENERGY STAR.
3. Values represent energy consumption, annualized to a 12-month period.
4. Values represent energy intensity, annualized to a 12-month period.
5. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

The government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, Licensed Professional facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S., EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460.

ENERGY STAR® Data Checklist for Commercial Buildings

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Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	P.S. #11	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	886 Bergen Ave., Jersey City, NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
P.S. #11 (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	104,509 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	170	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	No	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity

Meter: Electric 65-354-853-07 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
04/04/2011	05/03/2011	28,050.00
03/04/2011	04/03/2011	30,975.00
02/04/2011	03/03/2011	33,900.00
01/04/2011	02/03/2011	30,150.00
12/04/2010	01/03/2011	31,575.00
11/04/2010	12/03/2010	55,500.00
10/04/2010	11/03/2010	55,500.00
09/04/2010	10/03/2010	30,000.00
08/04/2010	09/03/2010	25,688.00
07/04/2010	08/03/2010	21,375.00
06/04/2010	07/03/2010	29,400.00
Electric 65-354-853-07 Consumption (kWh (thousand Watt-hours))		**372,113.00**
Electric 65-354-853-07 Consumption (kBtu (thousand Btu))		**1,269,649.56**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**1,269,649.56**
Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?		☐

Fuel Type: Natural Gas

Meter: Natural Gas 65-354-853-07 (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
04/04/2011	05/03/2011	80.90
03/04/2011	04/03/2011	80.90
02/04/2011	03/03/2011	80.90
01/04/2011	02/03/2011	80.90
12/04/2010	01/03/2011	80.90
11/04/2010	12/03/2010	80.90
10/04/2010	11/03/2010	80.90
09/04/2010	10/03/2010	80.90
08/04/2010	09/03/2010	80.90
07/04/2010	08/03/2010	80.90
06/04/2010	07/03/2010	80.90

Natural Gas 65-354-853-07 Consumption (therms)	**889.90**
Natural Gas 65-354-853-07 Consumption (kBtu (thousand Btu))	**88,990.00**
Total Natural Gas Consumption (kBtu (thousand Btu))	**88,990.00**
Is this the total Natural Gas consumption at this building including all Natural Gas meters?	☐

Fuel Type: Fuel Oil (No. 2)

Meter: Oil (Gallons)
Space(s): Entire Facility

Start Date	End Date	Energy Use (Gallons)
04/04/2011	05/03/2011	1,902.25
03/04/2011	04/03/2011	1,902.25
02/04/2011	03/03/2011	1,902.25
01/04/2011	02/03/2011	1,902.25
12/04/2010	01/03/2011	1,902.25
11/04/2010	12/03/2010	1,902.25
10/04/2010	11/03/2010	1,902.25
09/04/2010	10/03/2010	1,902.25
08/04/2010	09/03/2010	1,902.25
07/04/2010	08/03/2010	1,902.25
06/04/2010	07/03/2010	1,902.25

Oil Consumption (Gallons)	**20,924.75**
Oil Consumption (kBtu (thousand Btu))	**2,902,064.04**
Total Fuel Oil (No. 2) Consumption (kBtu (thousand Btu))	**2,902,064.04**
Is this the total Fuel Oil (No. 2) consumption at this building including all Fuel Oil (No. 2) meters?	☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
P.S. #11
886 Bergen Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

P.S. #11	
Gross Floor Area Excluding Parking: (ft^2)	104,509
Year Built	1968
For 12-month Evaluation Period Ending Date:	May 31, 2011

Facility Space Use Summary

P.S. #11	
Space Type	K-12 School
Gross Floor Area (ft^2)	104,509
Open Weekends?	Yes
Number of PCs	170
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months °	N/A
High School?	No
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 05/31/2011)	**Baseline** (Ending Date 05/31/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	72	72	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	44	44	43	N/A	55
Source ($kBtu/ft^2$)	75	75	73	N/A	93
Energy Cost					
$/year	N/A	N/A	N/A	N/A	N/A
$/$ft^2$/year	N/A	N/A	N/A	N/A	N/A
Greenhouse Gas Emissions					
$MtCO_2e$/year	432	432	418	N/A	535
$kgCO_2e/ft^2$/year	4	4	4	N/A	5

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

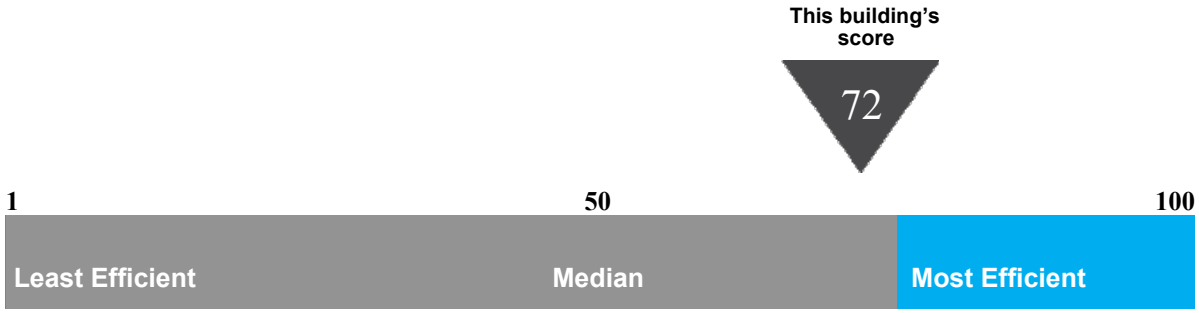
Statement of Energy Performance

2011

P.S. #11
886 Bergen Ave.
Jersey City, NJ 07305

Portfolio Manager Building ID: 2899924

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 75 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending May 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/23/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
P.S. #8

Building ID: 2899921
For 12-month Period Ending: April 30, 2011[1]
Date SEP becomes ineligible: N/A

Date SEP Generated: April 24, 2012

Facility
P.S. #8
96 Franklin St.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 1951
Gross Floor Area (ft²): 169,196

Energy Performance Rating[2] (1-100) 76

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	1,384,744
Fuel Oil (No. 2) (kBtu)	5,422,316
Natural Gas (kBtu)[4]	337,434
Total Energy (kBtu)	7,144,494

Energy Intensity[4]

Site (kBtu/ft²/yr)	42
Source (kBtu/ft²/yr)	62

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	613

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	55
National Median Source EUI	80
% Difference from National Median Source EUI	-23%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
1. Application for the ENERGY STAR must be submitted to EPA within 4 months of the Period Ending date. Award of the ENERGY STAR is not final until approval is received from EPA.
2. The EPA Energy Performance Rating is based on total source energy. A rating of 75 is the minimum to be eligible for the ENERGY STAR.
3. Values represent energy consumption, annualized to a 12-month period.
4. Values represent energy intensity, annualized to a 12-month period.
5. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

The government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, Licensed Professional facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S., EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460.

ENERGY STAR® Data Checklist for Commercial Buildings

In order for a building to qualify for the ENERGY STAR, a Professional Engineer (PE) or a Registered Architect (RA) must validate the accuracy of the data underlying the building's energy performance rating. This checklist is designed to provide an at-a-glance summary of a property's physical and operating characteristics, as well as its total energy consumption, to assist the PE or RA in double-checking the information that the building owner or operator has entered into Portfolio Manager.

Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	P.S. #8	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	96 Franklin St., Jersey City, NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
PS #8 (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	169,196 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	204	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	No	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity		
Meter: Electric 42-005-075-01 (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
03/07/2011	04/06/2011	27,833.30
02/07/2011	03/06/2011	27,833.30
01/07/2011	02/06/2011	27,833.30
12/07/2010	01/06/2011	27,833.30
11/07/2010	12/06/2010	27,833.30
10/07/2010	11/06/2010	27,833.30
09/07/2010	10/06/2010	27,833.30
08/07/2010	09/06/2010	27,833.30
07/07/2010	08/06/2010	27,833.30
06/07/2010	07/06/2010	27,833.30
05/07/2010	06/06/2010	27,833.30
Electric 42-005-075-01 Consumption (kWh (thousand Watt-hours))		**306,166.30**
Electric 42-005-075-01 Consumption (kBtu (thousand Btu))		**1,044,639.42**
Meter: Electric 67-245-235-08 (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
03/07/2011	04/06/2011	5,995.00
02/07/2011	03/06/2011	5,995.00
01/07/2011	02/06/2011	5,995.00
12/07/2010	01/06/2011	5,995.00
11/07/2010	12/06/2010	5,995.00
10/07/2010	11/06/2010	5,995.00
09/07/2010	10/06/2010	5,995.00
08/07/2010	09/06/2010	5,995.00
07/07/2010	08/06/2010	5,995.00
06/07/2010	07/06/2010	5,995.00
05/07/2010	06/06/2010	5,995.00
Electric 67-245-235-08 Consumption (kWh (thousand Watt-hours))		**65,945.00**
Electric 67-245-235-08 Consumption (kBtu (thousand Btu))		**225,004.34**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**1,269,643.76**

Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?	☐

Fuel Type: Natural Gas

Meter: Natural Gas 67-245-235-08 (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
03/07/2011	04/06/2011	250.70
02/07/2011	03/06/2011	250.70
01/07/2011	02/06/2011	250.70
12/07/2010	01/06/2011	250.70
11/07/2010	12/06/2010	250.70
10/07/2010	11/06/2010	250.70
09/07/2010	10/06/2010	250.70
08/07/2010	09/06/2010	250.70
07/07/2010	08/06/2010	250.70
06/07/2010	07/06/2010	250.70
05/07/2010	06/06/2010	250.70
Natural Gas 67-245-235-08 Consumption (therms)		**2,757.70**
Natural Gas 67-245-235-08 Consumption (kBtu (thousand Btu))		**275,770.00**

Meter: Hess Natural Gas (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
03/07/2011	04/06/2011	30.56
02/07/2011	03/06/2011	30.56
01/07/2011	02/06/2011	30.56
12/07/2010	01/06/2011	30.56
11/07/2010	12/06/2010	30.56
10/07/2010	11/06/2010	30.56
09/07/2010	10/06/2010	30.56
08/07/2010	09/06/2010	30.56
07/07/2010	08/06/2010	30.56
06/07/2010	07/06/2010	30.56
05/07/2010	06/06/2010	30.56
Hess Natural Gas Consumption (therms)		**336.16**
Hess Natural Gas Consumption (kBtu (thousand Btu))		**33,616.00**
Total Natural Gas Consumption (kBtu (thousand Btu))		**309,386.00**
Is this the total Natural Gas consumption at this building including all Natural Gas meters?		☐

Fuel Type: Fuel Oil (No. 2)

Meter: Oil (Gallons)
Space(s): Entire Facility

Start Date	End Date	Energy Use (Gallons)
03/07/2011	04/06/2011	3,258.80
02/07/2011	03/06/2011	3,258.80

01/07/2011	02/06/2011	3,258.80
12/07/2010	01/06/2011	3,258.80
11/07/2010	12/06/2010	3,258.80
10/07/2010	11/06/2010	3,258.80
09/07/2010	10/06/2010	3,258.80
08/07/2010	09/06/2010	3,258.80
07/07/2010	08/06/2010	3,258.80
06/07/2010	07/06/2010	3,258.80
05/07/2010	06/06/2010	3,258.80
Oil Consumption (Gallons)		**35,846.80**
Oil Consumption (kBtu (thousand Btu))		**4,971,610.62**
Total Fuel Oil (No. 2) Consumption (kBtu (thousand Btu))		**4,971,610.62**
Is this the total Fuel Oil (No. 2) consumption at this building including all Fuel Oil (No. 2) meters?		☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
P.S. #8
96 Franklin St.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

P.S. #8	
Gross Floor Area Excluding Parking: (ft^2)	169,196
Year Built	1951
For 12-month Evaluation Period Ending Date:	April 30, 2011

Facility Space Use Summary

PS #8	
Space Type	K-12 School
Gross Floor Area (ft^2)	169,196
Open Weekends?	Yes
Number of PCs	204
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months °	N/A
High School?	No
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 04/30/2011)	**Baseline** (Ending Date 04/30/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	76	76	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	42	42	43	N/A	55
Source ($kBtu/ft^2$)	62	62	63	N/A	80
Energy Cost					
$/year	N/A	N/A	N/A	N/A	N/A
$/$ft^2$/year	N/A	N/A	N/A	N/A	N/A
Greenhouse Gas Emissions					
$MtCO_2e$/year	613	613	623	N/A	796
$kgCO_2e/ft^2$/year	4	4	4	N/A	5

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

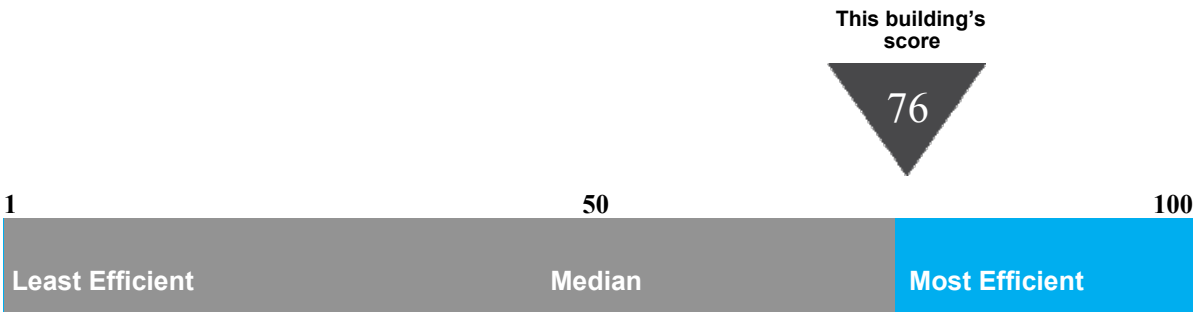
Statement of Energy Performance

2011

P.S. #8
96 Franklin St.
Jersey City, NJ 07305

Portfolio Manager Building ID: 2899921

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 62 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending April 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/24/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
P.S. #6

Building ID: 2899908
For 12-month Period Ending: April 30, 2011[1]
Date SEP becomes ineligible: N/A

Date SEP Generated: April 24, 2012

Facility
P.S. #6
100 St. Paul's Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 1919
Gross Floor Area (ft²): 148,882

Energy Performance Rating[2] (1-100) 63

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	3,177,585
Fuel Oil (No. 2) (kBtu)	1,675,763
Natural Gas - (kBtu)[4]	0
Total Energy (kBtu)	4,853,348

Energy Intensity[4]

Site (kBtu/ft²/yr)	33
Source (kBtu/ft²/yr)	83

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	573

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	37
National Median Source EUI	93
% Difference from National Median Source EUI	-11%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
1. Application for the ENERGY STAR must be submitted to EPA within 4 months of the Period Ending date. Award of the ENERGY STAR is not final until approval is received from EPA.
2. The EPA Energy Performance Rating is based on total source energy. A rating of 75 is the minimum to be eligible for the ENERGY STAR.
3. Values represent energy consumption, annualized to a 12-month period.
4. Values represent energy intensity, annualized to a 12-month period.
5. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

The government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, Licensed Professional facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S., EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460.

ENERGY STAR® Data Checklist for Commercial Buildings

In order for a building to qualify for the ENERGY STAR, a Professional Engineer (PE) or a Registered Architect (RA) must validate the accuracy of the data underlying the building's energy performance rating. This checklist is designed to provide an at-a-glance summary of a property's physical and operating characteristics, as well as its total energy consumption, to assist the PE or RA in double-checking the information that the building owner or operator has entered into Portfolio Manager.

Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	P.S. #6	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	100 St. Paul's Ave., Jersey City, NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
PS #6 (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	148,882 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	350	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	No	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity		
Meter: Electric 67-291-530-08 (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
03/10/2011	04/09/2011	1,524.00
02/10/2011	03/09/2011	2,322.00
01/10/2011	02/09/2011	4,566.00
12/10/2010	01/09/2011	1,404.00
11/10/2010	12/09/2010	1,734.00
10/10/2010	11/09/2010	654.00
09/10/2010	10/09/2010	558.00
08/10/2010	09/09/2010	366.00
07/10/2010	08/09/2010	540.00
06/10/2010	07/09/2010	396.00
05/10/2010	06/09/2010	561.00
Electric 67-291-530-08 Consumption (kWh (thousand Watt-hours))		**14,625.00**
Electric 67-291-530-08 Consumption (kBtu (thousand Btu))		**49,900.50**
Meter: Electric 67-291-547-05 (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
03/10/2011	04/09/2011	2,256.00
02/10/2011	03/09/2011	3,426.00
01/10/2011	02/09/2011	8,124.00
12/10/2010	01/09/2011	1,734.00
11/10/2010	12/09/2010	3,564.00
10/10/2010	11/09/2010	1,650.00
09/10/2010	10/09/2010	1,053.00
08/10/2010	09/09/2010	456.00
07/10/2010	08/09/2010	456.00
06/10/2010	07/09/2010	432.00
05/10/2010	06/09/2010	759.00
Electric 67-291-547-05 Consumption (kWh (thousand Watt-hours))		**23,910.00**
Electric 67-291-547-05 Consumption (kBtu (thousand Btu))		**81,580.92**

Meter: Electric 65-673-397-05 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/10/2011	04/09/2011	8,966.67
02/10/2011	03/09/2011	8,966.67
01/10/2011	02/09/2011	8,966.67
12/10/2010	01/09/2011	8,966.67
11/10/2010	12/09/2010	8,966.67
10/10/2010	11/09/2010	8,966.67
09/10/2010	10/09/2010	8,966.67
08/10/2010	09/09/2010	8,966.67
07/10/2010	08/09/2010	8,966.67
06/10/2010	07/09/2010	8,966.67
05/10/2010	06/09/2010	8,966.67
Electric 65-673-397-05 Consumption (kWh (thousand Watt-hours))		**98,633.37**
Electric 65-673-397-05 Consumption (kBtu (thousand Btu))		**336,537.06**

Meter: Electric 42-008-955-01 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/10/2011	04/09/2011	65,266.67
02/10/2011	03/09/2011	65,266.67
01/10/2011	02/09/2011	65,266.67
12/10/2010	01/09/2011	65,266.67
11/10/2010	12/09/2010	65,266.67
10/10/2010	11/09/2010	65,266.67
09/10/2010	10/09/2010	65,266.67
08/10/2010	09/09/2010	65,266.67
07/10/2010	08/09/2010	65,266.67
06/10/2010	07/09/2010	65,266.67
05/10/2010	06/09/2010	65,266.67
Electric 42-008-955-01 Consumption (kWh (thousand Watt-hours))		**717,933.37**
Electric 42-008-955-01 Consumption (kBtu (thousand Btu))		**2,449,588.66**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**2,917,607.14**
Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?		☐

Fuel Type: Fuel Oil (No. 2)

Meter: Oil (Gallons)
Space(s): Entire Facility

Start Date	End Date	Energy Use (Gallons)
03/10/2011	04/09/2011	1,007.25
02/10/2011	03/09/2011	1,007.25
01/10/2011	02/09/2011	1,007.25
12/10/2010	01/09/2011	1,007.25

11/10/2010	12/09/2010	1,007.25
10/10/2010	11/09/2010	1,007.25
09/10/2010	10/09/2010	1,007.25
08/10/2010	09/09/2010	1,007.25
07/10/2010	08/09/2010	1,007.25
06/10/2010	07/09/2010	1,007.25
05/10/2010	06/09/2010	1,007.25
Oil Consumption (Gallons)		**11,079.75**
Oil Consumption (kBtu (thousand Btu))		**1,536,656.07**
Total Fuel Oil (No. 2) Consumption (kBtu (thousand Btu))		**1,536,656.07**
Is this the total Fuel Oil (No. 2) consumption at this building including all Fuel Oil (No. 2) meters?		☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
P.S. #6
100 St. Paul's Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

P.S. #6	
Gross Floor Area Excluding Parking: (ft^2)	148,882
Year Built	1919
For 12-month Evaluation Period Ending Date:	April 30, 2011

Facility Space Use Summary

PS #6	
Space Type	K-12 School
Gross Floor Area (ft^2)	148,882
Open Weekends?	Yes
Number of PCs	350
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months °	N/A
High School?	No
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 04/30/2011)	**Baseline** (Ending Date 04/30/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	63	63	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	33	33	29	N/A	37
Source ($kBtu/ft^2$)	83	83	73	N/A	93
Energy Cost					
$/year	N/A	N/A	N/A	N/A	N/A
$/$ft^2$/year	N/A	N/A	N/A	N/A	N/A
Greenhouse Gas Emissions					
$MtCO_2e$/year	573	573	506	N/A	647
$kgCO_2e/ft^2$/year	4	4	4	N/A	5

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

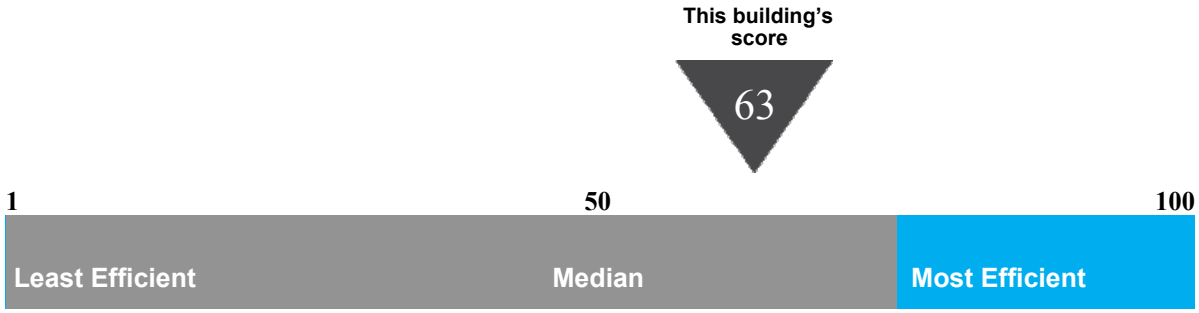
Statement of Energy Performance

2011

P.S. #6
100 St. Paul's Ave.
Jersey City, NJ 07305

Portfolio Manager Building ID: 2899908

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 83 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending April 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/24/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
P.S. #5

Building ID: 2899895
For 12-month Period Ending: April 30, 2011[1]
Date SEP becomes ineligible: N/A

Date SEP Generated: April 24, 2012

Facility
P.S. #5
182 Merseles St.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 1914
Gross Floor Area (ft²): 148,409

Energy Performance Rating[2] (1-100) 82

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	2,456,474
Natural Gas (kBtu)[4]	531,956
Total Energy (kBtu)	2,988,430

Energy Intensity[4]

Site (kBtu/ft²/yr)	20
Source (kBtu/ft²/yr)	59

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	376

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	28
National Median Source EUI	83
% Difference from National Median Source EUI	-29%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
1. Application for the ENERGY STAR must be submitted to EPA within 4 months of the Period Ending date. Award of the ENERGY STAR is not final until approval is received from EPA.
2. The EPA Energy Performance Rating is based on total source energy. A rating of 75 is the minimum to be eligible for the ENERGY STAR.
3. Values represent energy consumption, annualized to a 12-month period.
4. Values represent energy intensity, annualized to a 12-month period.
5. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

The government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, Licensed Professional facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S., EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460.

ENERGY STAR® Data Checklist for Commercial Buildings

In order for a building to qualify for the ENERGY STAR, a Professional Engineer (PE) or a Registered Architect (RA) must validate the accuracy of the data underlying the building's energy performance rating. This checklist is designed to provide an at-a-glance summary of a property's physical and operating characteristics, as well as its total energy consumption, to assist the PE or RA in double-checking the information that the building owner or operator has entered into Portfolio Manager.

Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	P.S. #5	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	182 Merseles St., Jersey City, NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
PS #5 (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	148,409 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	179	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	No	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity		
Meter: Electric 42-000-988-06 (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
03/07/2011	04/06/2011	24,656.00
02/07/2011	03/06/2011	25,624.00
01/07/2011	02/06/2011	23,340.00
12/07/2010	01/06/2011	24,400.00
11/07/2010	12/06/2010	22,526.00
10/07/2010	11/06/2010	22,170.00
09/07/2010	10/06/2010	28,521.00
08/07/2010	09/06/2010	18,502.00
07/07/2010	08/06/2010	18,720.00
06/07/2010	07/06/2010	25,237.00
05/07/2010	06/06/2010	25,237.00
Electric 42-000-988-06 Consumption (kWh (thousand Watt-hours))		**258,933.00**
Electric 42-000-988-06 Consumption (kBtu (thousand Btu))		**883,479.40**
Meter: Hess Electric (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
03/07/2011	04/06/2011	36,460.50
02/07/2011	03/06/2011	36,460.50
01/07/2011	02/06/2011	36,460.50
12/07/2010	01/06/2011	36,460.50
11/07/2010	12/06/2010	36,460.50
10/07/2010	11/06/2010	36,460.50
09/07/2010	10/06/2010	36,460.50
08/07/2010	09/06/2010	36,460.50
07/07/2010	08/06/2010	36,460.50
06/07/2010	07/06/2010	36,460.50
05/07/2010	06/06/2010	36,460.50
Hess Electric Consumption (kWh (thousand Watt-hours))		**401,065.50**
Hess Electric Consumption (kBtu (thousand Btu))		**1,368,435.49**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**2,251,914.88**

Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?	☐

Fuel Type: Natural Gas

Meter: Hess Natural Gas (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
03/07/2011	04/06/2011	443.40
02/07/2011	03/06/2011	443.40
01/07/2011	02/06/2011	443.40
12/07/2010	01/06/2011	443.40
11/07/2010	12/06/2010	443.40
10/07/2010	11/06/2010	443.40
09/07/2010	10/06/2010	443.40
08/07/2010	09/06/2010	443.40
07/07/2010	08/06/2010	443.40
06/07/2010	07/06/2010	443.40
05/07/2010	06/06/2010	443.40
Hess Natural Gas Consumption (therms)		**4,877.40**
Hess Natural Gas Consumption (kBtu (thousand Btu))		**487,740.00**
Total Natural Gas Consumption (kBtu (thousand Btu))		**487,740.00**
Is this the total Natural Gas consumption at this building including all Natural Gas meters?		☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
P.S. #5
182 Merseles St.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

P.S. #5	
Gross Floor Area Excluding Parking: (ft^2)	148,409
Year Built	1914
For 12-month Evaluation Period Ending Date:	April 30, 2011

Facility Space Use Summary

PS #5	
Space Type	K-12 School
Gross Floor Area (ft^2)	148,409
Open Weekends?	Yes
Number of PCs	179
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months °	N/A
High School?	No
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 04/30/2011)	**Baseline** (Ending Date 04/30/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	82	82	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	20	20	22	N/A	28
Source ($kBtu/ft^2$)	59	59	65	N/A	83
Energy Cost					
$/year	N/A	N/A	N/A	N/A	N/A
$/$ft^2$/year	N/A	N/A	N/A	N/A	N/A
Greenhouse Gas Emissions					
$MtCO_2e$/year	376	376	412	N/A	527
$kgCO_2e/ft^2$/year	3	3	3	N/A	4

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

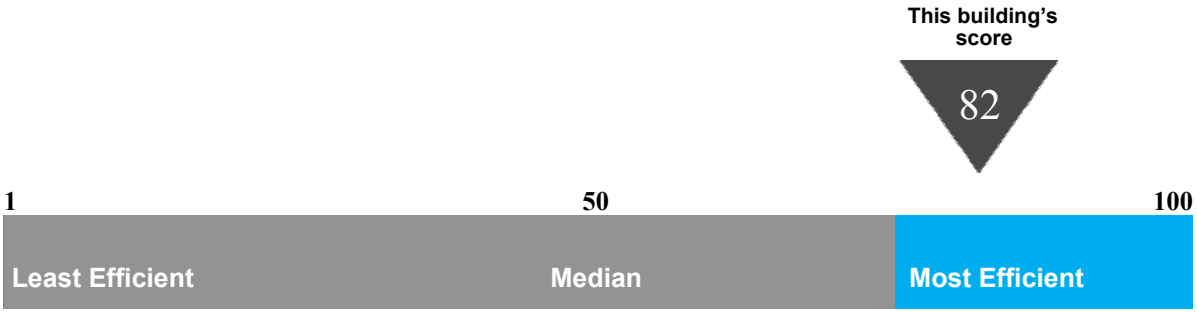
Statement of Energy Performance

2011

P.S. #5
182 Merseles St.
Jersey City, NJ 07305

Portfolio Manager Building ID: 2899895

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 59 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending April 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/24/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
P.S. #3

Building ID: 2899901
For 12-month Period Ending: April 30, 2011[1]
Date SEP becomes ineligible: N/A

Date SEP Generated: April 24, 2012

Facility
P.S. #3
111 Bright St.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 1909
Gross Floor Area (ft²): 117,939

Energy Performance Rating[2] (1-100) 1

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	8,643,802
Fuel Oil (No. 2) (kBtu)	1,660,933
Natural Gas (kBtu)[4]	5,382,166
Total Energy (kBtu)	15,686,901

Energy Intensity[4]

Site (kBtu/ft²/yr)	133
Source (kBtu/ft²/yr)	307

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	1,633

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	43
National Median Source EUI	100
% Difference from National Median Source EUI	208%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
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4. Values represent energy intensity, annualized to a 12-month period.
5. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

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Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
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CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	P.S. #3	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	111 Bright St., Jersey City, NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
PS #3 (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	117,939 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	300	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	No	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity		
Meter: Electric 54-410-469-05 (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
03/04/2011	04/03/2011	14,910.00
02/04/2011	03/03/2011	16,260.00
01/04/2011	02/03/2011	15,390.00
12/04/2010	01/03/2011	13,425.00
11/04/2010	12/03/2010	27,585.00
10/04/2010	11/03/2010	14,970.00
09/04/2010	10/03/2010	14,100.00
08/04/2010	09/03/2010	7,050.00
07/04/2010	08/03/2010	7,830.00
06/04/2010	07/03/2010	18,450.00
05/04/2010	06/03/2010	16,005.00
Electric 54-410-469-05 Consumption (kWh (thousand Watt-hours))		**165,975.00**
Electric 54-410-469-05 Consumption (kBtu (thousand Btu))		**566,306.70**
Meter: Electric 42-004-212-08 (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
03/04/2011	04/03/2011	175,444.00
02/04/2011	03/03/2011	190,700.00
01/04/2011	02/03/2011	172,162.00
12/04/2010	01/03/2011	185,852.00
11/04/2010	12/03/2010	186,019.00
10/04/2010	11/03/2010	187,106.00
09/04/2010	10/03/2010	231,131.00
08/04/2010	09/03/2010	191,619.00
07/04/2010	08/03/2010	193,223.00
06/04/2010	07/03/2010	238,897.00
05/04/2010	06/03/2010	160,187.00
Electric 42-004-212-08 Consumption (kWh (thousand Watt-hours))		**2,112,340.00**
Electric 42-004-212-08 Consumption (kBtu (thousand Btu))		**7,207,304.08**

Meter: Electric 65-417-633-05 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/04/2011	04/03/2011	4,370.00
02/04/2011	03/03/2011	6,720.00
01/04/2011	02/03/2011	5,760.00
12/04/2010	01/03/2011	6,400.00
11/04/2010	12/03/2010	3,160.00
10/04/2010	11/03/2010	1,820.00
09/04/2010	10/03/2010	1,580.00
08/04/2010	09/03/2010	2,300.00
07/04/2010	08/03/2010	2,900.00
06/04/2010	07/03/2010	3,020.00
05/04/2010	06/03/2010	2,020.00
Electric 65-417-633-05 Consumption (kWh (thousand Watt-hours))		**40,050.00**
Electric 65-417-633-05 Consumption (kBtu (thousand Btu))		**136,650.60**

Meter: Electric 65-600-449-04 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/04/2011	04/03/2011	2,240.00
02/04/2011	03/03/2011	2,320.00
01/04/2011	02/03/2011	2,320.00
12/04/2010	01/03/2011	7,520.00
11/04/2010	12/03/2010	5,120.00
10/04/2010	11/03/2010	2,960.00
09/04/2010	10/03/2010	1,520.00
08/04/2010	09/03/2010	2,400.00
07/04/2010	08/03/2010	2,880.00
06/04/2010	07/03/2010	3,120.00
05/04/2010	06/03/2010	2,280.00
Electric 65-600-449-04 Consumption (kWh (thousand Watt-hours))		**34,680.00**
Electric 65-600-449-04 Consumption (kBtu (thousand Btu))		**118,328.16**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**8,028,589.54**
Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?		☐

Fuel Type: Natural Gas

Meter: Natural Gas 42-004-212-08 (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
03/04/2011	04/03/2011	7,021.00
02/04/2011	03/03/2011	9,849.80
01/04/2011	02/03/2011	10,852.60
12/04/2010	01/03/2011	10,852.60

11/04/2010	12/03/2010	4,623.50
10/04/2010	11/03/2010	1,615.50
09/04/2010	10/03/2010	223.60
08/04/2010	09/03/2010	76.60
07/04/2010	08/03/2010	111.70
06/04/2010	07/03/2010	187.40
05/04/2010	06/03/2010	4,192.10
Natural Gas 42-004-212-08 Consumption (therms)		**49,606.40**
Natural Gas 42-004-212-08 Consumption (kBtu (thousand Btu))		**4,960,640.00**
Total Natural Gas Consumption (kBtu (thousand Btu))		**4,960,640.00**
Is this the total Natural Gas consumption at this building including all Natural Gas meters?		☐

Fuel Type: Fuel Oil (No. 2)

Meter: Oil (Gallons)
Space(s): Entire Facility

Start Date	End Date	Energy Use (Gallons)
03/04/2011	04/03/2011	998.10
02/04/2011	03/03/2011	998.10
01/04/2011	02/03/2011	998.10
12/04/2010	01/03/2011	998.10
11/04/2010	12/03/2010	998.10
10/04/2010	11/03/2010	998.10
09/04/2010	10/03/2010	998.10
08/04/2010	09/03/2010	998.10
07/04/2010	08/03/2010	998.10
06/04/2010	07/03/2010	998.10
05/04/2010	06/03/2010	998.10
Oil Consumption (Gallons)		**10,979.10**
Oil Consumption (kBtu (thousand Btu))		**1,522,696.87**
Total Fuel Oil (No. 2) Consumption (kBtu (thousand Btu))		**1,522,696.87**
Is this the total Fuel Oil (No. 2) consumption at this building including all Fuel Oil (No. 2) meters?		☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
P.S. #3
111 Bright St.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

P.S. #3	
Gross Floor Area Excluding Parking: (ft^2)	117,939
Year Built	1909
For 12-month Evaluation Period Ending Date:	April 30, 2011

Facility Space Use Summary

PS #3	
Space Type	K-12 School
Gross Floor Area (ft^2)	117,939
Open Weekends?	Yes
Number of PCs	300
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months °	N/A
High School?	No
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 04/30/2011)	**Baseline** (Ending Date 04/30/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	1	1	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	133	133	34	N/A	43
Source ($kBtu/ft^2$)	307	307	78	N/A	100
Energy Cost					
$/year	N/A	N/A	N/A	N/A	N/A
$/$ft^2$/year	N/A	N/A	N/A	N/A	N/A
Greenhouse Gas Emissions					
$MtCO_2e$/year	1,633	1,633	414	N/A	530
$kgCO_2e/ft^2$/year	14	14	4	N/A	5

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

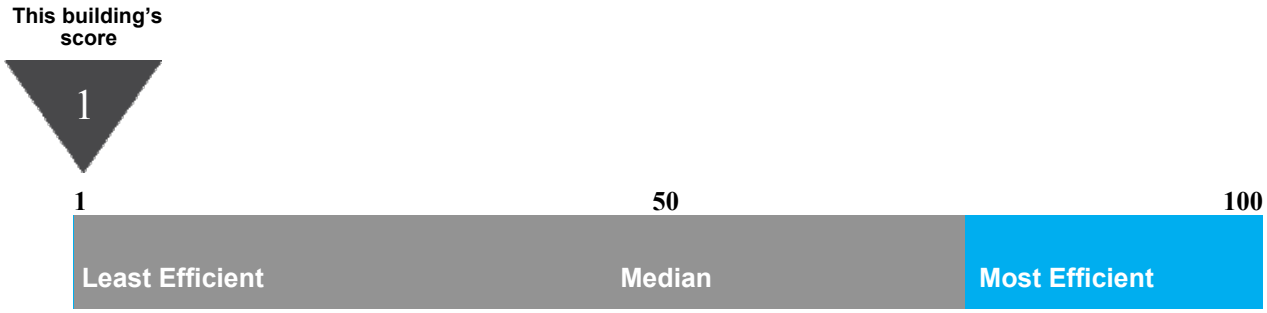
Statement of Energy Performance

2011

P.S. #3
111 Bright St.
Jersey City, NJ 07305

Portfolio Manager Building ID: 2899901

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 307 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending April 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/24/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
P.S. #1

Building ID: 2899890
For 12-month Period Ending: April 30, 2011[1]
Date SEP becomes ineligible: N/A

Date SEP Generated: April 23, 2012

Facility
P.S. #1
128 Duncan Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 1898
Gross Floor Area (ft²): 56,230

Energy Performance Rating[2] (1-100) 92

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	866,395
Natural Gas (kBtu)[4]	108,223
Total Energy (kBtu)	974,618

Energy Intensity[4]

Site (kBtu/ft²/yr)	17
Source (kBtu/ft²/yr)	53

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	128

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	30
National Median Source EUI	91
% Difference from National Median Source EUI	-41%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
1. Application for the ENERGY STAR must be submitted to EPA within 4 months of the Period Ending date. Award of the ENERGY STAR is not final until approval is received from EPA.
2. The EPA Energy Performance Rating is based on total source energy. A rating of 75 is the minimum to be eligible for the ENERGY STAR.
3. Values represent energy consumption, annualized to a 12-month period.
4. Values represent energy intensity, annualized to a 12-month period.
5. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

The government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, Licensed Professional facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S., EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460.

ENERGY STAR® Data Checklist for Commercial Buildings

In order for a building to qualify for the ENERGY STAR, a Professional Engineer (PE) or a Registered Architect (RA) must validate the accuracy of the data underlying the building's energy performance rating. This checklist is designed to provide an at-a-glance summary of a property's physical and operating characteristics, as well as its total energy consumption, to assist the PE or RA in double-checking the information that the building owner or operator has entered into Portfolio Manager.

Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	P.S. #1	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	128 Duncan Ave., Jersey City, NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
P.S. #1 (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	56,230 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	10	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	No	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity

Meter: Electric 67-547-028-18 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/05/2011	04/04/2011	21,163.75
02/05/2011	03/04/2011	21,163.75
01/05/2011	02/04/2011	21,163.75
12/05/2010	01/04/2011	21,163.75
11/05/2010	12/04/2010	21,163.75
10/05/2010	11/04/2010	21,163.75
09/05/2010	10/04/2010	21,163.75
08/05/2010	09/04/2010	21,163.75
07/05/2010	08/04/2010	21,163.75
06/05/2010	07/04/2010	21,163.75
05/05/2010	06/04/2010	21,163.75
Electric 67-547-028-18 Consumption (kWh (thousand Watt-hours))		**232,801.25**
Electric 67-547-028-18 Consumption (kBtu (thousand Btu))		**794,317.87**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**794,317.87**
Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?		☐

Fuel Type: Natural Gas

Meter: Natural Gas (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
03/05/2011	04/04/2011	90.20
02/05/2011	03/04/2011	90.20
01/05/2011	02/04/2011	90.20
12/05/2010	01/04/2011	90.20
11/05/2010	12/04/2010	90.20
10/05/2010	11/04/2010	90.20
09/05/2010	10/04/2010	90.20
08/05/2010	09/04/2010	90.20
07/05/2010	08/04/2010	90.20
06/05/2010	07/04/2010	90.20
05/05/2010	06/04/2010	90.20

Natural Gas Consumption (therms)	**992.20**
Natural Gas Consumption (kBtu (thousand Btu))	**99,220.00**
Total Natural Gas Consumption (kBtu (thousand Btu))	**99,220.00**
Is this the total Natural Gas consumption at this building including all Natural Gas meters?	☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
P.S. #1
128 Duncan Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

P.S. #1	
Gross Floor Area Excluding Parking: (ft^2)	56,230
Year Built	1898
For 12-month Evaluation Period Ending Date:	April 30, 2011

Facility Space Use Summary

P.S. #1	
Space Type	K-12 School
Gross Floor Area (ft^2)	56,230
Open Weekends?	Yes
Number of PCs	10
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months °	N/A
High School?	No
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 04/30/2011)	**Baseline** (Ending Date 04/30/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	92	92	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	17	17	23	N/A	30
Source ($kBtu/ft^2$)	53	53	71	N/A	91
Energy Cost					
$/year	N/A	N/A	N/A	N/A	N/A
$/$ft^2$/year	N/A	N/A	N/A	N/A	N/A
Greenhouse Gas Emissions					
$MtCO_2e$/year	128	128	171	N/A	219
$kgCO_2e/ft^2$/year	2	2	3	N/A	3

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

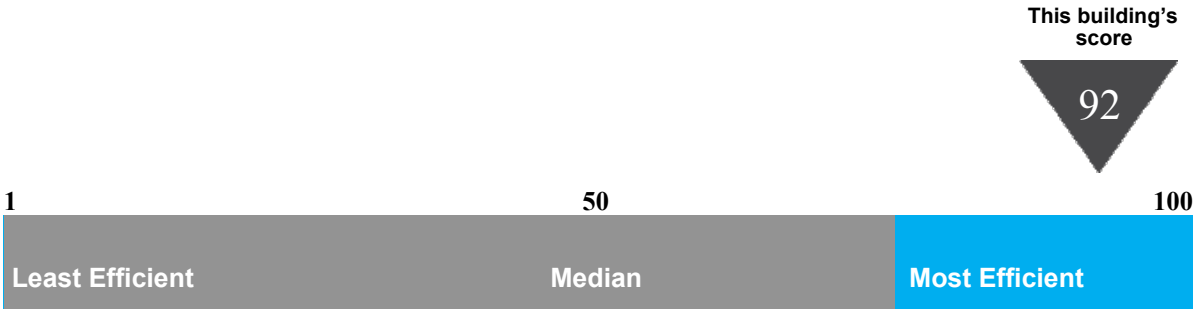
Statement of Energy Performance

2011

P.S. #1
128 Duncan Ave.
Jersey City, NJ 07305

Portfolio Manager Building ID: 2899890

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 53 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending April 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/23/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
Middle School #41

Building ID: 2899871
For 12-month Period Ending: May 31, 2011[1]
Date SEP becomes ineligible: N/A

Date SEP Generated: April 23, 2012

Facility
Middle School #41
59 Wilkinson Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 1977
Gross Floor Area (ft²): 140,467

Energy Performance Rating[2] (1-100) 2

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	4,362,452
Fuel Oil (No. 2) (kBtu)	7,908,394
Natural Gas (kBtu)[4]	1,720,363
Total Energy (kBtu)	13,991,209

Energy Intensity[4]

Site (kBtu/ft²/yr)	100
Source (kBtu/ft²/yr)	173

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	1,291

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	49
National Median Source EUI	85
% Difference from National Median Source EUI	105%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
1. Application for the ENERGY STAR must be submitted to EPA within 4 months of the Period Ending date. Award of the ENERGY STAR is not final until approval is received from EPA.
2. The EPA Energy Performance Rating is based on total source energy. A rating of 75 is the minimum to be eligible for the ENERGY STAR.
3. Values represent energy consumption, annualized to a 12-month period.
4. Values represent energy intensity, annualized to a 12-month period.
5. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

The government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, Licensed Professional facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S., EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460.

ENERGY STAR® Data Checklist for Commercial Buildings

In order for a building to qualify for the ENERGY STAR, a Professional Engineer (PE) or a Registered Architect (RA) must validate the accuracy of the data underlying the building's energy performance rating. This checklist is designed to provide an at-a-glance summary of a property's physical and operating characteristics, as well as its total energy consumption, to assist the PE or RA in double-checking the information that the building owner or operator has entered into Portfolio Manager.

Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	Middle School #41	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	59 Wilkinson Ave., Jersey City, NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
Middle School #41 (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	140,467 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	183	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	No	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity

Meter: Electric 42-006-843-06 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
04/07/2011	05/06/2011	91,289.00
03/07/2011	04/06/2011	101,052.00
02/07/2011	03/06/2011	110,814.00
01/07/2011	02/06/2011	116,703.00
12/07/2010	01/06/2011	121,213.00
11/07/2010	12/06/2010	129,456.00
10/07/2010	11/06/2010	103,763.00
09/07/2010	10/06/2010	95,665.00
08/07/2010	09/06/2010	96,523.00
07/07/2010	08/06/2010	106,656.00
06/07/2010	07/06/2010	105,186.00
Electric 42-006-843-06 Consumption (kWh (thousand Watt-hours))		**1,178,320.00**
Electric 42-006-843-06 Consumption (kBtu (thousand Btu))		**4,020,427.84**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**4,020,427.84**
Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?		☐

Fuel Type: Natural Gas

Meter: Natural Gas 42-006-843-06 (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
04/07/2011	05/06/2011	1,606.25
03/07/2011	04/06/2011	2,000.00
02/07/2011	03/06/2011	2,461.20
01/07/2011	02/06/2011	997.90
12/07/2010	01/06/2011	2,543.30
11/07/2010	12/06/2010	1,501.80
10/07/2010	11/06/2010	1,263.20
09/07/2010	10/06/2010	1,737.10
08/07/2010	09/06/2010	539.90
07/07/2010	08/06/2010	438.80
06/07/2010	07/06/2010	1,508.80

Natural Gas 42-006-843-06 Consumption (therms)	**16,598.25**
Natural Gas 42-006-843-06 Consumption (kBtu (thousand Btu))	**1,659,825.00**
Total Natural Gas Consumption (kBtu (thousand Btu))	**1,659,825.00**
Is this the total Natural Gas consumption at this building including all Natural Gas meters?	☐

Fuel Type: Fuel Oil (No. 2)

Meter: Oil (Gallons)
Space(s): Entire Facility

Start Date	End Date	Energy Use (Gallons)
04/07/2011	05/06/2011	4,750.33
03/07/2011	04/06/2011	4,750.33
02/07/2011	03/06/2011	4,750.33
01/07/2011	02/06/2011	4,750.33
12/07/2010	01/06/2011	4,750.33
11/07/2010	12/06/2010	4,750.33
10/07/2010	11/06/2010	4,750.33
09/07/2010	10/06/2010	4,750.33
08/07/2010	09/06/2010	4,750.33
07/07/2010	08/06/2010	4,750.33
06/07/2010	07/06/2010	4,750.33

Oil Consumption (Gallons)	**52,253.63**
Oil Consumption (kBtu (thousand Btu))	**7,247,082.07**
Total Fuel Oil (No. 2) Consumption (kBtu (thousand Btu))	**7,247,082.07**
Is this the total Fuel Oil (No. 2) consumption at this building including all Fuel Oil (No. 2) meters?	☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
Middle School #41
59 Wilkinson Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

Middle School #41	
Gross Floor Area Excluding Parking: (ft^2)	140,467
Year Built	1977
For 12-month Evaluation Period Ending Date:	May 31, 2011

Facility Space Use Summary

Middle School #41	
Space Type	K-12 School
Gross Floor Area (ft^2)	140,467
Open Weekends?	Yes
Number of PCs	183
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months °	N/A
High School?	No
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 05/31/2011)	**Baseline** (Ending Date 05/31/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	2	2	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	100	100	38	N/A	49
Source ($kBtu/ft^2$)	173	173	66	N/A	85
Energy Cost					
$/year	N/A	N/A	N/A	N/A	N/A
$/$ft^2$/year	N/A	N/A	N/A	N/A	N/A
Greenhouse Gas Emissions					
$MtCO_2e$/year	1,291	1,291	493	N/A	630
$kgCO_2e/ft^2$/year	9	9	3	N/A	4

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

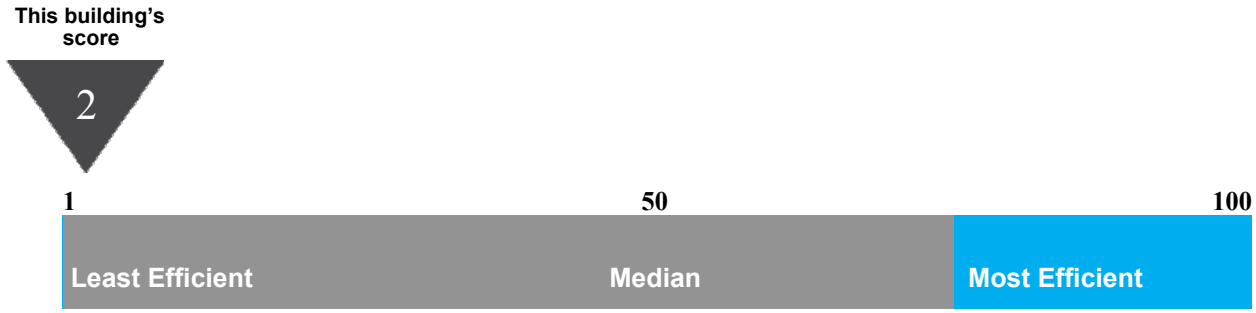
Statement of Energy Performance

2011

Middle School #41
59 Wilkinson Ave.
Jersey City, NJ 07305

Portfolio Manager Building ID: 2899871

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 173 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending May 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/23/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
Middle School #40

Building ID: 2899858
For 12-month Period Ending: April 30, 2011[1]
Date SEP becomes ineligible: N/A

Date SEP Generated: April 23, 2012

Facility
Middle School #40
88 Gates Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 1963
Gross Floor Area (ft²): 132,483

Energy Performance Rating[2] (1-100) 18

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	2,019,417
Fuel Oil (No. 2) (kBtu)	554,628
Natural Gas (kBtu)[4]	8,139,809
Total Energy (kBtu)	10,713,854

Energy Intensity[4]

Site (kBtu/ft²/yr)	81
Source (kBtu/ft²/yr)	119

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	760

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	60
National Median Source EUI	88
% Difference from National Median Source EUI	36%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
1. Application for the ENERGY STAR must be submitted to EPA within 4 months of the Period Ending date. Award of the ENERGY STAR is not final until approval is received from EPA.
2. The EPA Energy Performance Rating is based on total source energy. A rating of 75 is the minimum to be eligible for the ENERGY STAR.
3. Values represent energy consumption, annualized to a 12-month period.
4. Values represent energy intensity, annualized to a 12-month period.
5. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

The government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, Licensed Professional facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S., EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460.

ENERGY STAR® Data Checklist for Commercial Buildings

In order for a building to qualify for the ENERGY STAR, a Professional Engineer (PE) or a Registered Architect (RA) must validate the accuracy of the data underlying the building's energy performance rating. This checklist is designed to provide an at-a-glance summary of a property's physical and operating characteristics, as well as its total energy consumption, to assist the PE or RA in double-checking the information that the building owner or operator has entered into Portfolio Manager.

Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	Middle School #40	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	88 Gates Ave., Jersey City, NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
Middle School #40 (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	132,483 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	205	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	No	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity

Meter: Electric 42-004-722-01 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/07/2011	04/06/2011	47,280.00
02/07/2011	03/06/2011	48,800.00
01/07/2011	02/06/2011	47,680.00
12/07/2010	01/06/2011	53,840.00
11/07/2010	12/06/2010	53,840.00
10/07/2010	11/06/2010	53,440.00
09/07/2010	10/06/2010	54,080.00
08/07/2010	09/06/2010	34,080.00
07/07/2010	08/06/2010	48,640.00
06/07/2010	07/06/2010	53,760.00
05/07/2010	06/06/2010	50,080.00
Electric 42-004-722-01 Consumption (kWh (thousand Watt-hours))		**545,520.00**
Electric 42-004-722-01 Consumption (kBtu (thousand Btu))		**1,861,314.24**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**1,861,314.24**
Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?		☐

Fuel Type: Natural Gas

Meter: Natural Gas 42-004-722-01 (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
03/07/2011	04/06/2011	6,537.90
02/07/2011	03/06/2011	11,083.80
01/07/2011	02/06/2011	12,956.00
12/07/2010	01/06/2011	14,772.90
11/07/2010	12/06/2010	15,404.10
10/07/2010	11/06/2010	6,313.60
09/07/2010	10/06/2010	2,512.00
08/07/2010	09/06/2010	317.80
07/07/2010	08/06/2010	216.30
06/07/2010	07/06/2010	114.90
05/07/2010	06/06/2010	1,053.40

Natural Gas 42-004-722-01 Consumption (therms)	**71,282.70**
Natural Gas 42-004-722-01 Consumption (kBtu (thousand Btu))	**7,128,270.00**

Meter: Natural Gas 447185 (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
03/07/2011	04/06/2011	608.80
02/07/2011	03/06/2011	608.80
01/07/2011	02/06/2011	608.80
12/07/2010	01/06/2011	608.80
11/07/2010	12/06/2010	608.80
10/07/2010	11/06/2010	608.80
09/07/2010	10/06/2010	608.80
08/07/2010	09/06/2010	608.80
07/07/2010	08/06/2010	608.80
06/07/2010	07/06/2010	608.80
05/07/2010	06/06/2010	608.80

Natural Gas 447185 Consumption (therms)	**6,696.80**
Natural Gas 447185 Consumption (kBtu (thousand Btu))	**669,680.00**
Total Natural Gas Consumption (kBtu (thousand Btu))	**7,797,950.00**
Is this the total Natural Gas consumption at this building including all Natural Gas meters?	☐

Fuel Type: Fuel Oil (No. 2)

Meter: Oil (Gallons)
Space(s): Entire Facility

Start Date	End Date	Energy Use (Gallons)
03/07/2011	04/06/2011	333.33
02/07/2011	03/06/2011	333.33
01/07/2011	02/06/2011	333.33
12/07/2010	01/06/2011	333.33
11/07/2010	12/06/2010	333.33
10/07/2010	11/06/2010	333.33
09/07/2010	10/06/2010	333.33
08/07/2010	09/06/2010	333.33
07/07/2010	08/06/2010	333.33
06/07/2010	07/06/2010	333.33
05/07/2010	06/06/2010	333.33

Oil Consumption (Gallons)	**3,666.63**
Oil Consumption (kBtu (thousand Btu))	**508,526.75**
Total Fuel Oil (No. 2) Consumption (kBtu (thousand Btu))	**508,526.75**
Is this the total Fuel Oil (No. 2) consumption at this building including all Fuel Oil (No. 2) meters?	☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
Middle School #40
88 Gates Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

Middle School #40	
Gross Floor Area Excluding Parking: (ft^2)	132,483
Year Built	1963
For 12-month Evaluation Period Ending Date:	April 30, 2011

Facility Space Use Summary

Middle School #40	
Space Type	K-12 School
Gross Floor Area (ft^2)	132,483
Open Weekends?	Yes
Number of PCs	205
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months °	N/A
High School?	No
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 04/30/2011)	**Baseline** (Ending Date 04/30/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	18	18	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	81	81	47	N/A	60
Source ($kBtu/ft^2$)	119	119	69	N/A	88
Energy Cost					
$/year	N/A	N/A	N/A	N/A	N/A
$/$ft^2$/year	N/A	N/A	N/A	N/A	N/A
Greenhouse Gas Emissions					
$MtCO_2e$/year	760	760	438	N/A	560
$kgCO_2e/ft^2$/year	6	6	3	N/A	4

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

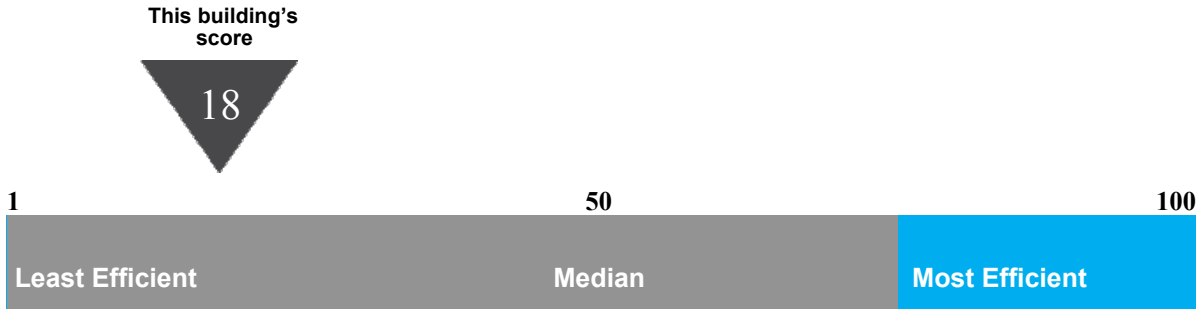
Statement of Energy Performance

2011

Middle School #40
88 Gates Ave.
Jersey City, NJ 07305

Portfolio Manager Building ID: 2899858

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 119 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending April 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/23/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
Middle School #7

Building ID: 2899869
For 12-month Period Ending: April 30, 2011[1]
Date SEP becomes ineligible: N/A

Date SEP Generated: April 23, 2012

Facility
Middle School #7
222 Laidlaw Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 2007
Gross Floor Area (ft²): 163,855

Energy Performance Rating[2] (1-100) 1

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	9,308,326
Fuel Oil (No. 2) (kBtu)	79,694
Natural Gas (kBtu)[4]	10,607,143
Total Energy (kBtu)	19,995,163

Energy Intensity[4]

Site (kBtu/ft²/yr)	122
Source (kBtu/ft²/yr)	258

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	1,888

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	50
National Median Source EUI	107
% Difference from National Median Source EUI	142%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
1. Application for the ENERGY STAR must be submitted to EPA within 4 months of the Period Ending date. Award of the ENERGY STAR is not final until approval is received from EPA.
2. The EPA Energy Performance Rating is based on total source energy. A rating of 75 is the minimum to be eligible for the ENERGY STAR.
3. Values represent energy consumption, annualized to a 12-month period.
4. Values represent energy intensity, annualized to a 12-month period.
5. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

The government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, Licensed Professional facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S., EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460.

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Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	Middle School #7	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	222 Laidlaw Ave., Jersey City, NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
Middle School #7 (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	163,855 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	651	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	No	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity

Meter: Electric 42-006-390-09 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/09/2011	04/08/2011	159,300.00
02/09/2011	03/08/2011	188,400.00
01/09/2011	02/08/2011	188,400.00
12/09/2010	01/08/2011	207,600.00
11/09/2010	12/08/2010	126,900.00
10/09/2010	11/08/2010	290,100.00
09/09/2010	10/08/2010	259,800.00
08/09/2010	09/08/2010	58,800.00
07/09/2010	08/08/2010	476,100.00
06/09/2010	07/08/2010	278,400.00
05/09/2010	06/08/2010	317,700.00
Electric 42-006-390-09 Consumption (kWh (thousand Watt-hours))		**2,551,500.00**
Electric 42-006-390-09 Consumption (kBtu (thousand Btu))		**8,705,718.00**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**8,705,718.00**
Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?		☐

Fuel Type: Natural Gas

Meter: Natural Gas 42-006-390-09 (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
03/09/2011	04/08/2011	4,541.70
02/09/2011	03/08/2011	22,072.50
01/09/2011	02/08/2011	25,906.30
12/09/2010	01/08/2011	25,272.10
11/09/2010	12/08/2010	17,413.30
10/09/2010	11/08/2010	3,098.60
09/09/2010	10/08/2010	546.90
08/09/2010	09/08/2010	210.20
07/09/2010	08/08/2010	481.80
06/09/2010	07/08/2010	436.30
05/09/2010	06/08/2010	436.30

Natural Gas 42-006-390-09 Consumption (therms)	**100,416.00**
Natural Gas 42-006-390-09 Consumption (kBtu (thousand Btu))	**10,041,600.00**
Total Natural Gas Consumption (kBtu (thousand Btu))	**10,041,600.00**
Is this the total Natural Gas consumption at this building including all Natural Gas meters?	☐

Fuel Type: Fuel Oil (No. 2)

Meter: Oil (Gallons)
Space(s): Entire Facility

Start Date	End Date	Energy Use (Gallons)
03/09/2011	04/08/2011	47.90
02/09/2011	03/08/2011	47.90
01/09/2011	02/08/2011	47.90
12/09/2010	01/08/2011	47.90
11/09/2010	12/08/2010	47.90
10/09/2010	11/08/2010	47.90
09/09/2010	10/08/2010	47.90
08/09/2010	09/08/2010	47.90
07/09/2010	08/08/2010	47.90
06/09/2010	07/08/2010	47.90
05/09/2010	06/08/2010	47.90

Oil Consumption (Gallons)	**526.90**
Oil Consumption (kBtu (thousand Btu))	**73,076.02**
Total Fuel Oil (No. 2) Consumption (kBtu (thousand Btu))	**73,076.02**
Is this the total Fuel Oil (No. 2) consumption at this building including all Fuel Oil (No. 2) meters?	☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
Middle School #7
222 Laidlaw Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

Middle School #7	
Gross Floor Area Excluding Parking: (ft^2)	163,855
Year Built	2007
For 12-month Evaluation Period Ending Date:	April 30, 2011

Facility Space Use Summary

Middle School #7	
Space Type	K-12 School
Gross Floor Area (ft^2)	163,855
Open Weekends?	Yes
Number of PCs	651
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months °	N/A
High School?	No
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 04/30/2011)	**Baseline** (Ending Date 04/30/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	1	1	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	122	122	39	N/A	50
Source ($kBtu/ft^2$)	258	258	83	N/A	107
Energy Cost					
$/year	N/A	N/A	N/A	N/A	N/A
$/$ft^2$/year	N/A	N/A	N/A	N/A	N/A
Greenhouse Gas Emissions					
$MtCO_2e$/year	1,888	1,888	610	N/A	780
$kgCO_2e/ft^2$/year	12	12	4	N/A	5

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

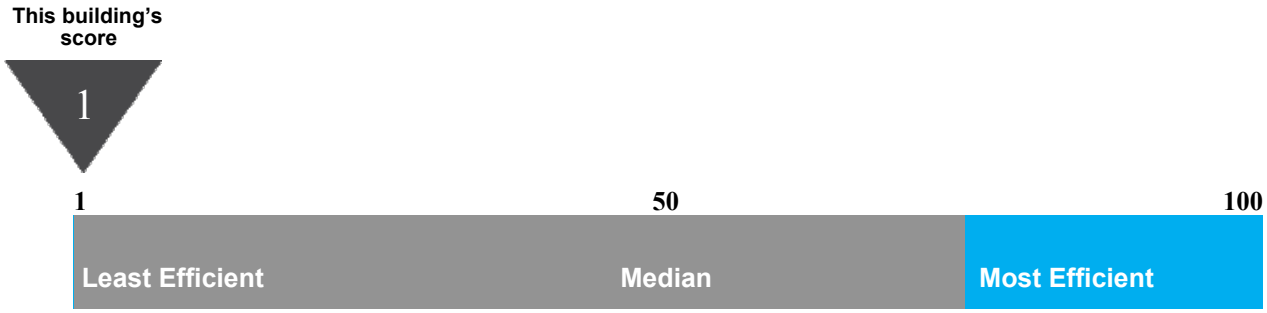
Statement of Energy Performance

2011

Middle School #7
222 Laidlaw Ave.
Jersey City, NJ 07305

Portfolio Manager Building ID: 2899869

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 258 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending April 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/23/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
Middle School #4

Building ID: 2899853
For 12-month Period Ending: April 30, 2011[1]
Date SEP becomes ineligible: N/A

Date SEP Generated: April 23, 2012

Facility
Middle School #4
107 Bright St.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 2006
Gross Floor Area (ft²): 169,678

Energy Performance Rating[2] (1-100) 2

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	5,722,278
Natural Gas (kBtu)[4]	3,780,009
Total Energy (kBtu)	9,502,287

Energy Intensity[4]

Site (kBtu/ft²/yr)	56
Source (kBtu/ft²/yr)	136

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	1,011

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	29
National Median Source EUI	71
% Difference from National Median Source EUI	92%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
1. Application for the ENERGY STAR must be submitted to EPA within 4 months of the Period Ending date. Award of the ENERGY STAR is not final until approval is received from EPA.
2. The EPA Energy Performance Rating is based on total source energy. A rating of 75 is the minimum to be eligible for the ENERGY STAR.
3. Values represent energy consumption, annualized to a 12-month period.
4. Values represent energy intensity, annualized to a 12-month period.
5. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

The government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, Licensed Professional facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S., EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460.

ENERGY STAR® Data Checklist for Commercial Buildings

In order for a building to qualify for the ENERGY STAR, a Professional Engineer (PE) or a Registered Architect (RA) must validate the accuracy of the data underlying the building's energy performance rating. This checklist is designed to provide an at-a-glance summary of a property's physical and operating characteristics, as well as its total energy consumption, to assist the PE or RA in double-checking the information that the building owner or operator has entered into Portfolio Manager.

Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	Middle School #4	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	107 Bright St., Jersey City, NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
Middle School #4 (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	169,678 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	301	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	80 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	No	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity

Meter: Electric 42-004-211-00 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/05/2011	04/04/2011	123,768.00
02/05/2011	03/04/2011	121,750.00
01/05/2011	02/04/2011	110,765.00
12/05/2010	01/04/2011	127,654.00
11/05/2010	12/04/2010	127,388.00
10/05/2010	11/04/2010	119,772.00
09/05/2010	10/04/2010	154,848.00
08/05/2010	09/04/2010	156,192.00
07/05/2010	08/04/2010	172,349.00
06/05/2010	07/04/2010	181,555.00
05/05/2010	06/04/2010	153,670.00
Electric 42-004-211-00 Consumption (kWh (thousand Watt-hours))		**1,549,711.00**
Electric 42-004-211-00 Consumption (kBtu (thousand Btu))		**5,287,613.93**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**5,287,613.93**
Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?		☐

Fuel Type: Natural Gas

Meter: Natural Gas (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
03/04/2011	04/03/2011	3,150.37
02/04/2011	03/03/2011	3,150.37
01/04/2011	02/03/2011	3,150.37
12/04/2010	01/03/2011	3,150.37
11/04/2010	12/03/2010	3,150.37
10/04/2010	11/03/2010	3,150.37
09/04/2010	10/03/2010	3,150.37
08/04/2010	09/03/2010	3,150.37
07/04/2010	08/03/2010	3,150.37
06/04/2010	07/03/2010	3,150.37
05/04/2010	06/03/2010	3,150.37

Natural Gas Consumption (therms)	**34,654.07**
Natural Gas Consumption (kBtu (thousand Btu))	**3,465,407.00**
Total Natural Gas Consumption (kBtu (thousand Btu))	**3,465,407.00**
Is this the total Natural Gas consumption at this building including all Natural Gas meters?	☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
Middle School #4
107 Bright St.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

Middle School #4	
Gross Floor Area Excluding Parking: (ft^2)	169,678
Year Built	2006
For 12-month Evaluation Period Ending Date:	April 30, 2011

Facility Space Use Summary

Middle School #4	
Space Type	K-12 School
Gross Floor Area (ft^2)	169,678
Open Weekends?	Yes
Number of PCs	301
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	80
Months °	N/A
High School?	No
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 04/30/2011)	**Baseline** (Ending Date 04/30/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	2	2	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	56	56	23	N/A	29
Source ($kBtu/ft^2$)	136	136	55	N/A	71
Energy Cost					
$/year	$ 174,407.22	$ 174,407.22	$ 70,977.51	N/A	$ 90,785.19
$/$ft^2$/year	$ 1.03	$ 1.03	$ 0.42	N/A	$ 0.54
Greenhouse Gas Emissions					
$MtCO_2e$/year	1,011	1,011	411	N/A	526
$kgCO_2e/ft^2$/year	6	6	2	N/A	3

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

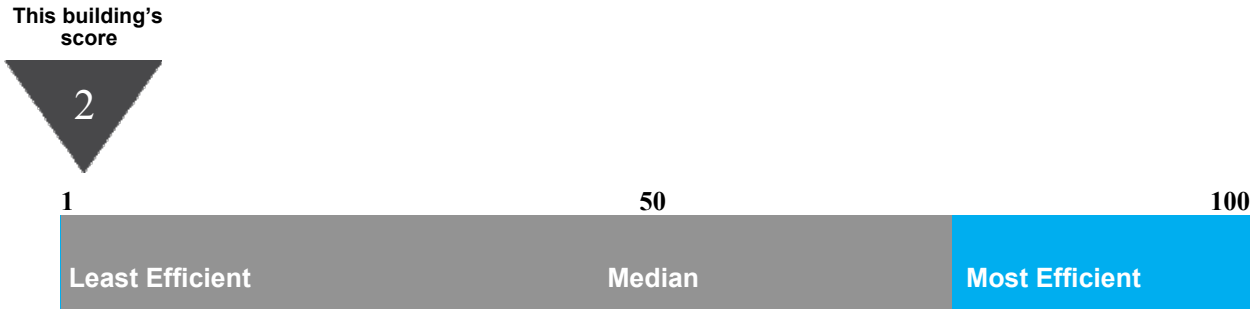
Statement of Energy Performance

2011

Middle School #4
107 Bright St.
Jersey City, NJ 07305

Portfolio Manager Building ID: 2899853

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 136 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending April 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/23/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
McNair Academic High School

Building ID: 2899849
For 12-month Period Ending: April 30, 2011[1]
Date SEP becomes ineligible: N/A
Date SEP Generated: April 23, 2012

Facility
McNair Academic High School
123 Coles St.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 1910
Gross Floor Area (ft²): 132,311

Energy Performance Rating[2] (1-100) 38

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	5,488,406
Fuel Oil (No. 2) (kBtu)	20,383
Natural Gas (kBtu)[4]	450,891
Total Energy (kBtu)	5,959,680

Energy Intensity[4]

Site (kBtu/ft²/yr)	45
Source (kBtu/ft²/yr)	142

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	803

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	41
National Median Source EUI	129
% Difference from National Median Source EUI	11%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
1. Application for the ENERGY STAR must be submitted to EPA within 4 months of the Period Ending date. Award of the ENERGY STAR is not final until approval is received from EPA.
2. The EPA Energy Performance Rating is based on total source energy. A rating of 75 is the minimum to be eligible for the ENERGY STAR.
3. Values represent energy consumption, annualized to a 12-month period.
4. Values represent energy intensity, annualized to a 12-month period.
5. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

The government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, Licensed Professional facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S., EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460.

ENERGY STAR® Data Checklist for Commercial Buildings

In order for a building to qualify for the ENERGY STAR, a Professional Engineer (PE) or a Registered Architect (RA) must validate the accuracy of the data underlying the building's energy performance rating. This checklist is designed to provide an at-a-glance summary of a property's physical and operating characteristics, as well as its total energy consumption, to assist the PE or RA in double-checking the information that the building owner or operator has entered into Portfolio Manager.

Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	McNair Academic High School	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	123 Coles St., Jersey City, NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
McNair Academic High School (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	132,311 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	241	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	Yes	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity

Meter: Electric 42-004-785-01 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/07/2011	04/06/2011	120,868.00
02/07/2011	03/06/2011	117,710.00
01/07/2011	02/06/2011	118,892.00
12/07/2010	01/06/2011	135,271.00
11/07/2010	12/06/2010	135,271.00
10/07/2010	11/06/2010	109,345.00
09/07/2010	10/06/2010	122,461.00
08/07/2010	09/06/2010	154,213.00
07/07/2010	08/06/2010	144,930.00
06/07/2010	07/06/2010	174,615.00
05/07/2010	06/06/2010	149,321.00
Electric 42-004-785-01 Consumption (kWh (thousand Watt-hours))		**1,482,897.00**
Electric 42-004-785-01 Consumption (kBtu (thousand Btu))		**5,059,644.56**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**5,059,644.56**
Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?		☐

Fuel Type: Natural Gas

Meter: Natural Gas (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
03/07/2011	04/06/2011	375.83
02/07/2011	03/06/2011	375.83
01/07/2011	02/06/2011	375.83
12/07/2010	01/06/2011	375.83
11/07/2010	12/06/2010	375.83
10/07/2010	11/06/2010	375.83
09/07/2010	10/06/2010	375.83
08/07/2010	09/06/2010	375.83
07/07/2010	08/06/2010	375.83
06/07/2010	07/06/2010	375.83
05/07/2010	06/06/2010	375.83

Natural Gas Consumption (therms)	**4,134.13**
Natural Gas Consumption (kBtu (thousand Btu))	**413,413.00**
Total Natural Gas Consumption (kBtu (thousand Btu))	**413,413.00**
Is this the total Natural Gas consumption at this building including all Natural Gas meters?	☐

Fuel Type: Fuel Oil (No. 2)

Meter: Oil (Gallons)
Space(s): Entire Facility

Start Date	End Date	Energy Use (Gallons)
03/07/2011	04/06/2011	12.25
02/07/2011	03/06/2011	12.25
01/07/2011	02/06/2011	12.25
12/07/2010	01/06/2011	12.25
11/07/2010	12/06/2010	12.25
10/07/2010	11/06/2010	12.25
09/07/2010	10/06/2010	12.25
08/07/2010	09/06/2010	12.25
07/07/2010	08/06/2010	12.25
06/07/2010	07/06/2010	12.25
05/07/2010	06/06/2010	12.25

Oil Consumption (Gallons)	**134.75**
Oil Consumption (kBtu (thousand Btu))	**18,688.54**
Total Fuel Oil (No. 2) Consumption (kBtu (thousand Btu))	**18,688.54**
Is this the total Fuel Oil (No. 2) consumption at this building including all Fuel Oil (No. 2) meters?	☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
McNair Academic High School
123 Coles St.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

McNair Academic High School	
Gross Floor Area Excluding Parking: (ft^2)	132,311
Year Built	1910
For 12-month Evaluation Period Ending Date:	April 30, 2011

Facility Space Use Summary

McNair Academic High School	
Space Type	K-12 School
Gross Floor Area (ft^2)	132,311
Open Weekends?	Yes
Number of PCs	241
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months °	N/A
High School?	Yes
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 04/30/2011)	**Baseline** (Ending Date 04/30/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	38	38	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	45	45	32	N/A	41
Source ($kBtu/ft^2$)	142	142	101	N/A	129
Energy Cost					
$/year	$ 181,721.44	$ 181,721.44	$ 128,463.82	N/A	$ 164,291.67
$/$ft^2$/year	$ 1.37	$ 1.37	$ 0.97	N/A	$ 1.24
Greenhouse Gas Emissions					
$MtCO_2e$/year	803	803	568	N/A	726
$kgCO_2e/ft^2$/year	6	6	4	N/A	5

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

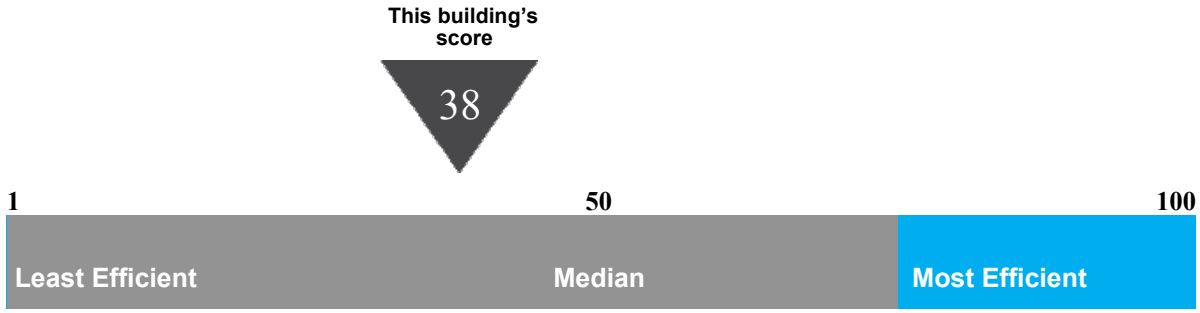
Statement of Energy Performance

2011

McNair Academic High School
123 Coles St.
Jersey City, NJ 07305

Portfolio Manager Building ID: 2899849

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 142 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending April 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/23/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
Lincoln High School

Building ID: 2899847
For 12-month Period Ending: April 30, 2011[1]
Date SEP becomes ineligible: N/A

Date SEP Generated: April 23, 2012

Facility
Lincoln High School
60 Crescent Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 1919
Gross Floor Area (ft²): 272,932

Energy Performance Rating[2] (1-100) 52

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	10,887,518
Natural Gas (kBtu)[4]	1,704,524
Total Energy (kBtu)	12,592,042

Energy Intensity[4]

Site (kBtu/ft²/yr)	46
Source (kBtu/ft²/yr)	140

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	1,632

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	47
National Median Source EUI	143
% Difference from National Median Source EUI	-2%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
1. Application for the ENERGY STAR must be submitted to EPA within 4 months of the Period Ending date. Award of the ENERGY STAR is not final until approval is received from EPA.
2. The EPA Energy Performance Rating is based on total source energy. A rating of 75 is the minimum to be eligible for the ENERGY STAR.
3. Values represent energy consumption, annualized to a 12-month period.
4. Values represent energy intensity, annualized to a 12-month period.
5. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

The government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, Licensed Professional facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S., EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460.

ENERGY STAR® Data Checklist for Commercial Buildings

In order for a building to qualify for the ENERGY STAR, a Professional Engineer (PE) or a Registered Architect (RA) must validate the accuracy of the data underlying the building's energy performance rating. This checklist is designed to provide an at-a-glance summary of a property's physical and operating characteristics, as well as its total energy consumption, to assist the PE or RA in double-checking the information that the building owner or operator has entered into Portfolio Manager.

Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	Lincoln High School	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	60 Crescent Ave., Jersey City, NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
Lincoln High School (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	272,932 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	500	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	Yes	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity		
Meter: Electric 42-006-492-09 (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
03/04/2011	04/03/2011	61,260.00
02/04/2011	03/03/2011	72,240.00
01/04/2011	02/03/2011	68,760.00
12/04/2010	01/03/2011	69,240.00
11/04/2010	12/03/2010	62,640.00
10/04/2010	11/03/2010	46,680.00
09/04/2010	10/03/2010	49,320.00
08/04/2010	09/03/2010	52,920.00
07/04/2010	08/03/2010	68,040.00
06/04/2010	07/03/2010	73,920.00
05/04/2010	06/03/2010	62,100.00
Electric 42-006-492-09 Consumption (kWh (thousand Watt-hours))		**687,120.00**
Electric 42-006-492-09 Consumption (kBtu (thousand Btu))		**2,344,453.44**
Meter: Electric 42-000-149-04 (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
03/04/2011	04/03/2011	103,000.00
02/04/2011	03/03/2011	104,800.00
01/04/2011	02/03/2011	88,400.00
12/04/2010	01/03/2011	109,600.00
11/04/2010	12/03/2010	115,600.00
10/04/2010	11/03/2010	101,200.00
09/04/2010	10/03/2010	104,000.00
08/04/2010	09/03/2010	75,600.00
07/04/2010	08/03/2010	69,600.00
06/04/2010	07/03/2010	108,400.00
05/04/2010	06/03/2010	104,800.00
Electric 42-000-149-04 Consumption (kWh (thousand Watt-hours))		**1,085,000.00**
Electric 42-000-149-04 Consumption (kBtu (thousand Btu))		**3,702,020.00**

Meter: Electric 65-937-304-08 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/04/2011	04/03/2011	105,366.67
02/04/2011	03/03/2011	105,366.67
01/04/2011	02/03/2011	105,366.67
12/04/2010	01/03/2011	105,366.67
11/04/2010	12/03/2010	105,366.67
10/04/2010	11/03/2010	105,366.67
09/04/2010	10/03/2010	105,366.67
08/04/2010	09/03/2010	105,366.67
07/04/2010	08/03/2010	105,366.67
06/04/2010	07/03/2010	105,366.67
05/04/2010	06/03/2010	105,366.67
Electric 65-937-304-08 Consumption (kWh (thousand Watt-hours))		**1,159,033.37**
Electric 65-937-304-08 Consumption (kBtu (thousand Btu))		**3,954,621.86**

Meter: South Jersey Electric (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/04/2011	04/03/2011	202.25
02/04/2011	03/03/2011	202.25
01/04/2011	02/03/2011	202.25
12/04/2010	01/03/2011	202.25
11/04/2010	12/03/2010	202.25
10/04/2010	11/03/2010	202.25
09/04/2010	10/03/2010	202.25
08/04/2010	09/03/2010	202.25
07/04/2010	08/03/2010	202.25
06/04/2010	07/03/2010	202.25
05/04/2010	06/03/2010	202.25
South Jersey Electric Consumption (kWh (thousand Watt-hours))		**2,224.75**
South Jersey Electric Consumption (kBtu (thousand Btu))		**7,590.85**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**10,008,686.15**
Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?		☐

Fuel Type: Natural Gas

Meter: Natural Gas (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
03/04/2011	04/03/2011	1,420.60
02/04/2011	03/03/2011	1,420.60
01/04/2011	02/03/2011	1,420.60
12/04/2010	01/03/2011	1,420.60

11/04/2010	12/03/2010	1,420.60
10/04/2010	11/03/2010	1,420.60
09/04/2010	10/03/2010	1,420.60
08/04/2010	09/03/2010	1,420.60
07/04/2010	08/03/2010	1,420.60
06/04/2010	07/03/2010	1,420.60
05/04/2010	06/03/2010	1,420.60
Natural Gas Consumption (therms)		**15,626.60**
Natural Gas Consumption (kBtu (thousand Btu))		**1,562,660.00**
Total Natural Gas Consumption (kBtu (thousand Btu))		**1,562,660.00**
Is this the total Natural Gas consumption at this building including all Natural Gas meters?		☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
Lincoln High School
60 Crescent Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

Lincoln High School	
Gross Floor Area Excluding Parking: (ft^2)	272,932
Year Built	1919
For 12-month Evaluation Period Ending Date:	April 30, 2011

Facility Space Use Summary

Lincoln High School	
Space Type	K-12 School
Gross Floor Area (ft^2)	272,932
Open Weekends?	Yes
Number of PCs	500
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months °	N/A
High School?	Yes
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 04/30/2011)	**Baseline** (Ending Date 04/30/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	52	52	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	46	46	37	N/A	47
Source ($kBtu/ft^2$)	140	140	111	N/A	143
Energy Cost					
$/year	N/A	N/A	N/A	N/A	N/A
$/$ft^2$/year	N/A	N/A	N/A	N/A	N/A
Greenhouse Gas Emissions					
$MtCO_2e$/year	1,632	1,632	1,301	N/A	1,664
$kgCO_2e/ft^2$/year	6	6	5	N/A	6

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

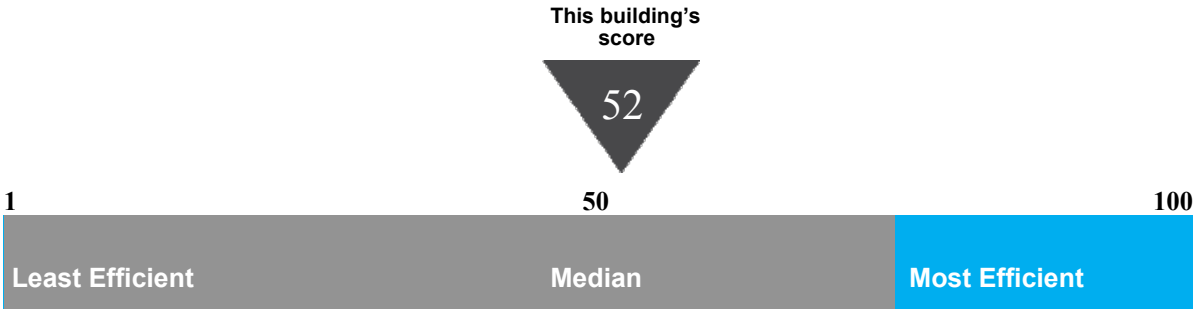
Statement of Energy Performance

2011

Lincoln High School
60 Crescent Ave.
Jersey City, NJ 07305

Portfolio Manager Building ID: 2899847

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 140 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending April 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/23/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
Liberty High School

Building ID: 2899863
For 12-month Period Ending: April 30, 2011[1]
Date SEP becomes ineligible: N/A
Date SEP Generated: April 23, 2012

Facility
Liberty High School
299 Sip Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 1911
Gross Floor Area (ft²): 33,316

Energy Performance Rating[2] (1-100) 27

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	1,291,168
Fuel Oil (No. 2) (kBtu)	1,387,572
Natural Gas (kBtu)[4]	480,641
Total Energy (kBtu)	3,159,381

Energy Intensity[4]

Site (kBtu/ft²/yr)	95
Source (kBtu/ft²/yr)	187

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	310

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	78
National Median Source EUI	153
% Difference from National Median Source EUI	22%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
1. Application for the ENERGY STAR must be submitted to EPA within 4 months of the Period Ending date. Award of the ENERGY STAR is not final until approval is received from EPA.
2. The EPA Energy Performance Rating is based on total source energy. A rating of 75 is the minimum to be eligible for the ENERGY STAR.
3. Values represent energy consumption, annualized to a 12-month period.
4. Values represent energy intensity, annualized to a 12-month period.
5. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

The government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, Licensed Professional facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S., EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460.

ENERGY STAR® Data Checklist for Commercial Buildings

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Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	Liberty High School	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	299 Sip Ave., Jersey City, NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
Liberty High School (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	33,316 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	123	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	Yes	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity		
Meter: Electric 67-547-023-03 (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
03/04/2011	04/03/2011	12,200.00
02/04/2011	03/03/2011	13,120.00
01/04/2011	02/03/2011	12,560.00
12/04/2010	01/03/2011	12,000.00
11/04/2010	12/03/2010	13,280.00
10/04/2010	11/03/2010	13,360.00
09/04/2010	10/03/2010	15,920.00
08/04/2010	09/03/2010	7,280.00
07/04/2010	08/03/2010	6,400.00
06/04/2010	07/03/2010	16,400.00
05/04/2010	06/03/2010	13,840.00
Electric 67-547-023-03 Consumption (kWh (thousand Watt-hours))		**136,360.00**
Electric 67-547-023-03 Consumption (kBtu (thousand Btu))		**465,260.32**
Meter: Electric 66-225-198-03 (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
03/04/2011	04/03/2011	8,893.33
02/04/2011	03/03/2011	8,893.33
01/04/2011	02/03/2011	8,893.33
12/04/2010	01/03/2011	8,893.33
11/04/2010	12/03/2010	8,893.33
10/04/2010	11/03/2010	8,893.33
09/04/2010	10/03/2010	8,893.33
08/04/2010	09/03/2010	8,893.33
07/04/2010	08/03/2010	8,893.33
06/04/2010	07/03/2010	8,893.33
05/04/2010	06/03/2010	8,893.33
Electric 66-225-198-03 Consumption (kWh (thousand Watt-hours))		**97,826.63**
Electric 66-225-198-03 Consumption (kBtu (thousand Btu))		**333,784.46**

Meter: Electric 66-132-787-18 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/04/2011	04/03/2011	10,333.33
02/04/2011	03/03/2011	10,333.33
01/04/2011	02/03/2011	10,333.33
12/04/2010	01/03/2011	10,333.33
11/04/2010	12/03/2010	10,333.33
10/04/2010	11/03/2010	10,333.33
09/04/2010	10/03/2010	10,333.33
08/04/2010	09/03/2010	10,333.33
07/04/2010	08/03/2010	10,333.33
06/04/2010	07/03/2010	10,333.33
05/04/2010	06/03/2010	10,333.33
Electric 66-132-787-18 Consumption (kWh (thousand Watt-hours))		**113,666.63**
Electric 66-132-787-18 Consumption (kBtu (thousand Btu))		**387,830.54**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**1,186,875.32**
Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?		☐

Fuel Type: Natural Gas

Meter: Natural Gas (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
03/04/2011	04/03/2011	400.58
02/04/2011	03/03/2011	400.58
01/04/2011	02/03/2011	400.58
12/04/2010	01/03/2011	400.58
11/04/2010	12/03/2010	400.58
10/04/2010	11/03/2010	400.58
09/04/2010	10/03/2010	400.58
08/04/2010	09/03/2010	400.58
07/04/2010	08/03/2010	400.58
06/04/2010	07/03/2010	400.58
05/04/2010	06/03/2010	400.58
Natural Gas Consumption (therms)		**4,406.38**
Natural Gas Consumption (kBtu (thousand Btu))		**440,638.00**
Total Natural Gas Consumption (kBtu (thousand Btu))		**440,638.00**
Is this the total Natural Gas consumption at this building including all Natural Gas meters?		☐

Fuel Type: Fuel Oil (No. 2)

Meter: Oil (Gallons)
Space(s): Entire Facility

Start Date	End Date	Energy Use (Gallons)
03/04/2011	04/03/2011	833.83

02/04/2011	03/03/2011	833.83
01/04/2011	02/03/2011	833.83
12/04/2010	01/03/2011	833.83
11/04/2010	12/03/2010	833.83
10/04/2010	11/03/2010	833.83
09/04/2010	10/03/2010	833.83
08/04/2010	09/03/2010	833.83
07/04/2010	08/03/2010	833.83
06/04/2010	07/03/2010	833.83
05/04/2010	06/03/2010	833.83
Oil Consumption (Gallons)		**9,172.13**
Oil Consumption (kBtu (thousand Btu))		**1,272,087.30**
Total Fuel Oil (No. 2) Consumption (kBtu (thousand Btu))		**1,272,087.30**
Is this the total Fuel Oil (No. 2) consumption at this building including all Fuel Oil (No. 2) meters?		☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
Liberty High School
299 Sip Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

Liberty High School	
Gross Floor Area Excluding Parking: (ft^2)	33,316
Year Built	1911
For 12-month Evaluation Period Ending Date:	April 30, 2011

Facility Space Use Summary

Liberty High School	
Space Type	K-12 School
Gross Floor Area (ft^2)	33,316
Open Weekends?	Yes
Number of PCs	123
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months °	N/A
High School?	Yes
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 04/30/2011)	**Baseline** (Ending Date 04/30/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	27	27	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	95	95	61	N/A	78
Source ($kBtu/ft^2$)	187	187	119	N/A	153
Energy Cost					
$/year	N/A	N/A	N/A	N/A	N/A
$/$ft^2$/year	N/A	N/A	N/A	N/A	N/A
Greenhouse Gas Emissions					
$MtCO_2e$/year	310	310	198	N/A	253
$kgCO_2e/ft^2$/year	9	9	6	N/A	7

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

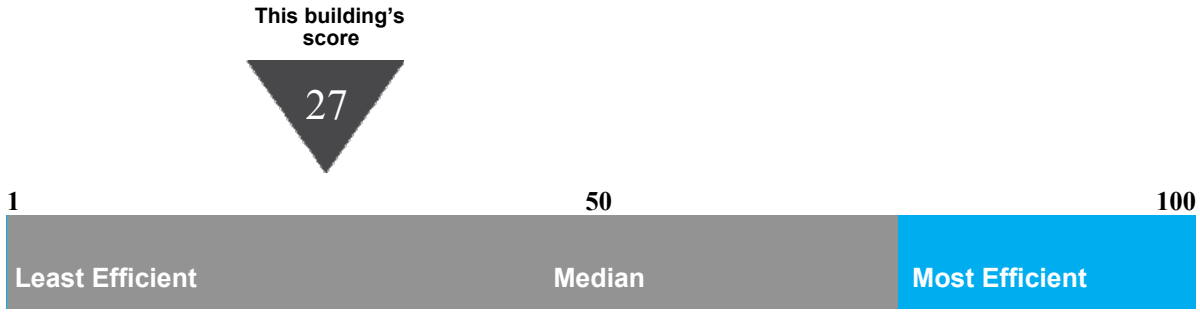
Statement of Energy Performance

2011

Liberty High School
299 Sip Ave.
Jersey City, NJ 07305

Portfolio Manager Building ID: 2899863

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 187 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending April 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/23/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
JCPS Administrative Facility

Building ID: 2900490
For 12-month Period Ending: April 30, 2011[1]
Date SEP becomes ineligible: N/A

Date SEP Generated: April 23, 2012

Facility
JCPS Administrative Facility
346 Claremont Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 1919
Gross Floor Area (ft²): 166,500

Energy Performance Rating[2] (1-100) 22

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	16,637,434
Natural Gas - (kBtu)[4]	0
Total Energy (kBtu)	16,637,434

Energy Intensity[4]

Site (kBtu/ft²/yr)	100
Source (kBtu/ft²/yr)	334

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	2,356

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	73
National Median Source EUI	244
% Difference from National Median Source EUI	37%
Building Type	Office

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
1. Application for the ENERGY STAR must be submitted to EPA within 4 months of the Period Ending date. Award of the ENERGY STAR is not final until approval is received from EPA.
2. The EPA Energy Performance Rating is based on total source energy. A rating of 75 is the minimum to be eligible for the ENERGY STAR.
3. Values represent energy consumption, annualized to a 12-month period.
4. Values represent energy intensity, annualized to a 12-month period.
5. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

The government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, Licensed Professional facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S., EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460.

ENERGY STAR® Data Checklist for Commercial Buildings

In order for a building to qualify for the ENERGY STAR, a Professional Engineer (PE) or a Registered Architect (RA) must validate the accuracy of the data underlying the building's energy performance rating. This checklist is designed to provide an at-a-glance summary of a property's physical and operating characteristics, as well as its total energy consumption, to assist the PE or RA in double-checking the information that the building owner or operator has entered into Portfolio Manager.

Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	JCPS Administrative Facility	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	Office	Is this an accurate description of the space in question?		☐
Location	346 Claremont Ave., Jersey City, NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
JCPS Administrative Facility (Office)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	166,500 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Weekly operating hours	75 Hours	Is this the total number of hours per week that the Office space is 75% occupied? This number should exclude hours when the facility is occupied only by maintenance, security, or other support personnel. For facilities with a schedule that varies during the year, "operating hours/week" refers to the total weekly hours for the schedule most often followed.		☐
Workers on Main Shift	200	Is this the number of employees present during the main shift? Note this is not the total number of employees or visitors who are in a building during an entire 24 hour period. For example, if there are two daily 8 hour shifts of 100 workers each, the Workers on Main Shift value is 100. The normal worker density ranges between 0.3 and 5.3 workers per 1000 square feet (92.8 square meters)		☐
Number of PCs	200	Is this the number of personal computers in the Office?		☐
Percent Cooled	Less than 50%	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	50% or more	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity		
Meter: Electric 42-007-199-08 (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
03/14/2011	04/13/2011	377,011.00
02/14/2011	03/13/2011	383,783.00
01/14/2011	02/13/2011	439,928.00
12/14/2010	01/13/2011	492,595.00
11/14/2010	12/13/2010	414,361.00
10/14/2010	11/13/2010	363,130.00
09/14/2010	10/13/2010	373,860.00
08/14/2010	09/13/2010	397,709.00
07/14/2010	08/13/2010	372,561.00
06/14/2010	07/13/2010	395,080.00
05/14/2010	06/13/2010	395,080.00
Electric 42-007-199-08 Consumption (kWh (thousand Watt-hours))		**4,405,098.00**
Electric 42-007-199-08 Consumption (kBtu (thousand Btu))		**15,030,194.38**
Meter: Electric 66-505-708-18 (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
03/12/2011	04/11/2011	7,571.33
02/12/2011	03/11/2011	7,571.33
01/12/2011	02/11/2011	7,571.33
12/12/2010	01/11/2011	7,571.33
11/12/2010	12/11/2010	7,571.33
10/12/2010	11/11/2010	7,571.33
09/12/2010	10/11/2010	7,571.33
08/12/2010	09/11/2010	7,571.33
07/12/2010	08/11/2010	7,571.33
06/12/2010	07/11/2010	7,571.33
05/12/2010	06/11/2010	7,571.33
Electric 66-505-708-18 Consumption (kWh (thousand Watt-hours))		**83,284.63**
Electric 66-505-708-18 Consumption (kBtu (thousand Btu))		**284,167.16**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**15,314,361.53**

Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?	☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
JCPS Administrative Facility
346 Claremont Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Claremont Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

JCPS Administrative Facility	
Gross Floor Area Excluding Parking: (ft^2)	166,500
Year Built	1919
For 12-month Evaluation Period Ending Date:	April 30, 2011

Facility Space Use Summary

JCPS Administrative Facility	
Space Type	Office
Gross Floor Area (ft^2)	166,500
Weekly operating hours	75
Workers on Main Shift	200
Number of PCs	200
Percent Cooled	Less than 50%
Percent Heated	50% or more

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 04/30/2011)	**Baseline** (Ending Date 04/30/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	22	22	75	N/A	50
Energy Intensity					
Site (kBtu/ft^2)	100	100	54	N/A	73
Source (kBtu/ft^2)	334	334	181	N/A	244
Energy Cost					
$/year	$ 431,217.17	$ 431,217.17	$ 233,475.27	N/A	$ 315,644.75
$/$ft^2$/year	$ 2.59	$ 2.59	$ 1.40	N/A	$ 1.90
Greenhouse Gas Emissions					
$MtCO_2e$/year	2,356	2,356	1,276	N/A	1,725
$kgCO_2e/ft^2$/year	14	14	8	N/A	10

More than 50% of your building is defined as Office. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

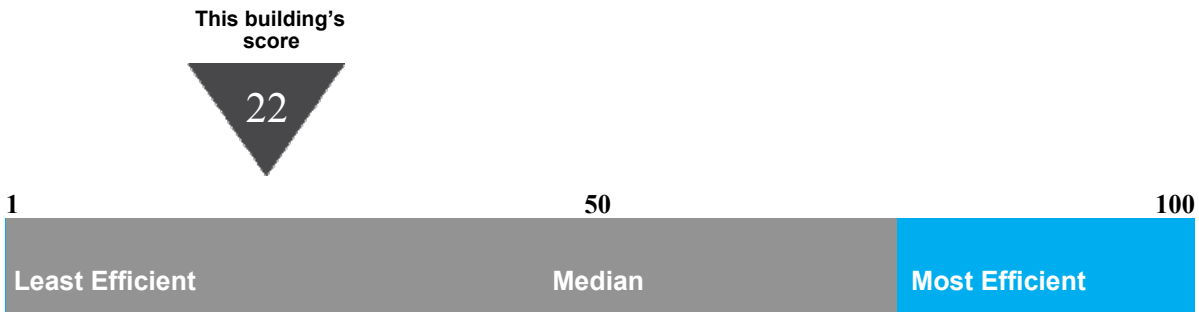
Statement of Energy Performance

2011

JCPS Administrative Facility
346 Claremont Ave.
Jersey City, NJ 07305

Portfolio Manager Building ID: 2900490

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 334 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending April 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/23/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
Jersey City Infinity Institute

Building ID: 2899872
For 12-month Period Ending: April 30, 2011[1]
Date SEP becomes ineligible: N/A

Date SEP Generated: April 23, 2012

Facility
Jersey City Infinity Institute
193 Old Bergen Road
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 1926
Gross Floor Area (ft²): 60,000

Energy Performance Rating[2] (1-100) 100

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	40,668
Natural Gas - (kBtu)[4]	0
Total Energy (kBtu)	40,668

Energy Intensity[4]

Site (kBtu/ft²/yr)	1
Source (kBtu/ft²/yr)	2

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	6

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	33
National Median Source EUI	111
% Difference from National Median Source EUI	-98%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
1. Application for the ENERGY STAR must be submitted to EPA within 4 months of the Period Ending date. Award of the ENERGY STAR is not final until approval is received from EPA.
2. The EPA Energy Performance Rating is based on total source energy. A rating of 75 is the minimum to be eligible for the ENERGY STAR.
3. Values represent energy consumption, annualized to a 12-month period.
4. Values represent energy intensity, annualized to a 12-month period.
5. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

The government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, Licensed Professional facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S., EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460.

ENERGY STAR® Data Checklist for Commercial Buildings

In order for a building to qualify for the ENERGY STAR, a Professional Engineer (PE) or a Registered Architect (RA) must validate the accuracy of the data underlying the building's energy performance rating. This checklist is designed to provide an at-a-glance summary of a property's physical and operating characteristics, as well as its total energy consumption, to assist the PE or RA in double-checking the information that the building owner or operator has entered into Portfolio Manager.

Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	Jersey City Infinity Institute	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	193 Old Bergen Road, Jersey City, NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
Jersey City Infinity Institute (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	60,000 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	145	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	No	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity		
Meter: Electric 66-873-417-07 (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
03/07/2011	04/06/2011	1,359.00
02/07/2011	03/06/2011	2,169.00
01/07/2011	02/06/2011	2,625.00
12/07/2010	01/06/2011	1,050.00
11/07/2010	12/06/2010	543.00
10/07/2010	11/06/2010	520.00
09/07/2010	10/06/2010	1,163.00
08/07/2010	09/06/2010	662.00
07/07/2010	08/06/2010	160.00
06/07/2010	07/06/2010	160.00
05/07/2010	06/06/2010	549.00
Electric 66-873-417-07 Consumption (kWh (thousand Watt-hours))		**10,960.00**
Electric 66-873-417-07 Consumption (kBtu (thousand Btu))		**37,395.52**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**37,395.52**
Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?		☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
Jersey City Infinity Institute
193 Old Bergen Road
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

Jersey City Infinity Institute	
Gross Floor Area Excluding Parking: (ft^2)	60,000
Year Built	1926
For 12-month Evaluation Period Ending Date:	April 30, 2011

Facility Space Use Summary

Jersey City Infinity Institute	
Space Type	K-12 School
Gross Floor Area (ft^2)	60,000
Open Weekends?	Yes
Number of PCs	145
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months °	N/A
High School?	No
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 04/30/2011)	**Baseline** (Ending Date 04/30/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	100	100	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	1	1	26	N/A	33
Source ($kBtu/ft^2$)	2	2	87	N/A	111
Energy Cost					
$/year	N/A	N/A	N/A	N/A	N/A
$/$ft^2$/year	N/A	N/A	N/A	N/A	N/A
Greenhouse Gas Emissions					
$MtCO_2e$/year	6	6	230	N/A	294
$kgCO_2e/ft^2$/year	0	0	0	N/A	0

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

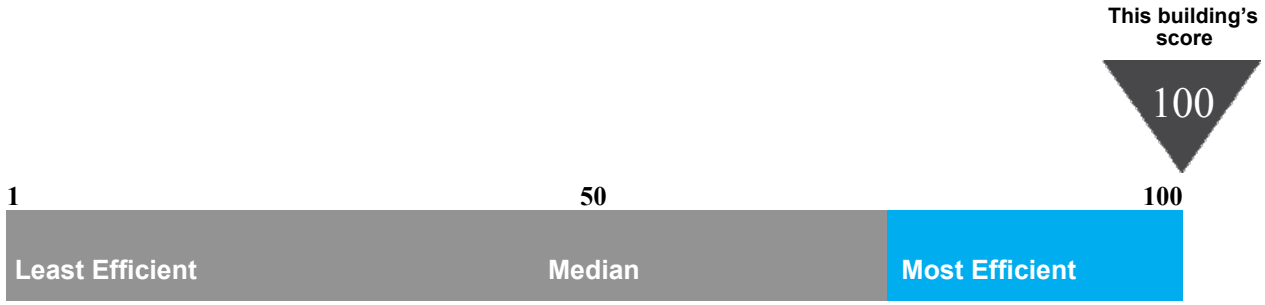
Statement of Energy Performance

2011

Jersey City Infinity Institute
193 Old Bergen Road
Jersey City, NJ 07305

Portfolio Manager Building ID: 2899872

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 2 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending April 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/23/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
Ferris High School

Building ID: 2899861
For 12-month Period Ending: April 30, 2011[1]
Date SEP becomes ineligible: N/A
Date SEP Generated: April 23, 2012

Facility
Ferris High School
35 Colgate St.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 1969
Gross Floor Area (ft²): 282,115

Energy Performance Rating[2] (1-100) 20

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	10,182,697
Natural Gas (kBtu)[4]	20,171,026
Total Energy (kBtu)	30,353,723

Energy Intensity[4]

Site (kBtu/ft²/yr)	108
Source (kBtu/ft²/yr)	195

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	2,515

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	81
National Median Source EUI	147
% Difference from National Median Source EUI	33%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
1. Application for the ENERGY STAR must be submitted to EPA within 4 months of the Period Ending date. Award of the ENERGY STAR is not final until approval is received from EPA.
2. The EPA Energy Performance Rating is based on total source energy. A rating of 75 is the minimum to be eligible for the ENERGY STAR.
3. Values represent energy consumption, annualized to a 12-month period.
4. Values represent energy intensity, annualized to a 12-month period.
5. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

The government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, Licensed Professional facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S., EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460.

ENERGY STAR® Data Checklist for Commercial Buildings

In order for a building to qualify for the ENERGY STAR, a Professional Engineer (PE) or a Registered Architect (RA) must validate the accuracy of the data underlying the building's energy performance rating. This checklist is designed to provide an at-a-glance summary of a property's physical and operating characteristics, as well as its total energy consumption, to assist the PE or RA in double-checking the information that the building owner or operator has entered into Portfolio Manager.

Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	Ferris High School	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	35 Colgate St., Jersey City, NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
Ferris High School (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	282,115 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	625	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	Yes	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity		
Meter: Electric 42-005-547-04 (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
03/09/2011	04/08/2011	204,397.00
02/09/2011	03/08/2011	205,812.00
01/09/2011	02/08/2011	209,802.00
12/09/2010	01/08/2011	210,120.00
11/09/2010	12/08/2010	211,809.00
10/09/2010	11/08/2010	182,838.00
09/09/2010	10/08/2010	219,307.00
08/09/2010	09/08/2010	251,213.00
07/09/2010	08/08/2010	178,990.00
06/09/2010	07/08/2010	256,801.00
05/09/2010	06/08/2010	229,891.00
Electric 42-005-547-04 Consumption (kWh (thousand Watt-hours))		**2,360,980.00**
Electric 42-005-547-04 Consumption (kBtu (thousand Btu))		**8,055,663.76**
Meter: Electric 66-618-695-18 (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
03/07/2011	04/06/2011	57,000.00
02/08/2011	03/07/2011	58,200.00
01/08/2011	02/07/2011	55,200.00
12/08/2010	01/07/2011	68,700.00
11/08/2010	12/07/2010	62,700.00
10/08/2010	11/07/2010	28,500.00
09/08/2010	10/07/2010	4,800.00
08/08/2010	09/07/2010	11,700.00
07/08/2010	08/07/2010	9,600.00
06/08/2010	07/07/2010	5,550.00
05/08/2010	06/07/2010	5,550.00
Electric 66-618-695-18 Consumption (kWh (thousand Watt-hours))		**367,500.00**
Electric 66-618-695-18 Consumption (kBtu (thousand Btu))		**1,253,910.00**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**9,309,573.76**

Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?	☐

Fuel Type: Natural Gas

Meter: Gas 42-005-547-04 (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
03/08/2011	04/07/2011	756.60
02/08/2011	03/07/2011	811.30
01/08/2011	02/07/2011	784.60
12/08/2010	01/07/2011	916.10
11/08/2010	12/07/2010	811.90
10/08/2010	11/07/2010	682.80
09/08/2010	10/07/2010	485.50
08/08/2010	09/07/2010	191.60
07/08/2010	08/07/2010	427.00
06/08/2010	07/07/2010	477.70
05/08/2010	06/07/2010	756.60
Gas 42-005-547-04 Consumption (therms)		**7,101.70**
Gas 42-005-547-04 Consumption (kBtu (thousand Btu))		**710,170.00**

Meter: Gas 42-001-889-02 (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
03/07/2011	04/06/2011	0.00
02/07/2011	03/06/2011	39,981.50
01/07/2011	02/06/2011	51,506.60
12/07/2010	01/06/2011	49,497.20
11/07/2010	12/06/2010	29,181.90
10/07/2010	11/06/2010	9,252.90
09/07/2010	10/06/2010	730.50
08/07/2010	09/06/2010	18.60
07/07/2010	08/06/2010	0.00
06/07/2010	07/06/2010	0.00
05/07/2010	06/06/2010	0.00
Gas 42-001-889-02 Consumption (therms)		**180,169.20**
Gas 42-001-889-02 Consumption (kBtu (thousand Btu))		**18,016,920.00**

Meter: Gas 491645 (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
03/07/2011	04/06/2011	48.38
02/07/2011	03/06/2011	48.38
01/07/2011	02/06/2011	48.38
12/07/2010	01/06/2011	48.38
11/07/2010	12/06/2010	48.38
10/07/2010	11/06/2010	48.38

09/07/2010	10/06/2010	48.38
08/07/2010	09/06/2010	48.38
07/07/2010	08/06/2010	48.38
06/07/2010	07/06/2010	48.38
05/07/2010	06/06/2010	48.38
Gas 491645 Consumption (therms)		**532.18**
Gas 491645 Consumption (kBtu (thousand Btu))		**53,218.00**
Total Natural Gas Consumption (kBtu (thousand Btu))		**18,780,308.00**
Is this the total Natural Gas consumption at this building including all Natural Gas meters?		☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
Ferris High School
35 Colgate St.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

Ferris High School	
Gross Floor Area Excluding Parking: (ft^2)	282,115
Year Built	1969
For 12-month Evaluation Period Ending Date:	April 30, 2011

Facility Space Use Summary

Ferris High School	
Space Type	K-12 School
Gross Floor Area (ft^2)	282,115
Open Weekends?	Yes
Number of PCs	625
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months °	N/A
High School?	Yes
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 04/30/2011)	**Baseline** (Ending Date 04/30/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	20	20	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	108	108	63	N/A	81
Source ($kBtu/ft^2$)	195	195	115	N/A	147
Energy Cost					
$/year	$ 541,754.57	$ 541,754.57	$ 319,191.58	N/A	$ 408,166.42
$/$ft^2$/year	$ 1.92	$ 1.92	$ 1.13	N/A	$ 1.45
Greenhouse Gas Emissions					
$MtCO_2e$/year	2,515	2,515	1,482	N/A	1,895
$kgCO_2e/ft^2$/year	9	9	5	N/A	7

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

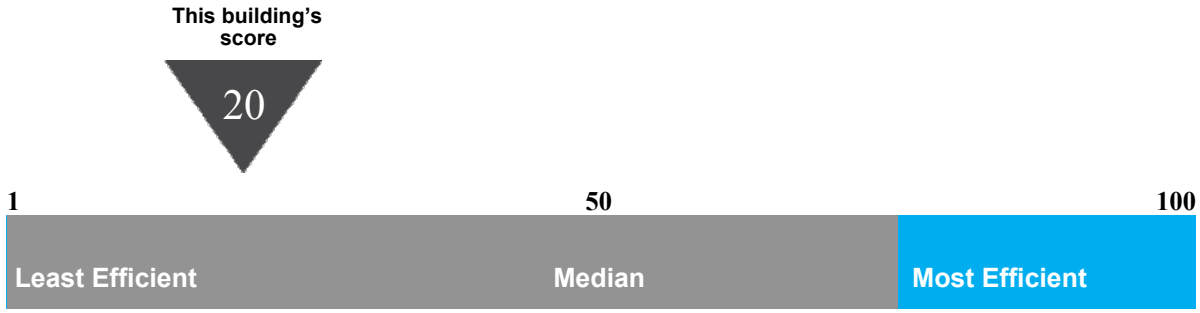
Statement of Energy Performance

2011

Ferris High School
35 Colgate St.
Jersey City, NJ 07305

Portfolio Manager Building ID: 2899861

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 195 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending April 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/23/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
Dickinson High School

Building ID: 2899840
For 12-month Period Ending: April 30, 2011[1]
Date SEP becomes ineligible: N/A

Date SEP Generated: April 23, 2012

Facility
Dickinson High School
2 Palisades Ave.
Jersey City , NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 1904
Gross Floor Area (ft²): 356,000

Energy Performance Rating[2] (1-100) 75

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	12,143,855
Fuel Oil (No. 2) (kBtu)	1,864,028
Natural Gas (kBtu)[4]	242,103
Total Energy (kBtu)	14,249,986

Energy Intensity[4]

Site (kBtu/ft²/yr)	40
Source (kBtu/ft²/yr)	120

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	1,870

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	52
National Median Source EUI	155
% Difference from National Median Source EUI	-23%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
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3. Values represent energy consumption, annualized to a 12-month period.
4. Values represent energy intensity, annualized to a 12-month period.
5. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

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Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	Dickinson High School	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	2 Palisades Ave., Jersey City , NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
Dickinson High School (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	356,000 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	700	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	Yes	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity		
Meter: Electric 66-101-131-06 (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
03/12/2011	04/11/2011	247.25
02/12/2011	03/11/2011	247.25
01/12/2011	02/11/2011	247.25
12/12/2010	01/11/2011	247.25
11/12/2010	12/11/2010	247.25
10/12/2010	11/11/2010	247.25
09/12/2010	10/11/2010	247.25
08/12/2010	09/11/2010	247.25
07/12/2010	08/11/2010	247.25
06/12/2010	07/11/2010	247.25
05/12/2010	06/11/2010	247.25
Electric 66-101-131-06 Consumption (kWh (thousand Watt-hours))		**2,719.75**
Electric 66-101-131-06 Consumption (kBtu (thousand Btu))		**9,279.79**
Meter: Electric 519264 (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
03/12/2011	04/11/2011	112,053.58
02/12/2011	03/11/2011	112,053.58
01/12/2011	02/11/2011	112,053.58
12/12/2010	01/11/2011	112,053.58
11/12/2010	12/11/2010	112,053.58
10/12/2010	11/11/2010	112,053.58
09/12/2010	10/11/2010	112,053.58
08/12/2010	09/11/2010	112,053.58
07/12/2010	08/11/2010	112,053.58
06/12/2010	07/11/2010	112,053.58
05/12/2010	06/11/2010	112,053.58
Electric 519264 Consumption (kWh (thousand Watt-hours))		**1,232,589.38**
Electric 519264 Consumption (kBtu (thousand Btu))		**4,205,594.96**

Meter: Electric 42-010-247-09 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
03/12/2011	04/11/2011	184,423.92
02/12/2011	03/11/2011	184,423.92
01/12/2011	02/11/2011	184,423.92
12/12/2010	01/11/2011	184,423.92
11/12/2010	12/11/2010	184,423.92
10/12/2010	11/11/2010	184,423.92
09/12/2010	10/11/2010	184,423.92
08/12/2010	09/11/2010	184,423.92
07/12/2010	08/11/2010	184,423.92
06/12/2010	07/11/2010	184,423.92
05/12/2010	06/11/2010	184,423.92
Electric 42-010-247-09 Consumption (kWh (thousand Watt-hours))		**2,028,663.12**
Electric 42-010-247-09 Consumption (kBtu (thousand Btu))		**6,921,798.57**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**11,136,673.32**
Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?		☐

Fuel Type: Natural Gas

Meter: Natural Gas (therms)
Space(s): Entire Facility

Start Date	End Date	Energy Use (therms)
03/12/2011	04/11/2011	201.84
02/12/2011	03/11/2011	201.84
01/12/2011	02/11/2011	201.84
12/12/2010	01/11/2011	201.84
11/12/2010	12/11/2010	201.84
10/12/2010	11/11/2010	201.84
09/12/2010	10/11/2010	201.84
08/12/2010	09/11/2010	201.84
07/12/2010	08/11/2010	201.84
06/12/2010	07/11/2010	201.84
05/12/2010	06/11/2010	201.84
Natural Gas Consumption (therms)		**2,220.24**
Natural Gas Consumption (kBtu (thousand Btu))		**222,024.00**
Total Natural Gas Consumption (kBtu (thousand Btu))		**222,024.00**
Is this the total Natural Gas consumption at this building including all Natural Gas meters?		☐

Fuel Type: Fuel Oil (No. 2)

Meter: Oil (Gallons)
Space(s): Entire Facility

Start Date	End Date	Energy Use (Gallons)
03/12/2011	04/11/2011	1,120.50

02/12/2011	03/11/2011	1,120.50
01/12/2011	02/11/2011	1,120.50
12/12/2010	01/11/2011	1,120.50
11/12/2010	12/11/2010	1,120.50
10/12/2010	11/11/2010	1,120.50
09/12/2010	10/11/2010	1,120.50
08/12/2010	09/11/2010	1,120.50
07/12/2010	08/11/2010	1,120.50
06/12/2010	07/11/2010	1,120.50
05/12/2010	06/11/2010	1,120.50
Oil Consumption (Gallons)		**12,325.50**
Oil Consumption (kBtu (thousand Btu))		**1,709,429.76**
Total Fuel Oil (No. 2) Consumption (kBtu (thousand Btu))		**1,709,429.76**
Is this the total Fuel Oil (No. 2) consumption at this building including all Fuel Oil (No. 2) meters?		☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
Dickinson High School
2 Palisades Ave.
Jersey City , NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

Dickinson High School	
Gross Floor Area Excluding Parking: (ft^2)	356,000
Year Built	1904
For 12-month Evaluation Period Ending Date:	April 30, 2011

Facility Space Use Summary

Dickinson High School	
Space Type	K-12 School
Gross Floor Area (ft^2)	356,000
Open Weekends?	Yes
Number of PCs	700
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months °	N/A
High School?	Yes
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 04/30/2011)	**Baseline** (Ending Date 04/30/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	75	75	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	40	40	40	N/A	52
Source ($kBtu/ft^2$)	120	120	121	N/A	155
Energy Cost					
$/year	N/A	N/A	N/A	N/A	N/A
$/$ft^2$/year	N/A	N/A	N/A	N/A	N/A
Greenhouse Gas Emissions					
$MtCO_2e$/year	1,870	1,870	1,889	N/A	2,416
$kgCO_2e/ft^2$/year	5	5	5	N/A	6

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

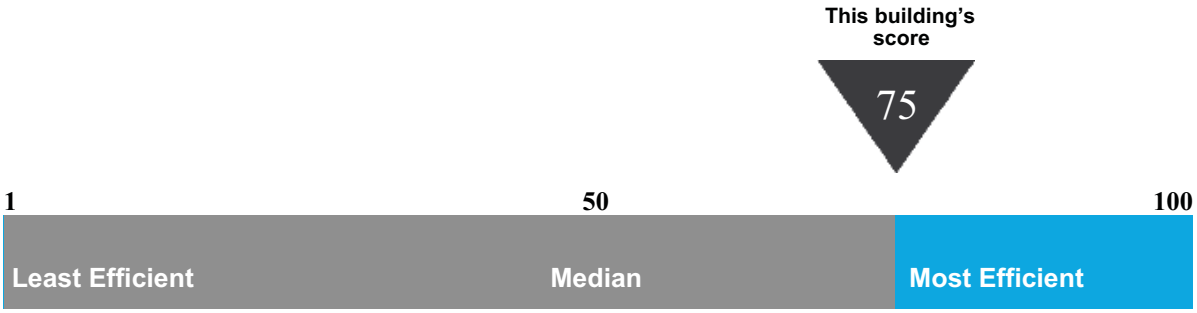
Statement of Energy Performance

2011

Dickinson High School
2 Palisades Ave.
Jersey City , NJ 07305

Portfolio Manager Building ID: 2899840

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 120 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending April 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/23/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
Cunningham Center ECC

Building ID: 2899824
For 12-month Period Ending: April 30, 2011[1]
Date SEP becomes ineligible: N/A

Date SEP Generated: April 23, 2012

Facility
Cunningham Center ECC
218 Ocean Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 2005
Gross Floor Area (ft²): 12,100

Energy Performance Rating[2] (1-100) 27

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	602,299
Natural Gas - (kBtu)[4]	0
Total Energy (kBtu)	602,299

Energy Intensity[4]

Site (kBtu/ft²/yr)	50
Source (kBtu/ft²/yr)	166

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	85

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	41
National Median Source EUI	135
% Difference from National Median Source EUI	23%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
1. Application for the ENERGY STAR must be submitted to EPA within 4 months of the Period Ending date. Award of the ENERGY STAR is not final until approval is received from EPA.
2. The EPA Energy Performance Rating is based on total source energy. A rating of 75 is the minimum to be eligible for the ENERGY STAR.
3. Values represent energy consumption, annualized to a 12-month period.
4. Values represent energy intensity, annualized to a 12-month period.
5. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

The government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, Licensed Professional facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S., EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460.

ENERGY STAR® Data Checklist for Commercial Buildings

In order for a building to qualify for the ENERGY STAR, a Professional Engineer (PE) or a Registered Architect (RA) must validate the accuracy of the data underlying the building's energy performance rating. This checklist is designed to provide an at-a-glance summary of a property's physical and operating characteristics, as well as its total energy consumption, to assist the PE or RA in double-checking the information that the building owner or operator has entered into Portfolio Manager.

Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	Cunningham Center ECC	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	218 Ocean Ave., Jersey City, NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
Cunningham Center ECC (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	12,100 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	22	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	12(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	No	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity		
Meter: Electric 67-272-769-00 (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
03/12/2011	04/11/2011	14,716.67
02/12/2011	03/11/2011	14,716.67
01/12/2011	02/11/2011	14,716.67
12/12/2010	01/11/2011	14,716.67
11/12/2010	12/11/2010	14,716.67
10/12/2010	11/11/2010	14,716.67
09/12/2010	10/11/2010	14,716.67
08/12/2010	09/11/2010	14,716.67
07/12/2010	08/11/2010	14,716.67
06/12/2010	07/11/2010	14,716.67
05/12/2010	06/11/2010	14,716.67
Electric 67-272-769-00 Consumption (kWh (thousand Watt-hours))		**161,883.37**
Electric 67-272-769-00 Consumption (kBtu (thousand Btu))		**552,346.06**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**552,346.06**
Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?		☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
Cunningham Center ECC
218 Ocean Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

Cunningham Center ECC	
Gross Floor Area Excluding Parking: (ft^2)	12,100
Year Built	2005
For 12-month Evaluation Period Ending Date:	April 30, 2011

Facility Space Use Summary

Cunningham Center ECC	
Space Type	K-12 School
Gross Floor Area (ft^2)	12,100
Open Weekends?	Yes
Number of PCs	22
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months ◦	12
High School?	No
School District ◦	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 04/30/2011)	**Baseline** (Ending Date 04/30/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	27	27	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	50	50	32	N/A	41
Source ($kBtu/ft^2$)	166	166	106	N/A	135
Energy Cost					
$/year	N/A	N/A	N/A	N/A	N/A
$/$ft^2$/year	N/A	N/A	N/A	N/A	N/A
Greenhouse Gas Emissions					
$MtCO_2e$/year	85	85	54	N/A	69
$kgCO_2e/ft^2$/year	7	7	4	N/A	6

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

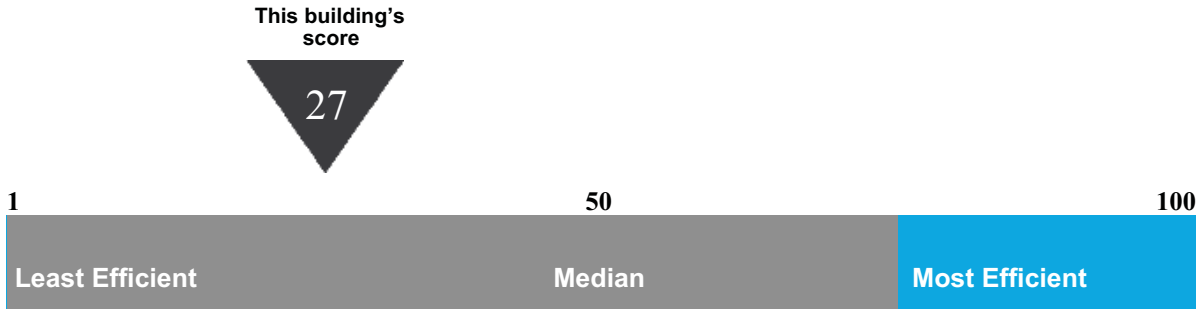
Statement of Energy Performance

2011

Cunningham Center ECC
218 Ocean Ave.
Jersey City, NJ 07305

Portfolio Manager Building ID: 2899824

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 166 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending April 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/23/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
Academy I

Building ID: 2899876
For 12-month Period Ending: May 31, 2011[1]
Date SEP becomes ineligible: N/A

Date SEP Generated: April 23, 2012

Facility
Academy I
209 Bergen Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 1966
Gross Floor Area (ft²): 64,884

Energy Performance Rating[2] (1-100) 4

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	3,766,343
Natural Gas - (kBtu)[4]	0
Total Energy (kBtu)	3,766,343

Energy Intensity[4]

Site (kBtu/ft²/yr)	58
Source (kBtu/ft²/yr)	194

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	533

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	32
National Median Source EUI	109
% Difference from National Median Source EUI	79%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
1. Application for the ENERGY STAR must be submitted to EPA within 4 months of the Period Ending date. Award of the ENERGY STAR is not final until approval is received from EPA.
2. The EPA Energy Performance Rating is based on total source energy. A rating of 75 is the minimum to be eligible for the ENERGY STAR.
3. Values represent energy consumption, annualized to a 12-month period.
4. Values represent energy intensity, annualized to a 12-month period.
5. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

The government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, Licensed Professional facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S., EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460.

ENERGY STAR® Data Checklist for Commercial Buildings

In order for a building to qualify for the ENERGY STAR, a Professional Engineer (PE) or a Registered Architect (RA) must validate the accuracy of the data underlying the building's energy performance rating. This checklist is designed to provide an at-a-glance summary of a property's physical and operating characteristics, as well as its total energy consumption, to assist the PE or RA in double-checking the information that the building owner or operator has entered into Portfolio Manager.

Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	Academy I	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	209 Bergen Ave., Jersey City, NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
Academy I (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	64,884 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	150	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	No	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity		
Meter: Electric 42-007-383-09 (kWh (thousand Watt-hours)) **Space(s):** Entire Facility **Generation Method:** Grid Purchase		
Start Date	**End Date**	**Energy Use (kWh (thousand Watt-hours))**
04/12/2011	05/11/2011	78,796.00
03/12/2011	04/11/2011	115,145.00
02/12/2011	03/11/2011	151,493.00
01/12/2011	02/11/2011	164,857.00
12/12/2010	01/11/2011	178,098.00
11/12/2010	12/11/2010	105,290.00
10/12/2010	11/11/2010	63,552.00
09/12/2010	10/11/2010	54,768.00
08/12/2010	09/11/2010	37,082.00
07/12/2010	08/11/2010	33,946.00
06/12/2010	07/11/2010	47,950.00
Electric 42-007-383-09 Consumption (kWh (thousand Watt-hours))		**1,030,977.00**
Electric 42-007-383-09 Consumption (kBtu (thousand Btu))		**3,517,693.52**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**3,517,693.52**
Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?		☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
Academy I
209 Bergen Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

Academy I	
Gross Floor Area Excluding Parking: (ft^2)	64,884
Year Built	1966
For 12-month Evaluation Period Ending Date:	May 31, 2011

Facility Space Use Summary

Academy I	
Space Type	K-12 School
Gross Floor Area (ft^2)	64,884
Open Weekends?	Yes
Number of PCs	150
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months °	N/A
High School?	No
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 05/31/2011)	**Baseline** (Ending Date 05/31/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	4	4	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	58	58	25	N/A	32
Source ($kBtu/ft^2$)	194	194	85	N/A	109
Energy Cost					
$/year	N/A	N/A	N/A	N/A	N/A
$/$ft^2$/year	N/A	N/A	N/A	N/A	N/A
Greenhouse Gas Emissions					
$MtCO_2e$/year	533	533	233	N/A	298
$kgCO_2e/ft^2$/year	8	8	4	N/A	4

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

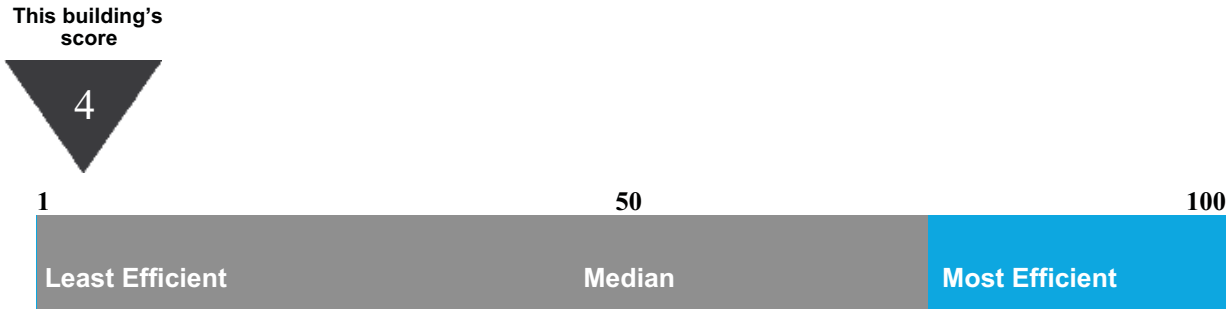
Statement of Energy Performance

2011

Academy I
209 Bergen Ave.
Jersey City, NJ 07305

Portfolio Manager Building ID: 2899876

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 194 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending May 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/23/2012

OMB No. 2060-0347

STATEMENT OF ENERGY PERFORMANCE
Snyder High School

Building ID: 2899852
For 12-month Period Ending: May 31, 2011[1]
Date SEP becomes ineligible: N/A

Date SEP Generated: April 24, 2012

Facility
Snyder High School
239 Bergen Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

Year Built: 1923
Gross Floor Area (ft²): 209,500

Energy Performance Rating[2] (1-100) 62

Site Energy Use Summary[3]

Electricity - Grid Purchase(kBtu)	6,604,954
Fuel Oil (No. 2) (kBtu)	5,674,399
Natural Gas - (kBtu)[4]	0
Total Energy (kBtu)	12,279,353

Energy Intensity[4]

Site (kBtu/ft²/yr)	59
Source (kBtu/ft²/yr)	133

Emissions (based on site energy use)

Greenhouse Gas Emissions ($MtCO_2e$/year)	1,353

Electric Distribution Utility
Public Service Electric & Gas Co

National Median Comparison

National Median Site EUI	66
National Median Source EUI	149
% Difference from National Median Source EUI	-11%
Building Type	K-12 School

Stamp of Certifying Professional

Based on the conditions observed at the time of my visit to this building, I certify that the information contained within this statement is accurate.

Meets Industry Standards[5] **for Indoor Environmental Conditions:**

Ventilation for Acceptable Indoor Air Quality	**N/A**
Acceptable Thermal Environmental Conditions	**N/A**
Adequate Illumination	**N/A**

Certifying Professional
Matt Goss
11 British American Blvd.
Latham, NY 12110

Notes:
1. Application for the ENERGY STAR must be submitted to EPA within 4 months of the Period Ending date. Award of the ENERGY STAR is not final until approval is received from EPA.
2. The EPA Energy Performance Rating is based on total source energy. A rating of 75 is the minimum to be eligible for the ENERGY STAR.
3. Values represent energy consumption, annualized to a 12-month period.
4. Values represent energy intensity, annualized to a 12-month period.
5. Based on Meeting ASHRAE Standard 62 for ventilation for acceptable indoor air quality, ASHRAE Standard 55 for thermal comfort, and IESNA Lighting Handbook for lighting quality.

The government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, Licensed Professional facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S., EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460.

ENERGY STAR® Data Checklist for Commercial Buildings

In order for a building to qualify for the ENERGY STAR, a Professional Engineer (PE) or a Registered Architect (RA) must validate the accuracy of the data underlying the building's energy performance rating. This checklist is designed to provide an at-a-glance summary of a property's physical and operating characteristics, as well as its total energy consumption, to assist the PE or RA in double-checking the information that the building owner or operator has entered into Portfolio Manager.

Please complete and sign this checklist and include it with the stamped, signed Statement of Energy Performance.
NOTE: You must check each box to indicate that each value is correct, OR include a note.

CRITERION	VALUE AS ENTERED IN PORTFOLIO MANAGER	VERIFICATION QUESTIONS	NOTES	☑
Building Name	Snyder High School	Is this the official building name to be displayed in the ENERGY STAR Registry of Labeled Buildings?		☐
Type	K-12 School	Is this an accurate description of the space in question?		☐
Location	239 Bergen Ave., Jersey City, NJ 07305	Is this address accurate and complete? Correct weather normalization requires an accurate zip code.		☐
Single Structure	Single Facility	Does this SEP represent a single structure? SEPs cannot be submitted for multiple-building campuses (with the exception of a hospital, k-12 school, hotel and senior care facility) nor can they be submitted as representing only a portion of a building.		☐
Snyder High School (K-12 School)				
CRITERION	**VALUE AS ENTERED IN PORTFOLIO MANAGER**	**VERIFICATION QUESTIONS**	**NOTES**	☑
Gross Floor Area	209,500 Sq. Ft.	Does this square footage include all supporting functions such as kitchens and break rooms used by staff, storage areas, administrative areas, elevators, stairwells, atria, vent shafts, etc. Also note that existing atriums should only include the base floor area that it occupies. Interstitial (plenum) space between floors should not be included in the total. Finally gross floor area is not the same as leasable space. Leasable space is a subset of gross floor area.		☐
Open Weekends?	Yes	Is this building normally open at all on the weekends? This includes activities beyond the work conducted by maintenance, cleaning, and security personnel. Weekend activity could include any time when the space is used for classes, performances or other school or community activities. If the building is open on the weekend as part of the standard schedule during one or more seasons, the building should select ?yes? for open weekends. The ?yes? response should apply whether the building is open for one or both of the weekend days.		☐
Number of PCs	701	Is this the number of personal computers in the K12 School?		☐
Number of walk-in refrigeration/freezer units	0	Is this the total number of commercial walk-in type freezers and coolers? These units are typically found in storage and receiving areas.		☐
Presence of cooking facilities	No	Does this school have a dedicated space in which food is prepared and served to students? If the school has space in which food for students is only kept warm and/or served to students, or has only a galley that is used by teachers and staff then the answer is "no".		☐
Percent Cooled	10 %	Is this the percentage of the total floor space within the facility that is served by mechanical cooling equipment?		☐
Percent Heated	100 %	Is this the percentage of the total floor space within the facility that is served by mechanical heating equipment?		☐
Months	N/A(Optional)	Is this school in operation for at least 8 months of the year?		☐

High School?	Yes	Is this building a high school (teaching grades 10, 11, and/or 12)? If the building teaches to high school students at all, the user should check 'yes' to 'high school'. For example, if the school teaches to grades K-12 (elementary/middle and high school), the user should check 'yes' to 'high school'.		☐

ENERGY STAR® Data Checklist for Commercial Buildings

Energy Consumption

Power Generation Plant or Distribution Utility: Public Service Electric & Gas Co

Fuel Type: Electricity

Meter: Electric 42-000-897-18 (kWh (thousand Watt-hours))
Space(s): Entire Facility
Generation Method: Grid Purchase

Start Date	End Date	Energy Use (kWh (thousand Watt-hours))
04/25/2011	05/24/2011	117,913.00
03/25/2011	04/24/2011	119,621.00
02/25/2011	03/24/2011	121,328.00
01/25/2011	02/24/2011	137,370.00
12/25/2010	01/24/2011	153,412.00
11/25/2010	12/24/2010	153,816.00
10/25/2010	11/24/2010	174,058.00
09/25/2010	10/24/2010	204,798.00
08/25/2010	09/24/2010	180,186.00
07/25/2010	08/24/2010	198,963.00
06/24/2010	07/24/2010	214,791.00
Electric 42-000-897-18 Consumption (kWh (thousand Watt-hours))		**1,776,256.00**
Electric 42-000-897-18 Consumption (kBtu (thousand Btu))		**6,060,585.47**
Total Electricity (Grid Purchase) Consumption (kBtu (thousand Btu))		**6,060,585.47**
Is this the total Electricity (Grid Purchase) consumption at this building including all Electricity meters?		☐

Fuel Type: Fuel Oil (No. 2)

Meter: Oil (Gallons)
Space(s): Entire Facility

Start Date	End Date	Energy Use (Gallons)
04/25/2011	05/24/2011	3,405.00
03/25/2011	04/24/2011	3,405.00
02/25/2011	03/24/2011	3,405.00
01/25/2011	02/24/2011	3,405.00
12/25/2010	01/24/2011	3,405.00
11/25/2010	12/24/2010	3,405.00
10/25/2010	11/24/2010	3,405.00
09/25/2010	10/24/2010	3,405.00
08/25/2010	09/24/2010	3,405.00
07/25/2010	08/24/2010	3,405.00
06/25/2010	07/24/2010	3,405.00

Oil Consumption (Gallons)	**37,455.00**
Oil Consumption (kBtu (thousand Btu))	**5,194,652.68**
Total Fuel Oil (No. 2) Consumption (kBtu (thousand Btu))	**5,194,652.68**
Is this the total Fuel Oil (No. 2) consumption at this building including all Fuel Oil (No. 2) meters?	☐

Additional Fuels	
Do the fuel consumption totals shown above represent the total energy use of this building? Please confirm there are no additional fuels (district energy, generator fuel oil) used in this facility.	☐

On-Site Solar and Wind Energy	
Do the fuel consumption totals shown above include all on-site solar and/or wind power located at your facility? Please confirm that no on-site solar or wind installations have been omitted from this list. All on-site systems must be reported.	☐

Certifying Professional

(When applying for the ENERGY STAR, the Certifying Professional must be the same PE or RA that signed and stamped the SEP.)

Name: _____ Date: _____

Signature: _____

Signature is required when applying for the ENERGY STAR.

FOR YOUR RECORDS ONLY. DO NOT SUBMIT TO EPA.

Please keep this Facility Summary for your own records; do not submit it to EPA. Only the Statement of Energy Performance (SEP), Data Checklist and Letter of Agreement need to be submitted to EPA when applying for the ENERGY STAR.

Facility
Snyder High School
239 Bergen Ave.
Jersey City, NJ 07305

Facility Owner
The Jersey City Public Schools
346 Clarement Ave.
Jeresy City , NJ 07305

Primary Contact for this Facility
Matt Goss
11 British American Blvd.
Latham, NY 12110

General Information

Snyder High School	
Gross Floor Area Excluding Parking: (ft^2)	209,500
Year Built	1923
For 12-month Evaluation Period Ending Date:	May 31, 2011

Facility Space Use Summary

Snyder High School	
Space Type	K-12 School
Gross Floor Area (ft^2)	209,500
Open Weekends?	Yes
Number of PCs	701
Number of walk-in refrigeration/freezer units	0
Presence of cooking facilities	No
Percent Cooled	10
Percent Heated	100
Months °	N/A
High School?	Yes
School District °	N/A

Energy Performance Comparison

	Evaluation Periods		Comparisons		
Performance Metrics	**Current** (Ending Date 05/31/2011)	**Baseline** (Ending Date 05/31/2011)	**Rating of 75**	**Target**	**National Median**
Energy Performance Rating	62	62	75	N/A	50
Energy Intensity					
Site ($kBtu/ft^2$)	59	59	52	N/A	66
Source ($kBtu/ft^2$)	133	133	117	N/A	149
Energy Cost					
$/year	N/A	N/A	N/A	N/A	N/A
$/$ft^2$/year	N/A	N/A	N/A	N/A	N/A
Greenhouse Gas Emissions					
$MtCO_2e$/year	1,353	1,353	1,190	N/A	1,521
$kgCO_2e/ft^2$/year	6	6	5	N/A	7

More than 50% of your building is defined as K-12 School. Please note that your rating accounts for all of the spaces listed. The National Median column presents energy performance data your building would have if your building had a median rating of 50.

Notes:
o - This attribute is optional.
d - A default value has been supplied by Portfolio Manager.

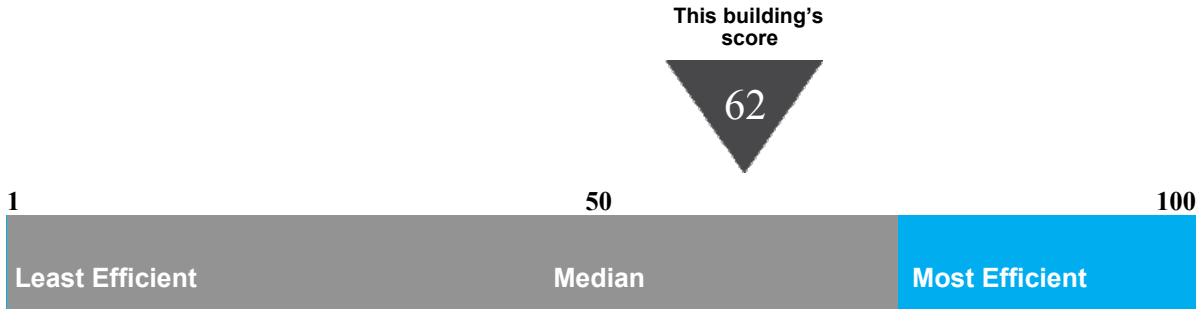
Statement of Energy Performance

2011

Snyder High School
239 Bergen Ave.
Jersey City, NJ 07305

Portfolio Manager Building ID: 2899852

The energy use of this building has been measured and compared to other similar buildings using the Environmental Protection Agency's (EPA's) Energy Performance Scale of 1–100, with 1 being the least energy efficient and 100 the most energy efficient. For more information, visit energystar.gov/benchmark.



This building uses 133 kBtu per square foot per year.*

*Based on source energy intensity for the 12 month period ending May 2011

Buildings with a score of 75 or higher may qualify for EPA's ENERGY STAR.

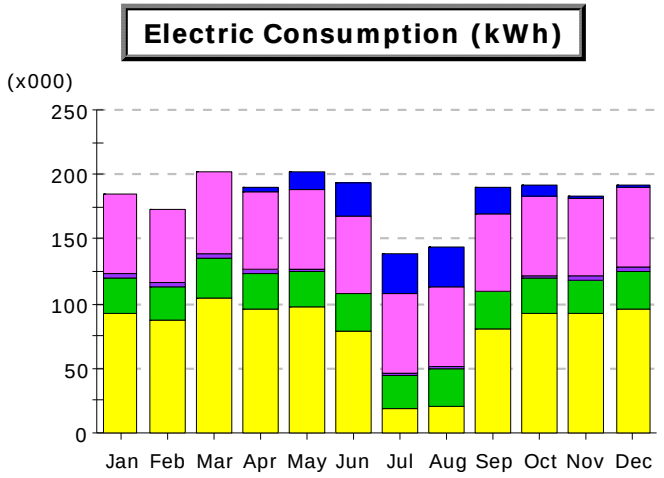
I certify that the information contained within this statement is accurate and in accordance with U.S. Environmental Protection Agency's measurement standards, found at energystar.gov

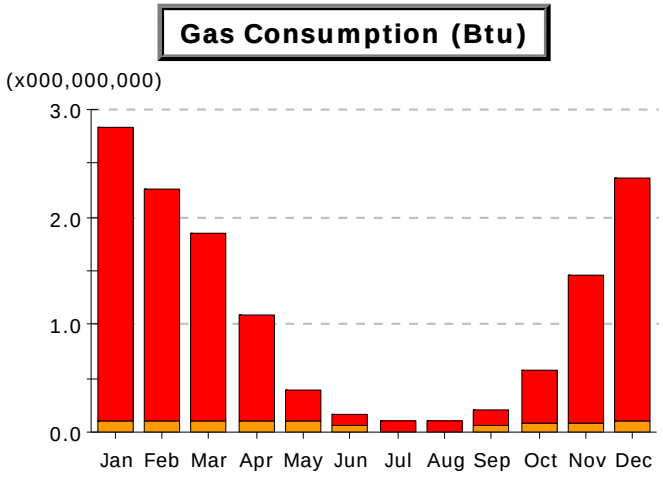
Date of certification

EPA United States Environmental Protection Agency

Date Generated: 04/24/2012

Appendix C





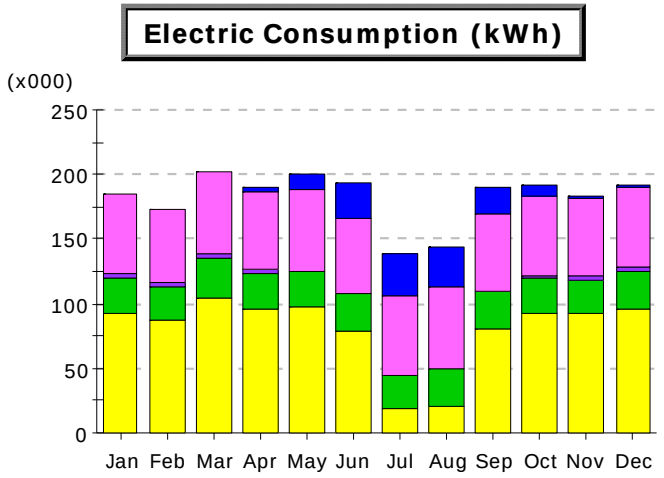


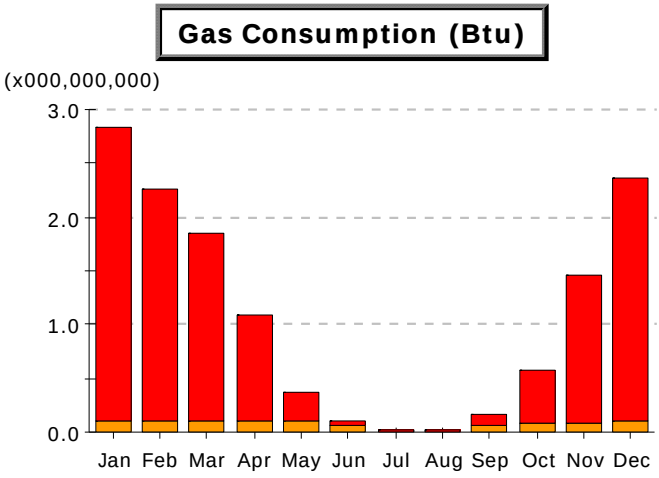
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	0.5	2.7	13.5	26.6	31.6	30.7	20.8	8.3	0.4	0.2	135.4
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	-	-	-	-	-	-	-	-	-	-	-	-	-
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	62.5	56.5	62.7	60.4	61.8	59.5	62.0	62.2	59.6	62.0	60.4	62.6	732.1
Pumps & Aux.	3.7	3.2	3.3	2.5	1.1	0.6	0.5	0.5	0.7	1.7	2.9	3.5	24.1
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	26.9	25.4	30.5	27.9	28.1	29.1	26.6	30.1	27.9	26.9	26.8	28.1	334.3
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	92.5	87.4	105.0	96.1	96.8	78.0	18.3	20.0	81.2	92.7	92.0	96.6	956.6
Total	185.6	172.6	201.9	189.7	201.2	193.8	138.9	143.5	190.2	191.6	182.5	191.0	2,182.6

Gas Consumption (Btu x000,000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	2.74	2.17	1.73	0.99	0.29	0.09	0.09	0.09	0.14	0.50	1.37	2.26	12.46
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	0.10	0.09	0.11	0.10	0.09	0.07	0.01	0.01	0.06	0.08	0.08	0.09	0.91
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	2.84	2.26	1.85	1.09	0.38	0.16	0.10	0.10	0.20	0.58	1.45	2.36	13.37





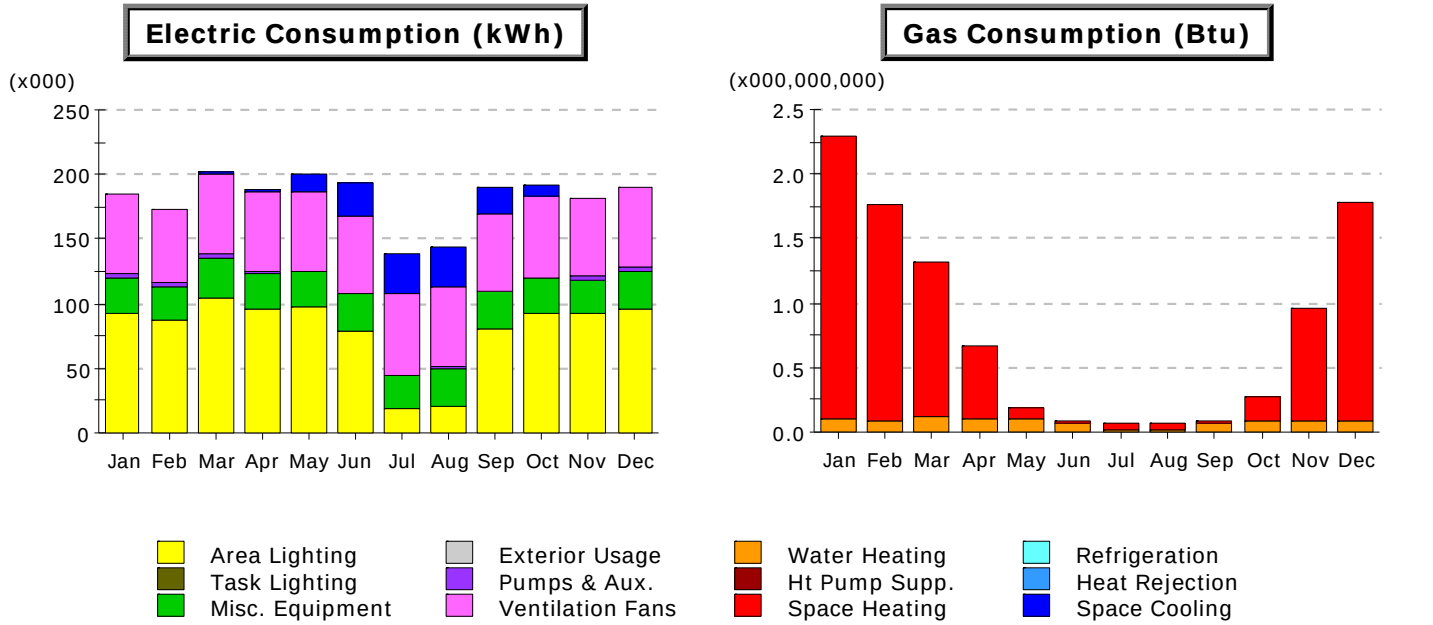


Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	0.5	2.7	13.5	26.5	31.5	30.7	20.7	8.3	0.4	0.2	135.1
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	-	-	-	-	-	-	-	-	-	-	-	-	-
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	62.5	56.5	62.7	60.4	61.8	59.6	62.0	62.2	59.7	62.0	60.4	62.6	732.4
Pumps & Aux.	3.7	3.2	3.3	2.4	0.9	0.2	0.1	0.0	0.3	1.5	2.9	3.5	22.0
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	26.9	25.4	30.5	27.9	28.1	29.1	26.6	30.1	27.9	26.9	26.8	28.1	334.3
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	92.5	87.4	105.0	96.1	96.8	78.0	18.3	20.0	81.2	92.7	92.0	96.6	956.6
Total	185.6	172.6	201.9	189.6	201.0	193.4	138.5	143.0	189.8	191.5	182.5	191.0	2,180.5

Gas Consumption (Btu x000,000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	2.74	2.17	1.73	0.99	0.27	0.04	0.01	0.00	0.11	0.50	1.37	2.26	12.20
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	0.10	0.09	0.11	0.10	0.09	0.07	0.01	0.01	0.06	0.08	0.08	0.09	0.91
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	2.84	2.26	1.84	1.09	0.37	0.11	0.02	0.01	0.17	0.57	1.45	2.36	13.10

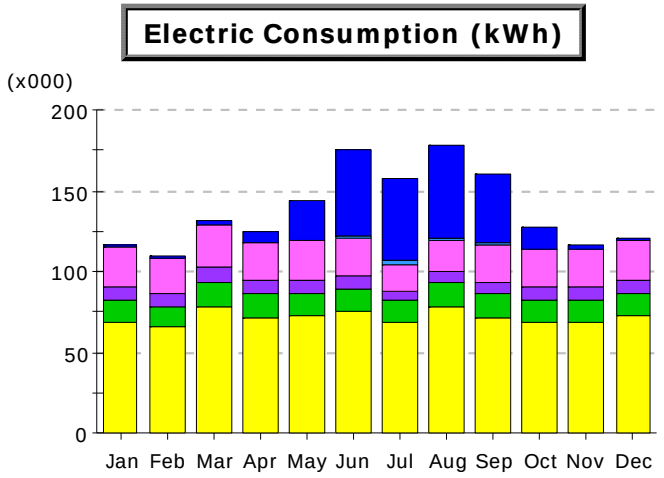


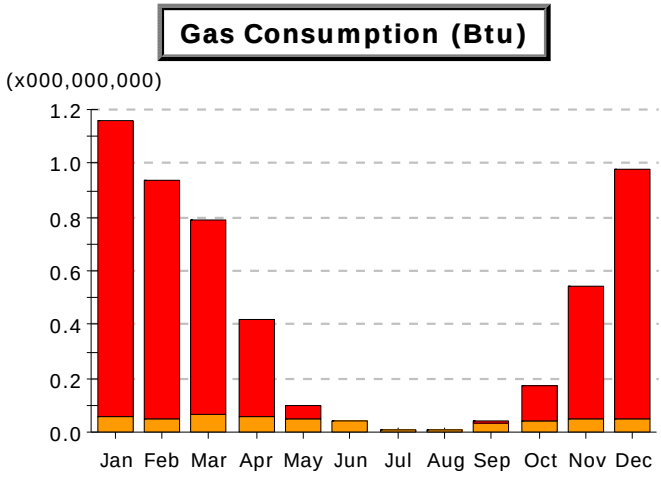
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	0.5	2.6	13.4	26.1	31.5	30.7	20.5	8.3	0.5	0.2	134.3
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	-	-	-	-	-	-	-	-	-	-	-	-	-
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	62.5	56.5	62.7	60.5	61.9	59.5	62.0	62.2	59.7	62.1	60.4	62.6	732.7
Pumps & Aux.	3.3	2.8	2.6	1.7	0.6	0.4	0.5	0.5	0.4	1.0	2.2	3.0	19.1
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	26.9	25.4	30.5	27.9	28.1	29.1	26.6	30.1	27.9	26.9	26.8	28.1	334.3
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	92.5	87.4	105.0	96.1	96.8	78.0	18.3	20.0	81.2	92.7	92.0	96.6	956.6
Total	185.3	172.2	201.3	189.0	200.8	193.1	138.9	143.5	189.7	190.9	181.9	190.5	2,177.1

Gas Consumption (Btu x000,000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	2.20	1.67	1.20	0.57	0.09	0.02	0.05	0.05	0.03	0.21	0.88	1.69	8.65
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	0.10	0.09	0.11	0.10	0.09	0.07	0.01	0.01	0.06	0.08	0.08	0.09	0.91
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	2.30	1.77	1.31	0.67	0.18	0.09	0.06	0.06	0.09	0.28	0.96	1.78	9.56





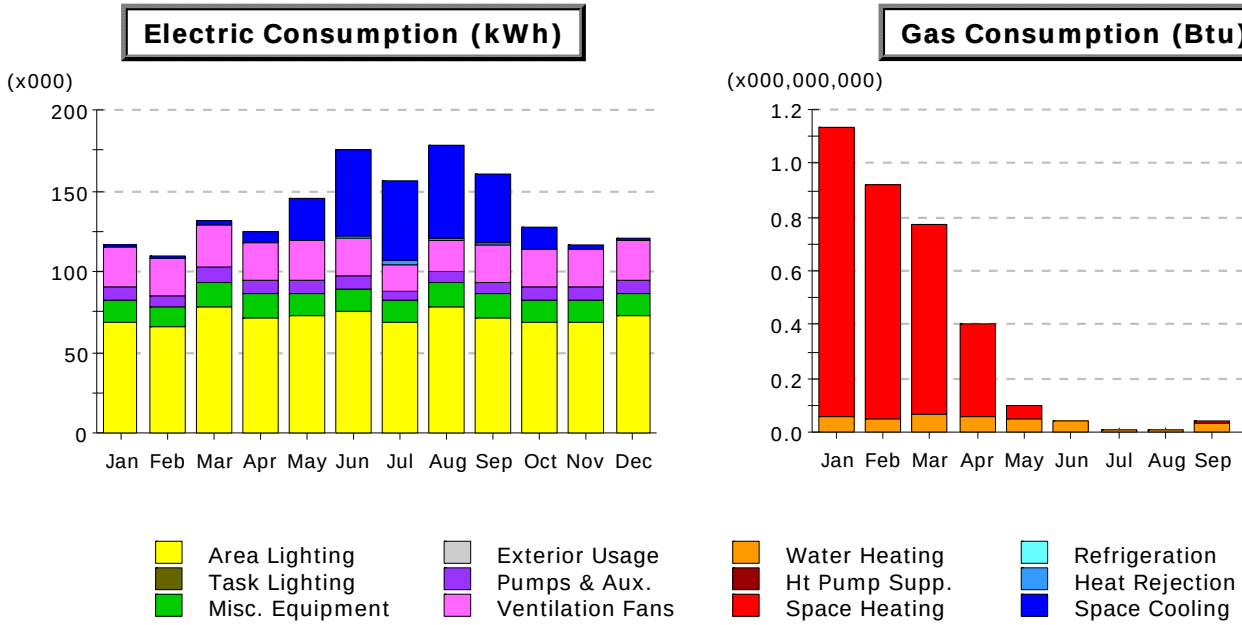


Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	1.1	1.1	2.3	5.8	25.1	53.0	51.3	58.1	42.8	13.6	2.4	1.5	258.1
Heat Reject.	-	-	0.0	0.0	0.4	0.9	1.9	1.5	0.7	0.1	0.0	-	5.5
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	-	-	-	-	-	-	-	-	-	-	-	-	-
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	24.3	22.7	26.9	24.4	24.8	24.0	16.5	18.9	23.6	23.4	23.4	25.0	277.9
Pumps & Aux.	8.0	7.5	8.9	8.0	7.8	7.7	5.5	6.4	7.4	7.5	7.7	8.3	90.8
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	13.6	12.8	15.4	14.1	14.2	14.7	13.6	15.4	14.1	13.6	13.5	14.2	169.2
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	69.2	65.3	78.1	71.8	72.2	74.8	69.2	78.1	71.8	69.2	68.9	72.2	860.7
Total	116.2	109.4	131.6	124.2	144.5	175.1	157.9	178.4	160.4	127.5	115.9	121.2	1,662.1

Gas Consumption (Btu x000,000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	1.10	0.89	0.73	0.36	0.05	-	-	-	0.01	0.13	0.49	0.92	4.68
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	0.05	0.05	0.06	0.06	0.05	0.04	0.01	0.01	0.04	0.04	0.05	0.05	0.51
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	1.16	0.94	0.79	0.42	0.10	0.04	0.01	0.01	0.04	0.17	0.54	0.98	5.18

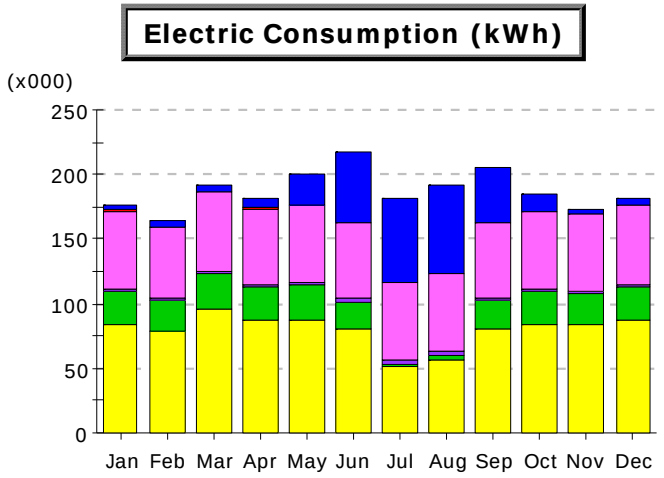


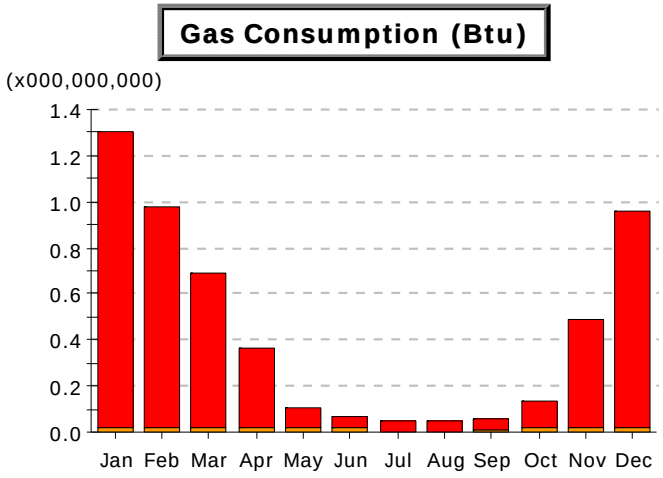
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	1.1	1.1	2.3	5.9	25.1	52.9	50.4	57.3	42.8	13.7	2.4	1.5	256.5
Heat Reject.	-	-	0.0	0.0	0.4	0.9	1.8	1.4	0.7	0.1	0.0	-	5.2
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	-	-	-	-	-	-	-	-	-	-	-	-	-
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	24.3	22.7	26.9	24.4	24.8	24.0	16.5	18.9	23.6	23.4	23.4	25.0	277.9
Pumps & Aux.	8.0	7.5	8.9	8.0	7.8	7.7	5.5	6.4	7.4	7.5	7.7	8.3	90.7
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	13.6	12.8	15.4	14.1	14.2	14.7	13.6	15.4	14.1	13.6	13.5	14.2	169.2
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	69.2	65.3	78.1	71.8	72.2	74.8	69.2	78.1	71.8	69.2	68.9	72.2	860.7
Total	116.2	109.3	131.6	124.2	144.5	175.0	156.8	177.5	160.4	127.5	115.9	121.1	1,660.1

Gas Consumption (Btu x000,000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	1.08	0.86	0.71	0.35	0.05	-	-	-	0.01	0.13	0.48	0.90	4.55
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	0.05	0.05	0.06	0.06	0.05	0.04	0.01	0.01	0.04	0.04	0.05	0.05	0.51
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	1.13	0.92	0.77	0.40	0.10	0.04	0.01	0.01	0.04	0.17	0.53	0.95	5.06





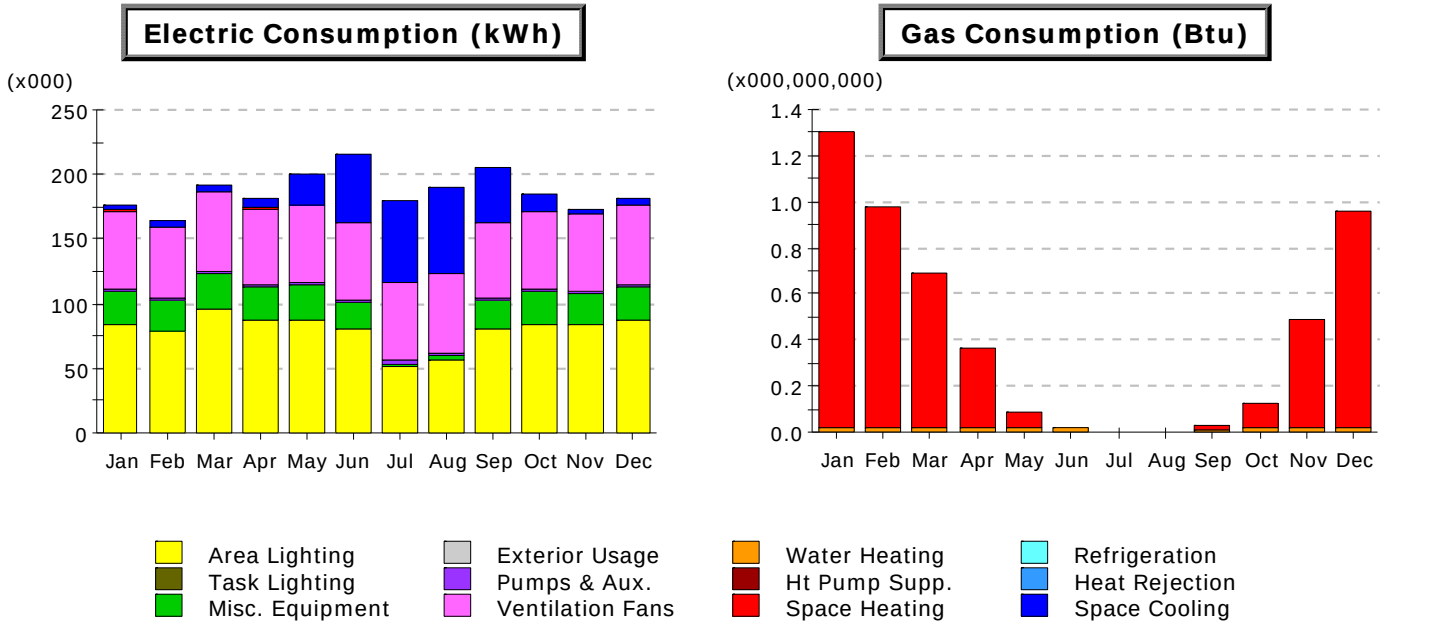


Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	4.3	3.8	4.6	7.5	23.4	54.3	65.1	68.7	42.3	13.7	4.6	4.3	296.6
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	0.7	0.5	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.3	0.5	2.9
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	60.6	54.8	60.6	58.7	60.6	58.7	60.6	60.6	58.7	60.6	58.7	60.6	714.1
Pumps & Aux.	1.9	1.7	1.8	1.7	1.9	2.1	2.3	2.4	2.0	1.8	1.7	1.8	23.1
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	25.0	23.6	28.3	26.0	26.1	20.4	2.9	2.9	21.6	25.0	24.9	26.1	252.7
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	84.0	79.3	95.2	87.2	87.8	81.1	51.1	57.3	80.8	84.1	83.5	87.7	959.1
Total	176.4	163.7	191.0	181.3	199.9	216.7	182.0	191.9	205.4	185.4	173.7	181.0	2,248.4

Gas Consumption (Btu x000,000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	1.28	0.96	0.66	0.34	0.08	0.06	0.05	0.05	0.04	0.12	0.47	0.94	5.05
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	0.02	0.02	0.02	0.02	0.02	0.01	0.00	0.00	0.01	0.02	0.02	0.02	0.19
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	1.30	0.98	0.69	0.37	0.10	0.07	0.05	0.05	0.06	0.13	0.49	0.96	5.24

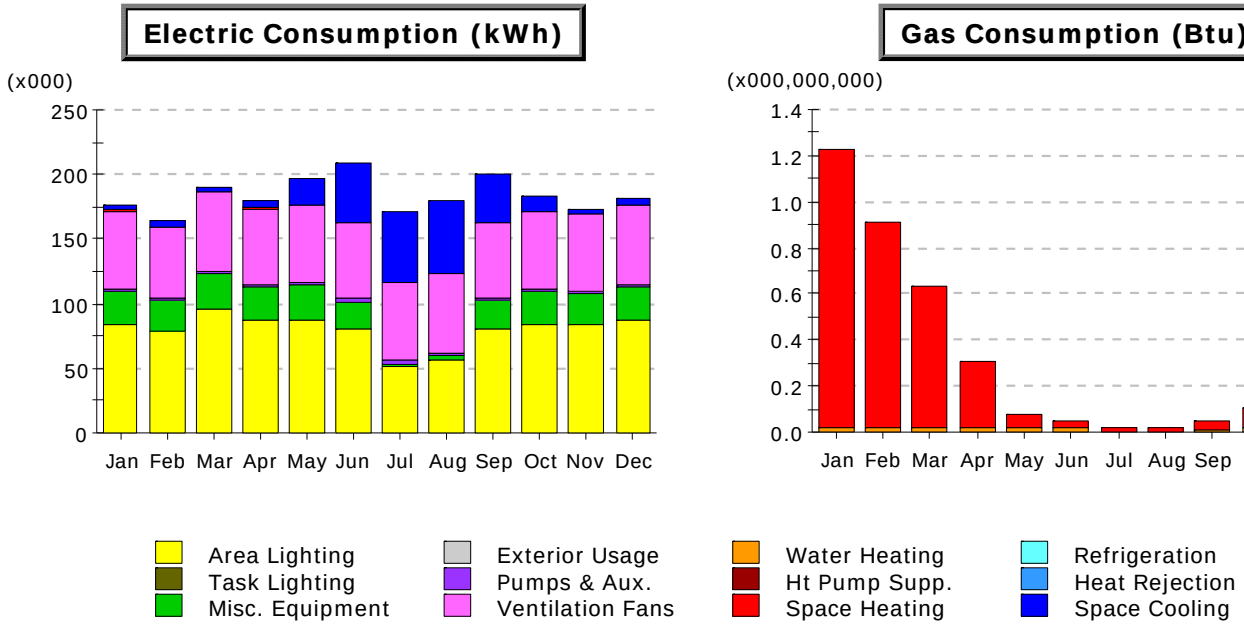


Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	4.3	3.8	4.6	7.4	23.1	53.3	63.8	67.6	42.0	13.7	4.6	4.3	292.4
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	0.7	0.5	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.5	2.8
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	60.6	54.8	60.6	58.7	60.6	58.7	60.6	60.6	58.7	60.6	58.7	60.6	714.1
Pumps & Aux.	1.9	1.7	1.8	1.7	1.8	1.9	2.0	2.1	1.9	1.8	1.7	1.8	22.0
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	25.0	23.6	28.3	26.0	26.1	20.4	2.9	2.9	21.6	25.0	24.9	26.1	252.7
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	84.0	79.3	95.2	87.2	87.8	81.1	51.1	57.3	80.8	84.1	83.5	87.7	959.1
Total	176.4	163.7	191.0	181.2	199.5	215.5	180.4	190.5	204.9	185.3	173.7	181.0	2,243.1

Gas Consumption (Btu x000,000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	1.28	0.96	0.66	0.34	0.06	0.01	0.00	0.00	0.02	0.11	0.47	0.94	4.85
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	0.02	0.02	0.02	0.02	0.02	0.01	0.00	0.00	0.01	0.02	0.02	0.02	0.19
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	1.30	0.98	0.69	0.36	0.08	0.02	0.00	0.00	0.03	0.13	0.49	0.96	5.05

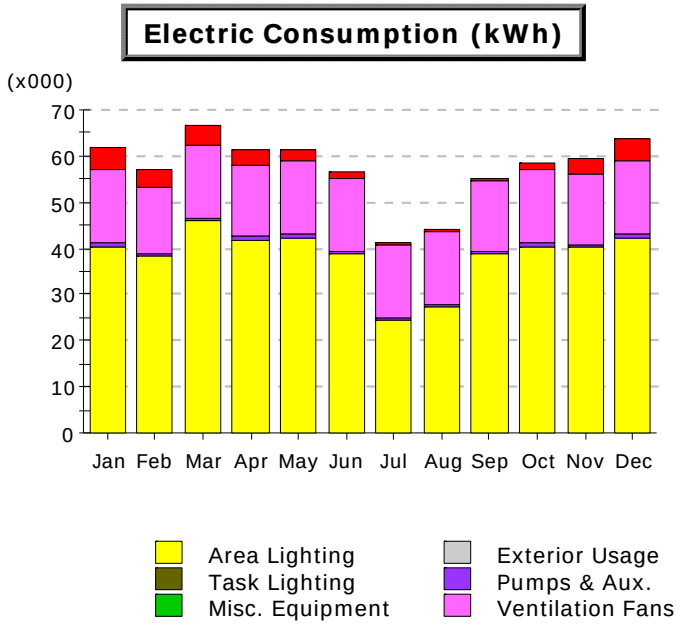


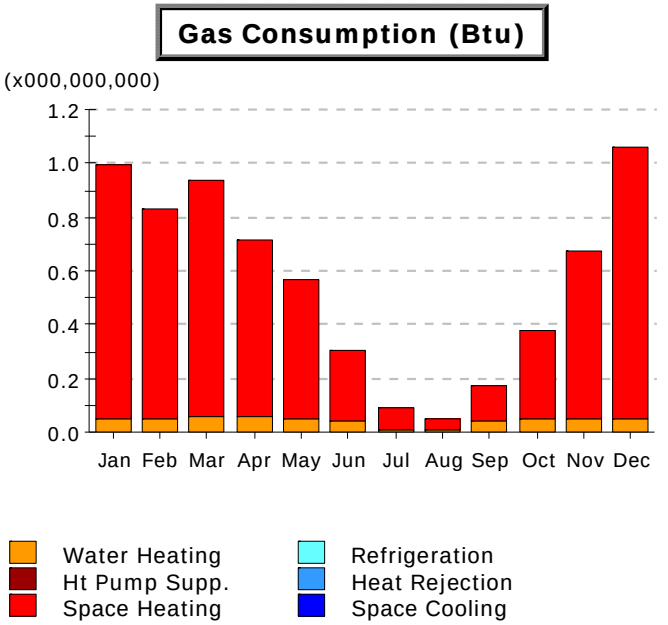
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	4.3	3.8	4.5	6.7	19.8	45.9	54.3	57.3	36.5	11.7	4.4	4.3	253.5
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	0.6	0.5	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.5	2.6
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	60.6	54.8	60.6	58.7	60.6	58.7	60.6	60.6	58.7	60.6	58.7	60.6	714.1
Pumps & Aux.	1.9	1.7	1.8	1.7	1.9	2.1	2.2	2.2	2.0	1.8	1.7	1.8	22.9
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	25.0	23.6	28.3	26.0	26.1	20.4	2.9	2.9	21.6	25.0	24.9	26.1	252.7
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	84.0	79.3	95.2	87.2	87.8	81.1	51.1	57.3	80.8	84.1	83.5	87.7	959.1
Total	176.4	163.7	190.8	180.5	196.3	208.2	171.1	180.4	199.6	183.4	173.5	181.0	2,204.8

Gas Consumption (Btu x000,000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	1.21	0.90	0.61	0.29	0.06	0.03	0.02	0.02	0.03	0.09	0.41	0.87	4.53
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	0.02	0.02	0.02	0.02	0.02	0.01	0.00	0.00	0.01	0.02	0.02	0.02	0.19
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	1.23	0.92	0.63	0.31	0.08	0.05	0.02	0.02	0.05	0.11	0.43	0.89	4.72



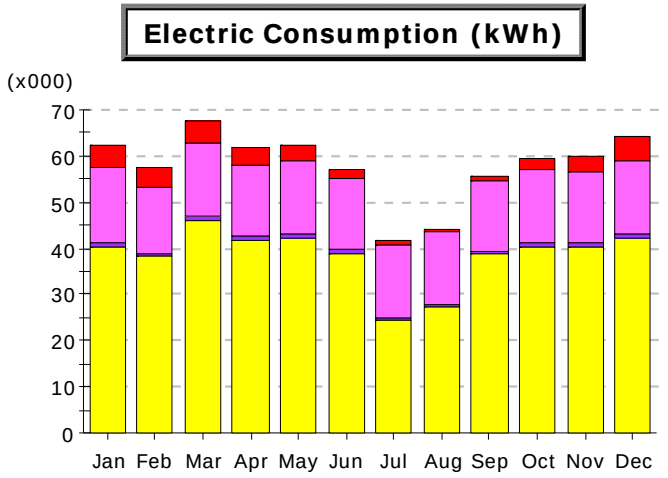


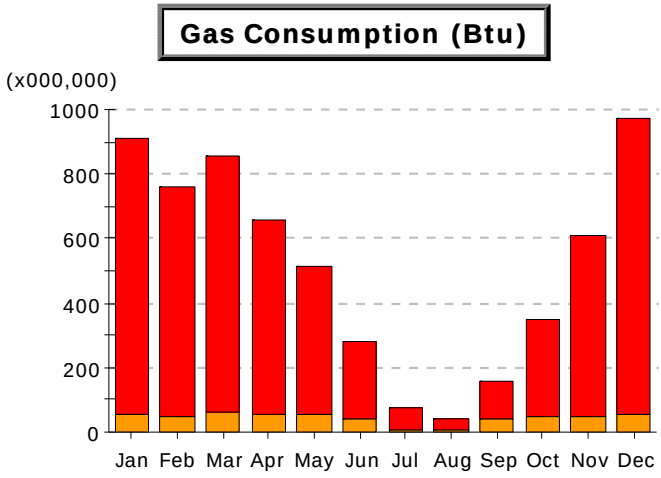
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	4.67	3.88	4.33	3.32	2.68	1.49	0.53	0.27	0.76	1.80	3.17	4.98	31.89
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	15.89	14.35	15.89	15.38	15.89	15.38	15.89	15.89	15.38	15.89	15.38	15.89	187.10
Pumps & Aux.	0.87	0.76	0.85	0.76	0.76	0.55	0.32	0.19	0.37	0.61	0.77	0.89	7.70
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	40.36	38.13	45.79	41.94	42.21	38.98	24.55	27.54	38.84	40.42	40.15	42.15	461.06
Total	61.79	57.12	66.87	61.40	61.54	56.41	41.28	43.90	55.35	58.72	59.47	63.90	687.75

Gas Consumption (Btu x000,000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	0.94	0.78	0.88	0.66	0.51	0.27	0.08	0.04	0.13	0.33	0.62	1.01	6.26
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	0.05	0.05	0.06	0.05	0.05	0.04	0.01	0.01	0.04	0.05	0.05	0.05	0.52
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	0.99	0.83	0.94	0.72	0.57	0.31	0.09	0.05	0.18	0.38	0.67	1.06	6.78





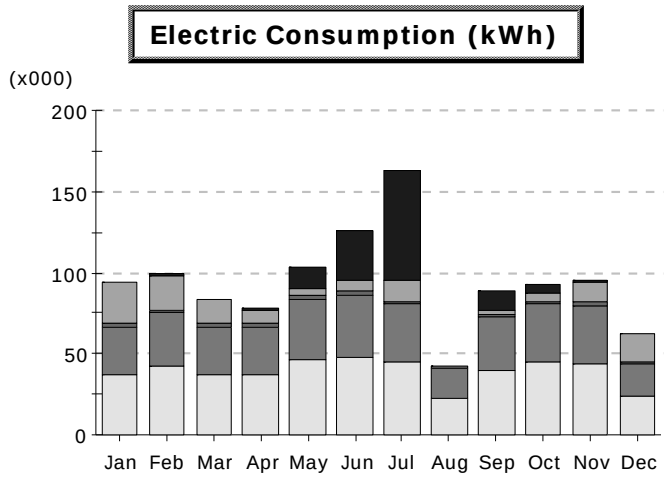


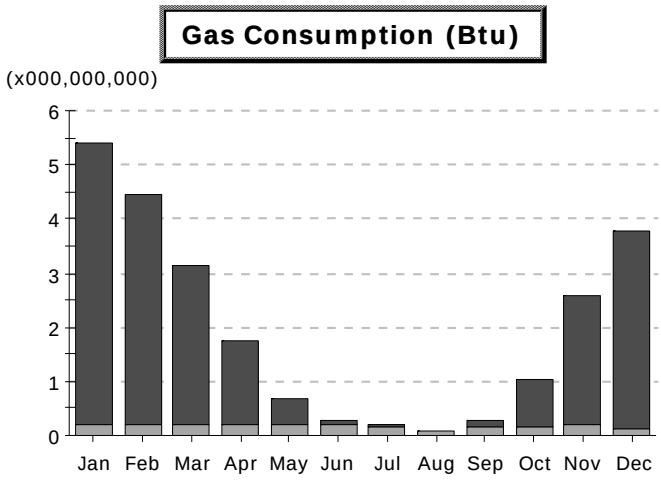
Electric Consumption (kWh x000)

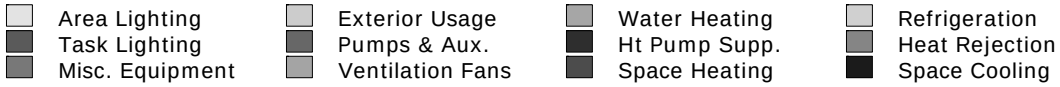
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	4.91	4.14	4.67	3.66	3.10	1.86	0.83	0.45	1.04	2.20	3.56	5.20	35.60
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	15.89	14.35	15.89	15.38	15.89	15.38	15.89	15.89	15.38	15.89	15.38	15.89	187.10
Pumps & Aux.	1.07	0.92	1.04	0.90	0.90	0.64	0.36	0.21	0.43	0.71	0.92	1.11	9.20
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	40.36	38.13	45.79	41.94	42.21	38.98	24.55	27.54	38.84	40.42	40.15	42.15	461.06
Total	62.23	57.54	67.38	61.87	62.11	56.86	41.63	44.09	55.69	59.21	60.01	64.35	692.96

Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	857.9	708.9	798.6	602.4	462.9	236.7	68.2	34.5	119.2	297.6	562.4	922.4	5,671.8
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	51.9	49.5	59.2	54.1	53.1	40.9	7.4	7.2	41.4	48.4	49.2	53.0	515.2
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	909.8	758.4	857.8	656.4	516.0	277.6	75.6	41.8	160.6	345.9	611.7	975.4	6,187.0





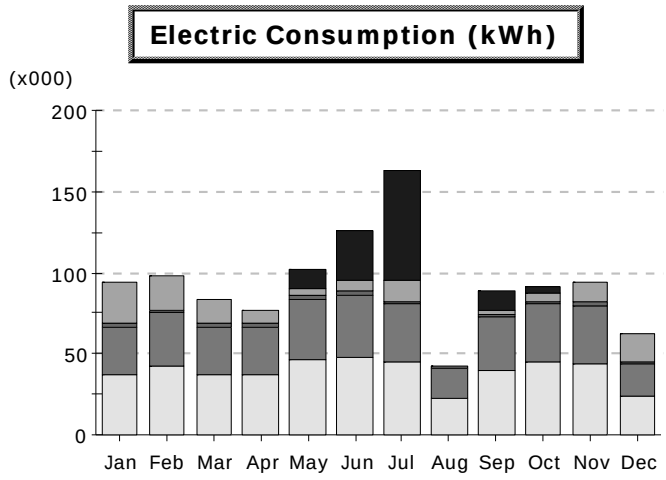


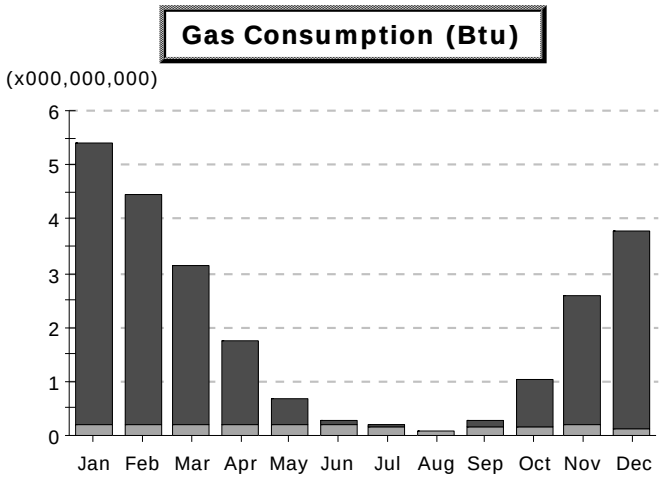
Electric Consumption (kWh x000)

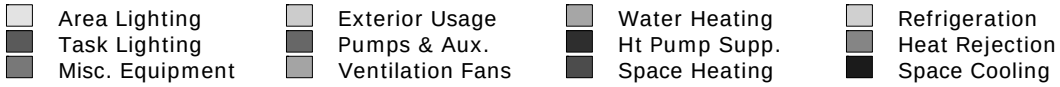
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	0.7	0.7	0.6	1.7	12.4	30.6	67.8	-	11.6	5.1	0.9	0.4	132.6
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	-	-	-	-	-	-	-	-	-	-	-	-	-
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	25.1	20.7	14.3	7.9	4.8	6.4	12.5	-	3.0	5.3	12.1	17.1	129.3
Pumps & Aux.	1.9	1.8	2.0	1.9	2.0	1.9	2.0	1.6	1.8	2.0	1.9	2.0	23.0
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	29.8	33.7	29.8	29.6	37.3	38.6	35.8	19.0	32.5	35.8	35.6	19.4	376.8
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	37.0	41.8	37.0	36.7	46.3	47.9	44.4	22.1	40.0	44.4	44.2	24.0	465.7
Total	94.5	98.8	83.7	77.9	102.8	125.4	162.6	42.7	88.8	92.6	94.7	62.8	1,127.3

Gas Consumption (Btu x000,000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	5.23	4.23	2.95	1.57	0.47	0.09	0.02	-	0.14	0.85	2.38	3.68	21.61
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	0.18	0.21	0.19	0.18	0.21	0.20	0.17	0.08	0.15	0.17	0.18	0.11	2.02
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	5.41	4.44	3.14	1.75	0.67	0.28	0.19	0.08	0.28	1.02	2.56	3.79	23.63





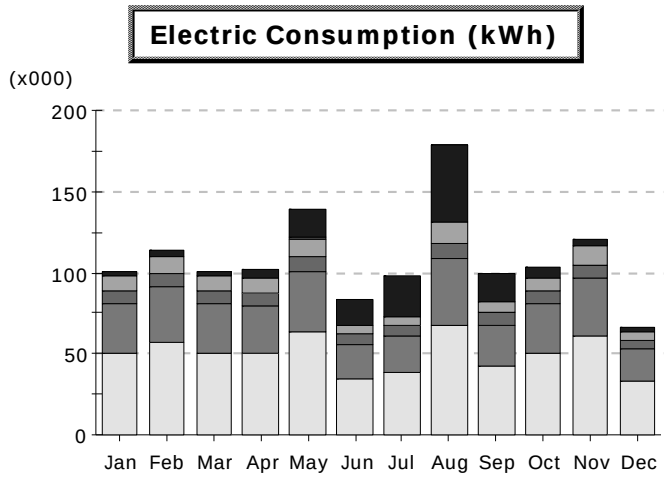


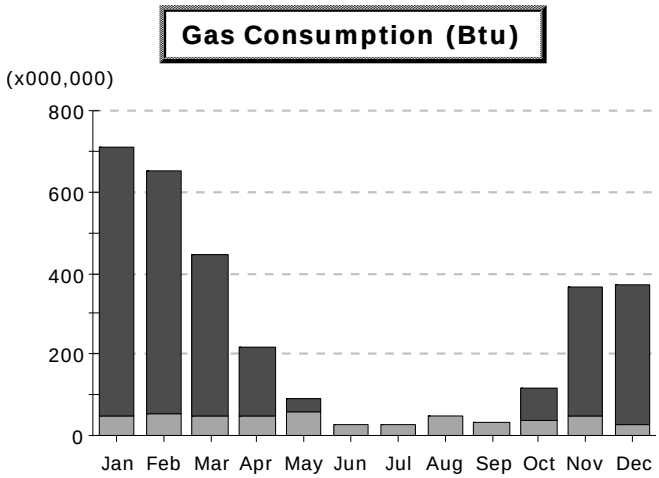
Electric Consumption (kWh x000)

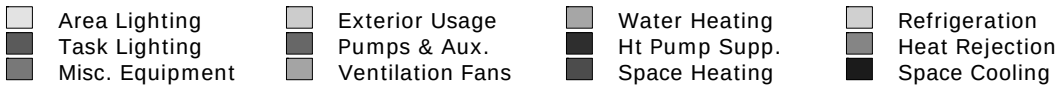
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	0.1	1.2	12.0	30.4	67.8	-	11.3	4.2	0.1	0.1	127.3
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	-	-	-	-	-	-	-	-	-	-	-	-	-
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	25.1	20.7	14.3	7.9	4.8	6.4	12.5	-	3.0	5.3	12.1	17.1	129.3
Pumps & Aux.	1.6	1.4	2.0	1.9	2.0	1.9	2.0	1.6	1.8	2.0	1.9	2.0	22.2
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	29.8	33.7	29.8	29.6	37.3	38.6	35.8	19.0	32.5	35.8	35.6	19.4	376.8
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	37.0	41.8	37.0	36.7	46.3	47.9	44.4	22.1	40.0	44.4	44.2	24.0	465.7
Total	93.4	97.7	83.2	77.4	102.3	125.2	162.5	42.7	88.6	91.7	94.0	62.5	1,121.3

Gas Consumption (Btu x000,000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	5.23	4.23	2.95	1.57	0.47	0.09	0.02	-	0.14	0.85	2.38	3.68	21.61
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	0.18	0.21	0.19	0.18	0.21	0.20	0.17	0.08	0.15	0.17	0.18	0.11	2.02
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	5.41	4.44	3.14	1.75	0.67	0.28	0.19	0.08	0.28	1.02	2.56	3.79	23.63





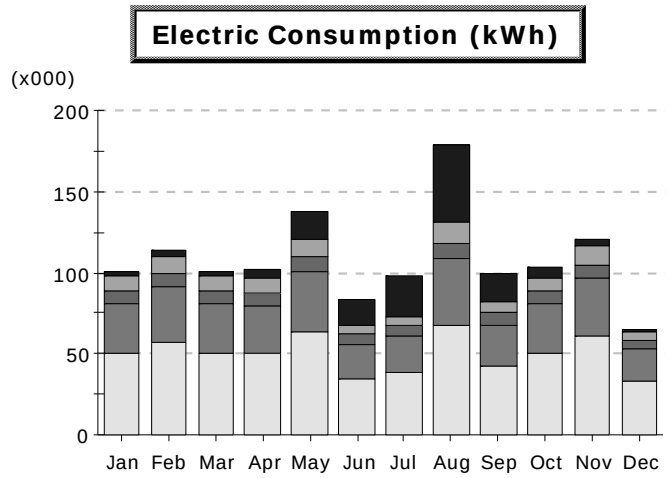


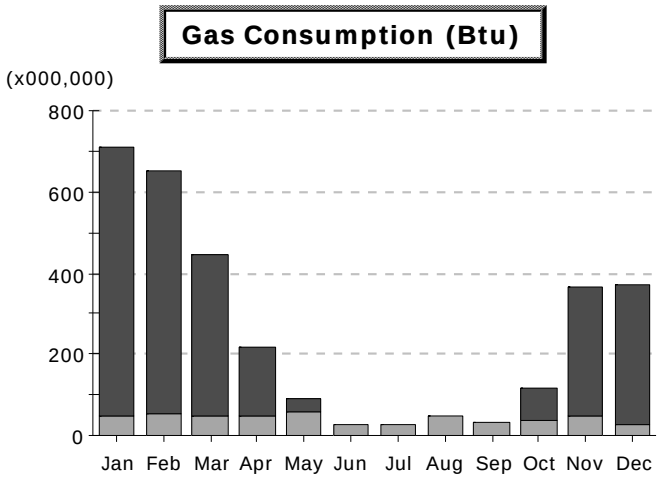
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	2.7	3.2	2.9	5.5	17.7	16.2	24.6	48.4	17.2	6.2	4.3	1.7	150.5
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	0.4	0.4	0.3	0.1	0.0	0.0	-	-	0.0	0.1	0.2	0.2	1.7
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	8.7	10.4	8.7	8.6	11.3	5.5	6.0	12.6	7.1	8.6	10.9	4.9	103.2
Pumps & Aux.	8.1	8.5	8.1	7.8	9.1	6.1	6.5	9.6	6.9	7.8	8.9	6.3	93.8
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	30.2	34.0	30.2	30.0	37.6	21.1	22.7	40.6	25.5	30.2	35.9	19.8	357.6
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	50.5	57.1	50.5	50.1	63.1	34.9	37.8	68.2	42.5	50.5	60.3	32.7	598.2
Total	100.6	113.5	100.6	102.1	138.9	83.7	97.7	179.3	99.2	103.3	120.5	65.6	1,304.9

Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	664.3	593.9	396.6	171.5	32.4	0.8	-	-	4.1	80.1	318.4	344.5	2,606.6
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	46.9	55.6	48.7	47.6	55.9	27.6	27.8	49.1	29.9	37.4	48.7	27.7	502.8
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	711.2	649.5	445.4	219.0	88.4	28.4	27.8	49.1	34.0	117.4	367.1	372.1	3,109.4





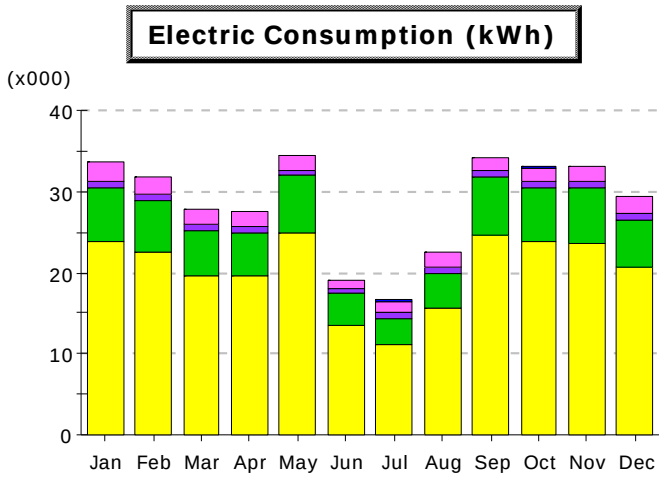


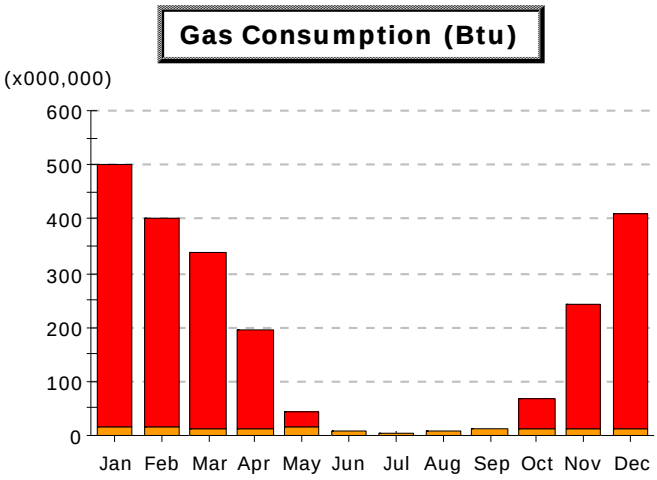
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	2.5	3.0	2.7	5.2	17.1	16.1	24.5	48.4	16.9	5.7	3.9	1.6	147.4
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	0.4	0.4	0.3	0.1	0.0	0.0	-	-	0.0	0.1	0.2	0.2	1.7
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	8.7	10.4	8.7	8.6	11.3	5.5	6.0	12.6	7.1	8.6	10.9	4.9	103.2
Pumps & Aux.	8.1	8.5	8.1	7.8	9.1	6.1	6.5	9.6	6.9	7.8	8.9	6.3	93.8
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	30.2	34.0	30.2	30.0	37.6	21.1	22.7	40.6	25.5	30.2	35.9	19.8	357.6
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	50.5	57.1	50.5	50.1	63.1	34.9	37.8	68.2	42.5	50.5	60.3	32.7	598.2
Total	100.4	113.3	100.3	101.8	138.3	83.6	97.6	179.3	98.9	102.8	120.1	65.5	1,301.8

Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	664.4	593.9	396.7	171.4	32.5	0.8	-	-	4.1	80.1	318.4	344.4	2,606.6
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	46.9	55.6	48.7	47.6	55.9	27.6	27.8	49.1	29.9	37.4	48.7	27.7	502.8
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	711.2	649.5	445.4	218.9	88.4	28.4	27.8	49.1	34.0	117.4	367.1	372.1	3,109.4





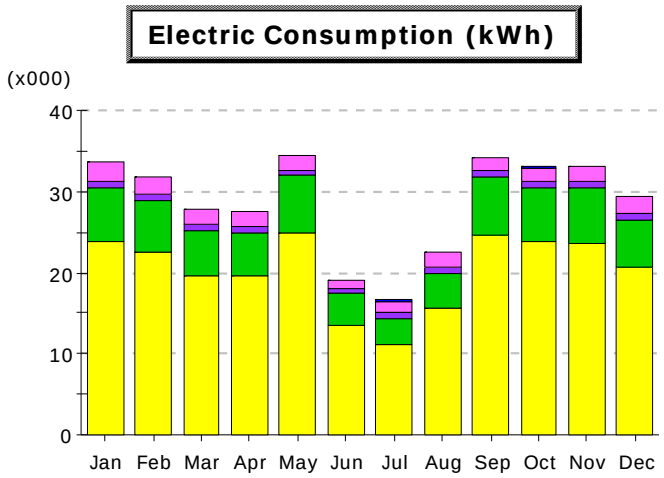


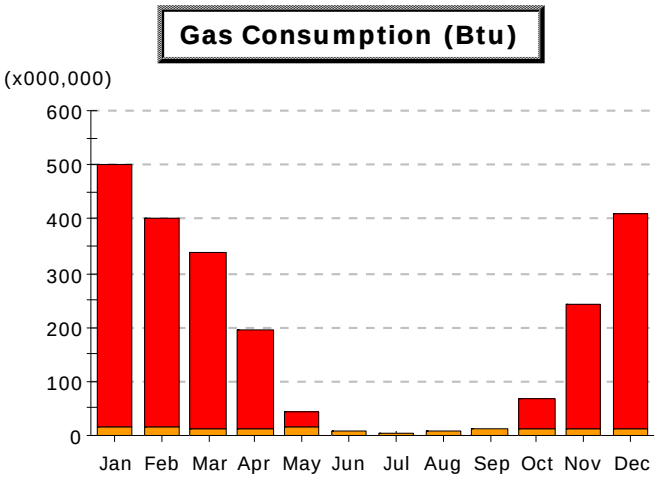
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	0.01	0.02	0.05	0.12	0.16	0.06	0.01	-	-	0.43
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	-	-	-	-	-	-	-	-	-	-	-	-	-
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	2.33	2.06	1.83	1.67	1.67	0.85	1.54	1.77	1.62	1.63	1.92	2.08	20.98
Pumps & Aux.	0.82	0.74	0.81	0.76	0.75	0.72	0.74	0.74	0.72	0.76	0.77	0.81	9.13
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	6.76	6.38	5.56	5.54	7.07	3.85	3.15	4.42	7.02	6.77	6.72	5.86	69.10
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	23.79	22.47	19.57	19.48	24.88	13.55	11.07	15.53	24.72	23.83	23.67	20.63	243.18
Total	33.69	31.66	27.77	27.45	34.39	19.02	16.63	22.63	34.14	32.98	33.08	29.38	342.82

Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	486.2	386.2	323.7	183.7	31.3	0.1	-	-	0.3	57.2	228.2	396.8	2,093.7
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	14.5	14.2	12.4	12.1	14.3	7.2	4.9	6.8	11.6	11.7	12.5	11.8	134.1
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	500.7	400.4	336.2	195.9	45.6	7.3	4.9	6.8	11.8	68.9	240.7	408.6	2,227.8





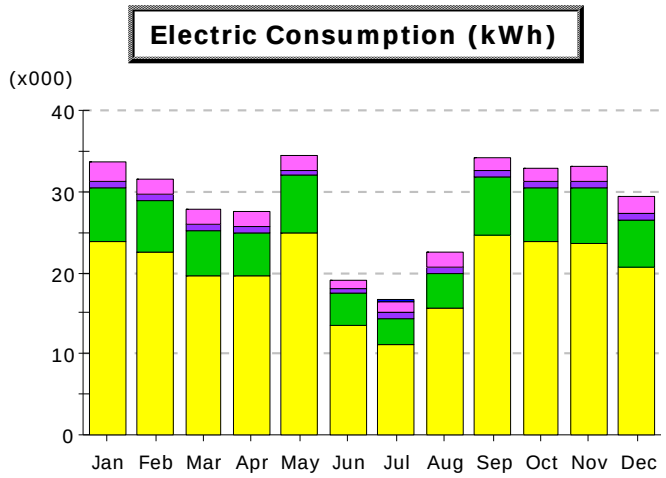


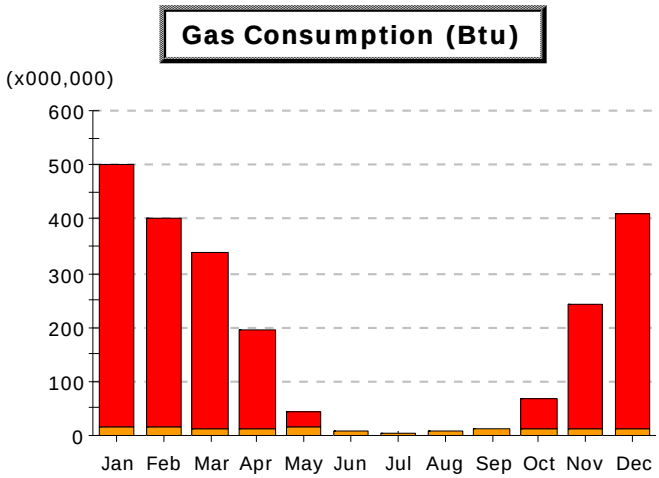
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	0.00	0.02	0.04	0.09	0.13	0.05	0.01	-	-	0.34
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	-	-	-	-	-	-	-	-	-	-	-	-	-
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	2.33	2.06	1.83	1.67	1.67	0.85	1.54	1.77	1.62	1.63	1.92	2.08	20.98
Pumps & Aux.	0.82	0.74	0.81	0.76	0.75	0.72	0.74	0.74	0.72	0.76	0.77	0.81	9.13
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	6.76	6.38	5.56	5.54	7.07	3.85	3.15	4.42	7.02	6.77	6.72	5.86	69.10
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	23.79	22.47	19.57	19.48	24.88	13.55	11.07	15.53	24.72	23.83	23.67	20.63	243.18
Total	33.69	31.66	27.77	27.45	34.38	19.01	16.60	22.59	34.13	32.98	33.08	29.38	342.74

Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	486.2	386.2	323.7	183.7	31.3	0.1	-	-	0.3	57.2	228.2	396.8	2,093.7
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	14.5	14.2	12.4	12.1	14.3	7.2	4.9	6.8	11.6	11.7	12.5	11.8	134.1
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	500.7	400.4	336.2	195.9	45.6	7.3	4.9	6.8	11.8	68.9	240.7	408.6	2,227.8





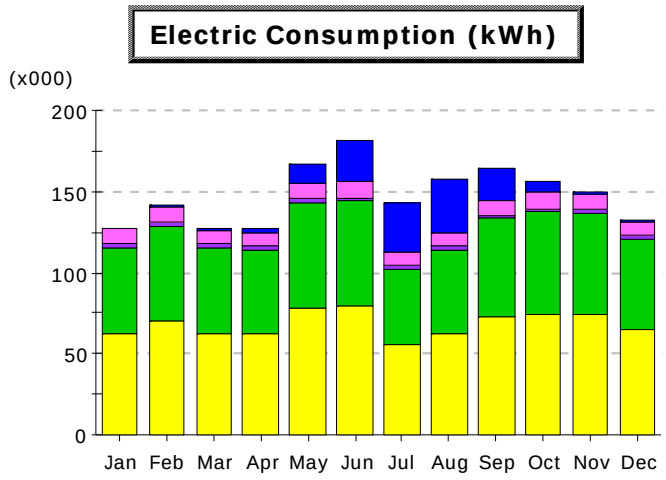


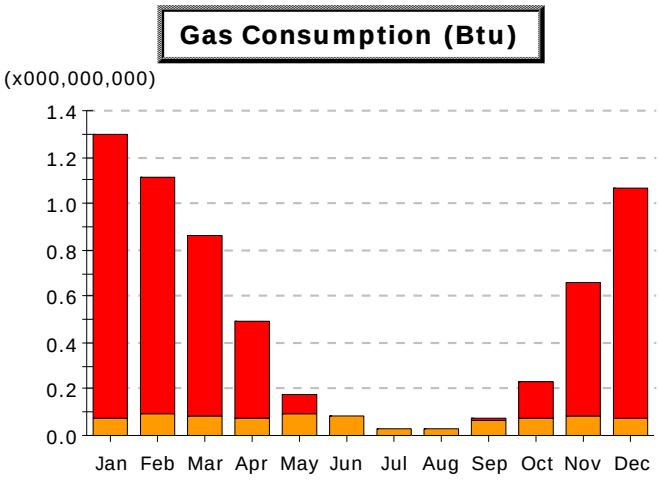
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	0.01	0.02	0.05	0.12	0.16	0.06	0.01	-	-	0.43
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	-	-	-	-	-	-	-	-	-	-	-	-	-
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	2.29	2.03	1.80	1.64	1.63	0.83	1.50	1.73	1.58	1.59	1.88	2.05	20.55
Pumps & Aux.	0.82	0.74	0.81	0.76	0.75	0.72	0.74	0.74	0.72	0.76	0.77	0.81	9.13
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	6.76	6.38	5.56	5.54	7.07	3.85	3.15	4.42	7.02	6.77	6.72	5.86	69.10
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	23.79	22.47	19.57	19.48	24.88	13.55	11.07	15.53	24.72	23.83	23.67	20.63	243.18
Total	33.66	31.62	27.74	27.42	34.35	19.00	16.59	22.58	34.10	32.95	33.04	29.34	342.40

Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	486.2	386.2	323.7	183.7	31.3	0.1	-	-	0.3	57.2	228.2	396.8	2,093.7
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	14.5	14.2	12.4	12.1	14.3	7.2	4.9	6.8	11.6	11.7	12.5	11.8	134.1
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	500.7	400.4	336.2	195.9	45.6	7.3	4.9	6.8	11.8	68.9	240.7	408.6	2,227.8





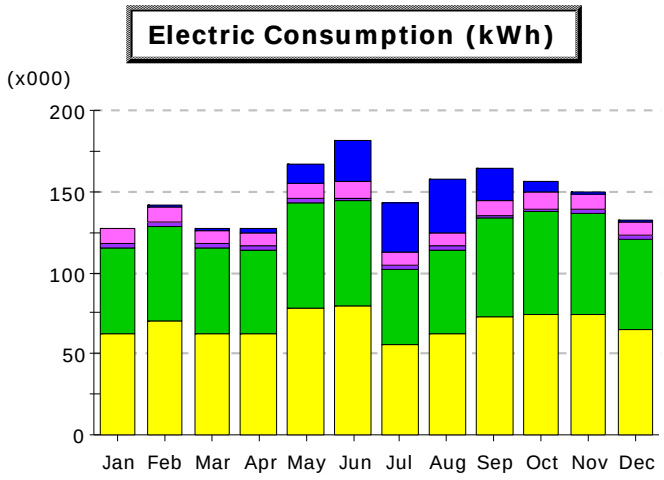


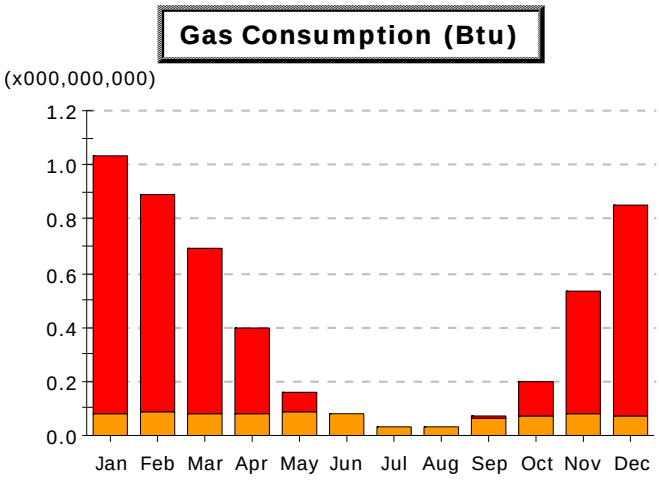
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	0.4	0.5	0.7	2.8	12.0	25.4	30.3	33.6	19.4	7.0	2.0	0.6	134.7
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	-	-	-	-	-	-	-	-	-	-	-	-	-
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	9.1	9.6	8.2	8.2	9.9	10.2	7.4	8.5	9.3	9.3	9.4	8.5	107.8
Pumps & Aux.	2.4	2.3	2.4	2.3	2.5	2.4	2.4	2.4	2.4	2.5	2.4	2.4	28.8
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	53.1	58.6	53.1	52.6	64.8	65.1	46.7	51.4	60.4	62.5	62.0	55.4	685.7
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	62.1	70.5	62.1	61.7	77.9	78.8	55.7	62.3	72.8	74.7	74.4	65.2	818.1
Total	127.1	141.5	126.5	127.6	167.1	181.9	142.4	158.1	164.2	156.0	150.2	132.2	1,775.1

Gas Consumption (Btu x000,000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	1.22	1.02	0.78	0.41	0.08	-	-	-	0.01	0.16	0.58	0.99	5.26
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	0.08	0.09	0.08	0.08	0.09	0.08	0.03	0.03	0.06	0.07	0.08	0.08	0.85
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	1.30	1.11	0.86	0.49	0.17	0.08	0.03	0.03	0.07	0.23	0.66	1.06	6.11





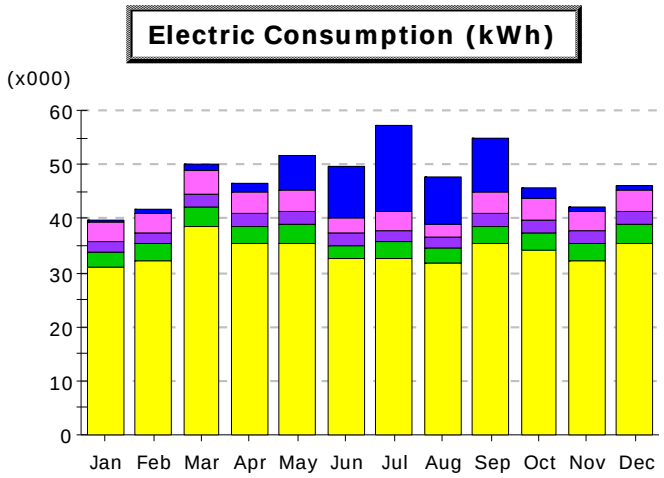


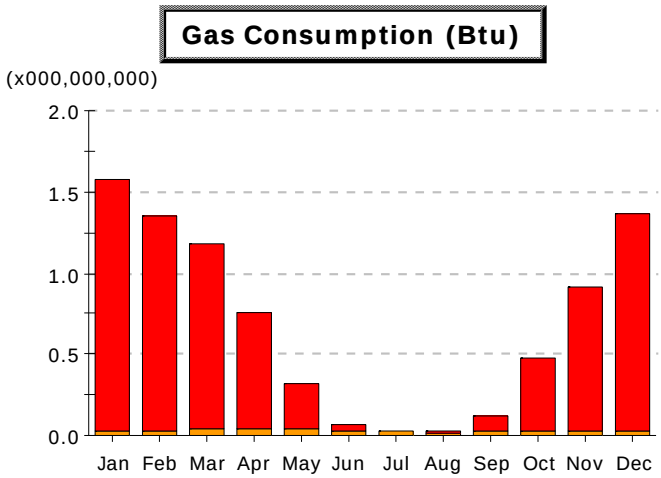
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	0.4	0.5	0.7	2.8	12.0	25.4	30.3	33.6	19.4	7.0	2.0	0.6	134.7
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	-	-	-	-	-	-	-	-	-	-	-	-	-
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	9.1	9.6	8.2	8.2	9.9	10.2	7.4	8.5	9.3	9.3	9.4	8.5	107.8
Pumps & Aux.	2.4	2.3	2.4	2.3	2.5	2.4	2.4	2.4	2.4	2.5	2.4	2.4	28.8
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	53.1	58.6	53.1	52.6	64.8	65.1	46.7	51.4	60.4	62.5	62.0	55.4	685.7
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	62.1	70.5	62.1	61.7	77.9	78.8	55.7	62.3	72.8	74.7	74.4	65.2	818.1
Total	127.1	141.5	126.5	127.6	167.1	181.9	142.4	158.1	164.2	156.0	150.2	132.2	1,775.1

Gas Consumption (Btu x000,000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	0.95	0.80	0.61	0.32	0.07	-	-	-	0.01	0.12	0.45	0.77	4.11
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	0.08	0.09	0.08	0.08	0.09	0.08	0.03	0.03	0.06	0.07	0.08	0.08	0.85
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	1.03	0.89	0.69	0.40	0.16	0.08	0.03	0.03	0.07	0.20	0.53	0.85	4.95





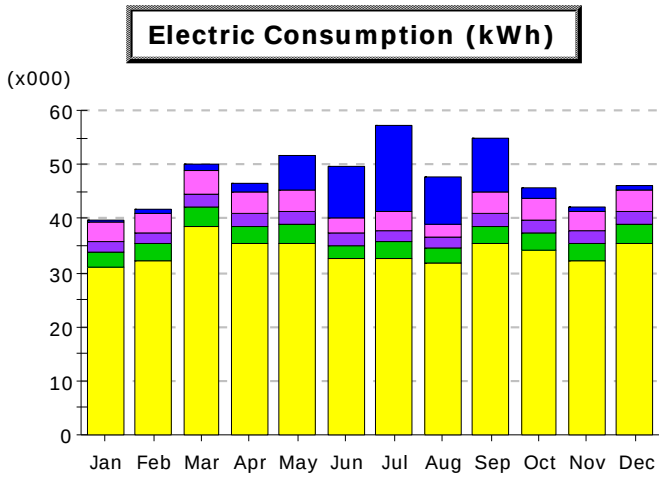


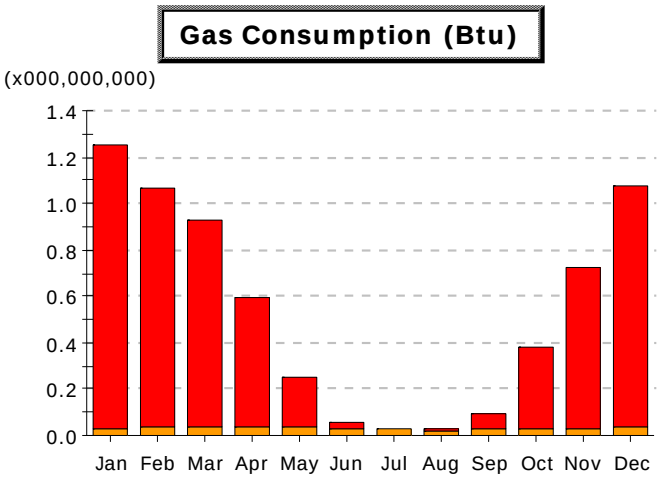
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	0.51	0.69	1.19	1.39	6.20	9.59	16.06	8.84	9.75	2.15	0.81	0.82	58.00
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	-	-	-	-	-	-	-	-	-	-	-	-	-
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	3.38	3.70	4.27	4.02	4.09	3.00	3.47	2.54	4.02	4.01	3.84	4.09	44.44
Pumps & Aux.	2.17	2.10	2.37	2.25	2.28	2.08	2.19	2.07	2.23	2.26	2.19	2.32	26.51
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	2.71	3.11	3.74	3.42	3.45	2.70	3.01	2.42	3.42	3.30	3.13	3.44	37.85
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	31.07	32.06	38.49	35.26	35.50	32.44	32.56	31.96	35.26	34.00	32.26	35.44	406.29
Total	39.84	41.66	50.06	46.34	51.52	49.81	57.29	47.84	54.68	45.71	42.24	46.11	573.10

Gas Consumption (Btu x000,000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	1.55	1.32	1.14	0.72	0.28	0.04	0.00	0.01	0.09	0.45	0.89	1.33	7.81
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	0.03	0.03	0.04	0.04	0.03	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.35
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	1.58	1.35	1.18	0.75	0.31	0.06	0.03	0.03	0.12	0.47	0.92	1.36	8.17





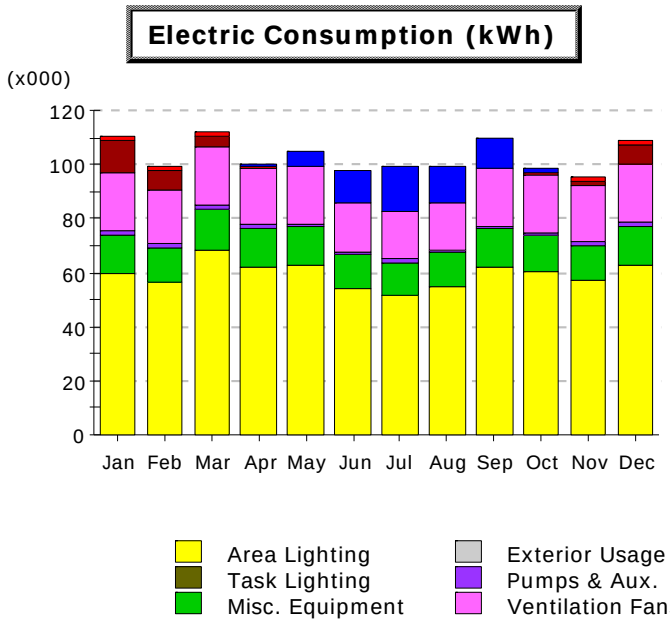


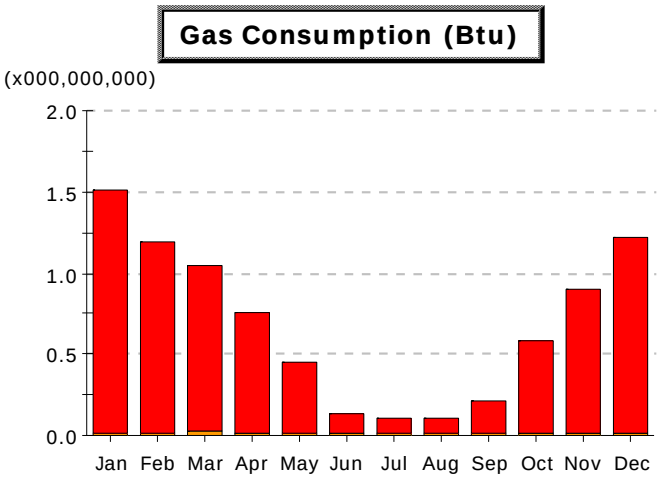
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	0.51	0.69	1.19	1.39	6.20	9.59	16.06	8.84	9.75	2.15	0.81	0.82	58.00
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	-	-	-	-	-	-	-	-	-	-	-	-	-
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	3.38	3.70	4.27	4.02	4.09	3.00	3.47	2.54	4.02	4.01	3.84	4.09	44.44
Pumps & Aux.	2.17	2.10	2.37	2.25	2.28	2.08	2.19	2.07	2.23	2.26	2.19	2.32	26.51
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	2.71	3.11	3.74	3.42	3.45	2.70	3.01	2.42	3.42	3.30	3.13	3.44	37.85
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	31.07	32.06	38.49	35.26	35.50	32.44	32.56	31.96	35.26	34.00	32.26	35.44	406.29
Total	39.84	41.66	50.06	46.34	51.52	49.81	57.29	47.84	54.68	45.71	42.24	46.11	573.10

Gas Consumption (Btu x000,000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	1.22	1.03	0.89	0.56	0.22	0.03	0.00	0.01	0.07	0.35	0.70	1.04	6.13
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	0.03	0.03	0.04	0.04	0.03	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.35
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	1.25	1.06	0.93	0.60	0.25	0.06	0.03	0.03	0.10	0.38	0.72	1.08	6.48



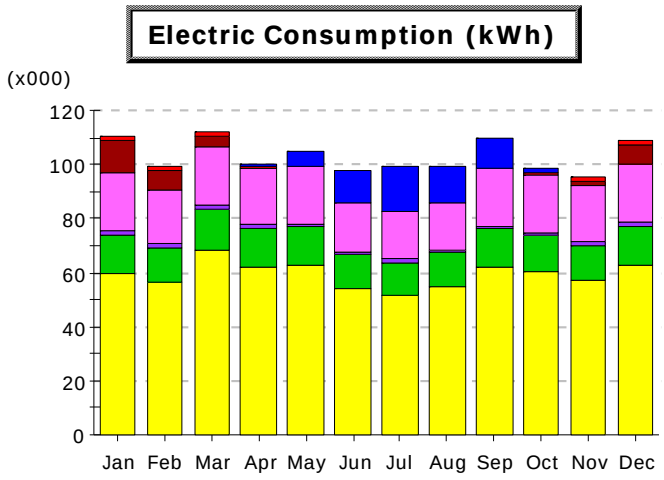


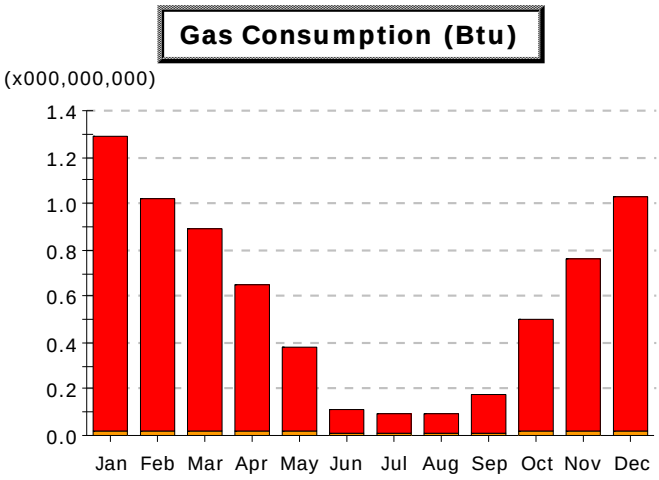
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	0.0	0.2	0.5	5.7	12.0	16.3	13.6	11.2	1.6	0.2	0.1	61.5
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	1.7	1.4	1.2	0.7	0.2	0.0	-	-	0.0	0.4	1.2	1.6	8.5
HP Supp.	11.4	7.3	4.2	0.5	0.0	-	-	-	-	0.2	1.9	7.1	32.5
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	21.9	19.7	21.6	20.6	21.2	18.0	18.1	17.4	20.7	21.1	20.8	21.8	243.1
Pumps & Aux.	1.6	1.5	1.5	1.4	1.1	1.0	1.1	1.1	1.0	1.2	1.4	1.6	15.3
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	13.6	12.9	15.5	14.2	14.3	12.4	11.8	12.5	14.2	13.7	13.0	14.2	162.1
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	60.0	56.6	68.0	62.3	62.7	54.4	51.9	54.8	62.3	60.1	57.0	62.6	712.6
Total	110.2	99.4	112.3	100.2	105.1	97.8	99.2	99.3	109.4	98.3	95.5	109.0	1,235.6

Gas Consumption (Btu x000,000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	1.49	1.18	1.03	0.74	0.43	0.12	0.09	0.10	0.19	0.58	0.88	1.20	8.04
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.19
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	1.51	1.20	1.05	0.76	0.45	0.13	0.10	0.11	0.21	0.59	0.90	1.22	8.22





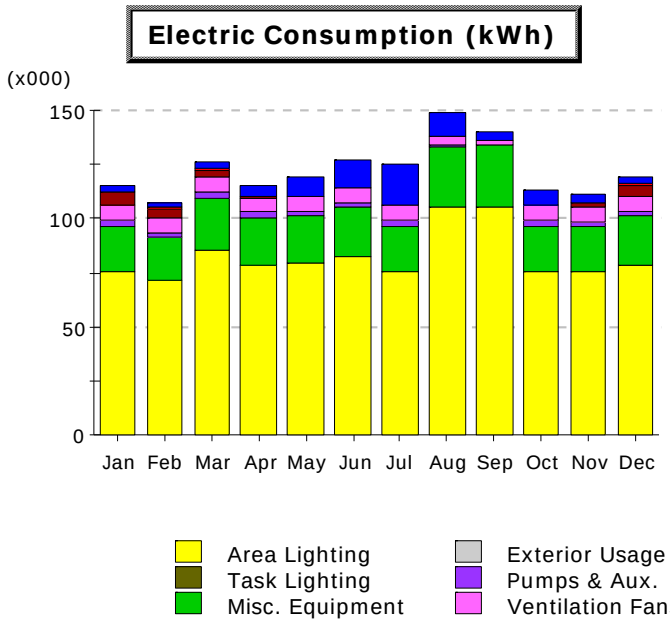


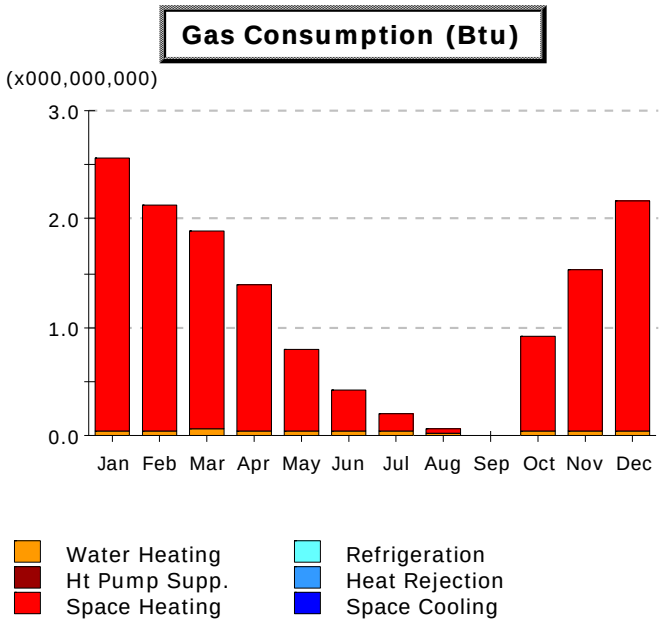
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	0.0	0.2	0.5	5.7	12.0	16.3	13.6	11.2	1.6	0.2	0.1	61.5
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	1.7	1.4	1.2	0.7	0.2	0.0	-	-	0.0	0.4	1.2	1.6	8.5
HP Supp.	11.4	7.3	4.2	0.5	0.0	-	-	-	-	0.2	1.9	7.1	32.5
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	21.9	19.7	21.6	20.6	21.2	18.0	18.1	17.4	20.7	21.1	20.8	21.8	243.1
Pumps & Aux.	1.6	1.5	1.5	1.4	1.1	1.0	1.1	1.1	1.0	1.2	1.4	1.6	15.3
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	13.6	12.9	15.5	14.2	14.3	12.4	11.8	12.5	14.2	13.7	13.0	14.2	162.1
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	60.0	56.6	68.0	62.3	62.7	54.4	51.9	54.8	62.3	60.1	57.0	62.6	712.6
Total	110.2	99.4	112.3	100.2	105.1	97.8	99.2	99.3	109.4	98.3	95.5	109.0	1,235.6

Gas Consumption (Btu x000,000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	1.27	1.00	0.87	0.63	0.36	0.10	0.08	0.08	0.16	0.49	0.75	1.02	6.80
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.19
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	1.28	1.02	0.89	0.65	0.38	0.11	0.09	0.09	0.18	0.50	0.76	1.03	6.99





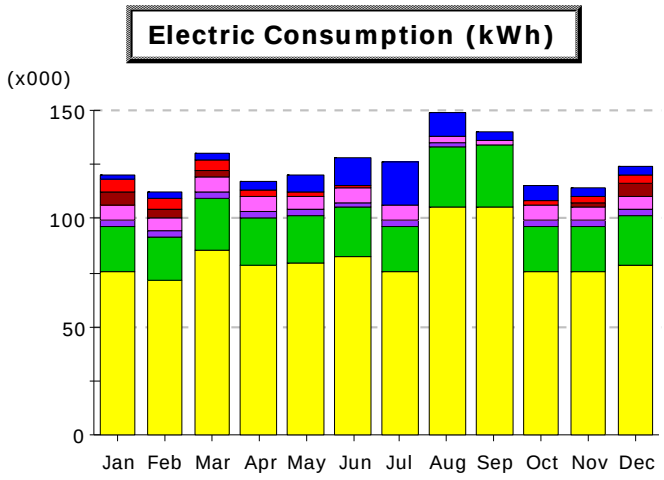


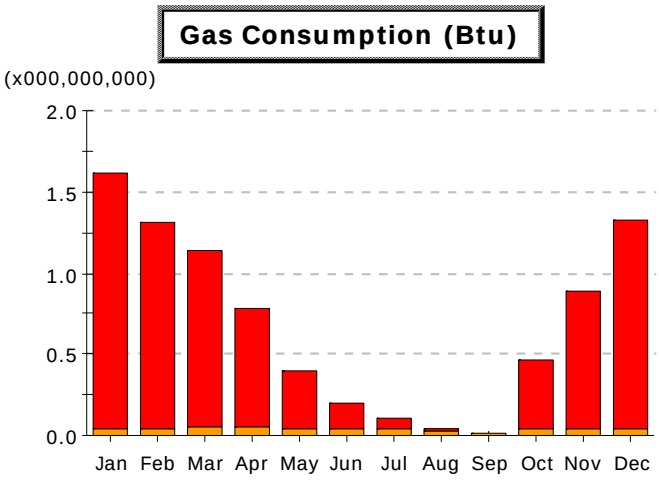
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	2.7	2.8	3.4	4.3	8.2	13.6	19.6	10.9	4.2	7.1	3.7	3.2	83.5
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	0.4	0.5	0.5	0.4	0.1	0.0	0.0	-	0.1	0.3	0.4	0.5	3.3
HP Supp.	5.8	4.5	3.2	0.7	-	-	-	-	-	0.1	1.6	5.1	21.1
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	6.9	6.2	6.8	6.6	6.8	6.6	6.8	3.3	1.4	6.8	6.6	6.8	71.5
Pumps & Aux.	2.7	2.5	2.7	2.6	2.6	2.5	2.6	1.2	0.4	2.6	2.6	2.7	27.7
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	21.1	19.9	23.9	21.9	22.0	22.9	21.1	28.5	28.4	21.1	21.0	22.0	273.8
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	75.5	71.4	85.7	78.5	79.0	82.0	75.5	104.9	105.4	75.7	75.2	78.9	987.6
Total	115.3	107.7	126.2	114.9	118.8	127.5	125.6	148.7	139.9	113.6	111.0	119.2	1,468.4

Gas Consumption (Btu x000,000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	2.52	2.07	1.83	1.33	0.74	0.38	0.17	0.05	-	0.87	1.49	2.12	13.58
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.02	0.01	0.04	0.04	0.05	0.47
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	2.57	2.12	1.89	1.38	0.79	0.42	0.21	0.07	0.01	0.91	1.53	2.17	14.05





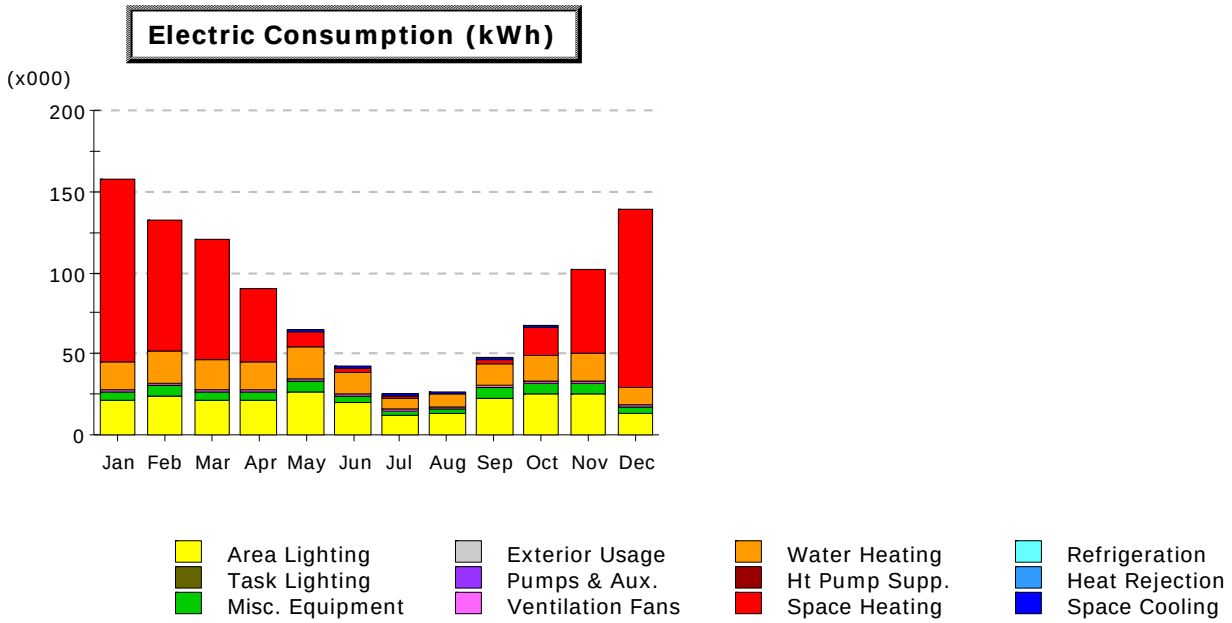


Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	2.7	2.8	3.4	4.3	8.2	13.6	19.6	10.9	4.2	7.1	3.7	3.2	83.5
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	5.5	4.6	4.2	2.9	1.3	0.5	0.2	0.1	0.1	1.7	3.3	4.8	29.2
HP Supp.	5.8	4.5	3.2	0.7	-	-	-	-	-	0.1	1.6	5.1	21.1
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	6.9	6.2	6.8	6.6	6.8	6.6	6.8	3.3	1.4	6.8	6.6	6.8	71.5
Pumps & Aux.	3.0	2.7	3.0	2.9	2.9	2.8	2.9	1.3	0.5	2.9	2.9	3.0	30.9
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	21.1	19.9	23.9	21.9	22.0	22.9	21.1	28.5	28.4	21.1	21.0	22.0	273.8
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	75.5	71.4	85.7	78.5	79.0	82.0	75.5	104.9	105.4	75.7	75.2	78.9	987.6
Total	120.6	112.2	130.1	117.7	120.3	128.3	126.1	148.9	140.0	115.3	114.2	123.8	1,497.5

Gas Consumption (Btu x000,000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	1.57	1.27	1.08	0.74	0.35	0.15	0.06	0.02	-	0.43	0.85	1.28	7.80
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.02	0.01	0.04	0.04	0.05	0.47
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	1.61	1.31	1.14	0.79	0.39	0.20	0.10	0.04	0.01	0.46	0.89	1.33	8.27

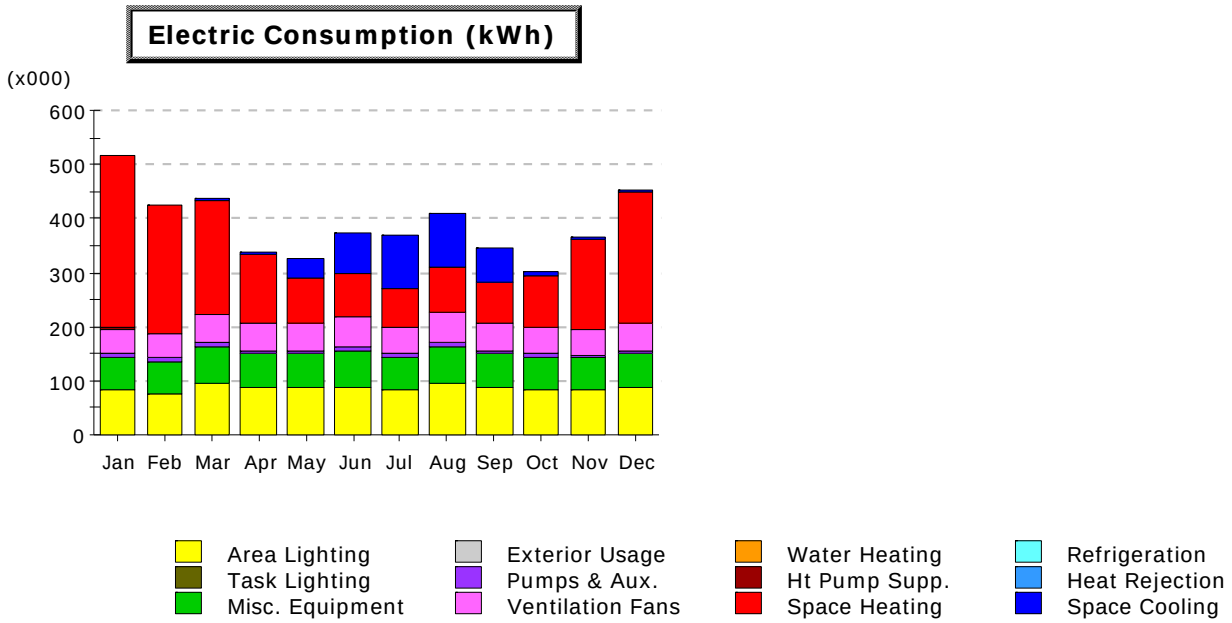


Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	0.1	0.1	0.1	0.4	1.2	1.6	1.7	2.1	1.9	1.2	0.6	0.2	11.1
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	111.7	80.9	74.3	44.9	8.9	2.3	0.6	0.2	1.9	17.1	51.1	109.7	503.5
HP Supp.	0.1	0.0	0.0	0.0	-	-	-	-	-	0.0	0.0	0.1	0.2
Hot Water	16.9	19.9	17.5	17.1	20.0	12.9	6.8	7.1	14.0	16.4	17.6	10.2	176.4
Vent. Fans	1.7	1.5	1.8	1.6	1.4	1.4	1.3	1.4	1.3	1.3	1.5	1.9	18.2
Pumps & Aux.	0.0	0.0	0.0	0.0	0.0	-	-	-	0.0	0.0	0.0	0.0	0.2
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	5.2	5.8	5.2	5.2	6.4	4.8	3.1	3.4	5.6	6.2	6.1	3.5	60.7
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	21.3	24.2	21.3	21.2	26.8	19.3	11.6	12.8	23.1	25.7	25.6	13.6	246.5
Total	157.1	132.5	120.4	90.4	64.7	42.3	25.1	27.0	47.8	67.9	102.5	139.2	1,016.8

Gas Consumption (Btu)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool													
Heat Reject.													
Refrigeration													
Space Heat													
HP Supp.													
Hot Water													
Vent. Fans													
Pumps & Aux.													
Ext. Usage													
Misc. Equip.													
Task Lights													
Area Lights													
Total													

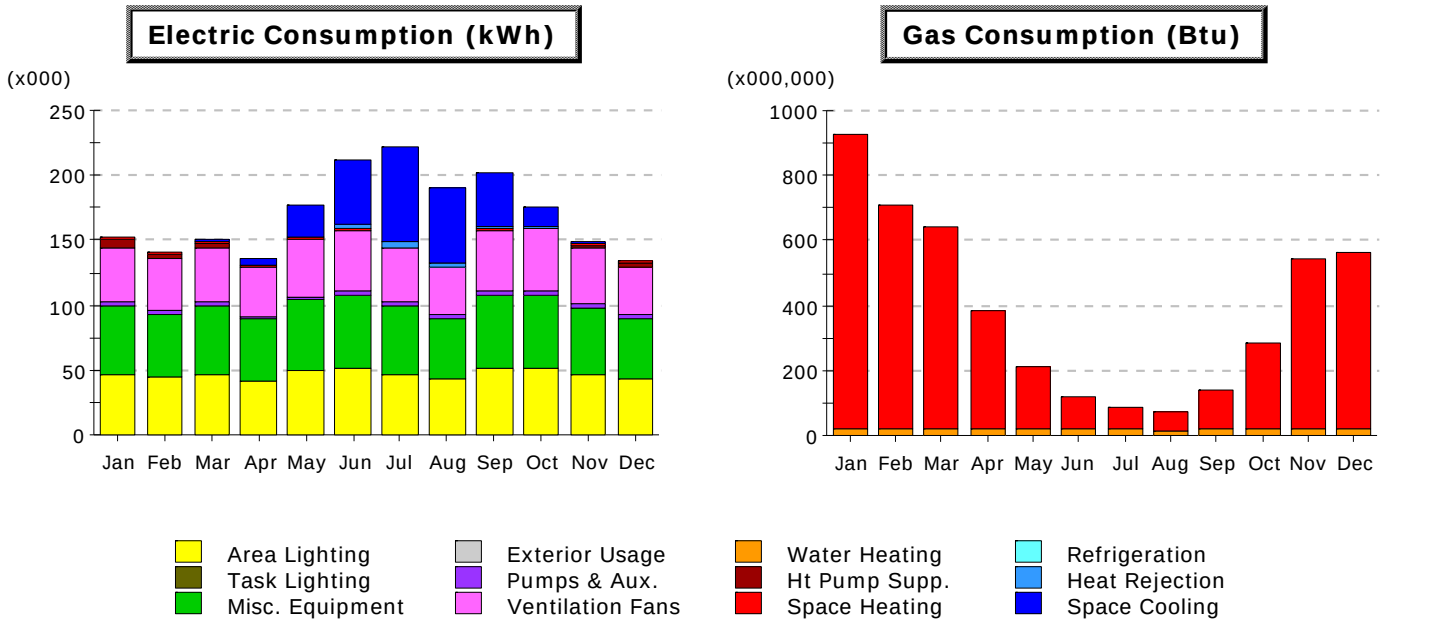


Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	1.7	1.6	4.2	4.7	35.4	78.1	98.5	98.3	62.0	7.2	2.3	2.1	396.1
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	318.1	238.2	207.1	128.3	83.3	79.4	73.0	83.5	76.4	95.8	166.4	245.9	1,795.4
HP Supp.	1.5	0.6	0.2	0.0	-	-	-	-	-	0.0	0.1	0.3	2.6
Hot Water	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.0
Vent. Fans	45.9	44.0	53.8	50.4	51.6	54.5	49.3	56.8	52.1	48.7	46.3	48.3	601.6
Pumps & Aux.	5.4	5.1	6.1	5.4	5.2	5.4	4.9	5.6	5.1	5.0	5.2	5.6	64.1
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	62.4	58.9	70.5	64.8	65.1	67.5	62.4	70.4	64.8	62.5	62.1	65.1	776.6
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	81.8	77.5	93.4	85.5	85.6	89.4	81.8	93.4	85.5	81.8	81.6	85.6	1,022.8
Total	516.9	426.0	435.3	339.1	326.3	374.4	369.9	408.2	346.0	301.0	364.2	453.1	4,660.3

Gas Consumption (Btu)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool													
Heat Reject.													
Refrigeration													
Space Heat													
HP Supp.													
Hot Water													
Vent. Fans													
Pumps & Aux.													
Ext. Usage													
Misc. Equip.													
Task Lights													
Area Lights													
Total													

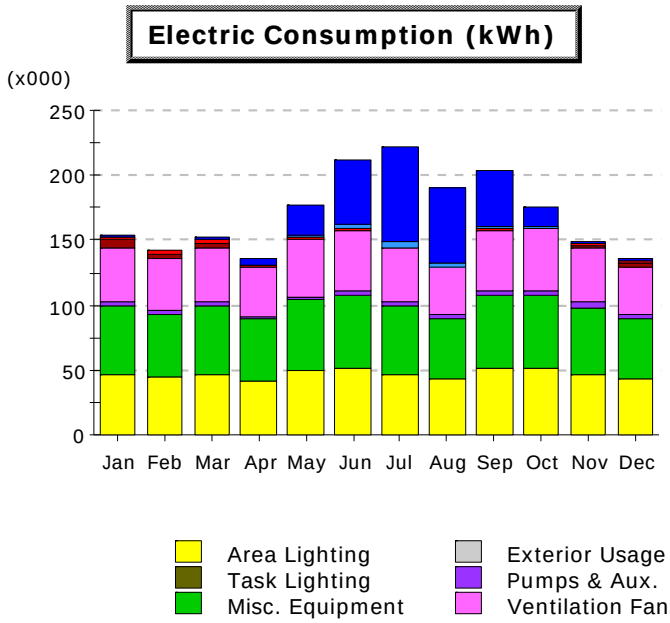


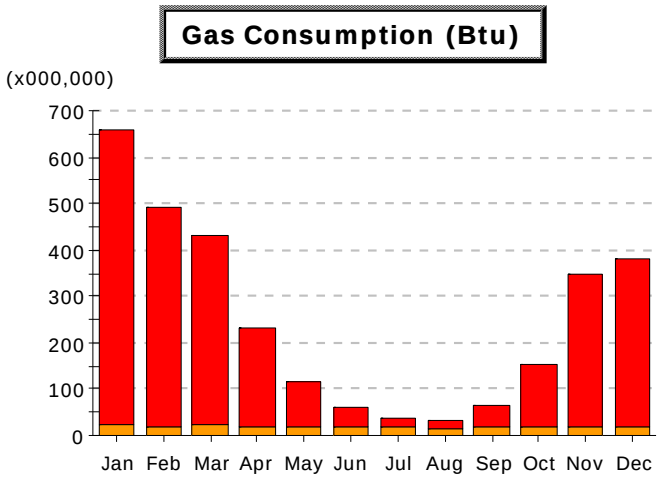
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	0.6	0.8	1.8	4.9	24.2	50.2	71.6	57.0	41.9	15.1	1.8	1.1	271.1
Heat Reject.	0.0	0.0	0.0	0.2	1.4	3.3	5.3	4.2	2.6	0.8	0.0	0.0	17.9
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	1.0	1.1	1.1	0.9	0.5	0.2	0.1	0.0	0.3	0.7	1.1	1.0	7.8
HP Supp.	6.2	4.4	3.3	0.9	-	-	-	-	-	-	1.9	3.3	19.8
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	41.9	39.5	42.0	36.9	44.6	46.9	42.1	37.0	47.0	47.0	42.0	37.0	503.8
Pumps & Aux.	3.7	3.5	3.6	2.9	3.0	3.3	3.4	2.8	3.3	3.3	3.5	3.3	39.6
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	51.8	48.4	51.8	46.5	54.3	56.5	51.8	46.8	56.5	56.8	51.5	46.8	619.7
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	47.0	43.9	47.0	42.1	49.2	51.3	47.0	42.4	51.3	51.5	46.7	42.4	561.7
Total	152.2	141.5	150.7	135.4	177.3	211.8	221.1	190.2	202.8	175.1	148.5	134.8	2,041.4

Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	904.8	689.0	623.2	362.7	193.6	100.3	71.0	60.1	118.4	267.6	522.1	545.6	4,458.3
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	21.3	20.5	22.0	19.3	20.8	19.9	16.9	14.5	17.6	18.5	18.2	18.0	227.5
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	926.1	709.4	645.1	382.0	214.4	120.2	87.9	74.6	136.0	286.1	540.3	563.7	4,685.9



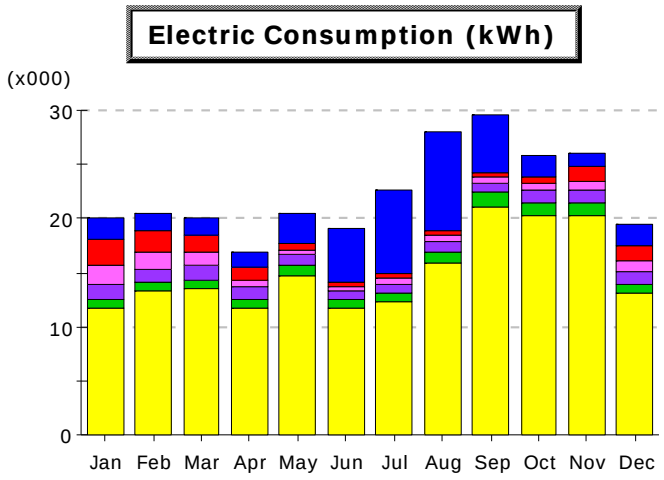


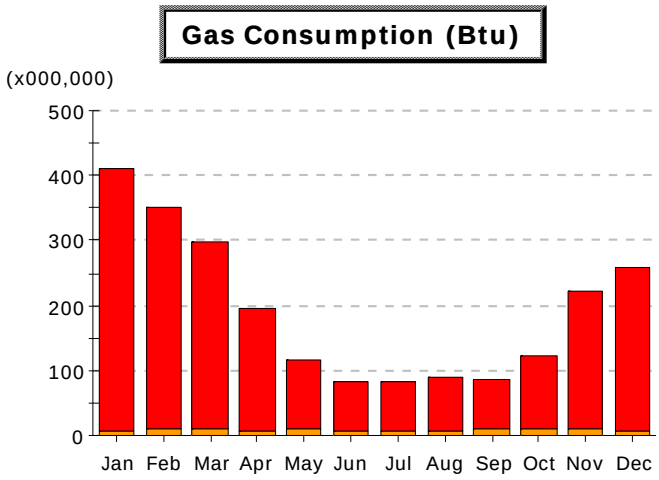
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	0.6	0.8	1.8	4.9	24.2	50.2	71.6	57.0	41.9	15.1	1.8	1.1	271.1
Heat Reject.	0.0	0.0	0.0	0.2	1.4	3.3	5.3	4.2	2.6	0.8	0.0	0.0	17.9
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	2.3	2.1	2.1	1.4	0.8	0.3	0.1	0.1	0.4	1.1	1.9	1.9	14.5
HP Supp.	6.2	4.4	3.3	0.9	-	-	-	-	-	-	1.9	3.3	19.8
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	41.9	39.5	42.0	36.9	44.6	46.9	42.1	37.0	47.0	47.0	42.0	37.0	503.8
Pumps & Aux.	4.0	3.7	3.9	3.1	3.1	3.4	3.4	2.8	3.3	3.4	3.7	3.5	41.3
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	51.8	48.4	51.8	46.5	54.3	56.5	51.8	46.8	56.5	56.8	51.5	46.8	619.7
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	47.0	43.9	47.0	42.1	49.2	51.3	47.0	42.4	51.3	51.5	46.7	42.4	561.7
Total	153.7	142.8	151.9	136.1	177.7	212.0	221.2	190.2	203.0	175.6	149.6	135.9	2,049.7

Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	635.4	468.8	409.8	213.8	94.9	38.2	21.8	18.1	49.0	133.1	329.0	359.9	2,771.8
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	21.3	20.5	22.0	19.3	20.8	19.9	16.9	14.5	17.6	18.5	18.2	18.0	227.5
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	656.7	489.2	431.8	233.1	115.7	58.1	38.8	32.6	66.6	151.6	347.2	377.9	2,999.3





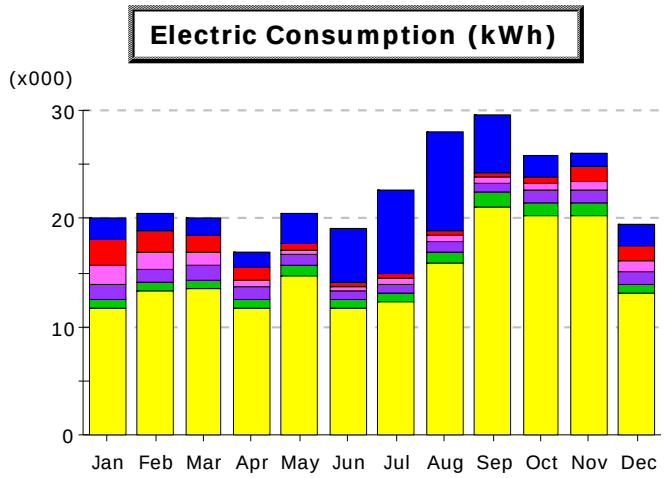


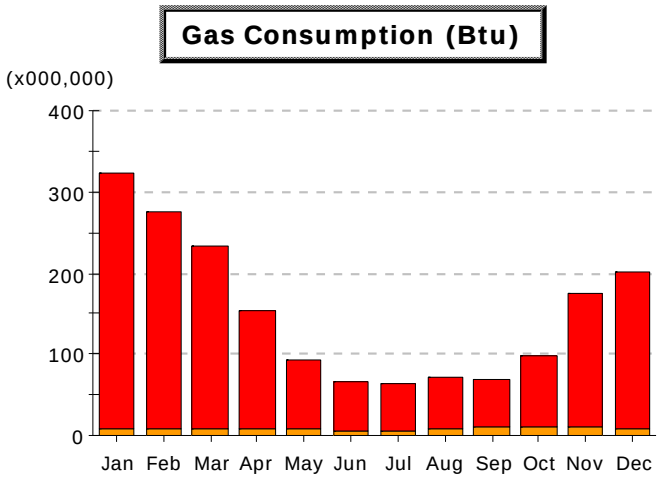
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	1.94	1.50	1.45	1.47	2.62	4.97	7.83	9.07	5.20	2.03	1.25	2.02	41.34
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	2.33	1.99	1.67	1.09	0.63	0.44	0.44	0.48	0.43	0.65	1.22	1.44	12.80
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	1.98	1.63	1.20	0.68	0.48	0.43	0.50	0.62	0.68	0.53	0.83	0.87	10.42
Pumps & Aux.	1.31	1.19	1.31	1.24	1.02	0.82	0.84	0.91	0.83	1.11	1.26	1.30	13.15
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	0.71	0.81	0.82	0.71	0.89	0.71	0.75	0.96	1.27	1.22	1.21	0.79	10.84
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	11.79	13.35	13.57	11.72	14.76	11.72	12.39	15.95	21.12	20.30	20.22	13.10	179.99
Total	20.06	20.46	20.01	16.91	20.40	19.09	22.74	27.99	29.52	25.84	25.99	19.53	268.53

Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	403.8	343.5	288.2	189.2	108.2	75.9	75.5	83.0	74.4	112.2	211.1	249.5	2,214.5
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	7.0	8.4	8.5	7.2	8.4	6.1	6.0	7.4	10.5	10.5	11.3	7.8	99.0
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	410.9	351.8	296.6	196.4	116.6	82.0	81.5	90.4	84.9	122.7	222.4	257.3	2,313.6





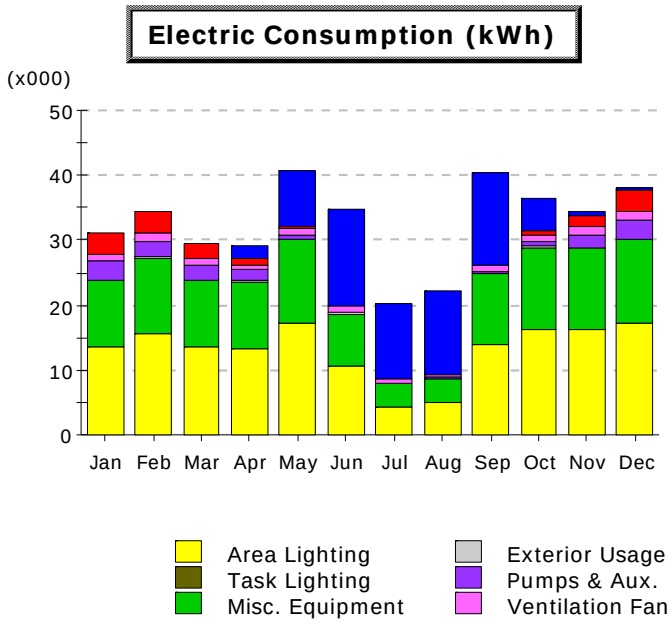


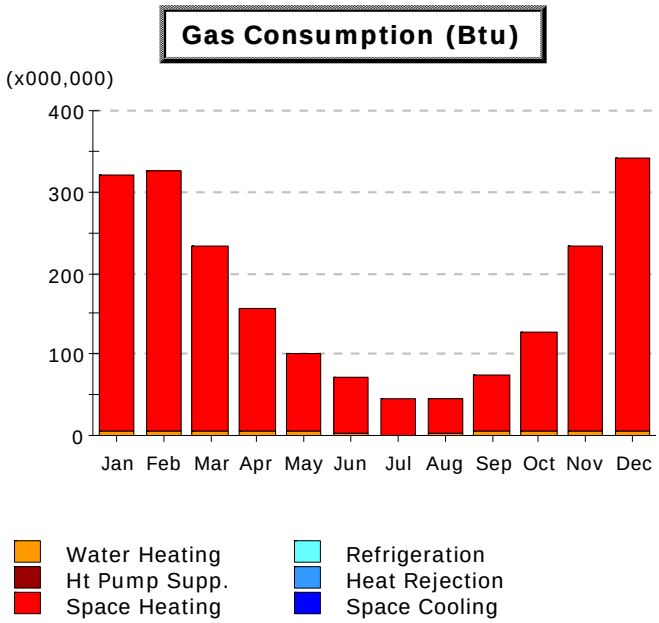
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	1.94	1.50	1.45	1.47	2.62	4.97	7.83	9.07	5.20	2.03	1.25	2.02	41.34
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	2.33	1.99	1.67	1.09	0.63	0.44	0.44	0.48	0.43	0.65	1.22	1.44	12.80
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	1.98	1.63	1.20	0.68	0.48	0.43	0.50	0.62	0.68	0.53	0.83	0.87	10.42
Pumps & Aux.	1.31	1.19	1.31	1.24	1.02	0.82	0.84	0.91	0.83	1.11	1.26	1.30	13.15
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	0.71	0.81	0.82	0.71	0.89	0.71	0.75	0.96	1.27	1.22	1.21	0.79	10.84
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	11.79	13.35	13.57	11.72	14.76	11.72	12.39	15.95	21.12	20.30	20.22	13.10	179.99
Total	20.06	20.46	20.01	16.91	20.40	19.09	22.74	27.99	29.52	25.84	25.99	19.53	268.53

Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	315.0	267.9	224.8	147.6	84.4	59.2	58.9	64.7	58.0	87.5	164.6	194.6	1,727.3
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	7.0	8.4	8.5	7.2	8.4	6.1	6.0	7.4	10.5	10.5	11.3	7.8	99.0
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	322.0	276.3	233.2	154.8	92.8	65.3	64.9	72.1	68.5	98.0	175.9	202.4	1,826.4





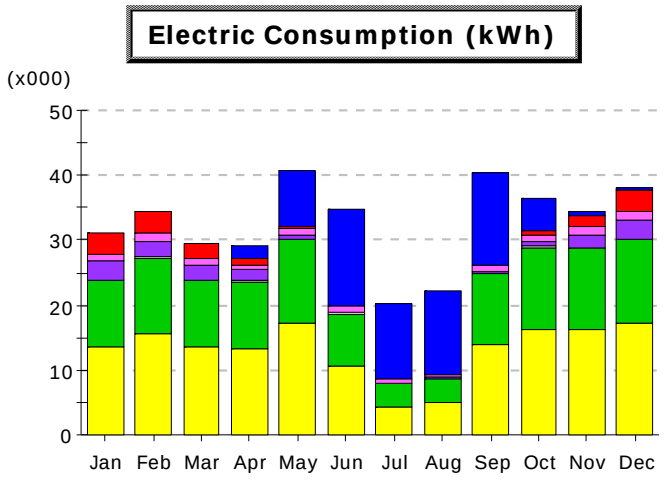


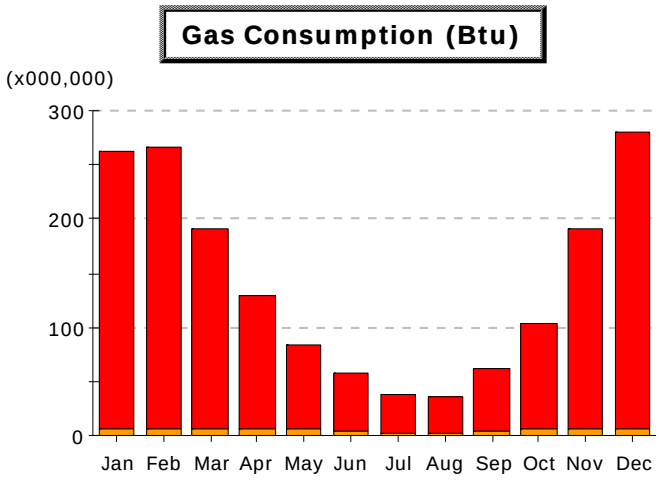
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	0.11	1.97	8.62	14.90	11.76	12.79	14.10	4.95	0.46	0.13	69.79
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	3.25	3.21	2.22	0.98	0.32	0.03	-	-	0.10	0.63	1.93	3.47	16.13
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	1.19	1.28	1.01	0.94	1.13	0.81	0.47	0.53	0.97	1.10	1.21	1.39	12.03
Pumps & Aux.	2.81	2.51	2.41	1.61	0.37	0.16	0.09	0.11	0.20	0.80	1.95	2.70	15.73
Ext. Usage	0.12	0.09	0.10	0.10	0.07	0.07	0.07	0.12	0.11	0.12	0.12	0.12	1.21
Misc. Equip.	10.33	11.85	10.33	10.28	13.12	8.13	3.45	3.75	10.78	12.57	12.48	13.11	120.18
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	13.44	15.43	13.44	13.38	17.08	10.56	4.43	4.82	14.02	16.36	16.25	17.06	156.26
Total	31.13	34.38	29.61	29.26	40.73	34.66	20.28	22.12	40.29	36.52	34.40	37.96	391.34

Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	316.2	318.7	226.7	151.8	95.3	67.2	44.0	43.2	70.9	120.9	227.0	335.5	2,017.2
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	5.3	6.2	5.4	5.3	6.3	3.5	1.3	1.3	4.2	5.1	5.4	6.2	55.5
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	321.4	324.9	232.1	157.2	101.5	70.7	45.3	44.6	75.0	125.9	232.4	341.7	2,072.7





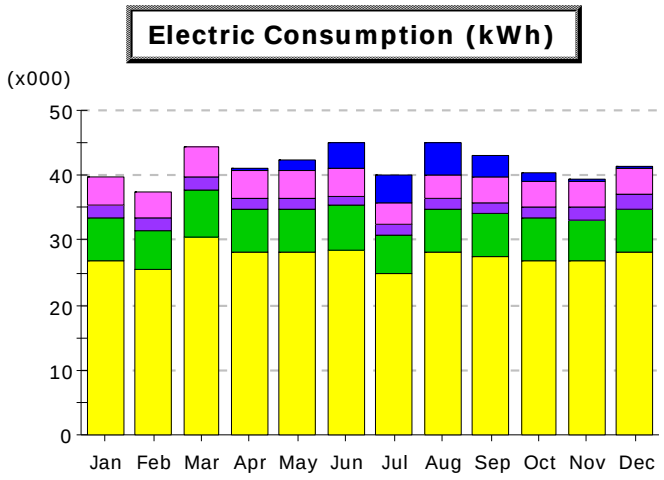


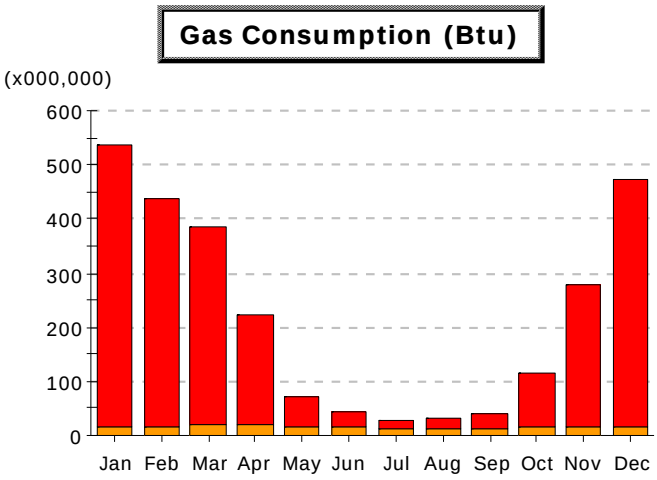
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	0.11	1.97	8.62	14.90	11.76	12.79	14.10	4.95	0.46	0.13	69.79
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	3.25	3.21	2.22	0.98	0.32	0.03	-	-	0.10	0.63	1.93	3.47	16.13
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	1.19	1.28	1.01	0.94	1.13	0.81	0.47	0.53	0.97	1.10	1.21	1.39	12.03
Pumps & Aux.	2.81	2.51	2.41	1.61	0.37	0.16	0.09	0.11	0.20	0.80	1.95	2.70	15.73
Ext. Usage	0.12	0.09	0.10	0.10	0.07	0.07	0.07	0.12	0.11	0.12	0.12	0.12	1.21
Misc. Equip.	10.33	11.85	10.33	10.28	13.12	8.13	3.45	3.75	10.78	12.57	12.48	13.11	120.18
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	13.44	15.43	13.44	13.38	17.08	10.56	4.43	4.82	14.02	16.36	16.25	17.06	156.26
Total	31.13	34.38	29.61	29.26	40.73	34.66	20.28	22.12	40.29	36.52	34.40	37.96	391.34

Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	258.0	260.1	185.0	123.9	77.7	54.8	35.9	35.3	57.8	98.6	185.2	273.8	1,646.1
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	5.3	6.2	5.4	5.3	6.3	3.5	1.3	1.3	4.2	5.1	5.4	6.2	55.5
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	263.2	266.3	190.4	129.2	84.0	58.4	37.2	36.6	62.0	103.7	190.7	279.9	1,701.6





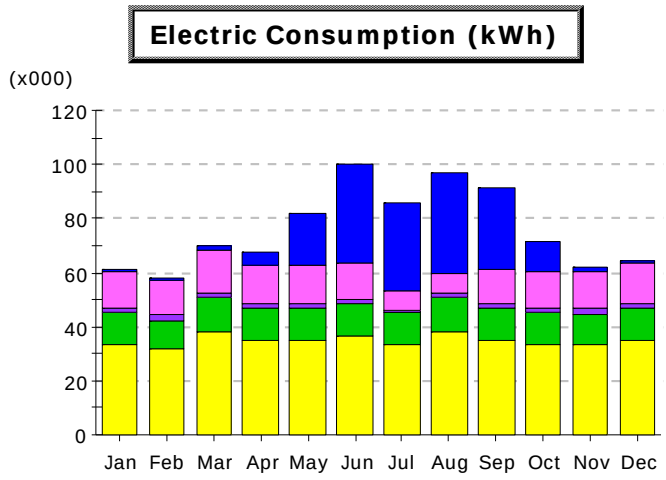


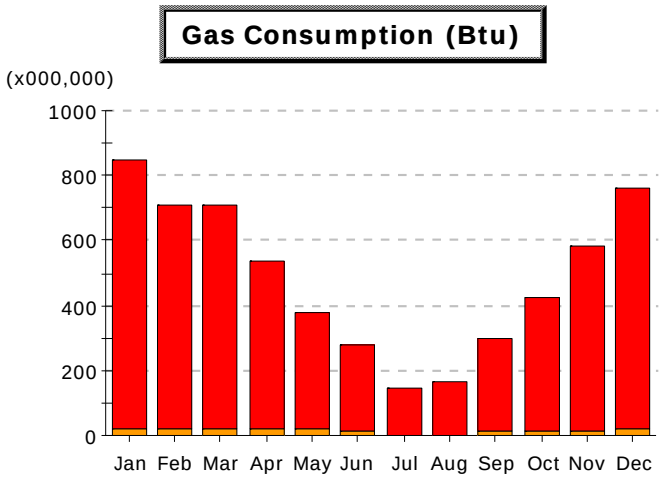
Electric Consumption (kWh x000)

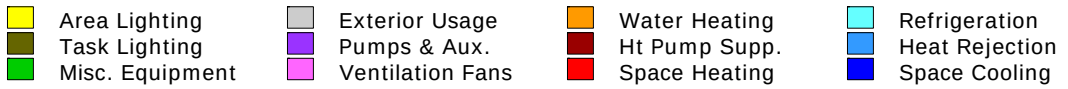
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	0.11	0.37	1.75	3.86	4.22	4.84	3.18	1.05	0.13	0.04	19.57
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	-	-	-	-	-	-	-	-	-	-	-	-	-
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	4.07	3.86	4.67	4.27	4.26	4.25	3.32	3.82	4.12	4.06	4.06	4.26	49.03
Pumps & Aux.	2.17	1.95	2.10	1.90	1.71	1.63	1.69	1.69	1.63	1.79	1.95	2.14	22.35
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	6.40	6.03	7.21	6.64	6.67	6.77	5.92	6.66	6.54	6.40	6.37	6.67	78.27
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	26.98	25.44	30.41	27.99	28.12	28.51	24.90	28.03	27.58	26.98	26.84	28.12	329.90
Total	39.62	37.28	44.50	41.16	42.52	45.02	40.05	45.04	43.05	40.28	39.36	41.23	499.12

Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	520.2	421.7	365.3	204.0	56.0	26.1	15.4	18.5	25.8	100.6	261.1	457.5	2,472.3
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	17.7	17.3	20.7	18.7	17.3	16.0	12.7	13.6	13.7	14.1	15.2	17.2	194.3
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	537.9	439.0	386.0	222.6	73.3	42.2	28.1	32.1	39.4	114.7	276.3	474.7	2,666.5





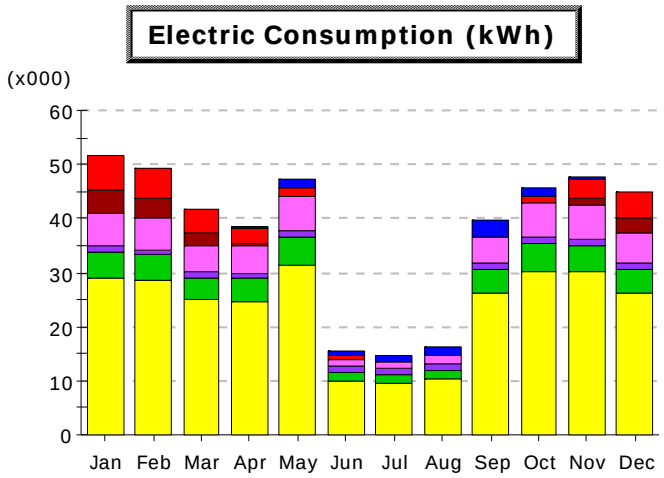


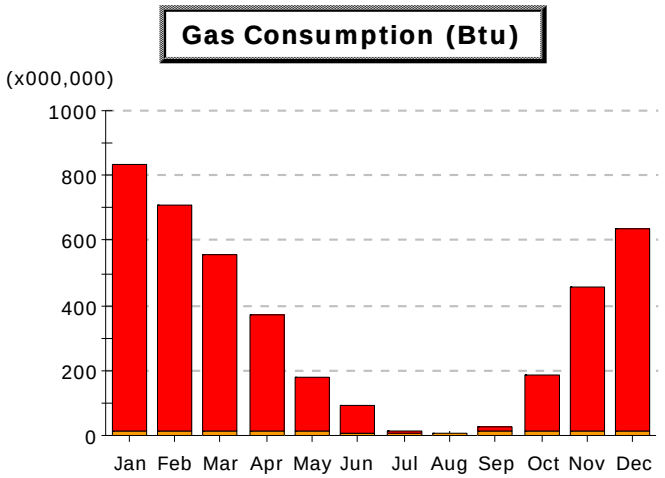
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	0.65	0.67	1.62	4.63	18.54	36.94	32.91	36.85	29.85	10.97	1.82	1.01	176.46
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	-	-	-	-	-	-	-	-	-	-	-	-	-
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	13.84	13.15	15.94	14.51	14.56	13.10	6.84	7.87	13.13	13.86	13.82	14.53	155.16
Pumps & Aux.	1.92	1.76	2.01	1.79	1.63	1.57	1.24	1.38	1.56	1.66	1.78	1.94	20.23
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	11.31	10.67	12.77	11.74	11.80	12.23	11.31	12.77	11.74	11.31	11.26	11.79	140.70
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	33.62	31.72	37.96	34.92	35.07	36.36	33.62	37.96	34.92	33.62	33.47	35.07	418.31
Total	61.34	57.97	70.29	67.59	81.58	100.21	85.91	96.84	91.21	71.42	62.15	64.34	910.85

Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	827.0	690.0	688.0	515.8	359.0	261.9	143.2	161.4	285.2	408.0	566.6	741.2	5,647.3
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	18.3	17.8	21.3	19.3	18.1	13.3	2.7	2.6	12.4	14.8	15.8	17.8	174.1
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	845.3	707.8	709.3	535.1	377.1	275.2	145.9	164.0	297.6	422.7	582.4	759.0	5,821.4





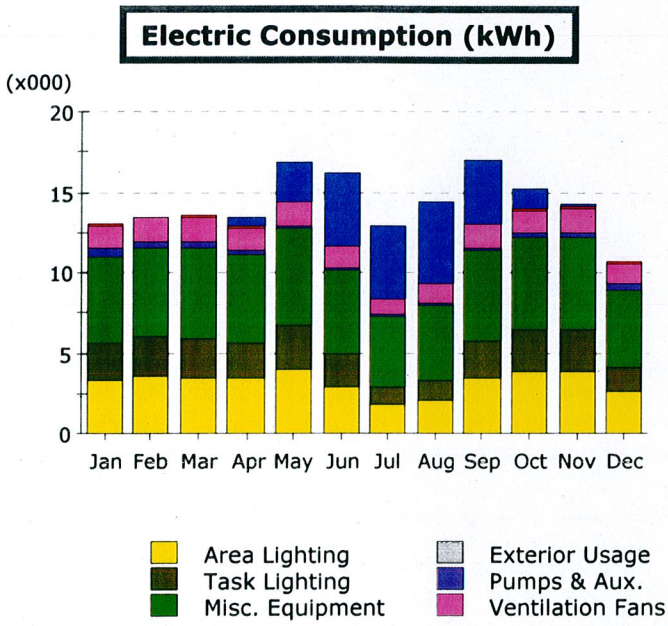


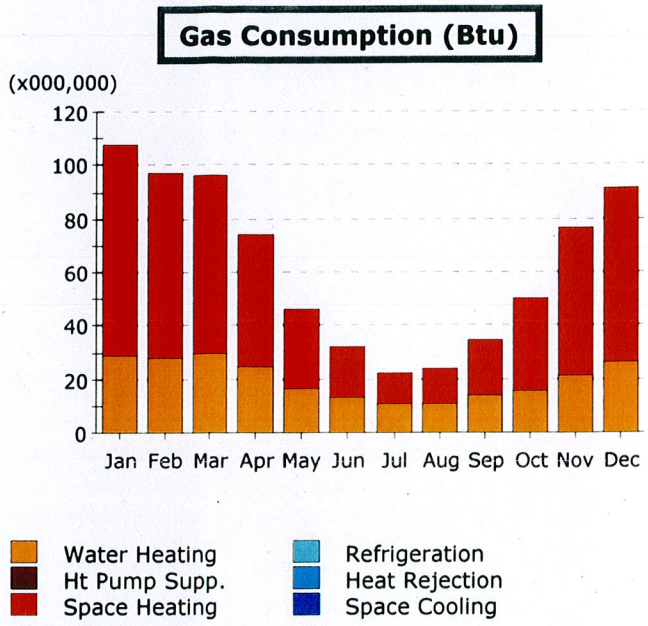
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	0.02	0.07	0.09	0.44	1.82	0.82	1.28	1.56	3.19	1.31	0.26	0.09	10.95
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	6.23	5.39	4.26	2.78	1.25	0.67	0.09	0.00	0.15	1.44	3.55	4.81	30.61
HP Supp.	4.47	3.56	2.18	0.22	-	-	-	-	-	0.05	1.29	2.97	14.75
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	6.16	5.92	5.00	5.10	6.40	1.37	1.19	1.36	4.88	6.37	6.28	5.52	55.55
Pumps & Aux.	1.22	1.10	1.21	1.17	1.19	1.15	1.19	1.19	1.15	1.19	1.17	1.22	14.14
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	4.73	4.68	4.08	4.06	5.17	1.68	1.60	1.75	4.31	4.96	4.92	4.30	46.25
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	28.86	28.52	24.86	24.75	31.53	9.85	9.38	10.26	26.21	30.24	30.04	26.20	280.72
Total	51.70	49.24	41.68	38.51	47.36	15.54	14.73	16.13	39.89	45.57	47.52	45.09	452.96

Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	816.9	694.6	545.7	356.1	161.1	89.8	11.4	-	15.3	172.2	441.5	620.1	3,924.7
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	15.2	15.7	13.6	13.3	15.8	3.8	3.3	3.5	10.5	12.8	13.7	12.9	134.0
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	832.1	710.3	559.3	369.4	176.9	93.6	14.7	3.5	25.8	185.0	455.2	633.0	4,058.7



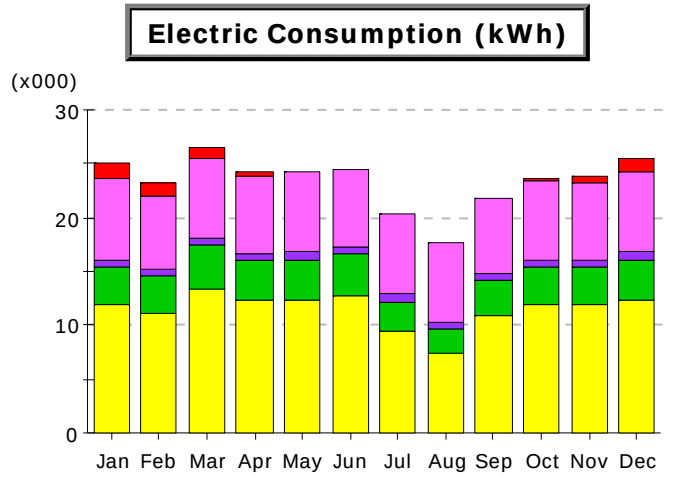


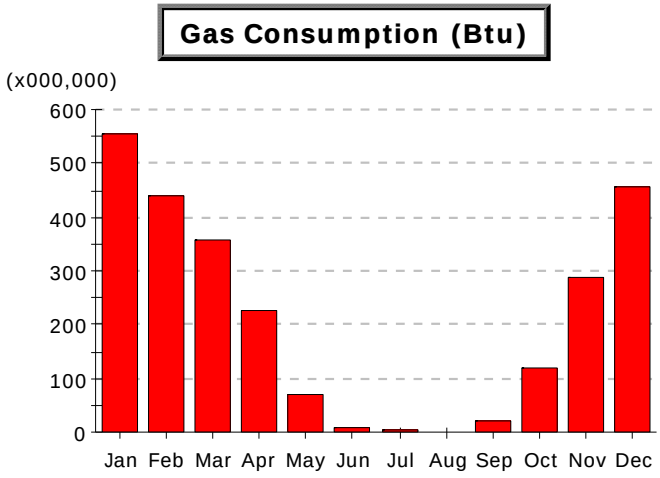
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	0.11	0.54	2.43	4.50	4.53	5.18	4.02	1.34	0.16	0.04	22.84
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	0.14	0.09	0.07	0.04	0.00	0.00	-	-	-	0.01	0.03	0.12	0.52
HP Supp.	0.05	0.01	0.01	0.00	-	-	-	-	-	0.00	0.00	0.01	0.08
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	1.37	1.42	1.49	1.39	1.53	1.33	0.99	1.15	1.42	1.46	1.48	1.19	16.22
Pumps & Aux.	0.50	0.45	0.45	0.33	0.16	0.13	0.14	0.14	0.13	0.22	0.38	0.48	3.52
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	5.37	5.42	5.66	5.41	5.99	5.27	4.36	4.74	5.58	5.79	5.73	4.73	64.05
Task Lights	2.25	2.51	2.35	2.28	2.78	1.94	1.03	1.18	2.37	2.64	2.64	1.59	25.58
Area Lights	3.33	3.58	3.47	3.36	3.95	2.93	1.84	2.04	3.45	3.79	3.77	2.57	38.08
Total	**13.01**	**13.48**	**13.61**	**13.36**	**16.85**	**16.10**	**12.89**	**14.44**	**16.97**	**15.25**	**14.20**	**10.73**	**170.89**

Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	78.81	69.57	66.67	49.01	28.90	18.75	11.77	12.89	21.07	35.32	55.59	64.82	513.16
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	28.59	27.80	29.74	24.61	16.77	13.24	10.69	10.83	13.70	15.23	21.13	26.14	238.48
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	**107.40**	**97.38**	**96.41**	**73.62**	**45.67**	**31.98**	**22.46**	**23.72**	**34.76**	**50.55**	**76.72**	**90.97**	**751.65**





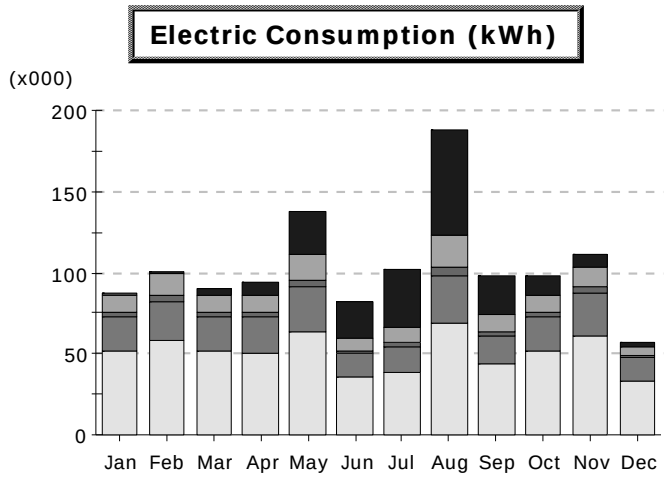


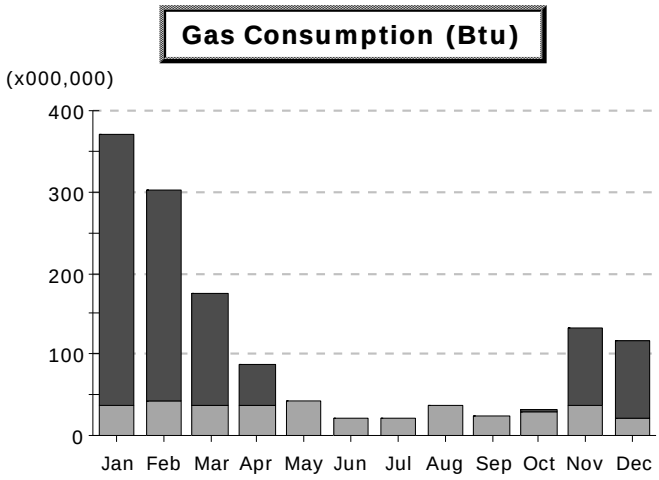
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	1.48	1.23	1.00	0.45	0.05	0.00	-	-	0.00	0.10	0.61	1.25	6.17
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	7.47	6.74	7.45	7.19	7.41	7.17	7.41	7.41	7.17	7.41	7.19	7.46	87.48
Pumps & Aux.	0.65	0.58	0.65	0.63	0.65	0.63	0.65	0.65	0.63	0.65	0.63	0.65	7.62
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	3.58	3.37	4.03	3.71	3.73	3.86	2.83	2.23	3.26	3.58	3.56	3.73	41.48
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	11.88	11.19	13.37	12.31	12.37	12.81	9.39	7.41	10.82	11.88	11.82	12.37	137.62
Total	25.06	23.12	26.49	24.29	24.21	24.46	20.28	17.69	21.88	23.62	23.80	25.46	280.38

Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	553.8	439.9	358.3	228.0	69.5	9.7	3.5	1.1	21.9	118.0	287.5	457.2	2,548.4
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	553.8	439.9	358.3	228.0	69.5	9.7	3.5	1.1	21.9	118.0	287.5	457.2	2,548.4





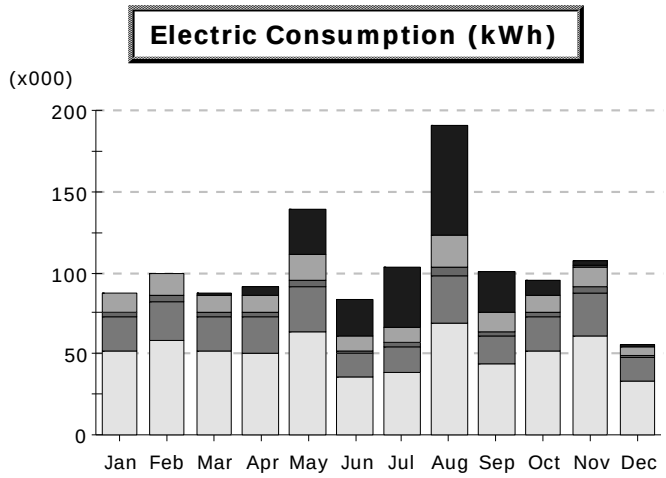


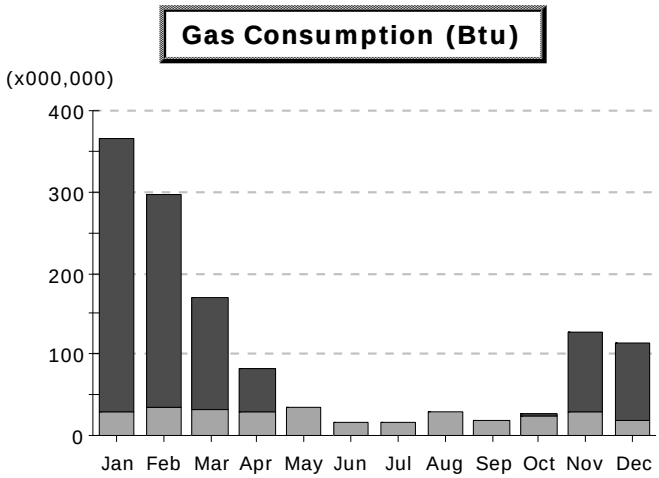
Electric Consumption (kWh x000)

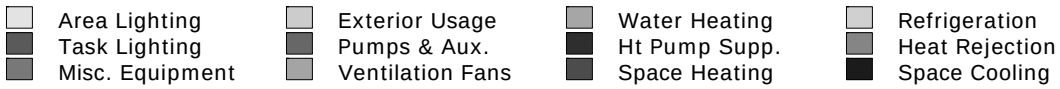
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	0.1	1.7	3.3	8.6	27.2	22.6	35.6	66.0	24.4	11.5	7.0	1.4	209.6
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	0.2	0.1	0.1	0.0	-	-	-	-	-	0.0	0.1	0.1	0.6
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	10.9	12.7	10.5	10.5	15.5	7.9	9.6	19.8	10.4	10.6	13.1	5.9	137.4
Pumps & Aux.	3.1	3.7	3.1	3.1	4.1	1.9	2.1	4.4	2.5	3.1	3.9	1.7	36.7
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	21.6	24.4	21.6	21.4	27.0	14.9	16.1	29.1	18.2	21.6	25.7	14.0	255.5
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	51.2	58.0	51.2	50.9	64.1	35.5	38.4	69.2	43.2	51.2	61.2	33.2	607.2
Total	87.1	100.6	89.8	94.6	137.8	82.7	101.9	188.7	98.6	98.0	110.9	56.4	1,247.0

Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	334.7	260.4	137.4	51.6	-	-	-	-	-	3.2	95.5	95.6	978.4
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	36.1	41.9	37.1	36.1	42.0	21.3	21.4	36.9	23.1	28.6	36.9	22.1	383.6
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	370.8	302.4	174.5	87.7	42.0	21.3	21.4	36.9	23.1	31.8	132.4	117.7	1,361.9





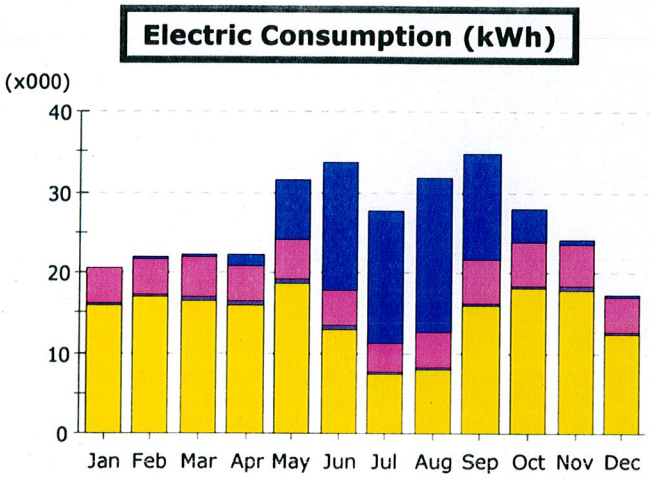


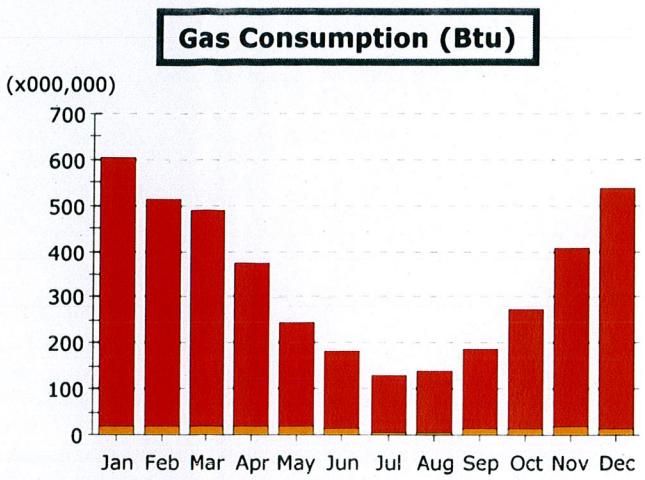
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	0.1	-	0.9	5.5	27.7	23.5	36.5	67.5	25.9	9.1	3.4	0.5	200.5
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	0.2	0.1	0.1	0.0	-	-	-	-	-	0.0	0.1	0.1	0.6
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	10.9	12.7	10.5	10.6	16.5	8.3	10.2	20.9	11.2	10.9	13.1	5.9	141.6
Pumps & Aux.	3.1	3.7	3.1	3.1	4.1	1.9	2.1	4.5	2.5	3.1	3.9	1.7	36.9
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	21.6	24.4	21.6	21.4	27.0	14.9	16.1	29.1	18.2	21.6	25.7	14.0	255.5
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	51.2	58.0	51.2	50.9	64.1	35.5	38.4	69.2	43.2	51.2	61.2	33.2	607.2
Total	87.0	98.9	87.4	91.5	139.3	84.1	103.3	191.3	101.0	95.8	107.4	55.4	1,242.4

Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	334.6	261.1	138.3	51.7	-	-	-	-	-	3.9	97.0	96.1	982.6
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	30.0	35.1	31.0	30.1	34.4	17.1	16.8	28.8	17.9	22.5	29.7	18.1	311.6
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	364.6	296.1	169.3	81.8	34.4	17.1	16.8	28.8	17.9	26.4	126.7	114.2	1,294.1





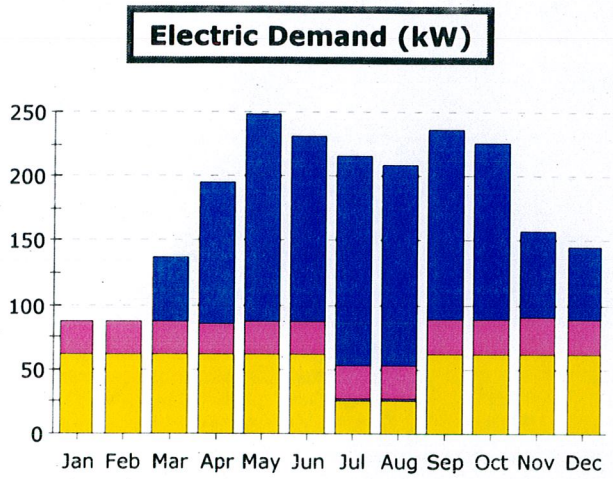


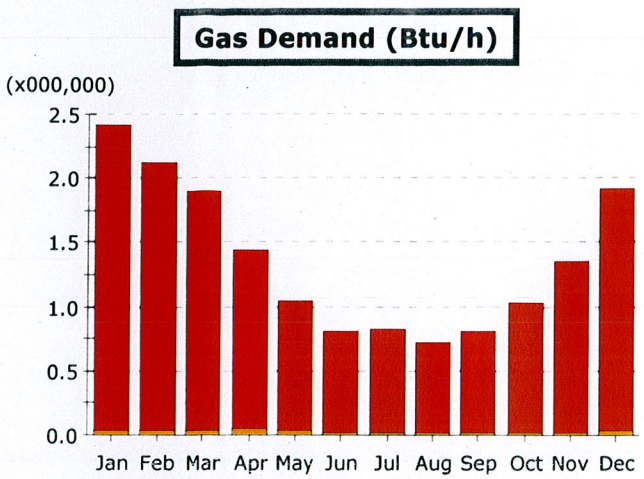
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	0.04	0.03	0.36	1.36	7.34	15.83	16.59	19.16	13.20	4.19	0.57	0.20	78.86
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	-	-	-	-	-	-	-	-	-	-	-	-	-
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	4.26	4.45	4.92	4.61	5.17	4.62	3.58	4.23	5.38	5.51	5.23	4.28	56.23
Pumps & Aux.	0.43	0.39	0.41	0.36	0.33	0.31	0.28	0.30	0.31	0.34	0.38	0.41	4.25
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	15.82	16.93	16.52	15.96	18.72	13.00	7.28	7.98	15.96	17.95	17.86	12.32	176.30
Total	**20.54**	**21.80**	**22.21**	**22.30**	**31.55**	**33.75**	**27.73**	**31.67**	**34.86**	**27.98**	**24.04**	**17.21**	**315.65**

Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	587.3	490.6	469.9	357.3	223.3	168.6	124.9	132.0	173.8	257.5	391.7	526.9	3,903.6
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	17.8	20.3	19.3	18.4	20.4	12.3	5.4	5.7	13.8	16.5	17.7	12.3	179.9
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	**605.2**	**510.9**	**489.2**	**375.7**	**243.7**	**180.8**	**130.3**	**137.6**	**187.6**	**274.0**	**409.4**	**539.2**	**4,083.5**





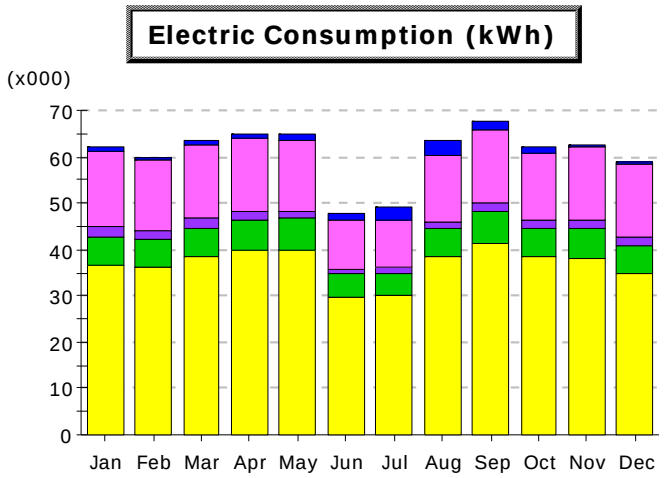


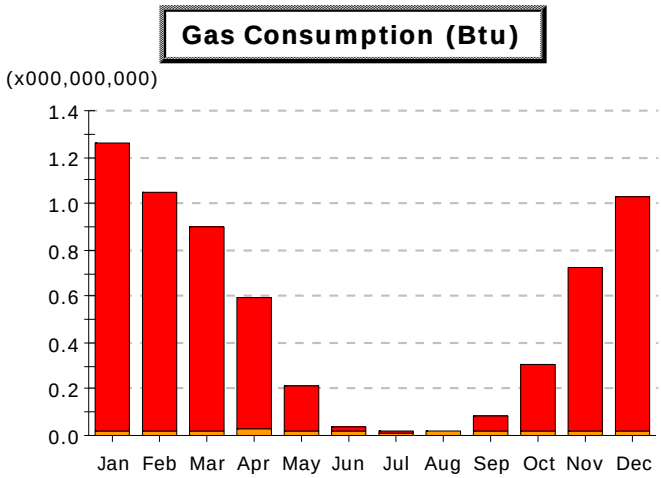
Electric Demand (kW)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	0.2	0.2	50.6	109.8	161.1	142.4	163.7	155.0	146.5	135.8	67.5	57.4	1,190.3
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	-	-	-	-	-	-	-	-	-	-	-	-	-
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	25.9	25.5	24.8	24.2	25.2	26.1	26.0	26.4	27.8	27.7	28.1	26.9	314.6
Pumps & Aux.	1.1	1.0	0.9	0.9	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	11.0
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	61.0	61.0	61.0	61.0	61.0	61.0	25.8	25.8	61.0	61.0	61.0	61.0	661.7
Total	**88.2**	**87.7**	**137.4**	**195.9**	**248.1**	**230.4**	**216.3**	**208.1**	**236.2**	**225.5**	**157.5**	**146.2**	**2,177.6**

Gas Demand (Btu/h x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	2.39	2.10	1.88	1.39	1.01	0.78	0.79	0.69	0.78	1.01	1.33	1.89	16.03
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	0.03	0.03	0.03	0.05	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.33
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	**2.42**	**2.13**	**1.91**	**1.45**	**1.04**	**0.80**	**0.82**	**0.71**	**0.80**	**1.03**	**1.35**	**1.91**	**16.36**





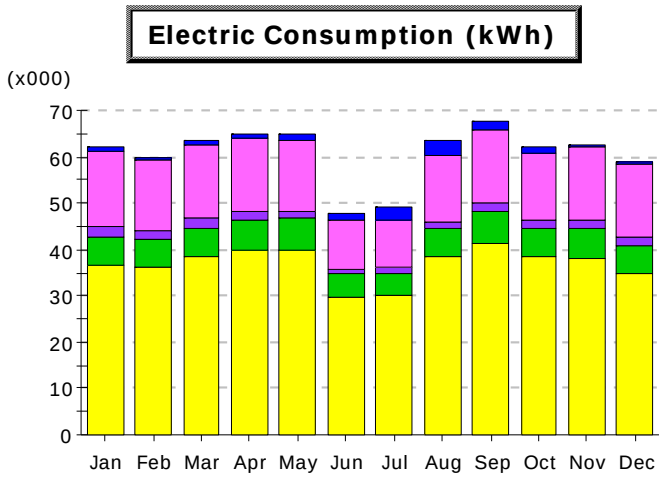


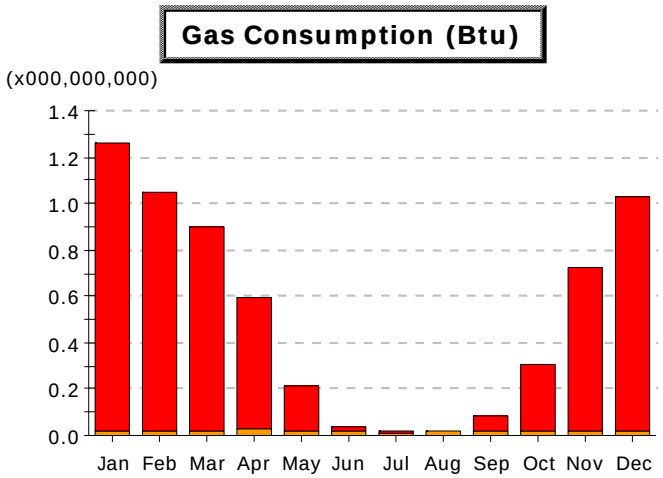
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	0.76	0.76	0.81	0.90	1.35	1.59	2.74	3.20	1.97	1.01	0.81	0.71	16.61
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	-	-	-	-	-	-	-	-	-	-	-	-	-
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	16.44	15.36	15.78	15.74	15.14	10.44	10.51	14.22	15.69	14.47	15.44	15.49	174.72
Pumps & Aux.	2.07	1.90	2.08	1.96	1.70	1.04	1.03	1.40	1.58	1.78	2.03	2.05	20.61
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	6.10	6.00	6.38	6.62	6.66	4.95	4.99	6.38	6.90	6.38	6.34	5.82	73.52
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	36.63	36.00	38.30	39.76	39.97	29.73	29.94	38.30	41.43	38.30	38.09	34.96	441.39
Total	62.00	60.00	63.35	64.98	64.82	47.75	49.20	63.49	67.57	61.94	62.71	59.03	726.85

Gas Consumption (Btu x000,000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	1.24	1.02	0.87	0.57	0.19	0.03	0.00	0.00	0.06	0.29	0.70	1.01	5.99
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.23
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	1.26	1.04	0.90	0.59	0.21	0.04	0.02	0.02	0.08	0.31	0.72	1.03	6.22





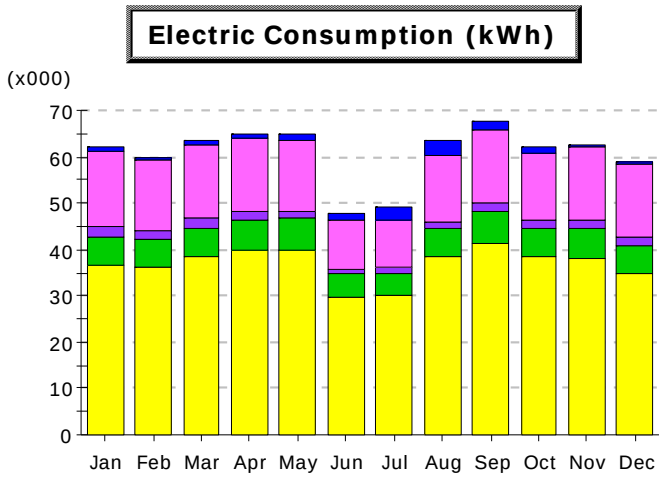


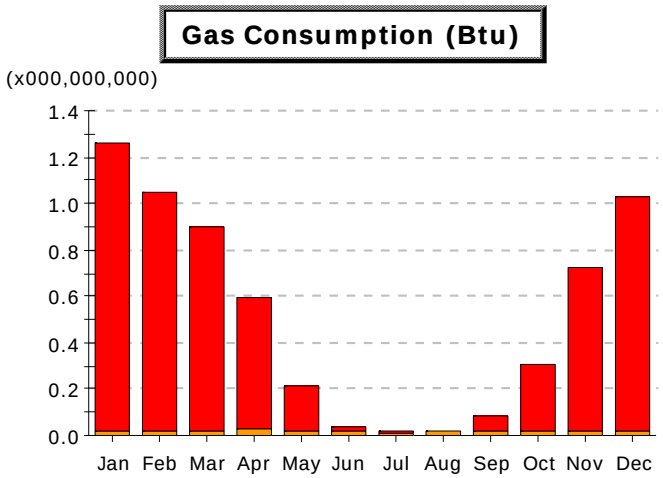
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	0.76	0.76	0.81	0.90	1.35	1.59	2.74	3.20	1.97	1.01	0.81	0.71	16.61
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	-	-	-	-	-	-	-	-	-	-	-	-	-
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	16.44	15.36	15.78	15.74	15.14	10.44	10.51	14.22	15.69	14.47	15.44	15.49	174.72
Pumps & Aux.	2.07	1.90	2.08	1.96	1.70	1.04	1.03	1.40	1.58	1.78	2.03	2.05	20.61
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	6.10	6.00	6.38	6.62	6.66	4.95	4.99	6.38	6.90	6.38	6.34	5.82	73.52
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	36.63	36.00	38.30	39.76	39.97	29.73	29.94	38.30	41.43	38.30	38.09	34.96	441.39
Total	62.00	60.00	63.35	64.98	64.82	47.75	49.20	63.49	67.57	61.94	62.71	59.03	726.85

Gas Consumption (Btu x000,000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	1.24	1.02	0.87	0.57	0.19	0.03	0.00	0.00	0.06	0.29	0.70	1.01	5.99
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.23
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	1.26	1.04	0.90	0.59	0.21	0.04	0.02	0.02	0.08	0.31	0.72	1.03	6.22





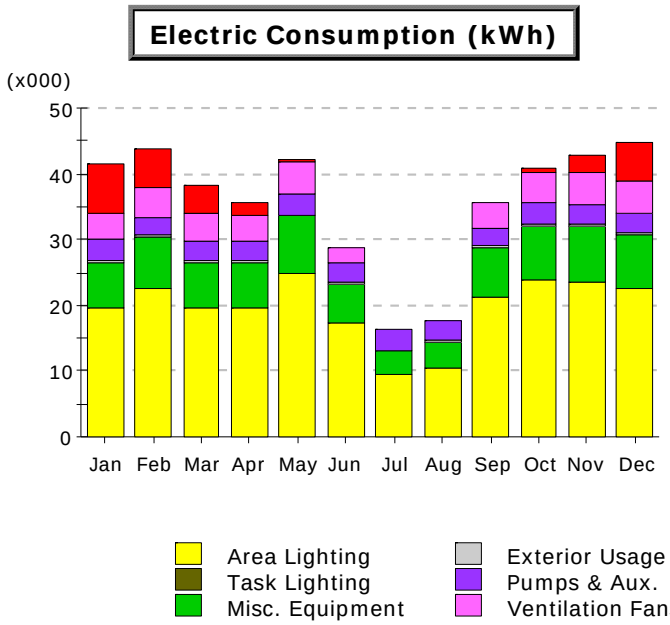


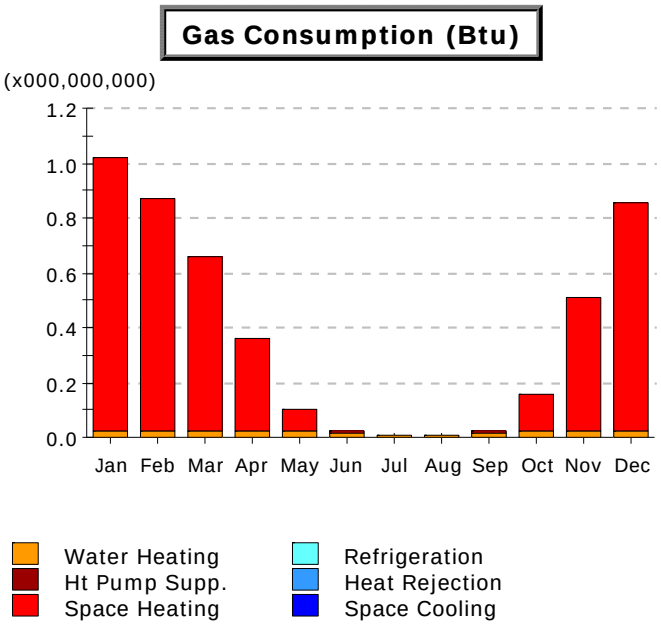
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	0.76	0.76	0.81	0.90	1.35	1.59	2.74	3.20	1.97	1.01	0.81	0.71	16.61
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	-	-	-	-	-	-	-	-	-	-	-	-	-
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	16.44	15.36	15.78	15.74	15.14	10.44	10.51	14.22	15.69	14.47	15.44	15.49	174.72
Pumps & Aux.	2.07	1.90	2.08	1.96	1.70	1.04	1.03	1.40	1.58	1.78	2.03	2.05	20.61
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	6.10	6.00	6.38	6.62	6.66	4.95	4.99	6.38	6.90	6.38	6.34	5.82	73.52
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	36.63	36.00	38.30	39.76	39.97	29.73	29.94	38.30	41.43	38.30	38.09	34.96	441.39
Total	62.00	60.00	63.35	64.98	64.82	47.75	49.20	63.49	67.57	61.94	62.71	59.03	726.85

Gas Consumption (Btu x000,000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	1.24	1.02	0.87	0.57	0.19	0.03	0.00	0.00	0.06	0.29	0.70	1.01	5.99
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.23
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	1.26	1.04	0.90	0.59	0.21	0.04	0.02	0.02	0.08	0.31	0.72	1.03	6.22





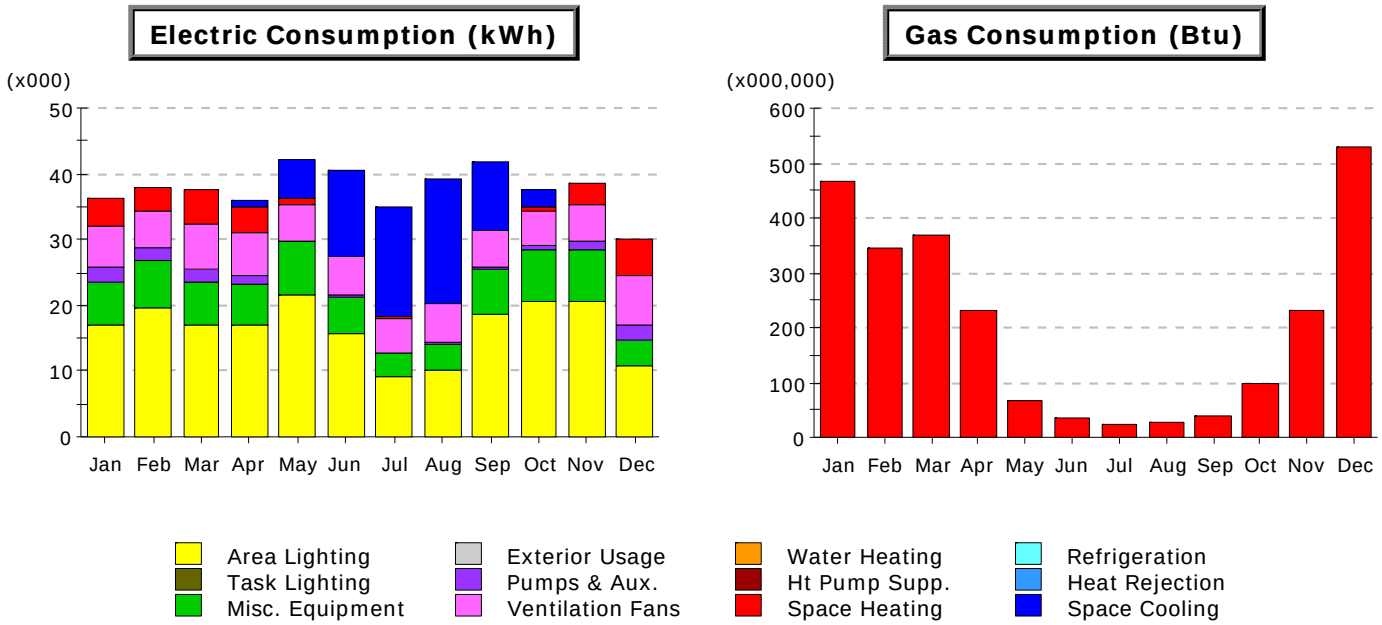


Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	7.36	5.88	4.30	2.09	0.28	0.01	0.00	-	0.01	0.57	2.84	5.91	29.23
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	4.11	4.67	3.99	3.97	5.00	2.40	0.02	0.00	3.80	4.76	4.80	4.65	42.17
Pumps & Aux.	3.03	2.73	3.03	2.93	3.03	2.93	3.03	3.03	2.93	3.03	2.93	3.03	35.64
Ext. Usage	0.35	0.27	0.30	0.29	0.20	0.20	0.20	0.33	0.32	0.33	0.34	0.35	3.48
Misc. Equip.	6.95	7.93	6.95	6.91	8.77	6.10	3.42	3.76	7.48	8.40	8.37	8.04	83.07
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	19.62	22.40	19.62	19.52	24.77	17.19	9.56	10.52	21.12	23.74	23.64	22.71	234.39
Total	41.41	43.88	38.18	35.71	42.04	28.83	16.22	17.64	35.67	40.83	42.91	44.68	427.99

Gas Consumption (Btu x000,000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	0.99	0.85	0.63	0.34	0.08	0.01	0.00	-	0.00	0.14	0.49	0.83	4.37
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	0.02	0.03	0.02	0.02	0.03	0.02	0.01	0.01	0.02	0.02	0.02	0.02	0.23
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	1.02	0.87	0.66	0.36	0.10	0.02	0.01	0.01	0.02	0.16	0.51	0.85	4.60

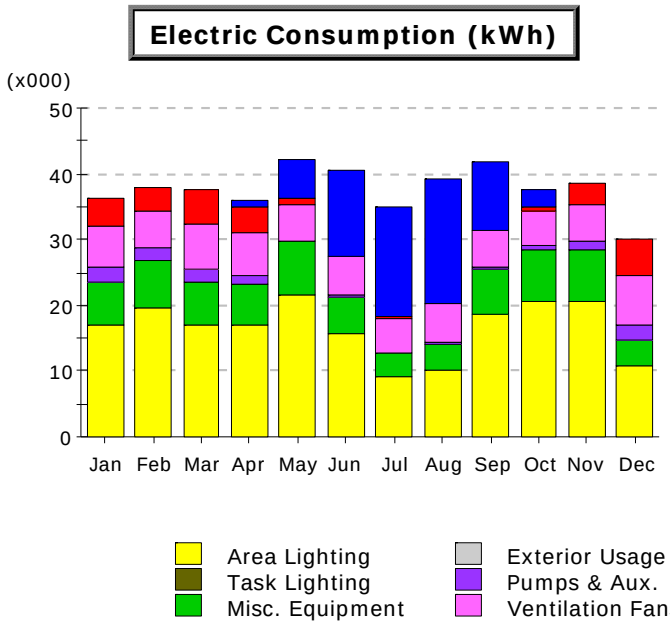


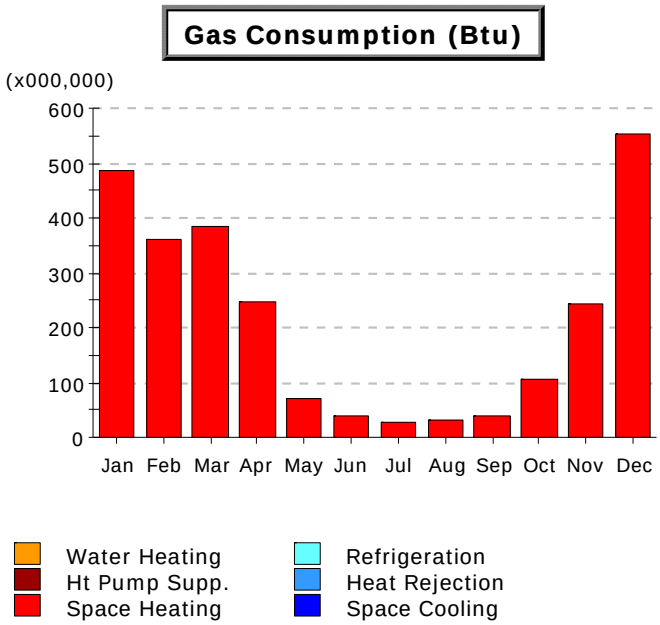
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	0.20	0.99	5.94	12.93	16.90	19.05	10.49	2.73	0.23	0.05	69.52
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	4.44	3.78	5.01	3.90	0.90	0.17	0.03	0.02	0.03	0.65	3.14	5.51	27.58
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	6.22	5.29	7.01	6.38	5.56	5.75	5.21	5.99	5.50	5.28	5.45	7.74	71.36
Pumps & Aux.	2.34	2.06	2.02	1.36	0.26	0.14	0.13	0.15	0.14	0.58	1.57	2.21	12.95
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	6.38	7.30	6.38	6.35	8.07	5.84	3.50	3.88	6.98	7.73	7.70	4.01	74.11
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	17.04	19.51	17.04	16.96	21.57	15.56	9.28	10.29	18.64	20.66	20.58	10.70	197.81
Total	36.42	37.93	37.66	35.94	42.29	40.40	35.04	39.37	41.78	37.63	38.66	30.21	453.34

Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	463.8	344.8	365.3	231.0	63.3	32.7	24.0	26.8	36.2	97.4	231.1	527.6	2,443.9
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	1.5	1.8	1.6	1.5	1.8	1.2	0.6	0.6	1.3	1.5	1.6	0.9	15.9
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	465.3	346.6	366.9	232.5	65.1	33.9	24.6	27.4	37.4	98.9	232.7	528.5	2,459.8





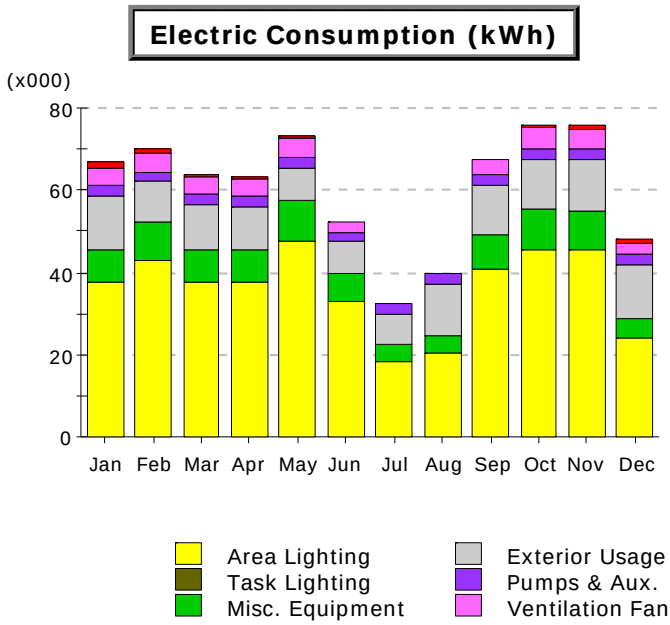


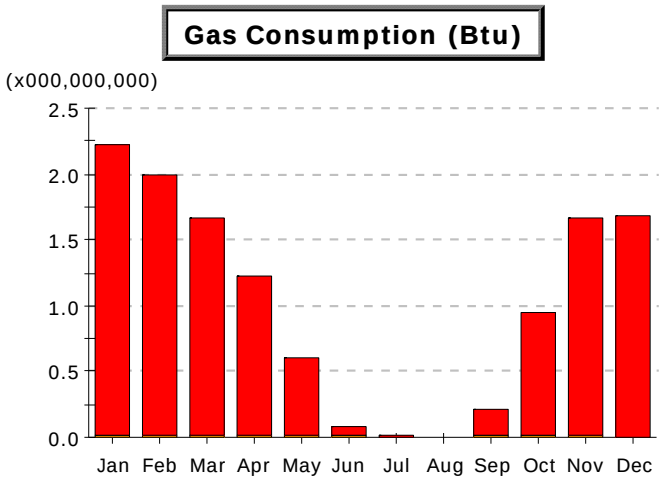
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	0.20	0.99	5.94	12.93	16.90	19.05	10.49	2.73	0.23	0.05	69.52
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	4.44	3.78	5.01	3.90	0.90	0.17	0.03	0.02	0.03	0.65	3.14	5.51	27.58
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	6.22	5.29	7.01	6.38	5.56	5.75	5.21	5.99	5.50	5.28	5.45	7.74	71.36
Pumps & Aux.	2.34	2.06	2.02	1.36	0.26	0.14	0.13	0.15	0.14	0.58	1.57	2.21	12.95
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	6.38	7.30	6.38	6.35	8.07	5.84	3.50	3.88	6.98	7.73	7.70	4.01	74.11
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	17.04	19.51	17.04	16.96	21.57	15.56	9.28	10.29	18.64	20.66	20.58	10.70	197.81
Total	36.42	37.93	37.66	35.94	42.29	40.40	35.04	39.37	41.78	37.63	38.66	30.21	453.34

Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	483.7	360.3	383.2	243.8	68.5	36.1	26.6	29.6	39.7	104.1	243.1	550.7	2,569.5
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	1.5	1.8	1.6	1.5	1.8	1.2	0.6	0.6	1.3	1.5	1.6	0.9	15.9
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	485.2	362.1	384.8	245.4	70.3	37.3	27.2	30.3	41.0	105.6	244.7	551.6	2,585.4



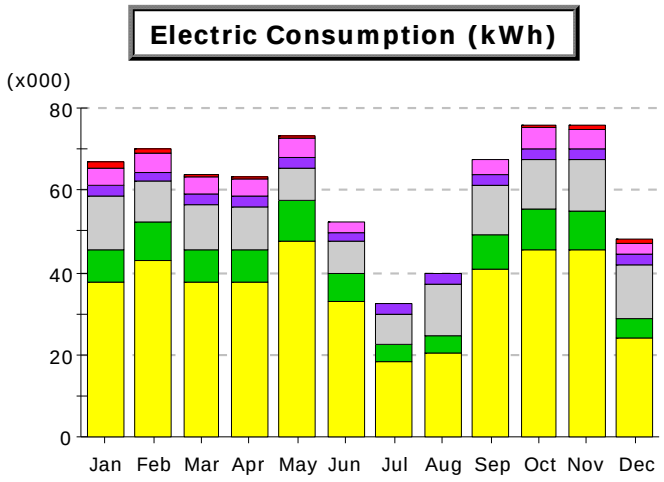


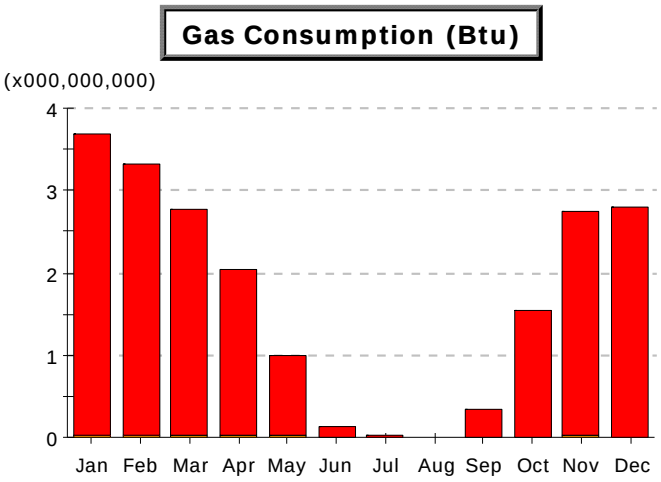
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	1.21	1.07	0.91	0.69	0.38	0.06	0.01	-	0.16	0.55	0.87	0.89	6.79
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	4.18	4.48	3.69	3.84	4.96	2.24	0.01	-	3.54	4.96	4.80	2.52	39.24
Pumps & Aux.	2.63	2.38	2.63	2.55	2.63	2.55	2.63	2.63	2.55	2.63	2.55	2.63	30.97
Ext. Usage	13.05	10.02	11.09	10.73	7.67	7.42	7.67	12.48	12.08	12.48	12.63	13.05	130.39
Misc. Equip.	7.83	8.94	7.83	7.79	9.89	6.88	3.85	4.24	8.44	9.48	9.43	4.96	89.57
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	37.78	43.13	37.78	37.58	47.68	33.09	18.40	20.25	40.66	45.70	45.51	23.90	431.45
Total	66.68	70.02	63.93	63.18	73.21	52.24	32.57	39.60	67.42	75.81	75.79	47.96	728.41

Gas Consumption (Btu x000,000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	2.21	1.98	1.66	1.21	0.59	0.08	0.01	-	0.21	0.93	1.65	1.67	12.20
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	0.01	0.02	0.01	0.01	0.02	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.14
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	2.22	2.00	1.67	1.23	0.61	0.09	0.02	0.00	0.22	0.94	1.66	1.68	12.34





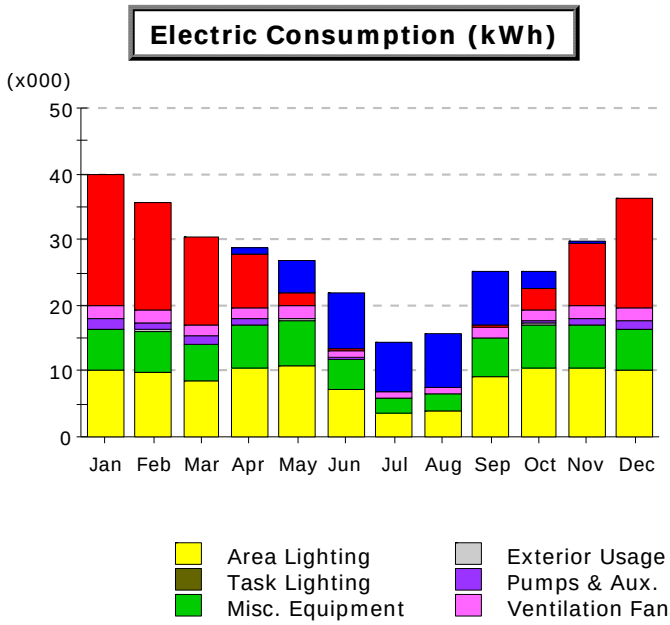


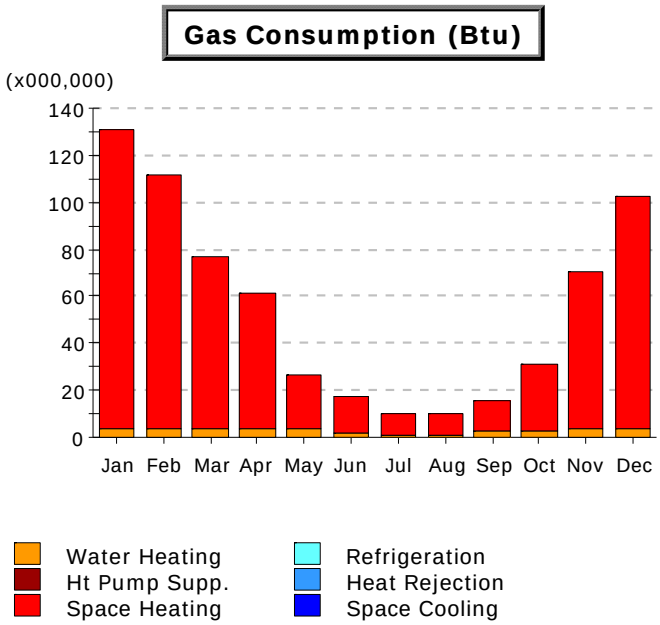
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	1.21	1.07	0.91	0.69	0.38	0.06	0.01	-	0.16	0.55	0.87	0.89	6.79
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	4.18	4.48	3.69	3.84	4.96	2.24	0.01	-	3.54	4.96	4.80	2.52	39.24
Pumps & Aux.	2.63	2.38	2.63	2.55	2.63	2.55	2.63	2.63	2.55	2.63	2.55	2.63	30.97
Ext. Usage	13.05	10.02	11.09	10.73	7.67	7.42	7.67	12.48	12.08	12.48	12.63	13.05	130.39
Misc. Equip.	7.83	8.94	7.83	7.79	9.89	6.88	3.85	4.24	8.44	9.48	9.43	4.96	89.57
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	37.78	43.13	37.78	37.58	47.68	33.09	18.40	20.25	40.66	45.70	45.51	23.90	431.45
Total	66.68	70.02	63.93	63.18	73.21	52.24	32.57	39.60	67.42	75.81	75.79	47.96	728.41

Gas Consumption (Btu x000,000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	3.67	3.29	2.75	2.01	0.98	0.13	0.02	-	0.34	1.54	2.74	2.78	20.26
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	0.01	0.02	0.01	0.01	0.02	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.14
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	3.68	3.31	2.77	2.03	0.99	0.14	0.03	0.00	0.35	1.55	2.75	2.79	20.39





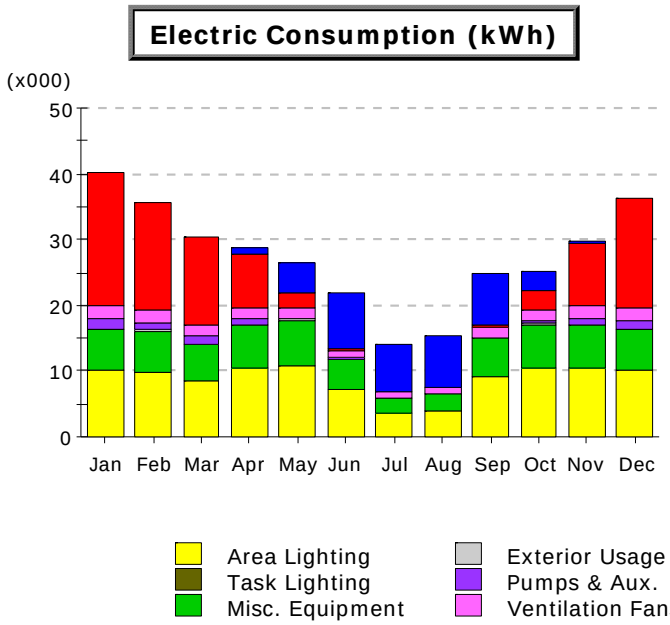


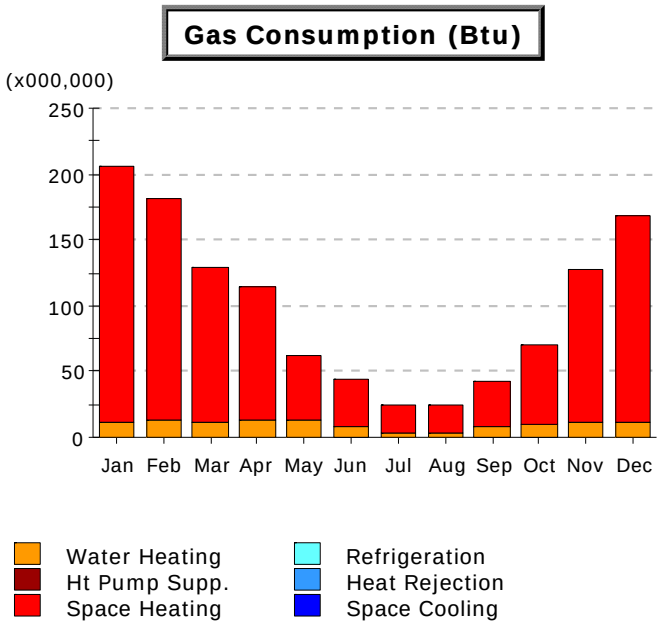
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	0.06	1.09	4.92	8.58	7.49	8.16	8.00	2.77	0.25	0.07	41.39
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	20.22	16.39	13.50	8.00	2.02	0.16	0.01	-	0.34	3.16	9.67	16.68	90.16
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	1.96	1.81	1.55	1.72	1.74	1.29	0.82	0.93	1.52	1.67	1.74	1.83	18.58
Pumps & Aux.	1.43	1.27	1.21	0.84	0.22	0.11	0.07	0.08	0.13	0.42	0.99	1.35	8.12
Ext. Usage	0.16	0.12	0.13	0.13	0.09	0.09	0.09	0.15	0.15	0.15	0.15	0.16	1.57
Misc. Equip.	6.27	6.20	5.40	6.54	6.87	4.54	2.29	2.52	5.76	6.58	6.53	6.27	65.77
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	9.98	9.87	8.59	10.41	10.93	7.21	3.59	3.95	9.16	10.46	10.39	9.98	104.53
Total	40.02	35.66	30.45	28.73	26.79	21.97	14.36	15.79	25.05	25.21	29.73	36.35	330.12

Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	127.29	108.08	73.77	57.25	22.75	15.35	9.39	8.71	13.46	27.95	67.35	99.43	630.76
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	3.65	3.72	3.26	3.85	3.74	2.22	0.97	1.01	2.54	3.05	3.28	3.41	34.71
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	130.94	111.79	77.03	61.10	26.49	17.57	10.36	9.72	16.00	31.01	70.62	102.84	665.47





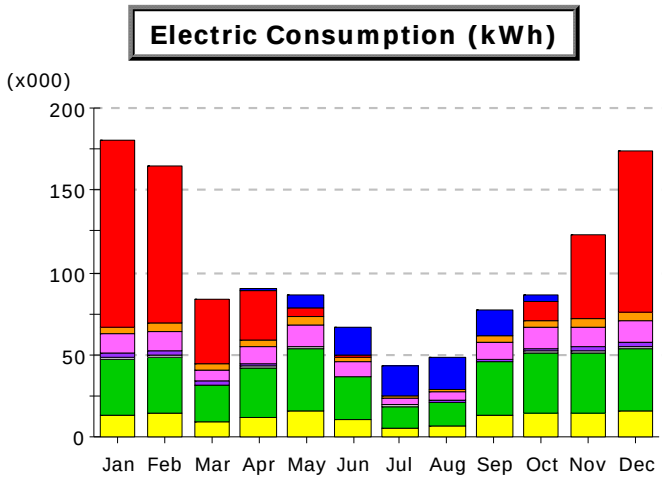


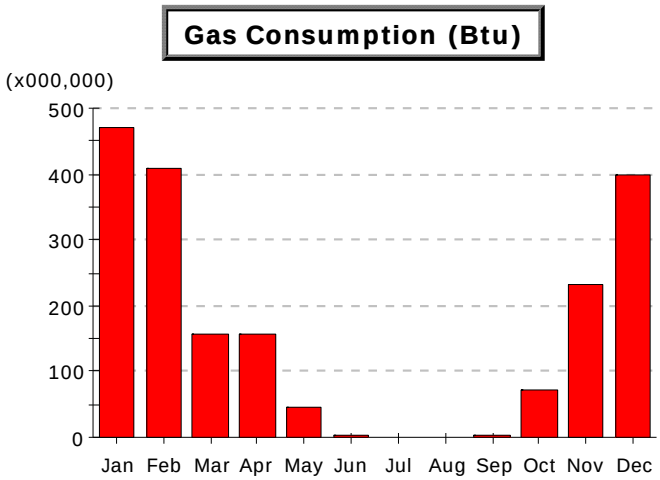
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	0.07	1.11	4.81	8.54	7.25	7.84	7.89	2.76	0.26	0.07	40.60
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	20.22	16.39	13.50	8.00	2.02	0.16	0.01	-	0.34	3.16	9.67	16.68	90.16
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	1.99	1.83	1.56	1.70	1.65	1.22	0.77	0.88	1.43	1.59	1.74	1.85	18.21
Pumps & Aux.	1.43	1.27	1.21	0.84	0.22	0.11	0.07	0.08	0.13	0.42	0.99	1.35	8.12
Ext. Usage	0.16	0.12	0.13	0.13	0.09	0.09	0.09	0.15	0.15	0.15	0.15	0.16	1.57
Misc. Equip.	6.27	6.20	5.40	6.54	6.87	4.54	2.29	2.52	5.76	6.58	6.53	6.27	65.77
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	9.98	9.87	8.59	10.41	10.93	7.21	3.59	3.95	9.16	10.46	10.39	9.98	104.53
Total	40.05	35.68	30.47	28.74	26.58	21.87	14.07	15.41	24.85	25.12	29.74	36.37	328.95

Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	194.3	169.2	118.8	101.8	49.8	35.9	21.8	20.7	34.5	59.6	116.3	156.9	1,079.5
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	12.1	12.4	10.9	12.8	12.5	7.4	3.2	3.4	8.5	10.2	10.9	11.4	115.5
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	206.4	181.6	129.7	114.6	62.2	43.3	25.0	24.1	42.9	69.7	127.2	168.3	1,195.0





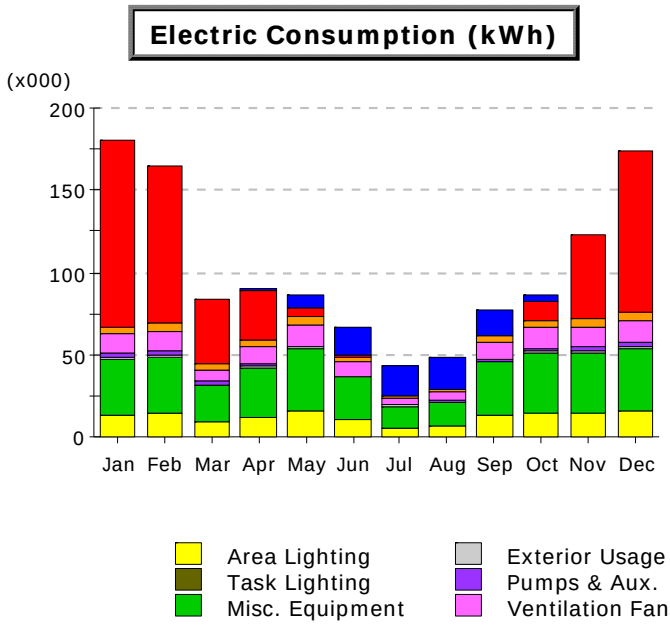


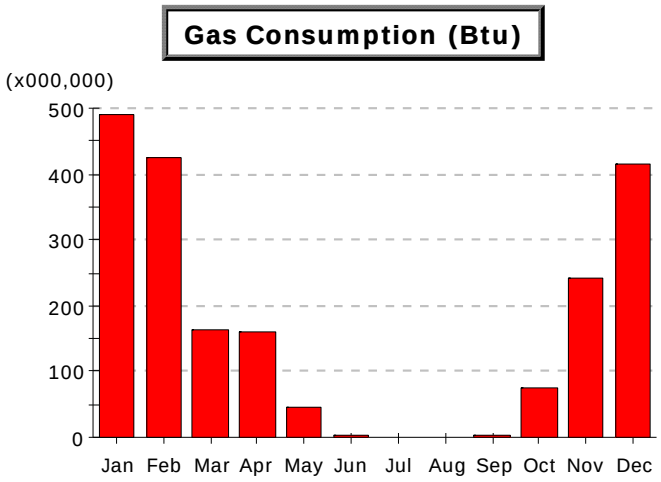
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	1.1	8.2	17.3	17.4	20.4	16.2	3.8	0.2	0.0	84.5
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	113.6	95.9	39.4	29.5	5.2	0.4	0.1	0.0	0.4	11.3	50.6	97.6	443.9
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	4.6	4.9	3.2	4.3	5.0	3.0	1.4	1.4	3.4	4.1	4.4	4.9	44.5
Vent. Fans	11.5	12.0	6.6	10.0	13.3	8.8	4.5	5.2	10.8	13.1	12.8	13.3	122.0
Pumps & Aux.	3.1	2.8	2.5	1.9	0.8	0.4	0.2	0.2	0.5	1.3	2.3	3.1	19.1
Ext. Usage	0.9	0.7	0.8	0.8	0.5	0.5	0.5	0.9	0.8	0.9	0.9	0.9	9.1
Misc. Equip.	33.4	34.6	22.1	30.0	38.2	25.7	13.3	14.6	32.2	36.6	36.4	38.2	355.4
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	13.6	14.1	9.0	12.2	15.6	10.4	5.4	5.9	13.1	14.9	14.9	15.6	144.8
Total	180.8	165.1	83.6	89.7	86.8	66.6	42.7	48.7	77.6	86.0	122.5	173.6	1,223.5

Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	471.1	409.9	157.4	155.4	45.5	2.9	-	-	4.1	72.2	232.2	400.2	1,950.9
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	471.1	409.9	157.4	155.4	45.5	2.9	-	-	4.1	72.2	232.2	400.2	1,950.9



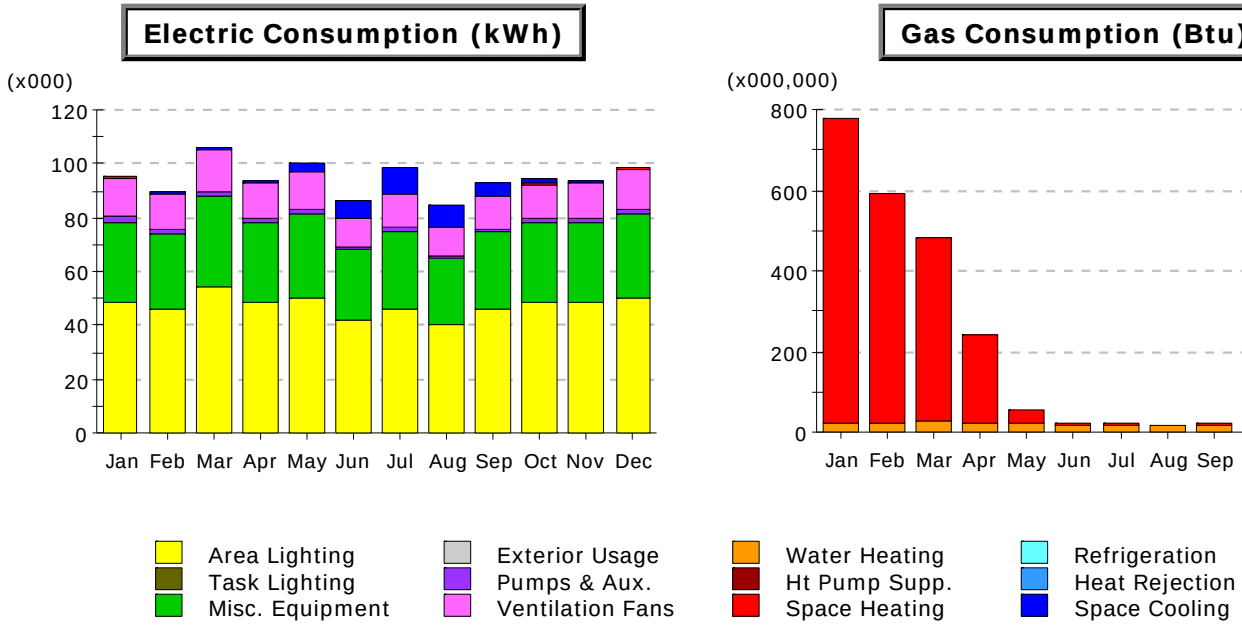


Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	1.1	8.2	17.3	17.4	20.4	16.2	3.8	0.2	0.0	84.5
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	113.6	95.9	39.4	29.5	5.2	0.4	0.1	0.0	0.4	11.3	50.6	97.6	443.9
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	4.6	4.9	3.2	4.3	5.0	3.0	1.4	1.4	3.4	4.1	4.4	4.9	44.5
Vent. Fans	11.5	12.0	6.6	10.0	13.3	8.8	4.5	5.2	10.8	13.1	12.8	13.3	122.0
Pumps & Aux.	3.1	2.8	2.5	1.9	0.8	0.4	0.2	0.2	0.5	1.3	2.3	3.1	19.1
Ext. Usage	0.9	0.7	0.8	0.8	0.5	0.5	0.5	0.9	0.8	0.9	0.9	0.9	9.1
Misc. Equip.	33.4	34.6	22.1	30.0	38.2	25.7	13.3	14.6	32.2	36.6	36.4	38.2	355.4
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	13.6	14.1	9.0	12.2	15.6	10.4	5.4	5.9	13.1	14.9	14.9	15.6	144.8
Total	180.8	165.1	83.6	89.7	86.8	66.6	42.7	48.7	77.6	86.0	122.5	173.6	1,223.5

Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	488.8	425.3	163.3	161.3	47.2	3.0	-	-	4.2	74.9	240.9	415.2	2,024.0
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	488.8	425.3	163.3	161.3	47.2	3.0	-	-	4.2	74.9	240.9	415.2	2,024.0

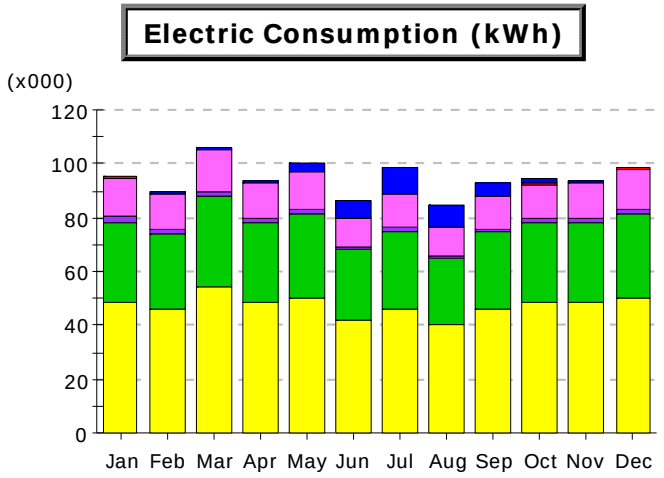


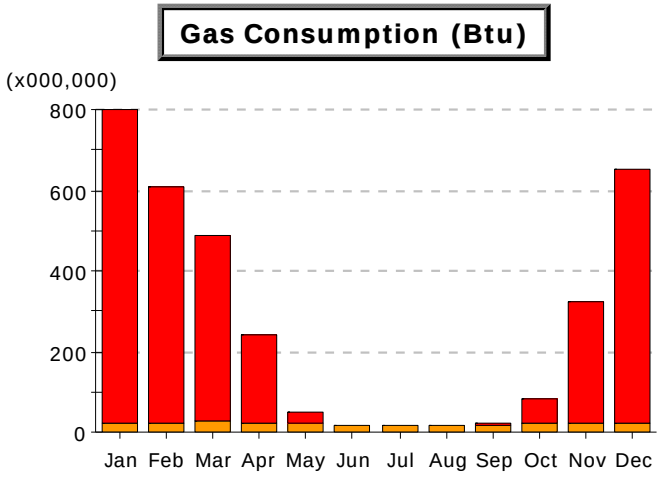
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	0.2	0.2	0.5	1.0	3.5	6.0	9.9	7.8	5.3	2.2	0.6	0.3	37.6
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	1.0	0.6	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.6	3.0
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	14.2	13.0	15.2	13.1	13.7	11.0	12.4	10.4	12.4	13.0	13.2	14.3	155.8
Pumps & Aux.	1.9	1.7	1.9	1.8	1.6	1.1	1.1	0.9	1.1	1.3	1.8	1.9	18.1
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	29.8	28.1	33.5	29.6	31.0	25.9	28.5	24.8	28.4	29.8	29.6	31.0	350.0
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	48.4	45.6	54.5	48.2	50.5	42.1	46.4	40.3	46.2	48.4	48.2	50.5	569.3
Total	95.5	89.3	106.0	93.8	100.3	86.1	98.3	84.3	93.3	94.7	93.5	98.5	1,133.8

Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	753.3	570.5	452.9	218.4	33.6	3.7	1.5	0.7	5.5	68.2	301.9	612.6	3,022.9
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	24.1	23.5	28.1	24.3	23.6	18.2	18.6	15.4	17.6	19.3	20.7	23.5	257.0
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	777.4	594.0	480.9	242.8	57.2	21.9	20.1	16.1	23.2	87.5	322.6	636.1	3,279.8





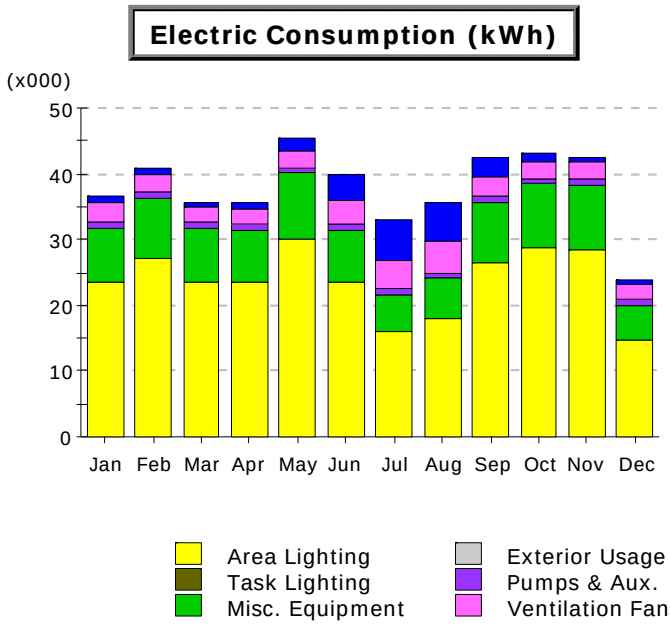


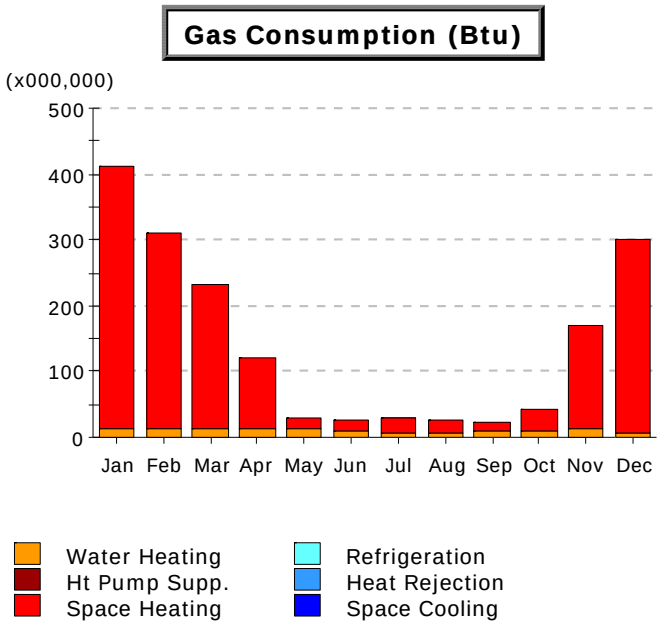
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	0.2	0.2	0.5	1.0	3.5	6.0	9.9	7.8	5.3	2.2	0.6	0.3	37.6
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	1.0	0.6	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.6	2.8
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	14.2	13.0	15.2	13.1	13.7	11.0	12.4	10.4	12.4	13.0	13.2	14.3	155.8
Pumps & Aux.	1.9	1.7	1.9	1.8	1.6	1.1	1.1	0.9	1.1	1.3	1.8	1.9	18.1
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	29.8	28.1	33.5	29.6	31.0	25.9	28.5	24.8	28.4	29.8	29.6	31.0	350.0
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	48.4	45.6	54.5	48.2	50.5	42.1	46.4	40.3	46.2	48.4	48.2	50.5	569.3
Total	95.5	89.3	106.0	93.8	100.3	86.1	98.3	84.3	93.3	94.7	93.5	98.5	1,133.6

Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	774.2	585.0	460.6	216.0	27.8	0.9	0.3	0.1	2.1	62.7	303.0	627.8	3,060.4
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	24.1	23.5	28.1	24.3	23.6	18.2	18.6	15.4	17.6	19.3	20.7	23.5	257.0
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	798.3	608.5	488.7	240.3	51.4	19.1	18.9	15.5	19.7	82.0	323.7	651.2	3,317.3





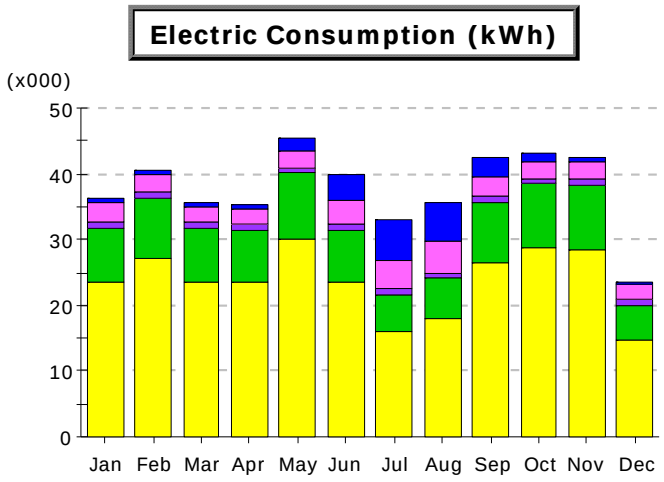


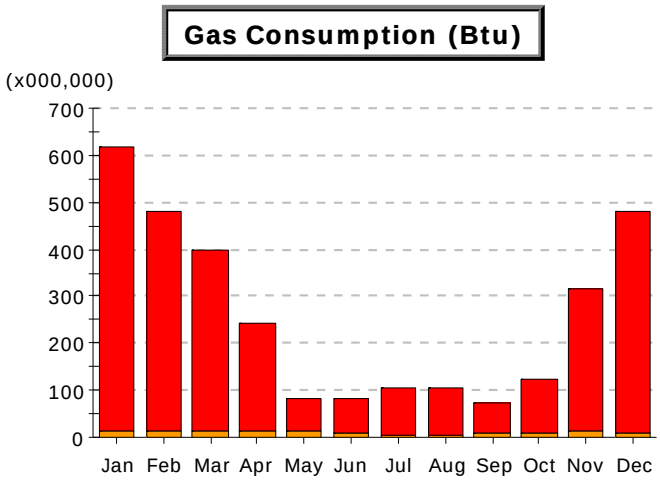
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	0.68	0.75	0.61	0.80	1.85	3.97	6.07	6.05	3.01	1.30	0.84	0.40	26.33
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	0.27	0.21	0.16	0.08	0.01	0.01	0.02	0.02	0.01	0.03	0.12	0.22	1.16
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	2.72	2.55	2.19	2.15	2.55	3.68	4.34	4.72	3.04	2.42	2.52	2.07	34.97
Pumps & Aux.	1.13	1.00	1.09	0.99	0.89	0.84	0.87	0.87	0.84	0.93	1.01	1.15	11.62
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	8.06	9.14	8.06	8.01	10.11	8.01	5.62	6.23	9.03	9.71	9.63	5.21	96.82
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	23.58	27.08	23.58	23.47	29.98	23.45	15.96	17.86	26.63	28.71	28.51	14.69	283.49
Total	36.44	40.72	35.70	35.52	45.40	39.97	32.88	35.74	42.56	43.09	42.64	23.73	454.39

Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	400.1	297.4	220.9	108.0	16.6	16.4	22.3	21.2	14.6	32.5	158.8	293.2	1,601.8
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	11.6	13.6	12.0	11.8	13.7	9.7	6.2	6.5	9.9	11.2	12.1	7.1	125.4
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	411.8	311.0	232.9	119.7	30.3	26.1	28.5	27.7	24.5	43.7	170.8	300.3	1,727.2





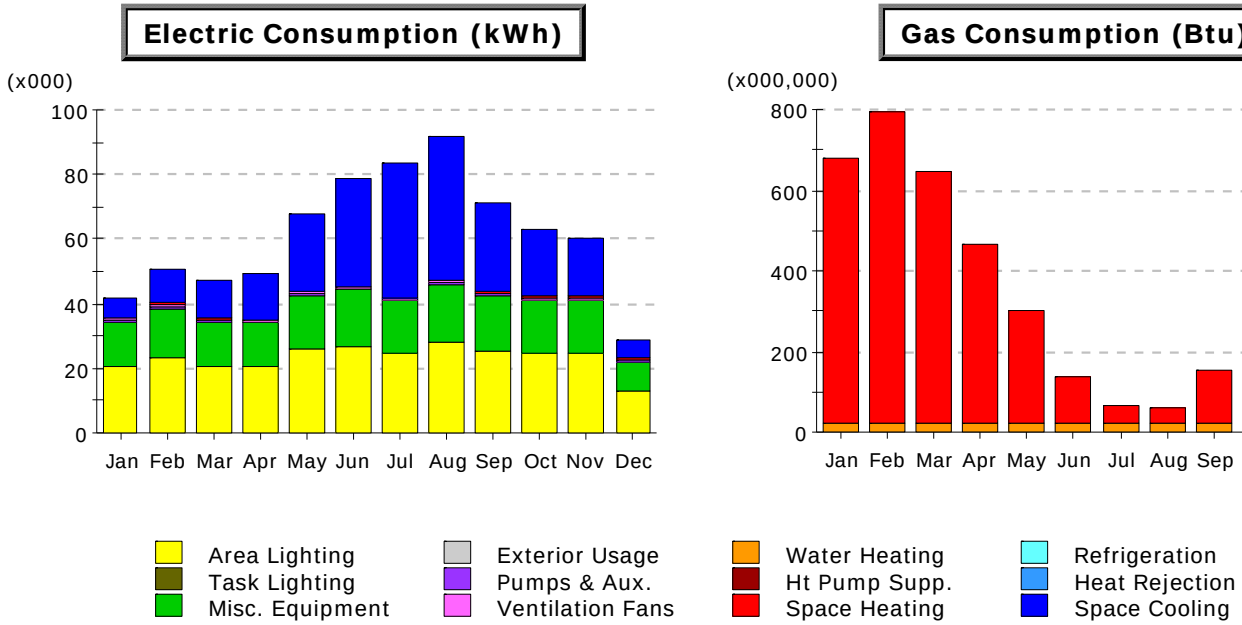


Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	0.68	0.75	0.61	0.80	1.85	3.97	6.07	6.05	3.01	1.30	0.84	0.40	26.33
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	-	-	-	-	-	-	-	-	-	-	-	-	-
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	2.72	2.55	2.19	2.15	2.55	3.68	4.34	4.72	3.04	2.42	2.52	2.07	34.97
Pumps & Aux.	1.13	1.00	1.09	0.99	0.89	0.84	0.87	0.87	0.84	0.93	1.01	1.15	11.62
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	8.06	9.14	8.06	8.01	10.11	8.01	5.62	6.23	9.03	9.71	9.63	5.21	96.82
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	23.58	27.08	23.58	23.47	29.98	23.45	15.96	17.86	26.63	28.71	28.51	14.69	283.49
Total	36.17	40.52	35.54	35.44	45.38	39.96	32.86	35.73	42.55	43.06	42.52	23.52	453.23

Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	606.6	468.9	384.5	229.7	67.4	71.2	99.2	97.8	61.5	111.4	301.8	474.9	2,975.0
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	11.6	13.6	12.0	11.8	13.7	9.7	6.2	6.5	9.9	11.2	12.1	7.1	125.4
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	618.2	482.5	396.6	241.5	81.1	80.9	105.4	104.3	71.4	122.7	313.8	482.0	3,100.3

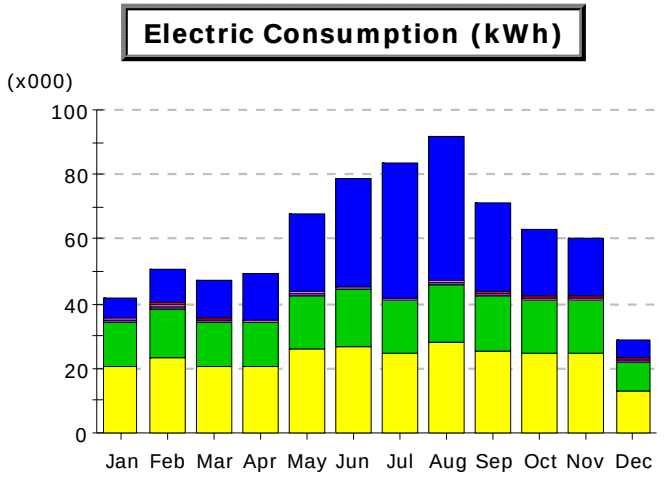


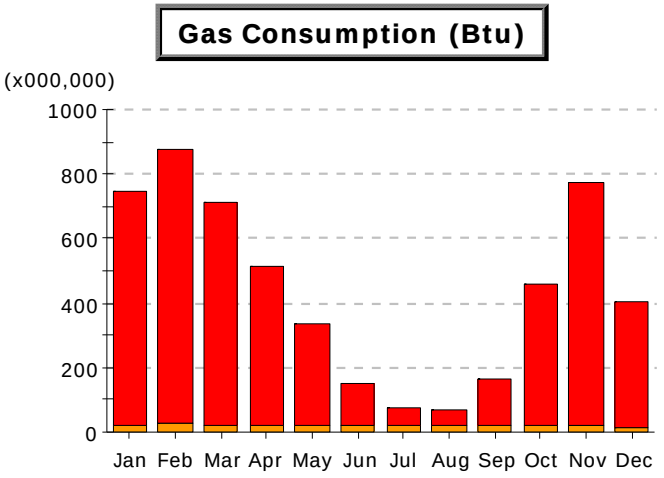
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	6.18	10.14	11.34	14.48	24.26	33.22	41.57	44.74	28.04	20.95	17.72	5.66	258.30
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	0.40	0.47	0.37	0.24	0.16	0.08	0.04	0.03	0.09	0.22	0.39	0.21	2.71
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	0.68	0.80	0.65	0.48	0.52	0.54	0.55	0.61	0.51	0.52	0.71	0.37	6.92
Pumps & Aux.	0.50	0.53	0.47	0.42	0.43	0.44	0.40	0.46	0.42	0.44	0.51	0.37	5.38
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	13.54	15.32	13.54	13.45	16.94	17.53	16.26	18.30	16.85	16.26	16.17	8.78	182.95
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	20.60	23.31	20.60	20.47	25.77	26.67	24.73	27.84	25.64	24.73	24.60	13.35	278.31
Total	41.90	50.57	46.97	49.54	68.08	78.48	83.55	91.98	71.55	63.12	60.11	28.74	734.57

Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	656.1	771.1	625.1	443.5	279.7	116.7	48.2	40.7	133.8	394.7	681.1	351.7	4,542.4
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	20.8	24.1	21.3	20.7	23.9	22.7	19.5	20.9	19.3	19.6	21.2	12.9	247.0
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	676.8	795.2	646.4	464.2	303.6	139.4	67.8	61.6	153.2	414.3	702.2	364.6	4,789.3





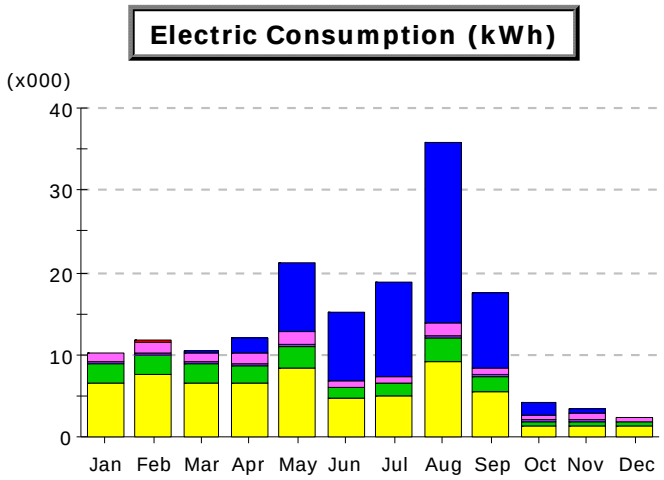


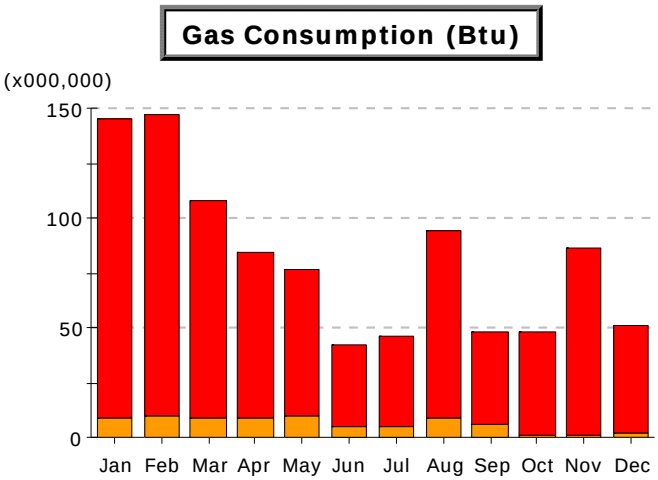
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	6.18	10.14	11.34	14.48	24.26	33.22	41.57	44.74	28.04	20.95	17.72	5.66	258.30
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	0.40	0.47	0.37	0.24	0.16	0.08	0.04	0.03	0.09	0.22	0.39	0.21	2.71
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	0.68	0.80	0.65	0.48	0.52	0.54	0.55	0.61	0.51	0.52	0.71	0.37	6.92
Pumps & Aux.	0.50	0.53	0.47	0.42	0.43	0.44	0.40	0.46	0.42	0.44	0.51	0.37	5.38
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	13.54	15.32	13.54	13.45	16.94	17.53	16.26	18.30	16.85	16.26	16.17	8.78	182.95
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	20.60	23.31	20.60	20.47	25.77	26.67	24.73	27.84	25.64	24.73	24.60	13.35	278.31
Total	41.90	50.57	46.97	49.54	68.08	78.48	83.55	91.98	71.55	63.12	60.11	28.74	734.57

Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	726.0	853.4	691.8	490.8	309.5	129.1	53.4	45.0	148.1	436.8	753.7	389.2	5,026.9
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	20.8	24.1	21.3	20.7	23.9	22.7	19.5	20.9	19.3	19.6	21.2	12.9	247.0
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	746.8	877.5	713.1	511.5	333.4	151.9	72.9	65.9	167.4	456.4	774.9	402.1	5,273.8





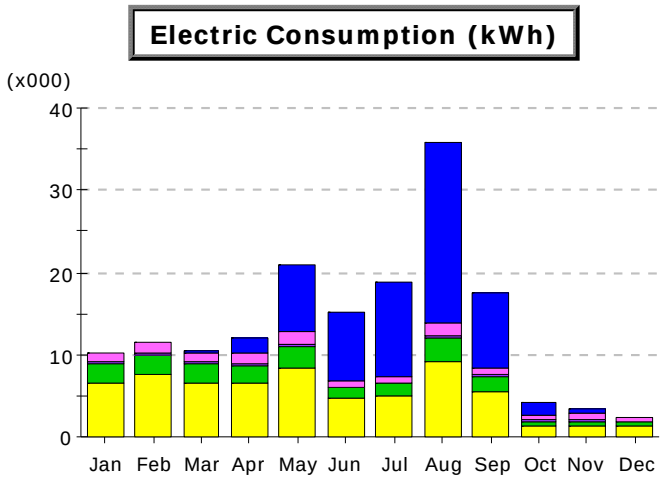


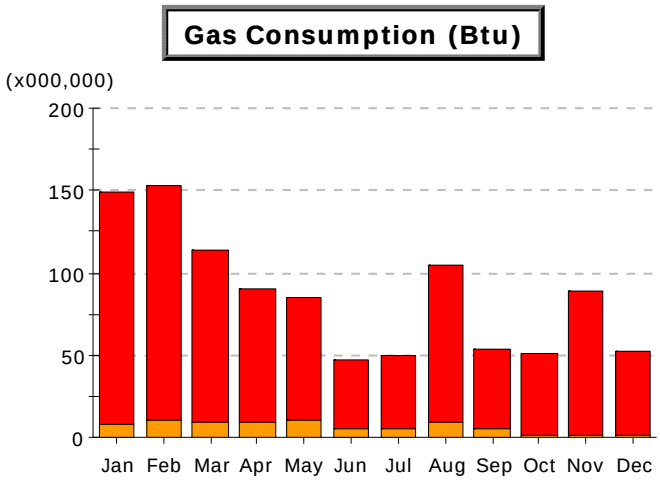
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	0.19	1.86	8.31	8.44	11.35	22.15	9.00	1.51	0.46	0.15	63.44
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	0.06	0.06	0.05	0.04	0.05	0.02	0.02	0.05	0.03	0.02	0.04	0.02	0.48
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	1.15	1.33	1.10	1.11	1.44	0.69	0.76	1.58	0.89	0.60	0.75	0.35	11.74
Pumps & Aux.	0.32	0.34	0.30	0.25	0.23	0.11	0.12	0.25	0.14	0.13	0.22	0.19	2.60
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	2.11	2.40	2.11	2.10	2.65	1.45	1.57	2.86	1.77	0.45	0.46	0.42	20.35
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	6.66	7.57	6.66	6.63	8.37	4.58	4.96	9.05	5.60	1.38	1.39	1.31	64.17
Total	10.31	11.69	10.41	11.99	21.05	15.29	18.78	35.94	17.43	4.10	3.32	2.45	162.77

Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	136.23	136.86	98.82	75.88	66.17	37.51	40.56	85.68	42.78	46.31	84.76	49.61	901.17
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	8.39	9.83	8.71	8.54	9.96	5.12	5.17	8.79	5.48	1.37	1.40	1.58	74.34
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	144.62	146.69	107.54	84.41	76.13	42.63	45.73	94.47	48.26	47.68	86.17	51.19	975.51





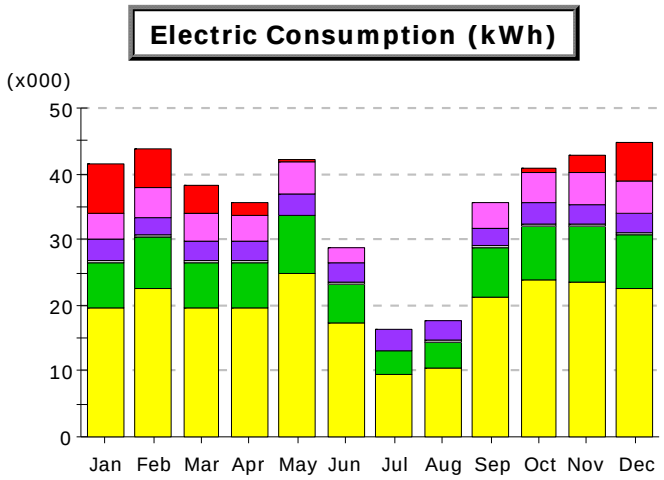


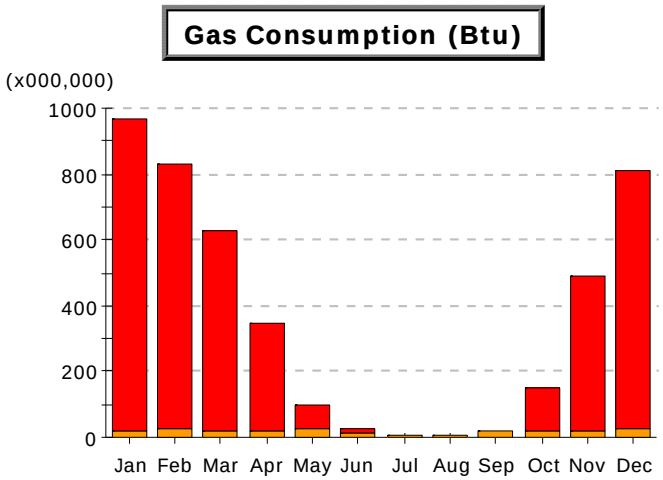
Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	0.19	1.86	8.31	8.44	11.35	22.15	9.00	1.51	0.46	0.15	63.44
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	-	-	-	-	-	-	-	-	-	-	-	-	-
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	1.15	1.33	1.10	1.11	1.44	0.69	0.76	1.58	0.89	0.60	0.75	0.35	11.74
Pumps & Aux.	0.32	0.34	0.30	0.25	0.23	0.11	0.12	0.25	0.14	0.13	0.22	0.19	2.60
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	2.11	2.40	2.11	2.10	2.65	1.45	1.57	2.86	1.77	0.45	0.46	0.42	20.35
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	6.66	7.57	6.66	6.63	8.37	4.58	4.96	9.05	5.60	1.38	1.39	1.31	64.17
Total	10.25	11.63	10.36	11.95	21.00	15.27	18.76	35.89	17.41	4.07	3.28	2.43	162.29

Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	140.2	143.2	104.7	82.2	74.4	41.6	45.1	95.4	47.8	50.1	87.7	50.2	962.6
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	8.4	9.8	8.7	8.5	10.0	5.1	5.2	8.8	5.5	1.4	1.4	1.6	74.3
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	148.6	153.0	113.5	90.8	84.4	46.7	50.3	104.2	53.3	51.4	89.1	51.8	1,037.0







Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	7.36	5.88	4.30	2.09	0.28	0.01	0.00	-	0.01	0.57	2.84	5.91	29.23
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent. Fans	4.11	4.67	3.99	3.97	5.00	2.40	0.02	0.00	3.80	4.76	4.80	4.65	42.17
Pumps & Aux.	3.03	2.73	3.03	2.93	3.03	2.93	3.03	3.03	2.93	3.03	2.93	3.03	35.64
Ext. Usage	0.35	0.27	0.30	0.29	0.20	0.20	0.20	0.33	0.32	0.33	0.34	0.35	3.48
Misc. Equip.	6.95	7.93	6.95	6.91	8.77	6.10	3.42	3.76	7.48	8.40	8.37	8.04	83.07
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	19.62	22.40	19.62	19.52	24.77	17.19	9.56	10.52	21.12	23.74	23.64	22.71	234.39
Total	41.41	43.88	38.18	35.71	42.04	28.83	16.22	17.64	35.67	40.83	42.91	44.68	427.99

Gas Consumption (Btu x000,000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	-	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat	946.8	807.8	603.5	325.7	73.8	7.6	0.9	-	2.3	132.0	467.3	789.0	4,156.8
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	21.6	25.3	22.3	22.0	25.5	15.9	7.9	8.2	17.4	20.5	22.1	23.0	231.7
Vent. Fans	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumps & Aux.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ext. Usage	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc. Equip.	-	-	-	-	-	-	-	-	-	-	-	-	-
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	968.4	833.1	625.9	347.7	99.3	23.4	8.9	8.2	19.8	152.5	489.3	812.0	4,388.5

Appendix D

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
Ferris - Exterior	002	Exterior	Exterior Wall Packs (Assume 70w)	10	900	0.9	4018	3616.2	$506.3	Replace 70W Fixture with 45W Induction Light Fixture	10	440	0.44	4018	4018	1767.92	1767.92	None Proposed	0	1848.28	258.8	$0.0	$380.0	$137.0	$0.0	$0.0	$1,370.0	$3,800.0	$5,170.0
Ferris - Interior	002	Faculity Room	150W Incandescent Fixture	3	450	0.45	4380	1971	$275.9	Replace 150W Incandescent Fixture with 25W CFL	3	75	0.075	4380	3066	328.5	229.95	Ceiling Mounted Occupancy Sensor	1	1741.05	243.7	$0.0	$7.0	$20.0	$103.0	$73.5	$133.5	$124.0	$257.5
Ferris - Interior	002	Mens	1x4 Fixtures w/ 1-T12 Lamp Fixture w/ Magnetic Ballast	4	171.2	0.1712	500	85.6	$12.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	4	97.28	0.09728	500	350	48.64	34.048	Ceiling Mounted Occupancy Sensor	1	51.552	7.2	$35.0	$5.0	$65.0	$103.0	$73.5	$333.5	$263.0	$596.5
Ferris - Interior	002	Womens	1x4 Fixtures w/ 1-T12 Lamp Fixture w/ Magnetic Ballast	4	171.2	0.1712	500	85.6	$12.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	4	97.28	0.09728	500	350	48.64	34.048	Ceiling Mounted Occupancy Sensor	1	51.552	7.2	$35.0	$5.0	$65.0	$103.0	$73.5	$333.5	$263.0	$596.5
Ferris - Interior	002	Womens	1x4 Fixtures w/ 1-T12 Lamp Fixture w/ Magnetic Ballast	4	171.2	0.1712	500	85.6	$12.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	4	97.28	0.09728	500	350	48.64	34.048	Ceiling Mounted Occupancy Sensor	1	51.552	7.2	$35.0	$5.0	$65.0	$103.0	$73.5	$333.5	$263.0	$596.5
Ferris - Interior	002	Mens	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	4	101.6	0.1016	500	50.8	$7.1	None Proposed	4	101.6	0.1016	500	350	50.8	35.56	Ceiling Mounted Occupancy Sensor	1	15.24	2.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	Womens	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	4	101.6	0.1016	500	50.8	$7.1	None Proposed	4	101.6	0.1016	500	350	50.8	35.56	Ceiling Mounted Occupancy Sensor	1	15.24	2.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	Mens	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	342.4	0.3424	500	171.2	$24.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	4	194.4	0.1944	500	350	97.2	68.04	Ceiling Mounted Occupancy Sensor	1	103.16	14.4	$70.0	$10.0	$65.0	$103.0	$73.5	$333.5	$423.0	$756.5
Ferris - Interior	001	102	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	4380	1332.396	$186.5	None Proposed	6	304.2	0.3042	4380	3066	1332.396	932.6772	Ceiling Mounted Occupancy Sensor	1	399.7188	56.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	107	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$62.2	None Proposed	2	101.4	0.1014	4380	3066	444.132	310.8924	Ceiling Mounted Occupancy Sensor	1	133.2396	18.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	138	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	4380	1332.396	$186.5	None Proposed	6	304.2	0.3042	4380	3066	1332.396	932.6772	Ceiling Mounted Occupancy Sensor	1	399.7188	56.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	138	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	10	507	0.507	4380	2220.66	$310.9	None Proposed	10	507	0.507	4380	3066	2220.66	1554.462	Ceiling Mounted Occupancy Sensor	1	666.198	93.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	138	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	405.6	0.4056	4380	1776.528	$248.7	None Proposed	8	405.6	0.4056	4380	3066	1776.528	1243.5696	Ceiling Mounted Occupancy Sensor	1	532.9584	74.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	148	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$62.2	None Proposed	2	101.4	0.1014	4380	3066	444.132	310.8924	Ceiling Mounted Occupancy Sensor	1	133.2396	18.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	157	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$559.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Ceiling Mounted Occupancy Sensor	1	1199.1564	167.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	160	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	4380	1332.396	$186.5	None Proposed	6	304.2	0.3042	4380	3066	1332.396	932.6772	Ceiling Mounted Occupancy Sensor	1	399.7188	56.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	161	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	4380	1332.396	$186.5	None Proposed	6	304.2	0.3042	4380	3066	1332.396	932.6772	Ceiling Mounted Occupancy Sensor	1	399.7188	56.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	165A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$652.9	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Ceiling Mounted Occupancy Sensor	1	1399.0158	195.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	165B	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	4380	1332.396	$186.5	None Proposed	6	304.2	0.3042	4380	3066	1332.396	932.6772	Ceiling Mounted Occupancy Sensor	1	399.7188	56.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	A106	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	33	1673.1	1.6731	4380	7328.178	$1,025.9	None Proposed	33	1673.1	1.6731	4380	3066	7328.178	5129.7246	Ceiling Mounted Occupancy Sensor	1	2198.4534	307.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	A109	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	405.6	0.4056	4380	1776.528	$248.7	None Proposed	8	405.6	0.4056	4380	3066	1776.528	1243.5696	Ceiling Mounted Occupancy Sensor	1	532.9584	74.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	A113	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	36	1825.2	1.8252	4380	7994.376	$1,119.2	None Proposed	36	1825.2	1.8252	4380	3066	7994.376	5596.0632	Ceiling Mounted Occupancy Sensor	1	2398.3128	335.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$3.5	None Proposed	1	50.7	0.0507	500	350	25.35	17.745	Ceiling Mounted Occupancy Sensor	1	7.605	1.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$7.1	None Proposed	2	101.4	0.1014	500	350	50.7	35.49	Ceiling Mounted Occupancy Sensor	1	15.21	2.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	35	1774.5	1.7745	8760	15544.62	$2,176.2	None Proposed	35	1774.5	1.7745	8760	8760	15544.62	15544.62	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	001	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	35	1774.5	1.7745	8760	15544.62	$2,176.2	None Proposed	35	1774.5	1.7745	8760	8760	15544.62	15544.62	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	001	Kitchen	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	24	1216.8	1.2168	3981	4844.0808	$678.2	None Proposed	24	1216.8	1.2168	3981	3981	4844.0808	4844.0808	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	001	Lobby	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$124.4	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Ceiling Mounted Occupancy Sensor	1	266.4792	37.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	Locker	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	35	1774.5	1.7745	4380	7772.31	$1,088.1	None Proposed	35	1774.5	1.7745	4380	3066	7772.31	5440.617	Ceiling Mounted Occupancy Sensor	1	2331.693	326.4	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	Locker	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	35	1774.5	1.7745	4380	7772.31	$1,088.1	None Proposed	35	1774.5	1.7745	4380	3066	7772.31	5440.617	Ceiling Mounted Occupancy Sensor	1	2331.693	326.4	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	Locker	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	24	1216.8	1.2168	4380	5329.584	$746.1	None Proposed	24	1216.8	1.2168	4380	3066	5329.584	3730.7088	Ceiling Mounted Occupancy Sensor	1	1598.8752	223.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	Mens	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$7.1	None Proposed	2	101.4	0.1014	500	350	50.7	35.49	Ceiling Mounted Occupancy Sensor	1	15.21	2.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	Mens Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	500	152.1	$21.3	None Proposed	6	304.2	0.3042	500	350	152.1	106.47	Ceiling Mounted Occupancy Sensor	1	45.63	6.4	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	Mens Locker	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	253.5	0.2535	4380	1110.33	$155.4	None Proposed	5	253.5	0.2535	4380	3066	1110.33	777.231	Ceiling Mounted Occupancy Sensor	1	333.099	46.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	Office	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	4380	1332.396	$186.5	None Proposed	6	304.2	0.3042	4380	3066	1332.396	932.6772	Ceiling Mounted Occupancy Sensor	1	399.7188	56.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	Office	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	10	507	0.507	4380	2220.66	$310.9	None Proposed	10	507	0.507	4380	3066	2220.66	1554.462	Ceiling Mounted Occupancy Sensor	1	666.198	93.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	Stage	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$62.2	None Proposed	2	101.4	0.1014	4380	4380	444.132	444.132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	001	Storage	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	9	456.3	0.4563	500	228.15	$31.9	None Proposed	9	456.3	0.4563	500	350	228.15	159.705	Ceiling Mounted Occupancy Sensor	1	68.445	9.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	Storage	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$7.1	None Proposed	2	101.4	0.1014	500	350	50.7	35.49	Ceiling Mounted Occupancy Sensor	1	15.21	2.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	Womens	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$3.5	None Proposed	1	50.7	0.0507	500	350	25.35	17.745	Ceiling Mounted Occupancy Sensor	1	7.605	1.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	Womens Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	500	152.1	$21.3	None Proposed	6	304.2	0.3042	500	350	152.1	106.47	Ceiling Mounted Occupancy Sensor	1	45.63	6.4	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	Womens Locker	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	253.5	0.2535	4380	1110.33	$155.4	None Proposed	5	253.5	0.2535	4380	3066	1110.33	777.231	Ceiling Mounted Occupancy Sensor	1	333.099	46.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	205	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	24	1216.8	1.2168	4380	5329.584	$746.1	None Proposed	24	1216.8	1.2168	4380	3066	5329.584	3730.7088	Ceiling Mounted Occupancy Sensor	1	1598.8752	223.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	206	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$652.9	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Ceiling Mounted Occupancy Sensor	1	1399.0158	195.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	207	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$559.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Ceiling Mounted Occupancy Sensor	1	1199.1564	167.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	230	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$559.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Ceiling Mounted Occupancy Sensor	1	1199.1564	167.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	231	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$559.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Ceiling Mounted Occupancy Sensor	1	1199.1564	167.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	232	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$652.9	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Ceiling Mounted Occupancy Sensor	1	1399.0158	195.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
Ferris - Interior	002	233	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$373.1	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Ceiling Mounted Occupancy Sensor	1	799.4376	111.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	234	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	24	1216.8	1.2168	4380	5329.584	$746.1	None Proposed	24	1216.8	1.2168	4380	3066	5329.584	3730.7088	Ceiling Mounted Occupancy Sensor	1	1598.8752	223.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	235	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	27	1368.9	1.3689	4380	5995.782	$839.4	None Proposed	27	1368.9	1.3689	4380	3066	5995.782	4197.0474	Ceiling Mounted Occupancy Sensor	1	1798.7346	251.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	A205	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	9	456.3	0.4563	4380	1998.594	$279.8	None Proposed	9	456.3	0.4563	4380	3066	1998.594	1399.0158	Ceiling Mounted Occupancy Sensor	1	599.5782	83.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	A210	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	16	811.2	0.8112	4380	3553.056	$497.4	None Proposed	16	811.2	0.8112	4380	3066	3553.056	2487.1392	Ceiling Mounted Occupancy Sensor	1	1065.9168	149.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	A211	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	30	1521	1.521	4380	6661.98	$932.7	None Proposed	30	1521	1.521	4380	3066	6661.98	4663.386	Ceiling Mounted Occupancy Sensor	1	1998.594	279.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	Mens	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	500	101.4	$14.2	None Proposed	4	202.8	0.2028	500	350	101.4	70.98	Ceiling Mounted Occupancy Sensor	1	30.42	4.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	Stairwell	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	8760	1776.528	$248.7	None Proposed	4	202.8	0.2028	8760	8760	1776.528	1776.528	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	002	214	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	27	1368.9	1.3689	4380	5995.782	$839.4	None Proposed	27	1368.9	1.3689	4380	3066	5995.782	4197.0474	Ceiling Mounted Occupancy Sensor	1	1798.7346	251.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	216	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$559.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Ceiling Mounted Occupancy Sensor	1	1199.1564	167.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	217	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$559.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Ceiling Mounted Occupancy Sensor	1	1199.1564	167.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	218	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$559.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Ceiling Mounted Occupancy Sensor	1	1199.1564	167.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	219	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$559.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Ceiling Mounted Occupancy Sensor	1	1199.1564	167.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	220	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$559.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Ceiling Mounted Occupancy Sensor	1	1199.1564	167.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	206	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$559.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Ceiling Mounted Occupancy Sensor	1	1199.1564	167.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	Womens	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	253.5	0.2535	500	126.75	$17.7	None Proposed	5	253.5	0.2535	500	350	126.75	88.725	Ceiling Mounted Occupancy Sensor	1	38.025	5.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	Mens	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	253.5	0.2535	500	126.75	$17.7	None Proposed	5	253.5	0.2535	500	350	126.75	88.725	Ceiling Mounted Occupancy Sensor	1	38.025	5.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	Stairwell	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	405.6	0.4056	8760	3553.056	$497.4	None Proposed	8	405.6	0.4056	8760	6132	3553.056	2487.1392	Ceiling Mounted Occupancy Sensor	1	1065.9168	149.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	228A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	4380	666.198	$93.3	None Proposed	3	152.1	0.1521	4380	3066	666.198	466.3386	Ceiling Mounted Occupancy Sensor	1	199.8594	28.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	242	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$559.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Ceiling Mounted Occupancy Sensor	1	1199.1564	167.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	8760	444.132	$62.2	None Proposed	1	50.7	0.0507	8760	8760	444.132	444.132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	002	241	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$559.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Ceiling Mounted Occupancy Sensor	1	1199.1564	167.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	227	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$559.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Ceiling Mounted Occupancy Sensor	1	1199.1564	167.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	228	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$559.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Ceiling Mounted Occupancy Sensor	1	1199.1564	167.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	090	240	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$559.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Ceiling Mounted Occupancy Sensor	1	1199.1564	167.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	239	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$559.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Ceiling Mounted Occupancy Sensor	1	1199.1564	167.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	238	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$559.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Ceiling Mounted Occupancy Sensor	1	1199.1564	167.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	229	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$373.1	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Ceiling Mounted Occupancy Sensor	1	799.4376	111.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	237	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$559.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Ceiling Mounted Occupancy Sensor	1	1199.1564	167.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	232	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	4380	1332.396	$186.5	None Proposed	6	304.2	0.3042	4380	3066	1332.396	932.6772	Ceiling Mounted Occupancy Sensor	1	399.7188	56.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	231A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$124.4	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Ceiling Mounted Occupancy Sensor	1	266.4792	37.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	40	2028	2.028	8760	17765.28	$2,487.1	None Proposed	40	2028	2.028	8760	8760	17765.28	17765.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	002	Mens	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$7.1	None Proposed	2	101.4	0.1014	500	350	50.7	35.49	Ceiling Mounted Occupancy Sensor	1	15.21	2.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	Womens	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$7.1	None Proposed	2	101.4	0.1014	500	350	50.7	35.49	Ceiling Mounted Occupancy Sensor	1	15.21	2.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	240	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	16	811.2	0.8112	4380	3553.056	$497.4	None Proposed	16	811.2	0.8112	4380	3066	3553.056	2487.1392	Ceiling Mounted Occupancy Sensor	1	1065.9168	149.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	Book Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	4380	666.198	$93.3	None Proposed	3	152.1	0.1521	4380	3066	666.198	466.3386	Ceiling Mounted Occupancy Sensor	1	199.8594	28.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	Storage	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	500	152.1	$21.3	None Proposed	6	304.2	0.3042	500	350	152.1	106.47	Ceiling Mounted Occupancy Sensor	1	45.63	6.4	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	Book Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	4380	666.198	$93.3	None Proposed	3	152.1	0.1521	4380	3066	666.198	466.3386	Ceiling Mounted Occupancy Sensor	1	199.8594	28.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	40	2028	2.028	8760	17765.28	$2,487.1	None Proposed	40	2028	2.028	8760	8760	17765.28	17765.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	002	Mens	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	500	101.4	$14.2	None Proposed	4	202.8	0.2028	500	350	101.4	70.98	Ceiling Mounted Occupancy Sensor	1	30.42	4.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	Womens	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	500	101.4	$14.2	None Proposed	4	202.8	0.2028	500	350	101.4	70.98	Ceiling Mounted Occupancy Sensor	1	30.42	4.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	003	308	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$652.9	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Ceiling Mounted Occupancy Sensor	1	1399.0158	195.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	003	309	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$652.9	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Ceiling Mounted Occupancy Sensor	1	1399.0158	195.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	003	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	8760	9326.772	$1,305.7	None Proposed	21	1064.7	1.0647	8760	8760	9326.772	9326.772	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	003	312	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$652.9	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Ceiling Mounted Occupancy Sensor	1	1399.0158	195.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	003	307	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$652.9	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Ceiling Mounted Occupancy Sensor	1	1399.0158	195.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	003	313	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$652.9	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Ceiling Mounted Occupancy Sensor	1	1399.0158	195.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	003	306	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$652.9	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Ceiling Mounted Occupancy Sensor	1	1399.0158	195.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
Ferris - Interior	003	314	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$652.9	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Ceiling Mounted Occupancy Sensor	1	1399.0158	195.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	003	305	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$652.9	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Ceiling Mounted Occupancy Sensor	1	1399.0158	195.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	003	315	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$652.9	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Ceiling Mounted Occupancy Sensor	1	1399.0158	195.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	003	304	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$652.9	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Ceiling Mounted Occupancy Sensor	1	1399.0158	195.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	003	316A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	4380	3330.99	$466.3	None Proposed	15	760.5	0.7605	4380	3066	3330.99	2331.693	Ceiling Mounted Occupancy Sensor	1	999.297	139.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	003	Mens	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	253.5	0.2535	500	126.75	$17.7	None Proposed	5	253.5	0.2535	500	350	126.75	88.725	Ceiling Mounted Occupancy Sensor	1	38.025	5.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	003	Womens	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	253.5	0.2535	500	126.75	$17.7	None Proposed	5	253.5	0.2535	500	350	126.75	88.725	Ceiling Mounted Occupancy Sensor	1	38.025	5.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	003	345	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$435.2	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Ceiling Mounted Occupancy Sensor	1	932.6772	130.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	003	342	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$559.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Ceiling Mounted Occupancy Sensor	1	1199.1564	167.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	003	324	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$559.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Ceiling Mounted Occupancy Sensor	1	1199.1564	167.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	003	341	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	30	1521	1.521	4380	6661.98	$932.7	None Proposed	30	1521	1.521	4380	3066	6661.98	4663.386	Ceiling Mounted Occupancy Sensor	1	1998.594	279.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	003	325	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$559.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Ceiling Mounted Occupancy Sensor	1	1199.1564	167.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	003	326	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	30	1521	1.521	4380	6661.98	$932.7	None Proposed	30	1521	1.521	4380	3066	6661.98	4663.386	Ceiling Mounted Occupancy Sensor	1	1998.594	279.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	003	337	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	30	1521	1.521	4380	6661.98	$932.7	None Proposed	30	1521	1.521	4380	3066	6661.98	4663.386	Ceiling Mounted Occupancy Sensor	1	1998.594	279.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	003	330	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	30	1521	1.521	4380	6661.98	$932.7	None Proposed	30	1521	1.521	4380	3066	6661.98	4663.386	Ceiling Mounted Occupancy Sensor	1	1998.594	279.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	003	309	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	4380	666.198	$93.3	None Proposed	3	152.1	0.1521	4380	3066	666.198	466.3386	Ceiling Mounted Occupancy Sensor	1	199.8594	28.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	003	Stairwell	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	8760	1776.528	$248.7	None Proposed	4	202.8	0.2028	8760	8760	1776.528	1776.528	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	001	138	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$971.3	None Proposed	18	1584	1.584	4380	3066	6937.92	4856.544	Ceiling Mounted Occupancy Sensor	1	2081.376	291.4	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	Storage	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	47	4136	4.136	500	2068	$289.5	None Proposed	47	4136	4.136	500	350	2068	1447.6	Ceiling Mounted Occupancy Sensor	1	620.4	86.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	Storage	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	500	396	$55.4	None Proposed	9	792	0.792	500	350	396	277.2	Ceiling Mounted Occupancy Sensor	1	118.8	16.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	Women's Faculty Lounge	2' 17W Fluorescent Fixture	1	15	0.015	4380	65.7	$9.2	None Proposed	1	15	0.015	4380	3066	65.7	45.99	Ceiling Mounted Occupancy Sensor	1	19.71	2.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	Women's Faculty Lounge	2' 17W Fluorescent Fixture	1	15	0.015	4380	65.7	$9.2	None Proposed	1	15	0.015	4380	3066	65.7	45.99	Ceiling Mounted Occupancy Sensor	1	19.71	2.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	Men's Faculty Lounge	2' 17W Fluorescent Fixture	1	15	0.015	4380	65.7	$9.2	None Proposed	1	15	0.015	4380	3066	65.7	45.99	Ceiling Mounted Occupancy Sensor	1	19.71	2.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	Men's Faculty Lounge	2' 17W Fluorescent Fixture	1	15	0.015	4380	65.7	$9.2	None Proposed	1	15	0.015	4380	3066	65.7	45.99	Ceiling Mounted Occupancy Sensor	1	19.71	2.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	Library	2' 17W Fluorescent Fixture	12	180	0.18	4380	788.4	$110.4	None Proposed	12	180	0.18	4380	3066	788.4	551.88	Ceiling Mounted Occupancy Sensor	1	236.52	33.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	Library	2' 17W Fluorescent Fixture	12	180	0.18	4380	788.4	$110.4	None Proposed	12	180	0.18	4380	3066	788.4	551.88	Ceiling Mounted Occupancy Sensor	1	236.52	33.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	232	2' 17W Fluorescent Fixture	11	165	0.165	4380	722.7	$101.2	None Proposed	11	165	0.165	4380	3066	722.7	505.89	Ceiling Mounted Occupancy Sensor	1	216.81	30.4	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	Stairwell	2' 17W Fluorescent Fixture	4	60	0.06	4380	262.8	$36.8	None Proposed	4	60	0.06	4380	3066	262.8	183.96	Ceiling Mounted Occupancy Sensor	1	78.84	11.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	Stairwell	2' 17W Fluorescent Fixture	3	45	0.045	8760	394.2	$55.2	None Proposed	3	45	0.045	8760	8760	394.2	394.2	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	003	320	2' 17W Fluorescent Fixture	2	30	0.03	4380	131.4	$18.4	None Proposed	2	30	0.03	4380	3066	131.4	91.98	Ceiling Mounted Occupancy Sensor	1	39.42	5.5	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	003	344	2' 17W Fluorescent Fixture	1	15	0.015	4380	65.7	$9.2	None Proposed	1	15	0.015	4380	3066	65.7	45.99	Ceiling Mounted Occupancy Sensor	1	19.71	2.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	107	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	4	252	0.252	4380	1103.76	$154.5	None Proposed	4	252	0.252	4380	3066	1103.76	772.632	Ceiling Mounted Occupancy Sensor	1	331.128	46.4	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	126	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	4	252	0.252	4380	1103.76	$154.5	None Proposed	4	252	0.252	4380	3066	1103.76	772.632	Ceiling Mounted Occupancy Sensor	1	331.128	46.4	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	Hallway	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	5	315	0.315	8760	2759.4	$386.3	None Proposed	5	315	0.315	8760	8760	2759.4	2759.4	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	001	Hallway	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	10	630	0.63	8760	5518.8	$772.6	None Proposed	10	630	0.63	8760	8760	5518.8	5518.8	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	001	Janitors	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	2	126	0.126	500	63	$8.8	None Proposed	2	126	0.126	500	350	63	44.1	Ceiling Mounted Occupancy Sensor	1	18.9	2.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	Kitchen	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	5	315	0.315	3982	1254.33	$175.6	None Proposed	5	315	0.315	3982	3982	1254.33	1254.33	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	001	Office	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	5	315	0.315	4380	1379.7	$193.2	None Proposed	5	315	0.315	4380	3066	1379.7	965.79	Ceiling Mounted Occupancy Sensor	1	413.91	57.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	Stairwell	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	1	63	0.063	8760	551.88	$77.3	None Proposed	1	63	0.063	8760	8760	551.88	551.88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	001	Stairwell	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	1	63	0.063	8760	551.88	$77.3	None Proposed	1	63	0.063	8760	8760	551.88	551.88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	001	Stairwell	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	1	63	0.063	8760	551.88	$77.3	None Proposed	1	63	0.063	8760	8760	551.88	551.88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	002	Stairwell	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	3	189	0.189	8760	1655.64	$231.8	None Proposed	3	189	0.189	8760	8760	1655.64	1655.64	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	002	Stairwell	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	4	252	0.252	8760	2207.52	$309.1	None Proposed	4	252	0.252	8760	8760	2207.52	2207.52	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	002	Stairwell	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	3	189	0.189	8760	1655.64	$231.8	None Proposed	3	189	0.189	8760	8760	1655.64	1655.64	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	002	Stairwell	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	3	189	0.189	8760	1655.64	$231.8	None Proposed	3	189	0.189	8760	8760	1655.64	1655.64	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	001	107	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	8	704	0.704	4380	3083.52	$431.7	None Proposed	8	704	0.704	4380	3066	3083.52	2158.464	Ceiling Mounted Occupancy Sensor	1	925.056	129.5	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	Cafeteria	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	4	352	0.352	4380	1541.76	$215.8	None Proposed	4	352	0.352	4380	3066	1541.76	1079.232	Ceiling Mounted Occupancy Sensor	1	462.528	64.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	Cafeteria	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	60	5280	5.28	4380	23126.4	$3,237.7	None Proposed	60	5280	5.28	4380	3066	23126.4	16188.48	Ceiling Mounted Occupancy Sensor	1	6937.92	971.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
Ferris - Interior	001	Faculity	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	16	1408	1.408	4380	6167.04	$863.4	None Proposed	16	1408	1.408	4380	3066	6167.04	4316.928	Ceiling Mounted Occupancy Sensor	1	1850.112	259.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	Faculity	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	20	1760	1.76	4380	7708.8	$1,079.2	None Proposed	20	1760	1.76	4380	3066	7708.8	5396.16	Ceiling Mounted Occupancy Sensor	1	2312.64	323.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	Hallway	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	8760	4625.28	$647.5	None Proposed	6	528	0.528	8760	8760	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	001	Hallway	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	8760	13875.84	$1,942.6	None Proposed	18	1584	1.584	8760	8760	13875.84	13875.84	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	001	Hallway	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	8760	9250.56	$1,295.1	None Proposed	12	1056	1.056	8760	8760	9250.56	9250.56	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	001	Janitors	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	4	352	0.352	500	176	$24.6	None Proposed	4	352	0.352	500	350	176	123.2	Ceiling Mounted Occupancy Sensor	1	52.8	7.4	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	Kitchen	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	20	1760	1.76	3980	7004.8	$980.7	None Proposed	20	1760	1.76	3980	3980	7004.8	7004.8	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	001	Office	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	26	2288	2.288	4380	10021.44	$1,403.0	None Proposed	26	2288	2.288	4380	3066	10021.44	7015.008	Ceiling Mounted Occupancy Sensor	1	3006.432	420.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	Office	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	4	352	0.352	4380	1541.76	$215.8	None Proposed	4	352	0.352	4380	3066	1541.76	1079.232	Ceiling Mounted Occupancy Sensor	1	462.528	64.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	Stairwell	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	8	704	0.704	8760	6167.04	$863.4	None Proposed	8	704	0.704	8760	8760	6167.04	6167.04	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	001	Stairwell	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	8760	4625.28	$647.5	None Proposed	6	528	0.528	8760	8760	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	001	Vice Principal	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	8	704	0.704	4380	3083.52	$431.7	None Proposed	8	704	0.704	4380	3066	3083.52	2158.464	Ceiling Mounted Occupancy Sensor	1	925.056	129.5	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	Stairwell	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	8	704	0.704	8760	6167.04	$863.4	None Proposed	8	704	0.704	8760	8760	6167.04	6167.04	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	002	Men's Faculty Lounge	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	4380	2312.64	$323.8	None Proposed	6	528	0.528	4380	3066	2312.64	1618.848	Ceiling Mounted Occupancy Sensor	1	693.792	97.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	Library	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	88	7744	7.744	4380	33918.72	$4,748.6	None Proposed	88	7744	7.744	4380	3066	33918.72	23743.104	Ceiling Mounted Occupancy Sensor	1	10175.616	1,424.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	Library	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	80	7040	7.04	4380	30835.2	$4,316.9	None Proposed	80	7040	7.04	4380	3066	30835.2	21584.64	Ceiling Mounted Occupancy Sensor	1	9250.56	1,295.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	Stairwell	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	8	704	0.704	8760	6167.04	$863.4	None Proposed	8	704	0.704	8760	8760	6167.04	6167.04	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	002	Hallway	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	8760	9250.56	$1,295.1	None Proposed	12	1056	1.056	8760	8760	9250.56	9250.56	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	002	Hallway	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	16	1408	1.408	8760	12334.08	$1,726.8	None Proposed	16	1408	1.408	8760	8760	12334.08	12334.08	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	003	Storage	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	8	704	0.704	500	352	$49.3	None Proposed	8	704	0.704	500	350	352	246.4	Ceiling Mounted Occupancy Sensor	1	105.6	14.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	003	345	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	4	352	0.352	4380	1541.76	$215.8	None Proposed	4	352	0.352	4380	3066	1541.76	1079.232	Ceiling Mounted Occupancy Sensor	1	462.528	64.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	003	Stairwell	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	8	704	0.704	8760	6167.04	$863.4	None Proposed	8	704	0.704	8760	8760	6167.04	6167.04	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	003	309	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	4	352	0.352	4380	1541.76	$215.8	None Proposed	4	352	0.352	4380	3066	1541.76	1079.232	Ceiling Mounted Occupancy Sensor	1	462.528	64.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	003	322	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	4	352	0.352	4380	1541.76	$215.8	None Proposed	4	352	0.352	4380	3066	1541.76	1079.232	Ceiling Mounted Occupancy Sensor	1	462.528	64.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	126	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	448	0.448	4380	1962.24	$274.7	None Proposed	4	448	0.448	4380	3066	1962.24	1373.568	Ceiling Mounted Occupancy Sensor	1	588.672	82.4	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	140	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	4380	981.12	$137.4	None Proposed	2	224	0.224	4380	3066	981.12	686.784	Ceiling Mounted Occupancy Sensor	1	294.336	41.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	141	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	4380	981.12	$137.4	None Proposed	2	224	0.224	4380	3066	981.12	686.784	Ceiling Mounted Occupancy Sensor	1	294.336	41.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	142	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	5	560	0.56	4380	2452.8	$343.4	None Proposed	5	560	0.56	4380	3066	2452.8	1716.96	Ceiling Mounted Occupancy Sensor	1	735.84	103.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	150	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	4380	981.12	$137.4	None Proposed	2	224	0.224	4380	3066	981.12	686.784	Ceiling Mounted Occupancy Sensor	1	294.336	41.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	151	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	4380	981.12	$137.4	None Proposed	2	224	0.224	4380	3066	981.12	686.784	Ceiling Mounted Occupancy Sensor	1	294.336	41.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	147A	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	1	112	0.112	4380	490.56	$68.7	None Proposed	1	112	0.112	4380	3066	490.56	343.392	Ceiling Mounted Occupancy Sensor	1	147.168	20.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	147B	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	1	112	0.112	4380	490.56	$68.7	None Proposed	1	112	0.112	4380	3066	490.56	343.392	Ceiling Mounted Occupancy Sensor	1	147.168	20.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	Cafeteria	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$824.1	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	247.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	001	Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	13	1456	1.456	8760	12754.56	$1,785.6	None Proposed	13	1456	1.456	8760	8760	12754.56	12754.56	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	001	Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	8760	8830.08	$1,236.2	None Proposed	9	1008	1.008	8760	8760	8830.08	8830.08	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	001	Kitchen	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	3984	892.416	$124.9	None Proposed	2	224	0.224	3984	3984	892.416	892.416	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	001	Lobby	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	30	3360	3.36	4380	14716.8	$2,060.4	None Proposed	30	3360	3.36	4380	3066	14716.8	10301.76	Ceiling Mounted Occupancy Sensor	1	4415.04	618.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	8760	8830.08	$1,236.2	None Proposed	9	1008	1.008	8760	8760	8830.08	8830.08	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	002	Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	10	1120	1.12	8760	9811.2	$1,373.6	None Proposed	10	1120	1.12	8760	8760	9811.2	9811.2	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	002	Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	11	1232	1.232	8760	10792.32	$1,510.9	None Proposed	11	1232	1.232	8760	8760	10792.32	10792.32	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	002	Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	8760	11773.44	$1,648.3	None Proposed	12	1344	1.344	8760	8760	11773.44	11773.44	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	002	Women's Faculty Lounge	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	448	0.448	4380	1962.24	$274.7	None Proposed	4	448	0.448	4380	3066	1962.24	1373.568	Ceiling Mounted Occupancy Sensor	1	588.672	82.4	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	36	4032	4.032	8760	35320.32	$4,944.8	None Proposed	36	4032	4.032	8760	6132	35320.32	24724.224	Ceiling Mounted Occupancy Sensor	1	10596.096	1,483.5	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Ferris - Interior	002	Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	11	1232	1.232	8760	10792.32	$1,510.9	None Proposed	11	1232	1.232	8760	8760	10792.32	10792.32	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	003	Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	448	0.448	8760	3924.48	$549.4	None Proposed	4	448	0.448	8760	8760	3924.48	3924.48	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Ferris - Interior	001	Pool	400W MH High Bay Fixture	31	14198	14.198	4380	62187.24	$8,706.2	Replace 400W Fixture with 250W Induction Light Fixture	31	6665	6.665	4380	3066	29192.7	20434.89	Ceiling Mounted Occupancy Sensor	1	41752.35	5,845.3	$0.0	$485.0	$137.0	$103.0	$73.5	$4,320.5	$15,138.0	$19,458.5
Ferris - Interior	001	30	400W MH High Bay Fixture	1	458	0.458	4380	2006.04	$280.8	Replace 400W Fixture with 250W Induction Light Fixture	1	215	0.215	4380	3066	941.7	659.19	Ceiling Mounted Occupancy Sensor	1	1346.85	188.6	$0.0	$485.0	$137.0	$103.0	$73.5	$210.5	$588.0	$798.5
Ferris - Interior	001	107	60W Incandescent Fixture	3	180	0.18	4380	788.4	$110.4	Replace 60W Incandescent Fixture with 13W CFL	3	39	0.039	4380	3066	170.82	119.574	Ceiling Mounted Occupancy Sensor	1	668.826	93.6	$0.0	$5.0	$20.0	$103.0	$73.5	$133.5	$118.0	$251.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
Ferris - Interior	001	Auditorium	60W Incandescent Fixture	24	1440	1.44	4380	6307.2	$883.0	Replace 60W Incandescent Fixture with 13W CFL	24	312	0.312	4380	3066	1366.56	956.592	Ceiling Mounted Occupancy Sensor	1	5350.608	749.1	$0.0	$5.0	$20.0	$103.0	$73.5	$553.5	$223.0	$776.5
Ferris - Interior	001	Janitors	60W Incandescent Fixture	1	60	0.06	500	30	$4.2	Replace 60W Incandescent Fixture with 13W CFL	1	13	0.013	500	350	6.5	4.55	Ceiling Mounted Occupancy Sensor	1	25.45	3.6	$0.0	$5.0	$20.0	$103.0	$73.5	$93.5	$108.0	$201.5
Ferris - Interior	001	Slop Sink	60W Incandescent Fixture	1	60	0.06	500	30	$4.2	Replace 60W Incandescent Fixture with 13W CFL	1	13	0.013	500	350	6.5	4.55	Ceiling Mounted Occupancy Sensor	1	25.45	3.6	$0.0	$5.0	$20.0	$103.0	$73.5	$93.5	$108.0	$201.5
Ferris - Interior	001	Slop Sink	60W Incandescent Fixture	1	60	0.06	500	30	$4.2	Replace 60W Incandescent Fixture with 13W CFL	1	13	0.013	500	350	6.5	4.55	Ceiling Mounted Occupancy Sensor	1	25.45	3.6	$0.0	$5.0	$20.0	$103.0	$73.5	$93.5	$108.0	$201.5
Ferris - Interior	001	Stage	60W Incandescent Fixture	8	480	0.48	4380	2102.4	$294.3	Replace 60W Incandescent Fixture with 13W CFL	8	104	0.104	4380	4380	455.52	455.52	None Proposed	0	1646.88	230.6	$0.0	$5.0	$20.0	$0.0	$0.0	$160.0	$40.0	$200.0
Ferris - Interior	002	Closet	60W Incandescent Fixture	1	60	0.06	500	30	$4.2	Replace 60W Incandescent Fixture with 13W CFL	1	13	0.013	500	350	6.5	4.55	Ceiling Mounted Occupancy Sensor	1	25.45	3.6	$0.0	$5.0	$20.0	$103.0	$73.5	$93.5	$108.0	$201.5
Ferris - Interior	002	Mens	8' T12 Fixture w/ 1-T12 Lamp	12	1344	1.344	500	672	$94.1	Replace 8' T12 Fixture with 1 Tandem Double-Length 1-T8 Lamp Fixture	12	768	0.768	500	350	384	268.8	Ceiling Mounted Occupancy Sensor	1	403.2	56.4	$65.1	$82.0	$93.0	$103.0	$73.5	$1,189.5	$1,868.2	$3,057.7
Ferris - Interior	002	Mens	8' T12 Fixture w/ 1-T12 Lamp	12	1344	1.344	500	672	$94.1	Replace 8' T12 Fixture with 1 Tandem Double-Length 1-T8 Lamp Fixture	12	768	0.768	500	350	384	268.8	Ceiling Mounted Occupancy Sensor	1	403.2	56.4	$65.1	$82.0	$93.0	$103.0	$73.5	$1,189.5	$1,868.2	$3,057.7
Ferris - Interior	002	Womens	8' T12 Fixture w/ 1-T12 Lamp	12	1344	1.344	500	672	$94.1	Replace 8' T12 Fixture with 1 Tandem Double-Length 1-T8 Lamp Fixture	12	768	0.768	500	350	384	268.8	Ceiling Mounted Occupancy Sensor	1	403.2	56.4	$65.1	$82.0	$93.0	$103.0	$73.5	$1,189.5	$1,868.2	$3,057.7
Ferris - Interior	002	Womens	8' T12 Fixture w/ 1-T12 Lamp	12	1344	1.344	500	672	$94.1	Replace 8' T12 Fixture with 1 Tandem Double-Length 1-T8 Lamp Fixture	12	768	0.768	500	350	384	268.8	Ceiling Mounted Occupancy Sensor	1	403.2	56.4	$65.1	$82.0	$93.0	$103.0	$73.5	$1,189.5	$1,868.2	$3,057.7
MS #4 - Exterior	000	Exterior	Exterior Wall Packs (Assume 70w)	30	2700	2.7	4417	11925.9	$1,550.4	Replace 70W Fixture with 45W Induction Light Fixture	30	1320	1.32	4417	4417	5830.44	5830.44	None Proposed	0	6095.46	792.4	$0.0	$380.0	$137.0	$0.0	$0.0	$4,110.0	$11,400.0	$15,510.0
MS #4 - Interior	001	Auditorium	13W CFL Fixture	16	208	0.208	4380	911.04	$118.4	None Proposed	16	208	0.208	4380	4380	911.04	911.04	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Bathroom	13W CFL Fixture	4	52	0.052	500	26	$3.4	None Proposed	4	52	0.052	500	500	26	26	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Cafeteria	13W CFL Fixture	448	5824	5.824	4380	25509.12	$3,316.2	None Proposed	448	5824	5.824	4380	4380	25509.12	25509.12	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Cafeteria	13W CFL Fixture	14	182	0.182	4380	797.16	$103.6	None Proposed	14	182	0.182	4380	4380	797.16	797.16	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Kitchen	13W CFL Fixture	24	312	0.312	4319	1347.528	$175.2	None Proposed	24	312	0.312	4319	4319	1347.528	1347.528	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Maintenance	13W CFL Fixture	4	52	0.052	4380	227.76	$29.6	None Proposed	4	52	0.052	4380	4380	227.76	227.76	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	268C	13W CFL Fixture	3	39	0.039	4380	170.82	$22.2	None Proposed	3	39	0.039	4380	4380	170.82	170.82	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	268E	13W CFL Fixture	2	26	0.026	4380	113.88	$14.8	None Proposed	2	26	0.026	4380	4380	113.88	113.88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	Aux Gym	13W CFL Fixture	12	156	0.156	4380	683.28	$88.8	None Proposed	12	156	0.156	4380	4380	683.28	683.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	Hallway	13W CFL Fixture	32	416	0.416	8760	3644.16	$473.7	None Proposed	32	416	0.416	8760	8760	3644.16	3644.16	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	Hallway	13W CFL Fixture	2	26	0.026	8760	227.76	$29.6	None Proposed	2	26	0.026	8760	8760	227.76	227.76	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	Hallway	13W CFL Fixture	6	78	0.078	8760	683.28	$88.8	None Proposed	6	78	0.078	8760	8760	683.28	683.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	Media Center	13W CFL Fixture	20	260	0.26	4380	1138.8	$148.0	None Proposed	20	260	0.26	4380	4380	1138.8	1138.8	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	Media Center	13W CFL Fixture	9	117	0.117	4380	512.46	$66.6	None Proposed	9	117	0.117	4380	4380	512.46	512.46	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	004	Hallway	13W CFL Fixture	32	416	0.416	8760	3644.16	$473.7	None Proposed	32	416	0.416	8760	8760	3644.16	3644.16	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	004	Hallway	13W CFL Fixture	4	52	0.052	8760	455.52	$59.2	None Proposed	4	52	0.052	8760	8760	455.52	455.52	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Storage	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	3	76.2	0.0762	500	38.1	$5.0	None Proposed	3	76.2	0.0762	500	500	38.1	38.1	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	004	Storage	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	1	25.4	0.0254	500	12.7	$1.7	None Proposed	1	25.4	0.0254	500	500	12.7	12.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Auditorium	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	405.6	0.4056	4380	1776.528	$230.9	None Proposed	8	405.6	0.4056	4380	4380	1776.528	1776.528	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Boiler Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	500	304.2	$39.5	None Proposed	12	608.4	0.6084	500	500	304.2	304.2	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Boiler Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$3.3	None Proposed	1	50.7	0.0507	500	500	25.35	25.35	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	48	2433.6	2.4336	8760	21318.336	$2,771.4	None Proposed	48	2433.6	2.4336	8760	8760	21318.336	21318.336	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Receiving	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	4380	666.198	$86.6	None Proposed	3	152.1	0.1521	4380	4380	666.198	666.198	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Server Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	500	101.4	$13.2	None Proposed	4	202.8	0.2028	500	500	101.4	101.4	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Storage	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$3.3	None Proposed	1	50.7	0.0507	500	500	25.35	25.35	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Storage	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$3.3	None Proposed	1	50.7	0.0507	500	500	25.35	25.35	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Storage	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	500	304.2	$39.5	None Proposed	12	608.4	0.6084	500	500	304.2	304.2	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	208	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$28.9	None Proposed	1	50.7	0.0507	4380	4380	222.066	222.066	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	25	1267.5	1.2675	8760	11103.3	$1,443.4	None Proposed	25	1267.5	1.2675	8760	8760	11103.3	11103.3	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	8760	1776.528	$230.9	None Proposed	4	202.8	0.2028	8760	8760	1776.528	1776.528	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	Storage	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$3.3	None Proposed	1	50.7	0.0507	500	500	25.35	25.35	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	Storage	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$9.9	None Proposed	3	152.1	0.1521	500	500	76.05	76.05	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	004	400	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	11	557.7	0.5577	4380	2442.726	$317.6	None Proposed	11	557.7	0.5577	4380	4380	2442.726	2442.726	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	004	401	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	36	1825.2	1.8252	4380	7994.376	$1,039.3	None Proposed	36	1825.2	1.8252	4380	4380	7994.376	7994.376	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	004	403	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	30	1521	1.521	4380	6661.98	$866.1	None Proposed	30	1521	1.521	4380	4380	6661.98	6661.98	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	004	404	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	10	507	0.507	4380	2220.66	$288.7	None Proposed	10	507	0.507	4380	4380	2220.66	2220.66	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	004	420	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$519.6	None Proposed	18	912.6	0.9126	4380	4380	3997.188	3997.188	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
MS #4 - Interior	004	421	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$519.6	None Proposed	18	912.6	0.9126	4380	4380	3997.188	3997.188	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	004	422	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$519.6	None Proposed	18	912.6	0.9126	4380	4380	3997.188	3997.188	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	004	423	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$519.6	None Proposed	18	912.6	0.9126	4380	4380	3997.188	3997.188	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	004	424	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$519.6	None Proposed	18	912.6	0.9126	4380	4380	3997.188	3997.188	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	004	425	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$519.6	None Proposed	18	912.6	0.9126	4380	4380	3997.188	3997.188	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	004	426	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$519.6	None Proposed	18	912.6	0.9126	4380	4380	3997.188	3997.188	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	004	427	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$519.6	None Proposed	18	912.6	0.9126	4380	4380	3997.188	3997.188	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	004	428	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$519.6	None Proposed	18	912.6	0.9126	4380	4380	3997.188	3997.188	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	004	429	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$519.6	None Proposed	18	912.6	0.9126	4380	4380	3997.188	3997.188	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	004	430	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$519.6	None Proposed	18	912.6	0.9126	4380	4380	3997.188	3997.188	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	004	431	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$519.6	None Proposed	18	912.6	0.9126	4380	4380	3997.188	3997.188	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	004	432	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$519.6	None Proposed	18	912.6	0.9126	4380	4380	3997.188	3997.188	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	004	433	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$519.6	None Proposed	18	912.6	0.9126	4380	4380	3997.188	3997.188	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	004	435	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	405.6	0.4056	4380	1776.528	$230.9	None Proposed	8	405.6	0.4056	4380	4380	1776.528	1776.528	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	004	437	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	9	456.3	0.4563	4380	1998.594	$259.8	None Proposed	9	456.3	0.4563	4380	4380	1998.594	1998.594	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	004	439	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	9	456.3	0.4563	4380	1998.594	$259.8	None Proposed	9	456.3	0.4563	4380	4380	1998.594	1998.594	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	004	Janitor	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$3.3	None Proposed	1	50.7	0.0507	500	500	25.35	25.35	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	101	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	108	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	10	880	0.88	4380	3854.4	$501.1	None Proposed	10	880	0.88	4380	4380	3854.4	3854.4	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	120	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	24	2112	2.112	4380	9250.56	$1,202.6	None Proposed	24	2112	2.112	4380	4380	9250.56	9250.56	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	122	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	24	2112	2.112	4380	9250.56	$1,202.6	None Proposed	24	2112	2.112	4380	4380	9250.56	9250.56	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	126	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	35	3080	3.08	4380	13490.4	$1,753.8	None Proposed	35	3080	3.08	4380	4380	13490.4	13490.4	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	126	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	5	440	0.44	4380	1927.2	$250.5	None Proposed	5	440	0.44	4380	4380	1927.2	1927.2	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	128	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$901.9	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	130	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$901.9	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	126A	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	20	1760	1.76	4380	7708.8	$1,002.1	None Proposed	20	1760	1.76	4380	4380	7708.8	7708.8	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	151 Music	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	4380	770.88	$100.2	None Proposed	2	176	0.176	4380	4380	770.88	770.88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Copy	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	8	704	0.704	4380	3083.52	$400.9	None Proposed	8	704	0.704	4380	4380	3083.52	3083.52	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	207	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	31	2728	2.728	4380	11948.64	$1,553.3	None Proposed	31	2728	2.728	4380	4380	11948.64	11948.64	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	220	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$901.9	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	221	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$901.9	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	222	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$901.9	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	223	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$901.9	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	224	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$901.9	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	225	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$901.9	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	226	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$901.9	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	229	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$901.9	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	230	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$901.9	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	231	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$901.9	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	232	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$901.9	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	233	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$451.0	None Proposed	9	792	0.792	4380	4380	3468.96	3468.96	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	234	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$451.0	None Proposed	9	792	0.792	4380	4380	3468.96	3468.96	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	235	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	8	704	0.704	4380	3083.52	$400.9	None Proposed	8	704	0.704	4380	4380	3083.52	3083.52	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	Boiler Room	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	16	1408	1.408	500	704	$91.5	None Proposed	16	1408	1.408	500	500	704	704	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	Media Center	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	30	2640	2.64	4380	11563.2	$1,503.2	None Proposed	30	2640	2.64	4380	4380	11563.2	11563.2	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	Media Center	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	16	1408	1.408	4380	6167.04	$801.7	None Proposed	16	1408	1.408	4380	4380	6167.04	6167.04	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	Media Center	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	35	3080	3.08	4380	13490.4	$1,753.8	None Proposed	35	3080	3.08	4380	4380	13490.4	13490.4	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	Media Center	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	110	9680	9.68	4380	42398.4	$5,511.8	None Proposed	110	9680	9.68	4380	4380	42398.4	42398.4	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
MS #4 - Interior	002	Music	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	32	2816	2.816	4380	12334.08	$1,603.4	None Proposed	32	2816	2.816	4380	4380	12334.08	12334.08	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	Office	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	4380	2312.64	$300.6	None Proposed	6	528	0.528	4380	4380	2312.64	2312.64	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	Hallway	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	8760	8830.08	$1,147.9	None Proposed	9	1008	1.008	8760	8760	8830.08	8830.08	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Stairwell	2' 17W Fluorescent Fixture	2	30	0.03	8760	262.8	$34.2	None Proposed	2	30	0.03	8760	8760	262.8	262.8	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Stairwell	2' 17W Fluorescent Fixture	16	240	0.24	8760	2102.4	$273.3	None Proposed	16	240	0.24	8760	8760	2102.4	2102.4	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	Stairwell	2' 17W Fluorescent Fixture	2	30	0.03	8760	262.8	$34.2	None Proposed	2	30	0.03	8760	8760	262.8	262.8	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	004	Stairwell	2' 17W Fluorescent Fixture	2	30	0.03	8760	262.8	$34.2	None Proposed	2	30	0.03	8760	8760	262.8	262.8	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Boiler Room	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	1	63	0.063	500	31.5	$4.1	None Proposed	1	63	0.063	500	350	31.5	22.05	Ceiling Mounted Occupancy Sensor	2	9.45	1.2	$0.0	$0.0	$0.0	$206.0	$147.0	$294.0	$412.0	$706.0
MS #4 - Interior	004	Hallway	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	8	504	0.504	8760	4415.04	$574.0	None Proposed	8	504	0.504	8760	8760	4415.04	4415.04	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	128	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	12	756	0.756	4380	3311.28	$430.5	None Proposed	12	756	0.756	4380	4380	3311.28	3311.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	151A	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	2	126	0.126	4380	551.88	$71.7	None Proposed	2	126	0.126	4380	4380	551.88	551.88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Dock	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	24	1512	1.512	4380	6622.56	$860.9	None Proposed	24	1512	1.512	4380	4380	6622.56	6622.56	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Hallway	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	5	315	0.315	8760	2759.4	$358.7	None Proposed	5	315	0.315	8760	8760	2759.4	2759.4	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Hallway	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	16	1008	1.008	8760	8830.08	$1,147.9	None Proposed	16	1008	1.008	8760	8760	8830.08	8830.08	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Kitchen	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	5	315	0.315	4316	1359.54	$176.7	None Proposed	5	315	0.315	4316	4316	1359.54	1359.54	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Maintenance	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	6	378	0.378	4380	1655.64	$215.2	None Proposed	6	378	0.378	4380	4380	1655.64	1655.64	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Maintenance	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	5	315	0.315	4380	1379.7	$179.4	None Proposed	5	315	0.315	4380	4380	1379.7	1379.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Nurse	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	6	378	0.378	4380	1655.64	$215.2	None Proposed	6	378	0.378	4380	4380	1655.64	1655.64	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Nurse	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	2	126	0.126	4380	551.88	$71.7	None Proposed	2	126	0.126	4380	4380	551.88	551.88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Nurse	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	3	189	0.189	4380	827.82	$107.6	None Proposed	3	189	0.189	4380	4380	827.82	827.82	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Office	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	8	504	0.504	4380	2207.52	$287.0	None Proposed	8	504	0.504	4380	4380	2207.52	2207.52	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	Aux Gym	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	2	126	0.126	4380	551.88	$71.7	None Proposed	2	126	0.126	4380	4380	551.88	551.88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	Hallway	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	15	945	0.945	8760	8278.2	$1,076.2	None Proposed	15	945	0.945	8760	8760	8278.2	8278.2	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	004	434	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	4	252	0.252	4380	1103.76	$143.5	None Proposed	4	252	0.252	4380	4380	1103.76	1103.76	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	004	Hallway	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	11	693	0.693	8760	6070.68	$789.2	None Proposed	11	693	0.693	8760	8760	6070.68	6070.68	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	004	Stairwell	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	2	126	0.126	8760	1103.76	$143.5	None Proposed	2	126	0.126	8760	8760	1103.76	1103.76	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Maintenance	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	4380	666.198	$86.6	None Proposed	3	152.1	0.1521	4380	4380	666.198	666.198	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	268C	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	11	557.7	0.5577	4380	2442.726	$317.6	None Proposed	11	557.7	0.5577	4380	4380	2442.726	2442.726	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	Mens	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	500	101.4	$13.2	None Proposed	4	202.8	0.2028	500	500	101.4	101.4	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	Womens	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	500	101.4	$13.2	None Proposed	4	202.8	0.2028	500	500	101.4	101.4	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	004	403A	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$57.7	None Proposed	2	101.4	0.1014	4380	4380	444.132	444.132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	004	Mens	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$9.9	None Proposed	3	152.1	0.1521	500	500	76.05	76.05	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	004	Mens	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$9.9	None Proposed	3	152.1	0.1521	500	500	76.05	76.05	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	004	Stairwell	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	8760	1332.396	$173.2	None Proposed	3	152.1	0.1521	8760	8760	1332.396	1332.396	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	004	Stairwell	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	8760	1332.396	$173.2	None Proposed	3	152.1	0.1521	8760	8760	1332.396	1332.396	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	004	Stairwell	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	8760	888.264	$115.5	None Proposed	2	101.4	0.1014	8760	8760	888.264	888.264	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	004	Womens	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$9.9	None Proposed	3	152.1	0.1521	500	500	76.05	76.05	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	004	Womens	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$9.9	None Proposed	3	152.1	0.1521	500	500	76.05	76.05	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	172	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	4380	2312.64	$300.6	None Proposed	6	528	0.528	4380	4380	2312.64	2312.64	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	126A	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	4380	770.88	$100.2	None Proposed	2	176	0.176	4380	4380	770.88	770.88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	151A	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	4380	770.88	$100.2	None Proposed	2	176	0.176	4380	4380	770.88	770.88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	151B	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	4380	770.88	$100.2	None Proposed	2	176	0.176	4380	4380	770.88	770.88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	151C	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	4380	770.88	$100.2	None Proposed	2	176	0.176	4380	4380	770.88	770.88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	151D	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	4380	770.88	$100.2	None Proposed	2	176	0.176	4380	4380	770.88	770.88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Bathroom	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	1	88	0.088	500	44	$5.7	None Proposed	1	88	0.088	500	500	44	44	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Copy	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	4380	770.88	$100.2	None Proposed	2	176	0.176	4380	4380	770.88	770.88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Kitchen	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4317	3419.064	$444.5	None Proposed	9	792	0.792	4317	4317	3419.064	3419.064	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Kitchen	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	4318	759.968	$98.8	None Proposed	2	176	0.176	4318	4318	759.968	759.968	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
MS #4 - Interior	001	Mens	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	3	264	0.264	500	132	$17.2	None Proposed	3	264	0.264	500	500	132	132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Mens	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	3	264	0.264	500	132	$17.2	None Proposed	3	264	0.264	500	500	132	132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Storage	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	500	264	$34.3	None Proposed	6	528	0.528	500	500	264	264	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Womens	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	3	264	0.264	500	132	$17.2	None Proposed	3	264	0.264	500	500	132	132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Womens	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	3	264	0.264	500	132	$17.2	None Proposed	3	264	0.264	500	500	132	132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	206	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	4	352	0.352	4380	1541.76	$200.4	None Proposed	4	352	0.352	4380	4380	1541.76	1541.76	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	207A	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	3	264	0.264	4380	1156.32	$150.3	None Proposed	3	264	0.264	4380	4380	1156.32	1156.32	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	268A	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	7	616	0.616	4380	2698.08	$350.8	None Proposed	7	616	0.616	4380	4380	2698.08	2698.08	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	268D	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	7	616	0.616	4380	2698.08	$350.8	None Proposed	7	616	0.616	4380	4380	2698.08	2698.08	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	268E	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	11	968	0.968	4380	4239.84	$551.2	None Proposed	11	968	0.968	4380	4380	4239.84	4239.84	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	Mens	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	1	88	0.088	500	44	$5.7	None Proposed	1	88	0.088	500	500	44	44	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	Stairwell	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	4	352	0.352	8760	3083.52	$400.9	None Proposed	4	352	0.352	8760	8760	3083.52	3083.52	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	Womens	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	1	88	0.088	500	44	$5.7	None Proposed	1	88	0.088	500	500	44	44	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	11	1232	1.232	8760	10792.32	$1,403.0	None Proposed	11	1232	1.232	8760	8760	10792.32	10792.32	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Auditorium	42W CFL Fixture	5	245	0.245	4380	1073.1	$139.5	None Proposed	5	245	0.245	4380	4380	1073.1	1073.1	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Auditorium	42W CFL Fixture	21	1029	1.029	4380	4507.02	$585.9	None Proposed	21	1029	1.029	4380	4380	4507.02	4507.02	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Auditorium	42W CFL Fixture	10	490	0.49	4380	2146.2	$279.0	None Proposed	10	490	0.49	4380	4380	2146.2	2146.2	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Auditorium	42W CFL Fixture	6	294	0.294	4380	1287.72	$167.4	None Proposed	6	294	0.294	4380	4380	1287.72	1287.72	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Hallway	42W CFL Fixture	32	1568	1.568	8760	13735.68	$1,785.6	None Proposed	32	1568	1.568	8760	8760	13735.68	13735.68	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	001	Hallway	42W CFL Fixture	33	1617	1.617	8760	14164.92	$1,841.4	None Proposed	33	1617	1.617	8760	8760	14164.92	14164.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
MS #4 - Interior	002	Gym	42W CFL Fixture	25	1225	1.225	4380	5365.5	$697.5	None Proposed	25	1225	1.225	4380	4380	5365.5	5365.5	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #12 - Exterior	763	Exterior	Exterior Wall Packs (Assume 70w)	10	900	0.9	4142	3727.8	$410.1	Replace 70W Fixture with 45W Induction Light Fixture	10	440	0.44	4142	4142	1822.48	1822.48	None Proposed	0	1905.32	209.6	$0.0	$380.0	$137.0	$0.0	$0.0	$1,370.0	$3,800.0	$5,170.0
PS #12 - Interior	001	Janitor	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	1	25.4	0.0254	500	12.7	$1.4	None Proposed	1	25.4	0.0254	500	350	12.7	8.89	Ceiling Mounted Occupancy Sensor	1	3.81	0.4	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	1	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	405.6	0.4056	4380	1776.528	$195.4	None Proposed	8	405.6	0.4056	4380	3066	1776.528	1243.5696	Ceiling Mounted Occupancy Sensor	1	532.9584	58.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	000	Basement	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	405.6	0.4056	4380	1776.528	$195.4	None Proposed	8	405.6	0.4056	4380	3066	1776.528	1243.5696	Ceiling Mounted Occupancy Sensor	1	532.9584	58.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	2	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	405.6	0.4056	4380	1776.528	$195.4	None Proposed	8	405.6	0.4056	4380	3066	1776.528	1243.5696	Ceiling Mounted Occupancy Sensor	1	532.9584	58.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	5	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$97.7	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Ceiling Mounted Occupancy Sensor	1	266.4792	29.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	7	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$97.7	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Ceiling Mounted Occupancy Sensor	1	266.4792	29.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	8	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	20	1014	1.014	4380	4441.32	$488.5	None Proposed	20	1014	1.014	4380	3066	4441.32	3108.924	Ceiling Mounted Occupancy Sensor	1	1332.396	146.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	135	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	20	1014	1.014	4380	4441.32	$488.5	None Proposed	20	1014	1.014	4380	3066	4441.32	3108.924	Ceiling Mounted Occupancy Sensor	1	1332.396	146.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	136	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$513.0	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Ceiling Mounted Occupancy Sensor	1	1399.0158	153.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	139	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$342.0	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Ceiling Mounted Occupancy Sensor	1	932.6772	102.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	140	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$342.0	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Ceiling Mounted Occupancy Sensor	1	932.6772	102.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	144	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$293.1	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Ceiling Mounted Occupancy Sensor	1	799.4376	87.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	210	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	24	1216.8	1.2168	4380	5329.584	$586.3	None Proposed	24	1216.8	1.2168	4380	3066	5329.584	3730.7088	Ceiling Mounted Occupancy Sensor	1	1598.8752	175.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	211	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$342.0	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Ceiling Mounted Occupancy Sensor	1	932.6772	102.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	213	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$513.0	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Ceiling Mounted Occupancy Sensor	1	1399.0158	153.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	214	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	11	557.7	0.5577	4380	2442.726	$268.7	None Proposed	11	557.7	0.5577	4380	3066	2442.726	1709.9082	Ceiling Mounted Occupancy Sensor	1	732.8178	80.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	216	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$342.0	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Ceiling Mounted Occupancy Sensor	1	932.6772	102.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	301	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$48.9	None Proposed	2	101.4	0.1014	4380	3066	444.132	310.8924	Ceiling Mounted Occupancy Sensor	1	133.2396	14.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	308	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$48.9	None Proposed	2	101.4	0.1014	4380	3066	444.132	310.8924	Ceiling Mounted Occupancy Sensor	1	133.2396	14.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	309	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$513.0	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Ceiling Mounted Occupancy Sensor	1	1399.0158	153.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	311	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$513.0	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Ceiling Mounted Occupancy Sensor	1	1399.0158	153.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	312	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$513.0	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Ceiling Mounted Occupancy Sensor	1	1399.0158	153.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	313	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$97.7	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Ceiling Mounted Occupancy Sensor	1	266.4792	29.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	314	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$97.7	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Ceiling Mounted Occupancy Sensor	1	266.4792	29.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	315	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	11	557.7	0.5577	4380	2442.726	$268.7	None Proposed	11	557.7	0.5577	4380	3066	2442.726	1709.9082	Ceiling Mounted Occupancy Sensor	1	732.8178	80.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	316	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	4380	3330.99	$366.4	None Proposed	15	760.5	0.7605	4380	3066	3330.99	2331.693	Ceiling Mounted Occupancy Sensor	1	999.297	109.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #12 - Interior	001	Art	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$48.9	None Proposed	2	101.4	0.1014	4380	3066	444.132	310.8924	Ceiling Mounted Occupancy Sensor	1	133.2396	14.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	B-13	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	9	456.3	0.4563	4380	1998.594	$219.8	None Proposed	9	456.3	0.4563	4380	3066	1998.594	1399.0158	Ceiling Mounted Occupancy Sensor	1	599.5782	66.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$5.6	None Proposed	2	101.4	0.1014	500	350	50.7	35.49	Ceiling Mounted Occupancy Sensor	1	15.21	1.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$5.6	None Proposed	2	101.4	0.1014	500	350	50.7	35.49	Ceiling Mounted Occupancy Sensor	1	15.21	1.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	500	101.4	$11.2	None Proposed	4	202.8	0.2028	500	350	101.4	70.98	Ceiling Mounted Occupancy Sensor	1	30.42	3.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	Boiler Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	11	557.7	0.5577	500	278.85	$30.7	None Proposed	11	557.7	0.5577	500	350	278.85	195.195	Ceiling Mounted Occupancy Sensor	1	83.655	9.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	Boys	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$5.6	None Proposed	2	101.4	0.1014	500	350	50.7	35.49	Ceiling Mounted Occupancy Sensor	1	15.21	1.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	Boys	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$5.6	None Proposed	2	101.4	0.1014	500	350	50.7	35.49	Ceiling Mounted Occupancy Sensor	1	15.21	1.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	Bulk Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$48.9	None Proposed	2	101.4	0.1014	4380	3066	444.132	310.8924	Ceiling Mounted Occupancy Sensor	1	133.2396	14.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	Cafeteria	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$48.9	None Proposed	2	101.4	0.1014	4380	3066	444.132	310.8924	Ceiling Mounted Occupancy Sensor	1	133.2396	14.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	Girls	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$5.6	None Proposed	2	101.4	0.1014	500	350	50.7	35.49	Ceiling Mounted Occupancy Sensor	1	15.21	1.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	Girls Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$5.6	None Proposed	2	101.4	0.1014	500	350	50.7	35.49	Ceiling Mounted Occupancy Sensor	1	15.21	1.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	8760	6661.98	$732.8	None Proposed	15	760.5	0.7605	8760	8760	6661.98	6661.98	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #12 - Interior	001	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	22	1115.4	1.1154	8760	9770.904	$1,074.8	None Proposed	22	1115.4	1.1154	8760	8760	9770.904	9770.904	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #12 - Interior	001	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	17	861.9	0.8619	8760	7550.244	$830.5	None Proposed	17	861.9	0.8619	8760	8760	7550.244	7550.244	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #12 - Interior	001	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	8760	2664.792	$293.1	None Proposed	6	304.2	0.3042	8760	8760	2664.792	2664.792	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #12 - Interior	001	Health	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	253.5	0.2535	4380	1110.33	$122.1	None Proposed	5	253.5	0.2535	4380	3066	1110.33	777.231	Ceiling Mounted Occupancy Sensor	1	333.099	36.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	Home Economic	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	35	1774.5	1.7745	4380	7772.31	$855.0	None Proposed	35	1774.5	1.7745	4380	3066	7772.31	5440.617	Ceiling Mounted Occupancy Sensor	1	2331.693	256.5	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	Kindergarden	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	22	1115.4	1.1154	4380	4885.452	$537.4	None Proposed	22	1115.4	1.1154	4380	3066	4885.452	3419.8164	Ceiling Mounted Occupancy Sensor	1	1465.6356	161.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	Mens	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$5.6	None Proposed	2	101.4	0.1014	500	350	50.7	35.49	Ceiling Mounted Occupancy Sensor	1	15.21	1.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	Meter Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$5.6	None Proposed	2	101.4	0.1014	500	350	50.7	35.49	Ceiling Mounted Occupancy Sensor	1	15.21	1.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	Office	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$48.9	None Proposed	2	101.4	0.1014	4380	3066	444.132	310.8924	Ceiling Mounted Occupancy Sensor	1	133.2396	14.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	Office	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	9	456.3	0.4563	4380	1998.594	$219.8	None Proposed	9	456.3	0.4563	4380	3066	1998.594	1399.0158	Ceiling Mounted Occupancy Sensor	1	599.5782	66.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	Office	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$48.9	None Proposed	2	101.4	0.1014	4380	3066	444.132	310.8924	Ceiling Mounted Occupancy Sensor	1	133.2396	14.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	Office	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	9	456.3	0.4563	4380	1998.594	$219.8	None Proposed	9	456.3	0.4563	4380	3066	1998.594	1399.0158	Ceiling Mounted Occupancy Sensor	1	599.5782	66.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	Office	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$293.1	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Ceiling Mounted Occupancy Sensor	1	799.4376	87.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	Principal	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$97.7	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Ceiling Mounted Occupancy Sensor	1	266.4792	29.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$97.7	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Ceiling Mounted Occupancy Sensor	1	266.4792	29.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	Slop	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$2.8	None Proposed	1	50.7	0.0507	500	350	25.35	17.745	Ceiling Mounted Occupancy Sensor	1	7.605	0.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	Stairwell	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	8760	888.264	$97.7	None Proposed	2	101.4	0.1014	8760	8760	888.264	888.264	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #12 - Interior	001	Stairwell	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	8760	888.264	$97.7	None Proposed	2	101.4	0.1014	8760	8760	888.264	888.264	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #12 - Interior	001	Stairwell	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	8760	444.132	$48.9	None Proposed	1	50.7	0.0507	8760	8760	444.132	444.132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #12 - Interior	001	Stairwell	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	8760	888.264	$97.7	None Proposed	2	101.4	0.1014	8760	8760	888.264	888.264	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #12 - Interior	001	Teachers Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$48.9	None Proposed	2	101.4	0.1014	4380	3066	444.132	310.8924	Ceiling Mounted Occupancy Sensor	1	133.2396	14.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	Womens	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$5.6	None Proposed	2	101.4	0.1014	500	350	50.7	35.49	Ceiling Mounted Occupancy Sensor	1	15.21	1.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #12 - Interior	001	Stage	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	6	513.6	0.5136	4380	2249.568	$247.5	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	6	291.84	0.29184	4380	4380	1278.2592	1278.2592	None Proposed	0	971.3088	106.8	$55.0	$10.0	$65.0	$0.0	$0.0	$390.0	$390.0	$780.0
PS #12 - Interior	001	Stairwell	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	4	342.4	0.3424	8760	2999.424	$329.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	4	194.56	0.19456	8760	8760	1704.3456	1704.3456	None Proposed	0	1295.0784	142.5	$55.0	$10.0	$65.0	$0.0	$0.0	$260.0	$260.0	$520.0
PS #12 - Interior	001	Stairwell	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	8760	749.856	$82.5	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	8760	8760	426.0864	426.0864	None Proposed	0	323.7696	35.6	$55.0	$10.0	$65.0	$0.0	$0.0	$65.0	$65.0	$130.0
PS #12 - Interior	001	Stairwell	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	4	342.4	0.3424	8760	2999.424	$329.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	4	194.56	0.19456	8760	8760	1704.3456	1704.3456	None Proposed	0	1295.0784	142.5	$55.0	$10.0	$65.0	$0.0	$0.0	$260.0	$260.0	$520.0
PS #12 - Interior	001	Auditorium	400W MH High Bay Fixture	15	6870	6.87	4380	30090.6	$3,310.0	Replace 400W Fixture with 250W Induction Light Fixture	15	3225	3.225	4380	3066	14125.5	9887.85	Ceiling Mounted Occupancy Sensor	1	20202.75	2,222.3	$0.0	$485.0	$137.0	$103.0	$73.5	$2,128.5	$7,378.0	$9,506.5
PS #12 - Interior	001	Gymnasium	400W MH High Bay Fixture	23	10534	10.534	4380	46138.92	$5,075.3	Replace 400W Fixture with 250W Induction Light Fixture	23	4945	4.945	4380	4380	21659.1	21659.1	None Proposed	0	24479.82	2,692.8	$0.0	$485.0	$137.0	$0.0	$0.0	$3,151.0	$11,155.0	$14,306.0
PS #12 - Interior	001	Boiler Room	60W Incandescent Fixture	2	120	0.12	500	60	$6.6	Replace 60W Incandescent Fixture with 13W CFL	2	26	0.026	500	350	13	9.1	Ceiling Mounted Occupancy Sensor	1	50.9	5.6	$0.0	$5.0	$20.0	$103.0	$73.5	$113.5	$113.0	$226.5
PS #12 - Interior	001	Electrical	60W Incandescent Fixture	2	120	0.12	500	60	$6.6	Replace 60W Incandescent Fixture with 13W CFL	2	26	0.026	500	350	13	9.1	Ceiling Mounted Occupancy Sensor	1	50.9	5.6	$0.0	$5.0	$20.0	$103.0	$73.5	$113.5	$113.0	$226.5
PS #12 - Interior	001	Storage	60W Incandescent Fixture	3	180	0.18	500	90	$9.9	Replace 60W Incandescent Fixture with 13W CFL	3	39	0.039	500	350	19.5	13.65	Ceiling Mounted Occupancy Sensor	1	76.35	8.4	$0.0	$5.0	$20.0	$103.0	$73.5	$133.5	$118.0	$251.5
PS #14 - Exterior	877	Exterior	Exterior Wall Packs (Assume 70w)	10	900	0.9	4256	3830.4	$421.3	Replace 70W Fixture with 45W Induction Light Fixture	10	440	0.44	4256	4256	1872.64	1872.64	None Proposed	0	1957.76	215.4	$0.0	$380.0	$137.0	$0.0	$0.0	$1,370.0	$3,800.0	$5,170.0
PS #14 - Interior	000	Art Instructors	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	24	1216.8	1.2168	4380	5329.584	$586.3	None Proposed	24	1216.8	1.2168	4380	3066	5329.584	3730.7088	Ceiling Mounted Occupancy Sensor	1	1598.8752	175.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	000	Art Instructors	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$48.9	None Proposed	2	101.4	0.1014	4380	3066	444.132	310.8924	Ceiling Mounted Occupancy Sensor	1	133.2396	14.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	000	B30	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	4380	666.198	$73.3	None Proposed	3	152.1	0.1521	4380	3066	666.198	466.3386	Ceiling Mounted Occupancy Sensor	1	199.8594	22.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	000	B31	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$24.4	None Proposed	1	50.7	0.0507	4380	3066	222.066	155.4462	Ceiling Mounted Occupancy Sensor	1	66.6198	7.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	000	B32	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	9	456.3	0.4563	4380	1998.594	$219.8	None Proposed	9	456.3	0.4563	4380	3066	1998.594	1399.0158	Ceiling Mounted Occupancy Sensor	1	599.5782	66.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #14 - Interior	000	B32	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$97.7	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Ceiling Mounted Occupancy Sensor	1	266.4792	29.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	000	B34	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	10	507	0.507	4380	2220.66	$244.3	None Proposed	10	507	0.507	4380	3066	2220.66	1554.462	Ceiling Mounted Occupancy Sensor	1	666.198	73.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	000	B35	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	9	456.3	0.4563	4380	1998.594	$219.8	None Proposed	9	456.3	0.4563	4380	3066	1998.594	1399.0158	Ceiling Mounted Occupancy Sensor	1	599.5782	66.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	000	B35	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$97.7	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Ceiling Mounted Occupancy Sensor	1	266.4792	29.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	000	B38	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$97.7	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Ceiling Mounted Occupancy Sensor	1	266.4792	29.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	000	B46	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	10	507	0.507	4380	2220.66	$244.3	None Proposed	10	507	0.507	4380	3066	2220.66	1554.462	Ceiling Mounted Occupancy Sensor	1	666.198	73.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	000	B52	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$24.4	None Proposed	1	50.7	0.0507	4380	3066	222.066	155.4462	Ceiling Mounted Occupancy Sensor	1	66.6198	7.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	000	B54	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$48.9	None Proposed	2	101.4	0.1014	4380	3066	444.132	310.8924	Ceiling Mounted Occupancy Sensor	1	133.2396	14.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	000	Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$5.6	None Proposed	2	101.4	0.1014	500	350	50.7	35.49	Ceiling Mounted Occupancy Sensor	1	15.21	1.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	000	Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$2.8	None Proposed	1	50.7	0.0507	500	350	25.35	17.745	Ceiling Mounted Occupancy Sensor	1	7.605	0.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	000	Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$8.4	None Proposed	3	152.1	0.1521	500	350	76.05	53.235	Ceiling Mounted Occupancy Sensor	1	22.815	2.5	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	000	Board Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$293.1	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Ceiling Mounted Occupancy Sensor	1	799.4376	87.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	000	Boiler Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	9	456.3	0.4563	500	228.15	$25.1	None Proposed	9	456.3	0.4563	500	350	228.15	159.705	Ceiling Mounted Occupancy Sensor	1	68.445	7.5	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	000	Cafeteria	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	36	1825.2	1.8252	4380	7994.376	$879.4	None Proposed	36	1825.2	1.8252	4380	3066	7994.376	5596.0632	Ceiling Mounted Occupancy Sensor	1	2398.3128	263.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	000	Cafeteria	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	36	1825.2	1.8252	4380	7994.376	$879.4	None Proposed	36	1825.2	1.8252	4380	3066	7994.376	5596.0632	Ceiling Mounted Occupancy Sensor	1	2398.3128	263.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	000	Closet	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$2.8	None Proposed	1	50.7	0.0507	500	350	25.35	17.745	Ceiling Mounted Occupancy Sensor	1	7.605	0.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	000	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	10	507	0.507	8760	4441.32	$488.5	None Proposed	10	507	0.507	8760	8760	4441.32	4441.32	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #14 - Interior	000	Library	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$439.7	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Ceiling Mounted Occupancy Sensor	1	1199.1564	131.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	000	Stairwell	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	8760	888.264	$97.7	None Proposed	2	101.4	0.1014	8760	8760	888.264	888.264	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #14 - Interior	000	Storage	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$5.6	None Proposed	2	101.4	0.1014	500	350	50.7	35.49	Ceiling Mounted Occupancy Sensor	1	15.21	1.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	000	Storage	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	500	101.4	$11.2	None Proposed	4	202.8	0.2028	500	350	101.4	70.98	Ceiling Mounted Occupancy Sensor	1	30.42	3.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	000	Wellness	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	405.6	0.4056	500	202.8	$22.3	None Proposed	8	405.6	0.4056	500	350	202.8	141.96	Ceiling Mounted Occupancy Sensor	1	60.84	6.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	001	1	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$513.0	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Ceiling Mounted Occupancy Sensor	1	1399.0158	153.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	001	2	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$513.0	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Ceiling Mounted Occupancy Sensor	1	1399.0158	153.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	001	3	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$513.0	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Ceiling Mounted Occupancy Sensor	1	1399.0158	153.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	001	4	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$513.0	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Ceiling Mounted Occupancy Sensor	1	1399.0158	153.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	001	5	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$513.0	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Ceiling Mounted Occupancy Sensor	1	1399.0158	153.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	001	6	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$513.0	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Ceiling Mounted Occupancy Sensor	1	1399.0158	153.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	001	7	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$513.0	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Ceiling Mounted Occupancy Sensor	1	1399.0158	153.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	001	102	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	4380	3330.99	$366.4	None Proposed	15	760.5	0.7605	4380	3066	3330.99	2331.693	Ceiling Mounted Occupancy Sensor	1	999.297	109.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	001	108	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$342.0	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Ceiling Mounted Occupancy Sensor	1	932.6772	102.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	001	135	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$293.1	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Ceiling Mounted Occupancy Sensor	1	799.4376	87.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	001	152	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$293.1	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Ceiling Mounted Occupancy Sensor	1	799.4376	87.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	001	156	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$293.1	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Ceiling Mounted Occupancy Sensor	1	799.4376	87.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	001	157	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$293.1	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Ceiling Mounted Occupancy Sensor	1	799.4376	87.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	001	123A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$293.1	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Ceiling Mounted Occupancy Sensor	1	799.4376	87.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	001	Assistant Principal	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	16	811.2	0.8112	4380	3553.056	$390.8	None Proposed	16	811.2	0.8112	4380	3066	3553.056	2487.1392	Ceiling Mounted Occupancy Sensor	1	1065.9168	117.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	001	Auditorium	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$48.9	None Proposed	2	101.4	0.1014	4380	3066	444.132	310.8924	Ceiling Mounted Occupancy Sensor	1	133.2396	14.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	001	Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$5.6	None Proposed	2	101.4	0.1014	500	350	50.7	35.49	Ceiling Mounted Occupancy Sensor	1	15.21	1.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	001	Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$2.8	None Proposed	1	50.7	0.0507	500	350	25.35	17.745	Ceiling Mounted Occupancy Sensor	1	7.605	0.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	001	Boys	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$2.8	None Proposed	1	50.7	0.0507	500	350	25.35	17.745	Ceiling Mounted Occupancy Sensor	1	7.605	0.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	001	Girls	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$5.6	None Proposed	2	101.4	0.1014	500	350	50.7	35.49	Ceiling Mounted Occupancy Sensor	1	15.21	1.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	001	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	9	456.3	0.4563	8760	3997.188	$439.7	None Proposed	9	456.3	0.4563	8760	8760	3997.188	3997.188	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #14 - Interior	001	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	8760	1776.528	$195.4	None Proposed	4	202.8	0.2028	8760	8760	1776.528	1776.528	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #14 - Interior	001	Main Office	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$24.4	None Proposed	1	50.7	0.0507	4380	3066	222.066	155.4462	Ceiling Mounted Occupancy Sensor	1	66.6198	7.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	001	Mens	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$2.8	None Proposed	1	50.7	0.0507	500	350	25.35	17.745	Ceiling Mounted Occupancy Sensor	1	7.605	0.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	001	Mens	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$2.8	None Proposed	1	50.7	0.0507	500	350	25.35	17.745	Ceiling Mounted Occupancy Sensor	1	7.605	0.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	001	Mens	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$2.8	None Proposed	1	50.7	0.0507	500	350	25.35	17.745	Ceiling Mounted Occupancy Sensor	1	7.605	0.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #14 - Interior	001	Nurse	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	253.5	0.2535	4380	1110.33	$122.1	None Proposed	5	253.5	0.2535	4380	3066	1110.33	777.231	Ceiling Mounted Occupancy Sensor	1	333.099	36.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	001	Stage	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$48.9	None Proposed	2	101.4	0.1014	4380	4380	444.132	444.132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #14 - Interior	001	Womens	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$2.8	None Proposed	1	50.7	0.0507	500	350	25.35	17.745	Ceiling Mounted Occupancy Sensor	1	7.605	0.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	001	Womens	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$2.8	None Proposed	1	50.7	0.0507	500	350	25.35	17.745	Ceiling Mounted Occupancy Sensor	1	7.605	0.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	002	8	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$513.0	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Ceiling Mounted Occupancy Sensor	1	1399.0158	153.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	002	9	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$513.0	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Ceiling Mounted Occupancy Sensor	1	1399.0158	153.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	002	10	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$439.7	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Ceiling Mounted Occupancy Sensor	1	1199.1564	131.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	002	11	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$439.7	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Ceiling Mounted Occupancy Sensor	1	1199.1564	131.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	002	201	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$293.1	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Ceiling Mounted Occupancy Sensor	1	799.4376	87.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	002	205	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$97.7	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Ceiling Mounted Occupancy Sensor	1	266.4792	29.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	002	206	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$48.9	None Proposed	2	101.4	0.1014	4380	3066	444.132	310.8924	Ceiling Mounted Occupancy Sensor	1	133.2396	14.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	002	207	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$342.0	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Ceiling Mounted Occupancy Sensor	1	932.6772	102.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	002	213	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$342.0	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Ceiling Mounted Occupancy Sensor	1	932.6772	102.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	002	214	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$342.0	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Ceiling Mounted Occupancy Sensor	1	932.6772	102.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	002	219	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$342.0	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Ceiling Mounted Occupancy Sensor	1	932.6772	102.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	002	220	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$342.0	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Ceiling Mounted Occupancy Sensor	1	932.6772	102.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	002	221	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$342.0	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Ceiling Mounted Occupancy Sensor	1	932.6772	102.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	002	225	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$342.0	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Ceiling Mounted Occupancy Sensor	1	932.6772	102.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	002	226	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$513.0	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Ceiling Mounted Occupancy Sensor	1	1399.0158	153.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	002	216B	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$342.0	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Ceiling Mounted Occupancy Sensor	1	932.6772	102.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	002	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	8760	5329.584	$586.3	None Proposed	12	608.4	0.6084	8760	8760	5329.584	5329.584	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #14 - Interior	002	Mens	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$2.8	None Proposed	1	50.7	0.0507	500	350	25.35	17.745	Ceiling Mounted Occupancy Sensor	1	7.605	0.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	002	Mens	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$5.6	None Proposed	2	101.4	0.1014	500	350	50.7	35.49	Ceiling Mounted Occupancy Sensor	1	15.21	1.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	002	Mens	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$2.8	None Proposed	1	50.7	0.0507	500	350	25.35	17.745	Ceiling Mounted Occupancy Sensor	1	7.605	0.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	002	Mens	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$5.6	None Proposed	2	101.4	0.1014	500	350	50.7	35.49	Ceiling Mounted Occupancy Sensor	1	15.21	1.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	002	Office	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	4380	666.198	$73.3	None Proposed	3	152.1	0.1521	4380	3066	666.198	466.3386	Ceiling Mounted Occupancy Sensor	1	199.8594	22.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	002	Stairwell	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	8760	888.264	$97.7	None Proposed	2	101.4	0.1014	8760	8760	888.264	888.264	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #14 - Interior	002	Stairwell	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	8760	888.264	$97.7	None Proposed	2	101.4	0.1014	8760	8760	888.264	888.264	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #14 - Interior	002	Teachers	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$48.9	None Proposed	2	101.4	0.1014	4380	3066	444.132	310.8924	Ceiling Mounted Occupancy Sensor	1	133.2396	14.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	002	Womens	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$2.8	None Proposed	1	50.7	0.0507	500	350	25.35	17.745	Ceiling Mounted Occupancy Sensor	1	7.605	0.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	002	Womens	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$5.6	None Proposed	2	101.4	0.1014	500	350	50.7	35.49	Ceiling Mounted Occupancy Sensor	1	15.21	1.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	003	301	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$342.0	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Ceiling Mounted Occupancy Sensor	1	932.6772	102.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	003	305	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$342.0	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Ceiling Mounted Occupancy Sensor	1	932.6772	102.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	003	306	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$342.0	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Ceiling Mounted Occupancy Sensor	1	932.6772	102.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	003	310	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$293.1	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Ceiling Mounted Occupancy Sensor	1	799.4376	87.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	003	312	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$97.7	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Ceiling Mounted Occupancy Sensor	1	266.4792	29.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	003	313	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$342.0	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Ceiling Mounted Occupancy Sensor	1	932.6772	102.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	003	314	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$342.0	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Ceiling Mounted Occupancy Sensor	1	932.6772	102.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	003	315	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$342.0	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Ceiling Mounted Occupancy Sensor	1	932.6772	102.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	003	319	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$342.0	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Ceiling Mounted Occupancy Sensor	1	932.6772	102.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	003	320	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$342.0	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Ceiling Mounted Occupancy Sensor	1	932.6772	102.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	003	Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$5.6	None Proposed	2	101.4	0.1014	500	350	50.7	35.49	Ceiling Mounted Occupancy Sensor	1	15.21	1.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	003	Mens	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$2.8	None Proposed	1	50.7	0.0507	500	350	25.35	17.745	Ceiling Mounted Occupancy Sensor	1	7.605	0.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	003	Storage	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$2.8	None Proposed	1	50.7	0.0507	500	350	25.35	17.745	Ceiling Mounted Occupancy Sensor	1	7.605	0.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	003	Storage	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$5.6	None Proposed	2	101.4	0.1014	500	350	50.7	35.49	Ceiling Mounted Occupancy Sensor	1	15.21	1.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	003	Womens	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$2.8	None Proposed	1	50.7	0.0507	500	350	25.35	17.745	Ceiling Mounted Occupancy Sensor	1	7.605	0.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	003	Hallway	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	10	856	0.856	8760	7498.56	$824.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	10	486.4	0.4864	8760	8760	4260.864	4260.864	None Proposed	0	3237.696	356.1	$55.0	$10.0	$65.0	$0.0	$0.0	$650.0	$650.0	$1,300.0
PS #14 - Interior	001	Hallway	1x8 Fixture w/ 2-T8 Lamps w/ Electronic Ballasts	5	253.5	0.2535	8760	2220.66	$244.3	Replace T8 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	5	243.2	0.2432	8760	8760	2130.432	2130.432	None Proposed	0	90.228	9.9	$55.0	$10.0	$65.0	$0.0	$0.0	$325.0	$325.0	$650.0
PS #14 - Interior	001	Hallway	1x8 Fixture w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	8760	1776.528	$195.4	Replace T8 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	4	194.56	0.19456	8760	8760	1704.3456	1704.3456	None Proposed	0	72.1824	7.9	$55.0	$10.0	$65.0	$0.0	$0.0	$260.0	$260.0	$520.0
PS #14 - Interior	001	Nurse	2' 17W Fluorescent Fixture	1	15	0.015	4380	65.7	$7.2	None Proposed	1	15	0.015	4380	3066	65.7	45.99	Ceiling Mounted Occupancy Sensor	1	19.71	2.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #14 - Interior	002	5A	2' 17W Fluorescent Fixture	1	15	0.015	4380	65.7	$7.2	None Proposed	1	15	0.015	4380	3066	65.7	45.99	Ceiling Mounted Occupancy Sensor	1	19.71	2.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	002	Hallway	2X2 Fixtures w/ 2-T8 Lamp Fixture w/ Electronic Ballasts	5	253.5	0.2535	8760	2220.66	$244.3	Replace T8 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	5	243.2	0.2432	8760	8760	2130.432	2130.432	None Proposed	0	90.228	9.9	$15.0	$10.0	$65.0	$0.0	$0.0	$325.0	$125.0	$450.0
PS #14 - Interior	001	Main Office	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	8	896	0.896	4380	3924.48	$431.7	None Proposed	8	896	0.896	4380	3066	3924.48	2747.136	Ceiling Mounted Occupancy Sensor	1	1177.344	129.5	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	000	Storage	300W Incandescent Fixture	1	300	0.3	500	150	$16.5	Replace 300W Incandescent Fixture with 65W CFL	1	65	0.065	500	350	32.5	22.75	Ceiling Mounted Occupancy Sensor	1	127.25	14.0	$0.0	$25.0	$20.0	$103.0	$73.5	$93.5	$128.0	$221.5
PS #14 - Interior	001	Closet	300W Incandescent Fixture	1	300	0.3	500	150	$16.5	Replace 300W Incandescent Fixture with 65W CFL	1	65	0.065	500	350	32.5	22.75	Ceiling Mounted Occupancy Sensor	1	127.25	14.0	$0.0	$25.0	$20.0	$103.0	$73.5	$93.5	$128.0	$221.5
PS #14 - Interior	001	Auditorium	400W MH Fixture	27	12366	12.366	4380	54163.08	$5,957.9	None Proposed	27	12366	12.366	4380	3066	54163.08	37914.156	Ceiling Mounted Occupancy Sensor	1	16248.924	1,787.4	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #14 - Interior	001	Gym	42W CFL Fixture	20	980	0.98	4380	4292.4	$472.2	None Proposed	20	980	0.98	4380	4380	4292.4	4292.4	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #14 - Interior	001	102	60W Incandescent Fixture	1	60	0.06	4380	262.8	$28.9	Replace 60W Incandescent Fixture with 13W CFL	1	13	0.013	4380	3066	56.94	39.858	Ceiling Mounted Occupancy Sensor	1	222.942	24.5	$0.0	$5.0	$20.0	$103.0	$73.5	$93.5	$108.0	$201.5
PS #14 - Interior	001	156	60W Incandescent Fixture	1	60	0.06	4380	262.8	$28.9	Replace 60W Incandescent Fixture with 13W CFL	1	13	0.013	4380	3066	56.94	39.858	Ceiling Mounted Occupancy Sensor	1	222.942	24.5	$0.0	$5.0	$20.0	$103.0	$73.5	$93.5	$108.0	$201.5
PS #14 - Interior	002	Shop	60W Incandescent Fixture	1	60	0.06	4380	262.8	$28.9	Replace 60W Incandescent Fixture with 13W CFL	1	13	0.013	4380	3066	56.94	39.858	Ceiling Mounted Occupancy Sensor	1	222.942	24.5	$0.0	$5.0	$20.0	$103.0	$73.5	$93.5	$108.0	$201.5
PS #14 - Interior	002	Storage	60W Incandescent Fixture	2	120	0.12	500	60	$6.6	Replace 60W Incandescent Fixture with 13W CFL	2	26	0.026	500	350	13	9.1	Ceiling Mounted Occupancy Sensor	1	50.9	5.6	$0.0	$5.0	$20.0	$103.0	$73.5	$113.5	$113.0	$226.5
PS #16 - Exterior	000	Exterior	Exterior Wall Packs (Assume 70w)	5	450	0.45	4070	1831.5	$274.7	Replace 70W Fixture with 45W Induction Light Fixture	5	220	0.22	4070	4070	895.4	895.4	None Proposed	0	936.1	140.4	$0.0	$380.0	$137.0	$0.0	$0.0	$685.0	$1,900.0	$2,585.0
PS #16 - Interior	001	Auditorium	13W CFL Fixture	1	13	0.013	4380	56.94	$8.5	None Proposed	1	13	0.013	4380	3066	56.94	39.858	Ceiling Mounted Occupancy Sensor	1	17.082	2.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #16 - Interior	001	Hallway	150W Incandescent Fixture	6	900	0.9	8760	7884	$1,182.6	Replace 150W Incandescent Fixture with 25W CFL	6	150	0.15	8760	8760	1314	1314	None Proposed	0	6570	985.5	$0.0	$7.0	$20.0	$0.0	$0.0	$120.0	$42.0	$162.0
PS #16 - Interior	001	Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$3.8	None Proposed	1	50.7	0.0507	500	350	25.35	17.745	Ceiling Mounted Occupancy Sensor	1	7.605	1.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #16 - Interior	001	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	8760	1332.396	$199.9	None Proposed	3	152.1	0.1521	8760	8760	1332.396	1332.396	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #16 - Interior	001	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	405.6	0.4056	8760	3553.056	$533.0	None Proposed	8	405.6	0.4056	8760	8760	3553.056	3553.056	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #16 - Interior	001	Mens Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	500	101.4	$15.2	None Proposed	4	202.8	0.2028	500	350	101.4	70.98	Ceiling Mounted Occupancy Sensor	1	30.42	4.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #16 - Interior	001	Shower	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	4380	1332.396	$199.9	None Proposed	6	304.2	0.3042	4380	3066	1332.396	932.6772	Ceiling Mounted Occupancy Sensor	1	399.7188	60.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #16 - Interior	001	Stage	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$66.6	None Proposed	2	101.4	0.1014	4380	4380	444.132	444.132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #16 - Interior	001	Stage	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$33.3	None Proposed	1	50.7	0.0507	4380	4380	222.066	222.066	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #16 - Interior	001	Stairwell	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	8760	888.264	$133.2	None Proposed	2	101.4	0.1014	8760	8760	888.264	888.264	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #16 - Interior	001	Stairwell	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	8760	444.132	$66.6	None Proposed	1	50.7	0.0507	8760	8760	444.132	444.132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #16 - Interior	001	Stairwell	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	8760	888.264	$133.2	None Proposed	2	101.4	0.1014	8760	8760	888.264	888.264	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #16 - Interior	001	Stairwell	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	8760	444.132	$66.6	None Proposed	1	50.7	0.0507	8760	8760	444.132	444.132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #16 - Interior	001	Womens Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	500	101.4	$15.2	None Proposed	4	202.8	0.2028	500	350	101.4	70.98	Ceiling Mounted Occupancy Sensor	1	30.42	4.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #16 - Interior	002	201	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$66.6	None Proposed	2	101.4	0.1014	4380	3066	444.132	310.8924	Ceiling Mounted Occupancy Sensor	1	133.2396	20.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #16 - Interior	002	Stairwell	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	8760	888.264	$133.2	None Proposed	2	101.4	0.1014	8760	8760	888.264	888.264	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #16 - Interior	002	Teachers Lounge	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	7	354.9	0.3549	4380	1554.462	$233.2	None Proposed	7	354.9	0.3549	4380	3066	1554.462	1088.1234	Ceiling Mounted Occupancy Sensor	1	466.3386	70.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #16 - Interior	003	Computer Lab	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	63	3194.1	3.1941	4380	13990.158	$2,098.5	None Proposed	63	3194.1	3.1941	4380	3066	13990.158	9793.1106	Ceiling Mounted Occupancy Sensor	1	4197.0474	629.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #16 - Interior	001	Bulk Room	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$56.2	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	33.9	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #16 - Interior	001	Cafeteria	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	10	856	0.856	4380	3749.28	$562.4	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	10	486.4	0.4864	4380	3066	2130.432	1491.3024	Ceiling Mounted Occupancy Sensor	1	2257.9776	338.7	$55.0	$10.0	$65.0	$103.0	$73.5	$723.5	$753.0	$1,476.5
PS #16 - Interior	001	Gym	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	13	1112.8	1.1128	4380	4874.064	$731.1	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	13	632.32	0.63232	4380	4380	2769.5616	2769.5616	None Proposed	0	2104.5024	315.7	$55.0	$10.0	$65.0	$0.0	$0.0	$845.0	$845.0	$1,690.0
PS #16 - Interior	001	Maintenance Room	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	2	171.2	0.1712	4380	749.856	$112.5	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	2	97.28	0.09728	4380	3066	426.0864	298.26048	Ceiling Mounted Occupancy Sensor	1	451.59552	67.7	$55.0	$10.0	$65.0	$103.0	$73.5	$203.5	$233.0	$436.5
PS #16 - Interior	001	Pool	400W MH High Bay Fixture	7	3206	3.206	4380	14042.28	$2,106.3	Replace 400W Fixture with 250W Induction Light Fixture	7	1505	1.505	4380	3066	6591.9	4614.33	Ceiling Mounted Occupancy Sensor	1	9427.95	1,414.2	$0.0	$485.0	$137.0	$103.0	$73.5	$1,032.5	$3,498.0	$4,530.5
PS #16 - Interior	002	Hallway	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	11	557.7	0.5577	8760	4885.452	$732.8	None Proposed	11	557.7	0.5577	8760	8760	4885.452	4885.452	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #16 - Interior	001	101	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Ceiling Mounted Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #16 - Interior	001	102	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Ceiling Mounted Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #16 - Interior	001	103	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Ceiling Mounted Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #16 - Interior	001	104	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Ceiling Mounted Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #16 - Interior	001	105	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Ceiling Mounted Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #16 - Interior	001	Main Office	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	10	1120	1.12	4380	4905.6	$735.8	None Proposed	10	1120	1.12	4380	3066	4905.6	3433.92	Ceiling Mounted Occupancy Sensor	1	1471.68	220.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #16 - Interior	001	Stairwell	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	1	112	0.112	8760	981.12	$147.2	None Proposed	1	112	0.112	8760	8760	981.12	981.12	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #16 - Interior	002	201	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Ceiling Mounted Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #16 - Interior	002	202	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Ceiling Mounted Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #16 - Interior	002	203	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Ceiling Mounted Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #16 - Interior	002	203	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	4380	981.12	$147.2	None Proposed	2	224	0.224	4380	3066	981.12	686.784	Ceiling Mounted Occupancy Sensor	1	294.336	44.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #16 - Interior	002	204	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Ceiling Mounted Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #16 - Interior	002	205	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Ceiling Mounted Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #16 - Interior	002	Bathroom	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	448	0.448	500	224	$33.6	None Proposed	4	448	0.448	500	350	224	156.8	Ceiling Mounted Occupancy Sensor	1	67.2	10.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #16 - Interior	002	Office	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	4380	981.12	$147.2	None Proposed	2	224	0.224	4380	3066	981.12	686.784	Ceiling Mounted Occupancy Sensor	1	294.336	44.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #16 - Interior	002	Office	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	4380	981.12	$147.2	None Proposed	2	224	0.224	4380	3066	981.12	686.784	Ceiling Mounted Occupancy Sensor	1	294.336	44.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #16 - Interior	002	Teachers Lounge	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$441.5	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Ceiling Mounted Occupancy Sensor	1	883.008	132.5	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #16 - Interior	003	301	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Ceiling Mounted Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #16 - Interior	003	305	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Ceiling Mounted Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #16 - Interior	003	306	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Ceiling Mounted Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #16 - Interior	003	308	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	4380	981.12	$147.2	None Proposed	2	224	0.224	4380	3066	981.12	686.784	Ceiling Mounted Occupancy Sensor	1	294.336	44.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #16 - Interior	003	308	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Ceiling Mounted Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #16 - Interior	003	308	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	8	896	0.896	4380	3924.48	$588.7	None Proposed	8	896	0.896	4380	3066	3924.48	2747.136	Ceiling Mounted Occupancy Sensor	1	1177.344	176.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #16 - Interior	003	Cafeteria	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	448	0.448	4380	1962.24	$294.3	None Proposed	4	448	0.448	4380	3066	1962.24	1373.568	Ceiling Mounted Occupancy Sensor	1	588.672	88.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #16 - Interior	003	Office	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	4380	981.12	$147.2	None Proposed	2	224	0.224	4380	3066	981.12	686.784	Ceiling Mounted Occupancy Sensor	1	294.336	44.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #16 - Interior	003	Special Ed	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	5	560	0.56	4380	2452.8	$367.9	None Proposed	5	560	0.56	4380	3066	2452.8	1716.96	Ceiling Mounted Occupancy Sensor	1	735.84	110.4	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #16 - Interior	002	Balcony	60W Incandescent Fixture	4	240	0.24	4380	1051.2	$157.7	Replace 60W Incandescent Fixture with 13W CFL	4	52	0.052	4380	3066	227.76	159.432	Ceiling Mounted Occupancy Sensor	1	891.768	133.8	$0.0	$5.0	$20.0	$103.0	$73.5	$153.5	$123.0	$276.5
PS #22 - Exterior	394	Exterior	Exterior Wall Packs (Assume 70w)	20	1800	1.8	4380	7884	$1,261.4	Replace 70W Fixture with 45W Induction Light Fixture	20	880	0.88	4380	4380	3854.4	3854.4	None Proposed	0	4029.6	644.7	$0.0	$380.0	$137.0	$0.0	$0.0	$2,740.0	$7,600.0	$10,340.0
PS #22 - Interior	000	Pool Area	1x4 Fixtures w/ 1-T12 Lamp Fixture w/ Magnetic Ballast	2	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	2	48.64	0.04864	4380	4380	213.0432	213.0432	None Proposed	0	161.8848	25.9	$35.0	$5.0	$65.0	$0.0	$0.0	$130.0	$80.0	$210.0
PS #22 - Interior	001	Lounge	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	171.2	0.1712	4380	749.856	$120.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	2	97.2	0.0972	4380	3066	425.736	298.0152	Ceiling Mounted Occupancy Sensor	1	451.8408	72.3	$70.0	$10.0	$65.0	$103.0	$73.5	$203.5	$263.0	$466.5
PS #22 - Interior	001	Music	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	171.2	0.1712	4380	749.856	$120.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	2	97.2	0.0972	4380	3066	425.736	298.0152	Ceiling Mounted Occupancy Sensor	1	451.8408	72.3	$70.0	$10.0	$65.0	$103.0	$73.5	$203.5	$263.0	$466.5
PS #22 - Interior	001	Storage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	171.2	0.1712	500	85.6	$13.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	2	97.2	0.0972	500	350	48.6	34.02	Ceiling Mounted Occupancy Sensor	1	51.58	8.3	$70.0	$10.0	$65.0	$103.0	$73.5	$203.5	$263.0	$466.5
PS #22 - Interior	001	Store Room	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	171.2	0.1712	500	85.6	$13.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	2	97.2	0.0972	500	350	48.6	34.02	Ceiling Mounted Occupancy Sensor	1	51.58	8.3	$70.0	$10.0	$65.0	$103.0	$73.5	$203.5	$263.0	$466.5
PS #22 - Interior	002	219	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	1027.2	1.0272	4380	4499.136	$719.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	583.2	0.5832	4380	3066	2554.416	1788.0912	Ceiling Mounted Occupancy Sensor	1	2711.0448	433.8	$70.0	$10.0	$65.0	$103.0	$73.5	$853.5	$1,063.0	$1,916.5
PS #22 - Interior	002	Boys	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	3	256.8	0.2568	500	128.4	$20.5	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	3	145.8	0.1458	500	350	72.9	51.03	Ceiling Mounted Occupancy Sensor	1	77.37	12.4	$70.0	$10.0	$65.0	$103.0	$73.5	$268.5	$343.0	$611.5
PS #22 - Interior	002	Hallway	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	10	856	0.856	8760	7498.56	$1,199.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	10	486	0.486	8760	8760	4257.36	4257.36	None Proposed	0	3241.2	518.6	$70.0	$10.0	$65.0	$0.0	$0.0	$650.0	$800.0	$1,450.0
PS #22 - Interior	002	Hallway	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	342.4	0.3424	8760	2999.424	$479.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	4	194.4	0.1944	8760	8760	1702.944	1702.944	None Proposed	0	1296.48	207.4	$70.0	$10.0	$65.0	$0.0	$0.0	$260.0	$320.0	$580.0
PS #22 - Interior	002	Storage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	171.2	0.1712	500	85.6	$13.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	2	97.2	0.0972	500	350	48.6	34.02	Ceiling Mounted Occupancy Sensor	1	51.58	8.3	$70.0	$10.0	$65.0	$103.0	$73.5	$203.5	$263.0	$466.5
PS #22 - Interior	003	302	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.6	0.0486	4380	3066	212.868	149.0076	Ceiling Mounted Occupancy Sensor	1	225.9204	36.1	$70.0	$10.0	$65.0	$103.0	$73.5	$138.5	$183.0	$321.5
PS #22 - Interior	003	304	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.6	0.0486	4380	3066	212.868	149.0076	Ceiling Mounted Occupancy Sensor	1	225.9204	36.1	$70.0	$10.0	$65.0	$103.0	$73.5	$138.5	$183.0	$321.5
PS #22 - Interior	003	Girls	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	5	428	0.428	500	214	$34.2	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	5	243	0.243	500	350	121.5	85.05	Ceiling Mounted Occupancy Sensor	1	128.95	20.6	$70.0	$10.0	$65.0	$103.0	$73.5	$398.5	$503.0	$901.5
PS #22 - Interior	003	Girls	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	3	256.8	0.2568	500	128.4	$20.5	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	3	145.8	0.1458	500	350	72.9	51.03	Ceiling Mounted Occupancy Sensor	1	77.37	12.4	$70.0	$10.0	$65.0	$103.0	$73.5	$268.5	$343.0	$611.5
PS #22 - Interior	003	Office	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	342.4	0.3424	4380	1499.712	$240.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	4	194.4	0.1944	4380	3066	851.472	596.0304	Ceiling Mounted Occupancy Sensor	1	903.6816	144.6	$70.0	$10.0	$65.0	$103.0	$73.5	$333.5	$423.0	$756.5
PS #22 - Interior	003	Office	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.6	0.0486	4380	3066	212.868	149.0076	Ceiling Mounted Occupancy Sensor	1	225.9204	36.1	$70.0	$10.0	$65.0	$103.0	$73.5	$138.5	$183.0	$321.5
PS #22 - Interior	003	Speech	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	171.2	0.1712	4380	749.856	$120.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	2	97.2	0.0972	4380	3066	425.736	298.0152	Ceiling Mounted Occupancy Sensor	1	451.8408	72.3	$70.0	$10.0	$65.0	$103.0	$73.5	$203.5	$263.0	$466.5
PS #22 - Interior	003	Stairwell	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	8	684.8	0.6848	8760	5998.848	$959.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	8	388.8	0.3888	8760	8760	3405.888	3405.888	None Proposed	0	2592.96	414.9	$70.0	$10.0	$65.0	$0.0	$0.0	$520.0	$640.0	$1,160.0
PS #22 - Interior	003	Teacher Lounge	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	342.4	0.3424	4380	1499.712	$240.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	4	194.4	0.1944	4380	3066	851.472	596.0304	Ceiling Mounted Occupancy Sensor	1	903.6816	144.6	$70.0	$10.0	$65.0	$103.0	$73.5	$333.5	$423.0	$756.5
PS #22 - Interior	003	Boiler Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	13	659.1	0.6591	500	329.55	$52.7	None Proposed	13	659.1	0.6591	500	350	329.55	230.685	Ceiling Mounted Occupancy Sensor	1	98.865	15.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #22 - Interior	000	Hallway	1x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	3	385.2	0.3852	8760	3374.352	$539.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	3	219	0.219	8760	8760	1918.44	1918.44	None Proposed	0	1455.912	232.9	$85.0	$15.0	$65.0	$0.0	$0.0	$195.0	$300.0	$495.0
PS #22 - Interior	000	Locker Room	1x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	4	513.6	0.5136	4380	2249.568	$359.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	4	292	0.292	4380	3066	1278.96	895.272	Ceiling Mounted Occupancy Sensor	1	1354.296	216.7	$85.0	$15.0	$65.0	$103.0	$73.5	$333.5	$503.0	$836.5
PS #22 - Interior	000	Pool Area	1x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	4	513.6	0.5136	4380	2249.568	$359.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	4	292	0.292	4380	4380	1278.96	1278.96	None Proposed	0	970.608	155.3	$85.0	$15.0	$65.0	$0.0	$0.0	$260.0	$400.0	$660.0
PS #22 - Interior	003	Boys Room	1x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	3	385.2	0.3852	500	192.6	$30.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	3	219	0.219	500	350	109.5	76.65	Ceiling Mounted Occupancy Sensor	1	115.95	18.6	$85.0	$15.0	$65.0	$103.0	$73.5	$268.5	$403.0	$671.5
PS #22 - Interior	000	Cafeteria	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	17	1455.2	1.4552	4380	6373.776	$1,019.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	17	826.88	0.82688	4380	3066	3621.7344	2535.21408	Ceiling Mounted Occupancy Sensor	1	3838.56192	614.2	$55.0	$10.0	$65.0	$103.0	$73.5	$1,178.5	$1,208.0	$2,386.5
PS #22 - Interior	000	Electrical Room	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	3	256.8	0.2568	500	128.4	$20.5	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	3	145.92	0.14592	500	350	72.96	51.072	Ceiling Mounted Occupancy Sensor	1	77.328	12.4	$55.0	$10.0	$65.0	$103.0	$73.5	$268.5	$298.0	$566.5
PS #22 - Interior	000	Girls	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	2	171.2	0.1712	500	85.6	$13.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	2	97.28	0.09728	500	350	48.64	34.048	Ceiling Mounted Occupancy Sensor	1	51.552	8.2	$55.0	$10.0	$65.0	$103.0	$73.5	$203.5	$233.0	$436.5
PS #22 - Interior	000	Hallway	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	3	256.8	0.2568	8760	2249.568	$359.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	3	145.92	0.14592	8760	8760	1278.2592	1278.2592	None Proposed	0	971.3088	155.4	$55.0	$10.0	$65.0	$0.0	$0.0	$195.0	$195.0	$390.0
PS #22 - Interior	000	Locker Room	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	4	342.4	0.3424	4380	1499.712	$240.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	4	194.56	0.19456	4380	3066	852.1728	596.52096	Ceiling Mounted Occupancy Sensor	1	903.19104	144.5	$55.0	$10.0	$65.0	$103.0	$73.5	$333.5	$363.0	$696.5
PS #22 - Interior	000	Shower	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #22 - Interior	000	Storage	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	3	256.8	0.2568	500	128.4	$20.5	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	3	145.92	0.14592	500	350	72.96	51.072	Ceiling Mounted Occupancy Sensor	1	77.328	12.4	$55.0	$10.0	$65.0	$103.0	$73.5	$268.5	$298.0	$566.5
PS #22 - Interior	001	101	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #22 - Interior	001	102	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #22 - Interior	001	103	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #22 - Interior	001	106	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	14	1198.4	1.1984	4380	5248.992	$839.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	14	680.96	0.68096	4380	3066	2982.6048	2087.82336	Ceiling Mounted Occupancy Sensor	1	3161.16864	505.8	$55.0	$10.0	$65.0	$103.0	$73.5	$983.5	$1,013.0	$1,996.5
PS #22 - Interior	001	108	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #22 - Interior	001	114	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #22 - Interior	001	123C	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #22 - Interior	001	Auditorium	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	6	513.6	0.5136	4380	2249.568	$359.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	6	291.84	0.29184	4380	3066	1278.2592	894.78144	Ceiling Mounted Occupancy Sensor	1	1354.78656	216.8	$55.0	$10.0	$65.0	$103.0	$73.5	$463.5	$493.0	$956.5
PS #22 - Interior	001	Stage	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	6	513.6	0.5136	4380	2249.568	$359.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	6	291.84	0.29184	4380	4380	1278.2592	1278.2592	None Proposed	0	971.3088	155.4	$55.0	$10.0	$65.0	$0.0	$0.0	$390.0	$390.0	$780.0
PS #22 - Interior	002	207	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #22 - Interior	002	214	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #22 - Interior	002	215	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #22 - Interior	002	216	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #22 - Interior	002	217	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #22 - Interior	002	218	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #22 - Interior	002	219	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #22 - Interior	002	222	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #22 - Interior	002	206C	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #22 - Interior	002	206C	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #22 - Interior	002	206C	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #22 - Interior	002	210C	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #22 - Interior	002	Girls	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	2	171.2	0.1712	500	85.6	$13.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	2	97.28	0.09728	500	350	48.64	34.048	Ceiling Mounted Occupancy Sensor	1	51.552	8.2	$55.0	$10.0	$65.0	$103.0	$73.5	$203.5	$233.0	$436.5
PS #22 - Interior	003	302	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #22 - Interior	003	304	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #22 - Interior	003	304	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #22 - Interior	003	305	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #22 - Interior	003	306	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #22 - Interior	003	307	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #22 - Interior	003	308	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #22 - Interior	003	309	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #22 - Interior	003	311	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #22 - Interior	003	312	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #22 - Interior	003	313	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #22 - Interior	003	314	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #22 - Interior	003	315	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #22 - Interior	003	316	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #22 - Interior	003	317	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #22 - Interior	003	321	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #22 - Interior	003	322	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #22 - Interior	003	323	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #22 - Interior	003	303C	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #22 - Interior	003	Office	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	36.1	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
PS #22 - Interior	002	220	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	1027.2	1.0272	4380	4499.136	$719.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Ceiling Mounted Occupancy Sensor	1	2633.7816	421.4	$70.0	$10.0	$65.0	$103.0	$73.5	$853.5	$1,063.0	$1,916.5
PS #22 - Interior	002	222	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	16	1369.6	1.3696	4380	5998.848	$959.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	16	811.2	0.8112	4380	3066	3553.056	2487.1392	Ceiling Mounted Occupancy Sensor	1	3511.7088	561.9	$70.0	$10.0	$65.0	$103.0	$73.5	$1,113.5	$1,383.0	$2,496.5
PS #22 - Interior	002	Hallway	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	8760	749.856	$120.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	50.7	0.0507	8760	8760	444.132	444.132	None Proposed	0	305.724	48.9	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0
PS #22 - Interior	000	107	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	1027.2	1.0272	4380	4499.136	$719.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	583.2	0.5832	4380	3066	2554.416	1788.0912	Ceiling Mounted Occupancy Sensor	1	2711.0448	433.8	$70.0	$10.0	$65.0	$103.0	$73.5	$853.5	$1,063.0	$1,916.5
PS #22 - Interior	001	118	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.6	0.0486	4380	3066	212.868	149.0076	Ceiling Mounted Occupancy Sensor	1	225.9204	36.1	$70.0	$10.0	$65.0	$103.0	$73.5	$138.5	$183.0	$321.5
PS #22 - Interior	002	210	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	1027.2	1.0272	4380	4499.136	$719.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	583.2	0.5832	4380	3066	2554.416	1788.0912	Ceiling Mounted Occupancy Sensor	1	2711.0448	433.8	$70.0	$10.0	$65.0	$103.0	$73.5	$853.5	$1,063.0	$1,916.5
PS #22 - Interior	002	211	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.6	0.0486	4380	3066	212.868	149.0076	Ceiling Mounted Occupancy Sensor	1	225.9204	36.1	$70.0	$10.0	$65.0	$103.0	$73.5	$138.5	$183.0	$321.5
PS #22 - Interior	002	211C	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	1027.2	1.0272	4380	4499.136	$719.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	583.2	0.5832	4380	3066	2554.416	1788.0912	Ceiling Mounted Occupancy Sensor	1	2711.0448	433.8	$70.0	$10.0	$65.0	$103.0	$73.5	$853.5	$1,063.0	$1,916.5
PS #22 - Interior	003	3	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	4380	374.928	$60.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.6	0.0486	4380	3066	212.868	149.0076	Ceiling Mounted Occupancy Sensor	1	225.9204	36.1	$70.0	$10.0	$65.0	$103.0	$73.5	$138.5	$183.0	$321.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #22 - Interior	003	301	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	1027.2	1.0272	4380	4499.136	$719.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	583.2	0.5832	4380	3066	2554.416	1788.0912	Ceiling Mounted Occupancy Sensor	1	2711.0448	433.8	$70.0	$10.0	$65.0	$103.0	$73.5	$853.5	$1,063.0	$1,916.5
PS #22 - Interior	003	302	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	1027.2	1.0272	4380	4499.136	$719.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	583.2	0.5832	4380	3066	2554.416	1788.0912	Ceiling Mounted Occupancy Sensor	1	2711.0448	433.8	$70.0	$10.0	$65.0	$103.0	$73.5	$853.5	$1,063.0	$1,916.5
PS #22 - Interior	003	303	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	16	1369.6	1.3696	4380	5998.848	$959.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	16	777.6	0.7776	4380	3066	3405.888	2384.1216	Ceiling Mounted Occupancy Sensor	1	3614.7264	578.4	$70.0	$10.0	$65.0	$103.0	$73.5	$1,113.5	$1,383.0	$2,496.5
PS #22 - Interior	003	304	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	1027.2	1.0272	4380	4499.136	$719.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	583.2	0.5832	4380	3066	2554.416	1788.0912	Ceiling Mounted Occupancy Sensor	1	2711.0448	433.8	$70.0	$10.0	$65.0	$103.0	$73.5	$853.5	$1,063.0	$1,916.5
PS #22 - Interior	003	304	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	1027.2	1.0272	4380	4499.136	$719.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	583.2	0.5832	4380	3066	2554.416	1788.0912	Ceiling Mounted Occupancy Sensor	1	2711.0448	433.8	$70.0	$10.0	$65.0	$103.0	$73.5	$853.5	$1,063.0	$1,916.5
PS #22 - Interior	003	305	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	1027.2	1.0272	4380	4499.136	$719.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	583.2	0.5832	4380	3066	2554.416	1788.0912	Ceiling Mounted Occupancy Sensor	1	2711.0448	433.8	$70.0	$10.0	$65.0	$103.0	$73.5	$853.5	$1,063.0	$1,916.5
PS #22 - Interior	003	306	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	1027.2	1.0272	4380	4499.136	$719.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	583.2	0.5832	4380	3066	2554.416	1788.0912	Ceiling Mounted Occupancy Sensor	1	2711.0448	433.8	$70.0	$10.0	$65.0	$103.0	$73.5	$853.5	$1,063.0	$1,916.5
PS #22 - Interior	003	307	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	1027.2	1.0272	4380	4499.136	$719.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	583.2	0.5832	4380	3066	2554.416	1788.0912	Ceiling Mounted Occupancy Sensor	1	2711.0448	433.8	$70.0	$10.0	$65.0	$103.0	$73.5	$853.5	$1,063.0	$1,916.5
PS #22 - Interior	003	309	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	16	1369.6	1.3696	4380	5998.848	$959.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	16	777.6	0.7776	4380	3066	3405.888	2384.1216	Ceiling Mounted Occupancy Sensor	1	3614.7264	578.4	$70.0	$10.0	$65.0	$103.0	$73.5	$1,113.5	$1,383.0	$2,496.5
PS #22 - Interior	003	321	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	16	1369.6	1.3696	4380	5998.848	$959.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	16	777.6	0.7776	4380	3066	3405.888	2384.1216	Ceiling Mounted Occupancy Sensor	1	3614.7264	578.4	$70.0	$10.0	$65.0	$103.0	$73.5	$1,113.5	$1,383.0	$2,496.5
PS #22 - Interior	003	322	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	16	1369.6	1.3696	4380	5998.848	$959.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	16	777.6	0.7776	4380	3066	3405.888	2384.1216	Ceiling Mounted Occupancy Sensor	1	3614.7264	578.4	$70.0	$10.0	$65.0	$103.0	$73.5	$1,113.5	$1,383.0	$2,496.5
PS #22 - Interior	003	323	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	1027.2	1.0272	4380	4499.136	$719.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	583.2	0.5832	4380	3066	2554.416	1788.0912	Ceiling Mounted Occupancy Sensor	1	2711.0448	433.8	$70.0	$10.0	$65.0	$103.0	$73.5	$853.5	$1,063.0	$1,916.5
PS #22 - Interior	003	Hallway	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	26	2225.6	2.2256	8760	19496.256	$3,119.4	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	26	1263.6	1.2636	8760	8760	11069.136	11069.136	None Proposed	0	8427.12	1,348.3	$70.0	$10.0	$65.0	$0.0	$0.0	$1,690.0	$2,080.0	$3,770.0
PS #22 - Interior	003	Hallway	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	15	1284	1.284	8760	11247.84	$1,799.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	15	729	0.729	8760	8760	6386.04	6386.04	None Proposed	0	4861.8	777.9	$70.0	$10.0	$65.0	$0.0	$0.0	$975.0	$1,200.0	$2,175.0
PS #22 - Interior	003	Office	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	8	684.8	0.6848	4380	2999.424	$479.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	8	388.8	0.3888	4380	3066	1702.944	1192.0608	Ceiling Mounted Occupancy Sensor	1	1807.3632	289.2	$70.0	$10.0	$65.0	$103.0	$73.5	$593.5	$743.0	$1,336.5
PS #22 - Interior	003	P. Brown	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	10	856	0.856	4380	3749.28	$599.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	10	486	0.486	4380	3066	2128.68	1490.076	Ceiling Mounted Occupancy Sensor	1	2259.204	361.5	$70.0	$10.0	$65.0	$103.0	$73.5	$723.5	$903.0	$1,626.5
PS #22 - Interior	003	Teacher Lounge	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	17	1455.2	1.4552	4380	6373.776	$1,019.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	17	826.2	0.8262	4380	3066	3618.756	2533.1292	Ceiling Mounted Occupancy Sensor	1	3840.6468	614.5	$70.0	$10.0	$65.0	$103.0	$73.5	$1,178.5	$1,463.0	$2,641.5
PS #22 - Interior	003	Hallway	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	16	811.2	0.8112	8760	7106.112	$1,137.0	None Proposed	16	811.2	0.8112	8760	8760	7106.112	7106.112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #22 - Interior	000	Hallway	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	16	2739.2	2.7392	8760	23995.392	$3,839.3	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	16	1556.8	1.5568	8760	8760	13637.568	13637.568	None Proposed	0	10357.824	1,657.3	$105.0	$20.0	$65.0	$0.0	$0.0	$1,040.0	$2,000.0	$3,040.0
PS #22 - Interior	001	101	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,439.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	866.9	$105.0	$20.0	$65.0	$103.0	$73.5	$853.5	$1,603.0	$2,456.5
PS #22 - Interior	001	102	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,439.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	866.9	$105.0	$20.0	$65.0	$103.0	$73.5	$853.5	$1,603.0	$2,456.5
PS #22 - Interior	001	103	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	10	1712	1.712	4380	7498.56	$1,199.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	10	973	0.973	4380	3066	4261.74	2983.218	Ceiling Mounted Occupancy Sensor	1	4515.342	722.5	$105.0	$20.0	$65.0	$103.0	$73.5	$723.5	$1,353.0	$2,076.5
PS #22 - Interior	001	105	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,439.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	866.9	$105.0	$20.0	$65.0	$103.0	$73.5	$853.5	$1,603.0	$2,456.5
PS #22 - Interior	001	108	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	16	2739.2	2.7392	4380	11997.696	$1,919.6	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	16	1556.8	1.5568	4380	3066	6818.784	4773.1488	Ceiling Mounted Occupancy Sensor	1	7224.5472	1,155.9	$105.0	$20.0	$65.0	$103.0	$73.5	$1,113.5	$2,103.0	$3,216.5
PS #22 - Interior	001	109	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,439.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	866.9	$105.0	$20.0	$65.0	$103.0	$73.5	$853.5	$1,603.0	$2,456.5
PS #22 - Interior	001	110	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,439.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	866.9	$105.0	$20.0	$65.0	$103.0	$73.5	$853.5	$1,603.0	$2,456.5
PS #22 - Interior	001	111	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,439.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	866.9	$105.0	$20.0	$65.0	$103.0	$73.5	$853.5	$1,603.0	$2,456.5
PS #22 - Interior	001	114	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,439.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	866.9	$105.0	$20.0	$65.0	$103.0	$73.5	$853.5	$1,603.0	$2,456.5
PS #22 - Interior	001	116	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,439.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	866.9	$105.0	$20.0	$65.0	$103.0	$73.5	$853.5	$1,603.0	$2,456.5
PS #22 - Interior	001	117	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	16	2739.2	2.7392	4380	11997.696	$1,919.6	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	16	1556.8	1.5568	4380	3066	6818.784	4773.1488	Ceiling Mounted Occupancy Sensor	1	7224.5472	1,155.9	$105.0	$20.0	$65.0	$103.0	$73.5	$1,113.5	$2,103.0	$3,216.5
PS #22 - Interior	001	118	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,439.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	866.9	$105.0	$20.0	$65.0	$103.0	$73.5	$853.5	$1,603.0	$2,456.5
PS #22 - Interior	001	118	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,439.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	866.9	$105.0	$20.0	$65.0	$103.0	$73.5	$853.5	$1,603.0	$2,456.5
PS #22 - Interior	001	119	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,439.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	866.9	$105.0	$20.0	$65.0	$103.0	$73.5	$853.5	$1,603.0	$2,456.5
PS #22 - Interior	001	120	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	16	2739.2	2.7392	4380	11997.696	$1,919.6	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	16	1556.8	1.5568	4380	3066	6818.784	4773.1488	Ceiling Mounted Occupancy Sensor	1	7224.5472	1,155.9	$105.0	$20.0	$65.0	$103.0	$73.5	$1,113.5	$2,103.0	$3,216.5
PS #22 - Interior	001	121	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	16	2739.2	2.7392	4380	11997.696	$1,919.6	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	16	1556.8	1.5568	4380	3066	6818.784	4773.1488	Ceiling Mounted Occupancy Sensor	1	7224.5472	1,155.9	$105.0	$20.0	$65.0	$103.0	$73.5	$1,113.5	$2,103.0	$3,216.5
PS #22 - Interior	001	122	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,439.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	866.9	$105.0	$20.0	$65.0	$103.0	$73.5	$853.5	$1,603.0	$2,456.5
PS #22 - Interior	001	123	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,439.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	866.9	$105.0	$20.0	$65.0	$103.0	$73.5	$853.5	$1,603.0	$2,456.5
PS #22 - Interior	001	Hallway	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	8760	17996.544	$2,879.4	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	8760	8760	10228.176	10228.176	None Proposed	0	7768.368	1,242.9	$105.0	$20.0	$65.0	$0.0	$0.0	$780.0	$1,500.0	$2,280.0
PS #22 - Interior	001	Hallway	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	7	1198.4	1.1984	8760	10497.984	$1,679.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	7	681.1	0.6811	8760	8760	5966.436	5966.436	None Proposed	0	4531.548	725.0	$105.0	$20.0	$65.0	$0.0	$0.0	$455.0	$875.0	$1,330.0
PS #22 - Interior	001	Main Office	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	13	2225.6	2.2256	4380	9748.128	$1,559.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	13	1264.9	1.2649	4380	3066	5540.262	3878.1834	Ceiling Mounted Occupancy Sensor	1	5869.9446	939.2	$105.0	$20.0	$65.0	$103.0	$73.5	$918.5	$1,728.0	$2,646.5
PS #22 - Interior	002	204	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	10	1712	1.712	4380	7498.56	$1,199.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	10	973	0.973	4380	3066	4261.74	2983.218	Ceiling Mounted Occupancy Sensor	1	4515.342	722.5	$105.0	$20.0	$65.0	$103.0	$73.5	$723.5	$1,353.0	$2,076.5
PS #22 - Interior	002	206	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,439.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	866.9	$105.0	$20.0	$65.0	$103.0	$73.5	$853.5	$1,603.0	$2,456.5
PS #22 - Interior	002	207	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	10	1712	1.712	4380	7498.56	$1,199.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	10	973	0.973	4380	3066	4261.74	2983.218	Ceiling Mounted Occupancy Sensor	1	4515.342	722.5	$105.0	$20.0	$65.0	$103.0	$73.5	$723.5	$1,353.0	$2,076.5
PS #22 - Interior	002	208	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	16	2739.2	2.7392	4380	11997.696	$1,919.6	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	16	1556.8	1.5568	4380	3066	6818.784	4773.1488	Ceiling Mounted Occupancy Sensor	1	7224.5472	1,155.9	$105.0	$20.0	$65.0	$103.0	$73.5	$1,113.5	$2,103.0	$3,216.5
PS #22 - Interior	002	209	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	17	2910.4	2.9104	4380	12747.552	$2,039.6	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	17	1654.1	1.6541	4380	3066	7244.958	5071.4706	Ceiling Mounted Occupancy Sensor	1	7676.0814	1,228.2	$105.0	$20.0	$65.0	$103.0	$73.5	$1,178.5	$2,228.0	$3,406.5
PS #22 - Interior	002	214	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,439.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	866.9	$105.0	$20.0	$65.0	$103.0	$73.5	$853.5	$1,603.0	$2,456.5
PS #22 - Interior	002	215	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	16	2739.2	2.7392	4380	11997.696	$1,919.6	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	16	1556.8	1.5568	4380	3066	6818.784	4773.1488	Ceiling Mounted Occupancy Sensor	1	7224.5472	1,155.9	$105.0	$20.0	$65.0	$103.0	$73.5	$1,113.5	$2,103.0	$3,216.5
PS #22 - Interior	002	216	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	16	2739.2	2.7392	4380	11997.696	$1,919.6	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	16	1556.8	1.5568	4380	3066	6818.784	4773.1488	Ceiling Mounted Occupancy Sensor	1	7224.5472	1,155.9	$105.0	$20.0	$65.0	$103.0	$73.5	$1,113.5	$2,103.0	$3,216.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #22 - Interior	002	217	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	16	2739.2	2.7392	4380	11997.696	$1,919.6	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	16	1556.8	1.5568	4380	3066	6818.784	4773.1488	Ceiling Mounted Occupancy Sensor	1	7224.5472	1,155.9	$105.0	$20.0	$65.0	$103.0	$73.5	$1,113.5	$2,103.0	$3,216.5
PS #22 - Interior	002	218	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,439.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	866.9	$105.0	$20.0	$65.0	$103.0	$73.5	$853.5	$1,603.0	$2,456.5
PS #22 - Interior	002	222	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,439.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	866.9	$105.0	$20.0	$65.0	$103.0	$73.5	$853.5	$1,603.0	$2,456.5
PS #22 - Interior	002	223	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	16	2739.2	2.7392	4380	11997.696	$1,919.6	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	16	1556.8	1.5568	4380	3066	6818.784	4773.1488	Ceiling Mounted Occupancy Sensor	1	7224.5472	1,155.9	$105.0	$20.0	$65.0	$103.0	$73.5	$1,113.5	$2,103.0	$3,216.5
PS #22 - Interior	002	206C	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,439.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	866.9	$105.0	$20.0	$65.0	$103.0	$73.5	$853.5	$1,603.0	$2,456.5
PS #22 - Interior	002	206C	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,439.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	866.9	$105.0	$20.0	$65.0	$103.0	$73.5	$853.5	$1,603.0	$2,456.5
PS #22 - Interior	002	Girls	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	1	171.2	0.1712	500	85.6	$13.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	97.3	0.0973	500	350	48.65	34.055	Ceiling Mounted Occupancy Sensor	1	51.545	8.2	$105.0	$20.0	$65.0	$103.0	$73.5	$138.5	$228.0	$366.5
PS #22 - Interior	002	Hallway	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	15	2568	2.568	8760	22495.68	$3,599.3	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	15	1459.5	1.4595	8760	8760	12785.22	12785.22	None Proposed	0	9710.46	1,553.7	$105.0	$20.0	$65.0	$0.0	$0.0	$975.0	$1,875.0	$2,850.0
PS #22 - Interior	002	Hallway	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	10	1712	1.712	8760	14997.12	$2,399.5	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	10	973	0.973	8760	8760	8523.48	8523.48	None Proposed	0	6473.64	1,035.8	$105.0	$20.0	$65.0	$0.0	$0.0	$650.0	$1,250.0	$1,900.0
PS #22 - Interior	002	Library	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	31	5307.2	5.3072	4380	23245.536	$3,719.3	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	31	3016.3	3.0163	4380	3066	13211.394	9247.9758	Ceiling Mounted Occupancy Sensor	1	13997.5602	2,239.6	$105.0	$20.0	$65.0	$103.0	$73.5	$2,088.5	$3,978.0	$6,066.5
PS #22 - Interior	002	Teachers	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	6	1027.2	1.0272	4380	4499.136	$719.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	6	583.8	0.5838	4380	3066	2557.044	1789.9308	Ceiling Mounted Occupancy Sensor	1	2709.2052	433.5	$105.0	$20.0	$65.0	$103.0	$73.5	$463.5	$853.0	$1,316.5
PS #22 - Interior	002	Teachers	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	4	684.8	0.6848	4380	2999.424	$479.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	4	389.2	0.3892	4380	3066	1704.696	1193.2872	Ceiling Mounted Occupancy Sensor	1	1806.1368	289.0	$105.0	$20.0	$65.0	$103.0	$73.5	$333.5	$603.0	$936.5
PS #22 - Interior	002	Teachers	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	14	2396.8	2.3968	4380	10497.984	$1,679.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	14	1362.2	1.3622	4380	3066	5966.436	4176.5052	Ceiling Mounted Occupancy Sensor	1	6321.4788	1,011.4	$105.0	$20.0	$65.0	$103.0	$73.5	$983.5	$1,853.0	$2,836.5
PS #22 - Interior	003	3	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,439.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	866.9	$105.0	$20.0	$65.0	$103.0	$73.5	$853.5	$1,603.0	$2,456.5
PS #22 - Interior	003	301	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,439.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	866.9	$105.0	$20.0	$65.0	$103.0	$73.5	$853.5	$1,603.0	$2,456.5
PS #22 - Interior	003	302	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,439.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	866.9	$105.0	$20.0	$65.0	$103.0	$73.5	$853.5	$1,603.0	$2,456.5
PS #22 - Interior	003	304	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,439.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	866.9	$105.0	$20.0	$65.0	$103.0	$73.5	$853.5	$1,603.0	$2,456.5
PS #22 - Interior	003	308	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	16	2739.2	2.7392	4380	11997.696	$1,919.6	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	16	1556.8	1.5568	4380	3066	6818.784	4773.1488	Ceiling Mounted Occupancy Sensor	1	7224.5472	1,155.9	$105.0	$20.0	$65.0	$103.0	$73.5	$1,113.5	$2,103.0	$3,216.5
PS #22 - Interior	003	310	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,439.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	866.9	$105.0	$20.0	$65.0	$103.0	$73.5	$853.5	$1,603.0	$2,456.5
PS #22 - Interior	003	311	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,439.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	866.9	$105.0	$20.0	$65.0	$103.0	$73.5	$853.5	$1,603.0	$2,456.5
PS #22 - Interior	003	312	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	16	2739.2	2.7392	4380	11997.696	$1,919.6	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	16	1556.8	1.5568	4380	3066	6818.784	4773.1488	Ceiling Mounted Occupancy Sensor	1	7224.5472	1,155.9	$105.0	$20.0	$65.0	$103.0	$73.5	$1,113.5	$2,103.0	$3,216.5
PS #22 - Interior	003	313	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	10	1712	1.712	4380	7498.56	$1,199.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	10	973	0.973	4380	3066	4261.74	2983.218	Ceiling Mounted Occupancy Sensor	1	4515.342	722.5	$105.0	$20.0	$65.0	$103.0	$73.5	$723.5	$1,353.0	$2,076.5
PS #22 - Interior	003	314	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,439.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	866.9	$105.0	$20.0	$65.0	$103.0	$73.5	$853.5	$1,603.0	$2,456.5
PS #22 - Interior	003	315	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,439.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	866.9	$105.0	$20.0	$65.0	$103.0	$73.5	$853.5	$1,603.0	$2,456.5
PS #22 - Interior	003	316	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	16	2739.2	2.7392	4380	11997.696	$1,919.6	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	16	1556.8	1.5568	4380	3066	6818.784	4773.1488	Ceiling Mounted Occupancy Sensor	1	7224.5472	1,155.9	$105.0	$20.0	$65.0	$103.0	$73.5	$1,113.5	$2,103.0	$3,216.5
PS #22 - Interior	003	317	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,439.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	866.9	$105.0	$20.0	$65.0	$103.0	$73.5	$853.5	$1,603.0	$2,456.5
PS #22 - Interior	003	318	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,439.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	866.9	$105.0	$20.0	$65.0	$103.0	$73.5	$853.5	$1,603.0	$2,456.5
PS #22 - Interior	003	319	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,439.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	866.9	$105.0	$20.0	$65.0	$103.0	$73.5	$853.5	$1,603.0	$2,456.5
PS #22 - Interior	003	320	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	4	684.8	0.6848	4380	2999.424	$479.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	4	389.2	0.3892	4380	3066	1704.696	1193.2872	Ceiling Mounted Occupancy Sensor	1	1806.1368	289.0	$105.0	$20.0	$65.0	$103.0	$73.5	$333.5	$603.0	$936.5
PS #22 - Interior	003	320	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,439.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	866.9	$105.0	$20.0	$65.0	$103.0	$73.5	$853.5	$1,603.0	$2,456.5
PS #22 - Interior	003	321	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	16	2739.2	2.7392	4380	11997.696	$1,919.6	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	16	1556.8	1.5568	4380	3066	6818.784	4773.1488	Ceiling Mounted Occupancy Sensor	1	7224.5472	1,155.9	$105.0	$20.0	$65.0	$103.0	$73.5	$1,113.5	$2,103.0	$3,216.5
PS #22 - Interior	003	322	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	16	2739.2	2.7392	4380	11997.696	$1,919.6	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	16	1556.8	1.5568	4380	3066	6818.784	4773.1488	Ceiling Mounted Occupancy Sensor	1	7224.5472	1,155.9	$105.0	$20.0	$65.0	$103.0	$73.5	$1,113.5	$2,103.0	$3,216.5
PS #22 - Interior	003	Hallway	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	10	1712	1.712	8760	14997.12	$2,399.5	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	10	973	0.973	8760	8760	8523.48	8523.48	None Proposed	0	6473.64	1,035.8	$105.0	$20.0	$65.0	$0.0	$0.0	$650.0	$1,250.0	$1,900.0
PS #22 - Interior	003	Hallway	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	15	2568	2.568	8760	22495.68	$3,599.3	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	15	1459.5	1.4595	8760	8760	12785.22	12785.22	None Proposed	0	9710.46	1,553.7	$105.0	$20.0	$65.0	$0.0	$0.0	$975.0	$1,875.0	$2,850.0
PS #22 - Interior	003	Teacher Lounge	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	10	1712	1.712	4380	7498.56	$1,199.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	10	973	0.973	4380	3066	4261.74	2983.218	Ceiling Mounted Occupancy Sensor	1	4515.342	722.5	$105.0	$20.0	$65.0	$103.0	$73.5	$723.5	$1,353.0	$2,076.5
PS #22 - Interior	003	Teacher Lounge	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	8	1369.6	1.3696	4380	5998.848	$959.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	8	778.4	0.7784	4380	3066	3409.392	2386.5744	Ceiling Mounted Occupancy Sensor	1	3612.2736	578.0	$105.0	$20.0	$65.0	$103.0	$73.5	$593.5	$1,103.0	$1,696.5
PS #22 - Interior	002	Teachers	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	4380	981.12	$157.0	None Proposed	2	224	0.224	4380	3066	981.12	686.784	Ceiling Mounted Occupancy Sensor	1	294.336	47.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #22 - Interior	000	Gym	400W Metal Halide Fixtures	10	4580	4.58	4380	20060.4	$3,209.7	Replace Metal Halide Fixtures with 6-Lamp Fluorescent Highbay Fixtures	10	2260	2.26	4380	4380	9898.8	9898.8	None Proposed	0	10161.6	1,625.9	$168.0	$105.0	$100.0	$0.0	$0.0	$1,000.0	$2,730.0	$3,730.0
PS #22 - Interior	001	Auditorium	400W Metal Halide Fixtures	12	5496	5.496	4380	24072.48	$3,851.6	Replace Metal Halide Fixtures with 6-Lamp Fluorescent Highbay Fixtures	12	2712	2.712	4380	3066	11878.56	8314.992	Ceiling Mounted Occupancy Sensor	1	15757.488	2,521.2	$168.0	$105.0	$100.0	$103.0	$73.5	$1,273.5	$3,379.0	$4,652.5
PS #22 - Interior	000	Closet	60W Incandescent Fixture	1	60	0.06	500	30	$4.8	Replace 60W Incandescent Fixture with 13W CFL	1	13	0.013	500	350	6.5	4.55	Ceiling Mounted Occupancy Sensor	1	25.45	4.1	$0.0	$5.0	$20.0	$103.0	$73.5	$93.5	$108.0	$201.5
PS #22 - Interior	003	Teacher Lounge	60W Incandescent Fixture	1	60	0.06	4380	262.8	$42.0	Replace 60W Incandescent Fixture with 13W CFL	1	13	0.013	4380	3066	56.94	39.858	Ceiling Mounted Occupancy Sensor	1	222.942	35.7	$0.0	$5.0	$20.0	$103.0	$73.5	$93.5	$108.0	$201.5
PS #22 - Interior	003	301	8' T12 Fixture w/ 1-T12 Lamp	1	112	0.112	4380	490.56	$78.5	Replace 8' T12 Fixture with 1 Tandem Double-Length 1-T8 Lamp Fixture	1	64	0.064	4380	3066	280.32	196.224	Ceiling Mounted Occupancy Sensor	1	294.336	47.1	$65.1	$82.0	$93.0	$103.0	$73.5	$166.5	$250.1	$416.6
PS #22 - Interior	000	109	8' T12 Fixture w/ 2-T12 Lamps	18	4086	4.086	4380	17896.68	$2,863.5	Replace 8' T12 Fixture with 1 Tandem Double-Length 2-T8 Lamp Fixture	18	2160	2.16	4380	3066	9460.8	6622.56	Ceiling Mounted Occupancy Sensor	1	11274.12	1,803.9	$65.1	$105.0	$93.0	$103.0	$73.5	$1,747.5	$3,164.8	$4,912.3
PS #22 - Interior	002	204	8' T12 Fixture w/ 2-T12 Lamps	1	227	0.227	4380	994.26	$159.1	Replace 8' T12 Fixture with 1 Tandem Double-Length 2-T8 Lamp Fixture	1	120	0.12	4380	3066	525.6	367.92	Ceiling Mounted Occupancy Sensor	1	626.34	100.2	$65.1	$105.0	$93.0	$103.0	$73.5	$166.5	$273.1	$439.6
PS #22 - Interior	003	Teacher Lounge	8' T12 Fixture w/ 2-T12 Lamps	1	227	0.227	4380	994.26	$159.1	Replace 8' T12 Fixture with 1 Tandem Double-Length 2-T8 Lamp Fixture	1	120	0.12	4380	3066	525.6	367.92	Ceiling Mounted Occupancy Sensor	1	626.34	100.2	$65.1	$105.0	$93.0	$103.0	$73.5	$166.5	$273.1	$439.6
PS #3 - Exterior	1235	Exterior	Exterior Wall Packs (Assume 70w)	20	1800	1.8	4380	7884	$946.1	Replace 70W Fixture with 45W Induction Light Fixture	20	880	0.88	4380	4380	3854.4	3854.4	None Proposed	0	4029.6	483.6	$0.0	$380.0	$137.0	$0.0	$0.0	$2,740.0	$7,600.0	$10,340.0
PS #3 - Interior	001	115	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	5	127	0.127	4380	556.26	$66.8	None Proposed	5	127	0.127	4380	4380	556.26	556.26	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	121	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	6	152.4	0.1524	4380	667.512	$80.1	None Proposed	6	152.4	0.1524	4380	4380	667.512	667.512	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #3 - Interior	001	140	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	1	25.4	0.0254	4380	111.252	$13.4	None Proposed	1	25.4	0.0254	4380	4380	111.252	111.252	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Electric Room	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	1	25.4	0.0254	500	12.7	$1.5	None Proposed	1	25.4	0.0254	500	500	12.7	12.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Janitor	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	1	25.4	0.0254	500	12.7	$1.5	None Proposed	1	25.4	0.0254	500	500	12.7	12.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Janitor	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	1	25.4	0.0254	500	12.7	$1.5	None Proposed	1	25.4	0.0254	500	500	12.7	12.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Service	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	2	50.8	0.0508	4380	222.504	$26.7	None Proposed	2	50.8	0.0508	4380	4380	222.504	222.504	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Stairwell	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	10	254	0.254	8760	2225.04	$267.0	None Proposed	10	254	0.254	8760	8760	2225.04	2225.04	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Trash	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	1	25.4	0.0254	500	12.7	$1.5	None Proposed	1	25.4	0.0254	500	500	12.7	12.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	202	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	18	457.2	0.4572	4380	2002.536	$240.3	None Proposed	18	457.2	0.4572	4380	4380	2002.536	2002.536	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	204	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	18	457.2	0.4572	4380	2002.536	$240.3	None Proposed	18	457.2	0.4572	4380	4380	2002.536	2002.536	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	Janitor	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	1	25.4	0.0254	500	12.7	$1.5	None Proposed	1	25.4	0.0254	500	500	12.7	12.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	318	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	1	25.4	0.0254	4380	111.252	$13.4	None Proposed	1	25.4	0.0254	4380	4380	111.252	111.252	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	304A	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	2	50.8	0.0508	4380	222.504	$26.7	None Proposed	2	50.8	0.0508	4380	4380	222.504	222.504	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	304B	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	1	25.4	0.0254	4380	111.252	$13.4	None Proposed	1	25.4	0.0254	4380	4380	111.252	111.252	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	310B	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	1	25.4	0.0254	4380	111.252	$13.4	None Proposed	1	25.4	0.0254	4380	4380	111.252	111.252	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$3.0	None Proposed	1	50.7	0.0507	500	500	25.35	25.35	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	201	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$106.6	None Proposed	4	202.8	0.2028	4380	4380	888.264	888.264	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	212	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$53.3	None Proposed	2	101.4	0.1014	4380	4380	444.132	444.132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	102	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$832.6	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	104	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$832.6	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	106	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$832.6	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	108	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$832.6	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	109	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$832.6	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	110	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$832.6	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	109	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$832.6	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	110	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$832.6	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	111	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$832.6	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	112	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$832.6	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	113	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$832.6	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	114	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$832.6	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	116	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	1	88	0.088	4380	385.44	$46.3	None Proposed	1	88	0.088	4380	4380	385.44	385.44	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	140	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	16	1408	1.408	4380	6167.04	$740.0	None Proposed	16	1408	1.408	4380	4380	6167.04	6167.04	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	125L	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	8	704	0.704	4380	3083.52	$370.0	None Proposed	8	704	0.704	4380	4380	3083.52	3083.52	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Music	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	27	2376	2.376	4380	10406.88	$1,248.8	None Proposed	27	2376	2.376	4380	4380	10406.88	10406.88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Play Room	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	27	2376	2.376	4380	10406.88	$1,248.8	None Proposed	27	2376	2.376	4380	4380	10406.88	10406.88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	201	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	30	2640	2.64	4380	11563.2	$1,387.6	None Proposed	30	2640	2.64	4380	4380	11563.2	11563.2	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	206	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$832.6	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	207	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	36	3168	3.168	4380	13875.84	$1,665.1	None Proposed	36	3168	3.168	4380	4380	13875.84	13875.84	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	208	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$832.6	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	209	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$832.6	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	210	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$832.6	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	211	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$832.6	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	212	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$832.6	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	213	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$832.6	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	214	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$832.6	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	215	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$416.3	None Proposed	9	792	0.792	4380	4380	3468.96	3468.96	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	216	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$832.6	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	217	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$416.3	None Proposed	9	792	0.792	4380	4380	3468.96	3468.96	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	219	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$416.3	None Proposed	9	792	0.792	4380	4380	3468.96	3468.96	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	302	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$832.6	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	303	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	40	3520	3.52	4380	15417.6	$1,850.1	None Proposed	40	3520	3.52	4380	4380	15417.6	15417.6	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #3 - Interior	003	304	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$832.6	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	305	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	24	2112	2.112	4380	9250.56	$1,110.1	None Proposed	24	2112	2.112	4380	4380	9250.56	9250.56	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	306	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$832.6	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	308	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$832.6	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	310	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$832.6	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	311	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$832.6	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	312	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$832.6	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	313	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$832.6	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	314	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$832.6	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	315	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$416.3	None Proposed	9	792	0.792	4380	4380	3468.96	3468.96	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	316	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$832.6	None Proposed	18	1584	1.584	4380	4380	6937.92	6937.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	317	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$416.3	None Proposed	9	792	0.792	4380	4380	3468.96	3468.96	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	319	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$416.3	None Proposed	9	792	0.792	4380	4380	3468.96	3468.96	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Hallway	2' 17W Fluorescent Fixture	2	30	0.03	8760	262.8	$31.5	None Proposed	2	30	0.03	8760	8760	262.8	262.8	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Stairwell	2' 17W Fluorescent Fixture	1	15	0.015	8760	131.4	$15.8	None Proposed	1	15	0.015	8760	8760	131.4	131.4	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	Stairwell	2' 17W Fluorescent Fixture	2	30	0.03	8760	262.8	$31.5	None Proposed	2	30	0.03	8760	8760	262.8	262.8	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	Hallway	26W CFL Fixture	8	208	0.208	8760	1822.08	$218.6	None Proposed	8	208	0.208	8760	8760	1822.08	1822.08	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Hallway	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	5	315	0.315	8760	2759.4	$331.1	None Proposed	5	315	0.315	8760	8760	2759.4	2759.4	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Hallway	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	7	441	0.441	8760	3863.16	$463.6	None Proposed	7	441	0.441	8760	8760	3863.16	3863.16	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Hallway	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	8	504	0.504	8760	4415.04	$529.8	None Proposed	8	504	0.504	8760	8760	4415.04	4415.04	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Hallway	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	11	693	0.693	8760	6070.68	$728.5	None Proposed	11	693	0.693	8760	8760	6070.68	6070.68	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Hallway	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	10	630	0.63	8760	5518.8	$662.3	None Proposed	10	630	0.63	8760	8760	5518.8	5518.8	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Hallway	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	6	378	0.378	8760	3311.28	$397.4	None Proposed	6	378	0.378	8760	8760	3311.28	3311.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	201	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	2	126	0.126	4380	551.88	$66.2	None Proposed	2	126	0.126	4380	4380	551.88	551.88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	Hallway	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	22	1386	1.386	8760	12141.36	$1,457.0	None Proposed	22	1386	1.386	8760	8760	12141.36	12141.36	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	Hallway	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	28	1764	1.764	8760	15452.64	$1,854.3	None Proposed	28	1764	1.764	8760	8760	15452.64	15452.64	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	Hallway	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	20	1260	1.26	8760	11037.6	$1,324.5	None Proposed	20	1260	1.26	8760	8760	11037.6	11037.6	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	Hallway	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	5	315	0.315	8760	2759.4	$331.1	None Proposed	5	315	0.315	8760	8760	2759.4	2759.4	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	104	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	3	189	0.189	4380	827.82	$99.3	None Proposed	3	189	0.189	4380	4380	827.82	827.82	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	107	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	18	1134	1.134	4380	4966.92	$596.0	None Proposed	18	1134	1.134	4380	4380	4966.92	4966.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	112	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	3	189	0.189	4380	827.82	$99.3	None Proposed	3	189	0.189	4380	4380	827.82	827.82	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	113	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	3	189	0.189	4380	827.82	$99.3	None Proposed	3	189	0.189	4380	4380	827.82	827.82	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	114	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	3	189	0.189	4380	827.82	$99.3	None Proposed	3	189	0.189	4380	4380	827.82	827.82	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Bathroom	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	1	63	0.063	500	31.5	$3.8	None Proposed	1	63	0.063	500	500	31.5	31.5	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Bathroom	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	1	63	0.063	500	31.5	$3.8	None Proposed	1	63	0.063	500	500	31.5	31.5	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Bathroom	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	1	63	0.063	500	31.5	$3.8	None Proposed	1	63	0.063	500	500	31.5	31.5	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Bathroom	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	2	126	0.126	500	63	$7.6	None Proposed	2	126	0.126	500	500	63	63	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Bathroom	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	4	252	0.252	500	126	$15.1	None Proposed	4	252	0.252	500	500	126	126	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Hallway	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	16	1008	1.008	8760	8830.08	$1,059.6	None Proposed	16	1008	1.008	8760	8760	8830.08	8830.08	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Hallway	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	15	945	0.945	8760	8278.2	$993.4	None Proposed	15	945	0.945	8760	8760	8278.2	8278.2	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Hallway	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	5	315	0.315	8760	2759.4	$331.1	None Proposed	5	315	0.315	8760	8760	2759.4	2759.4	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Hallway	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	4	252	0.252	8760	2207.52	$264.9	None Proposed	4	252	0.252	8760	8760	2207.52	2207.52	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Lockers	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	1	63	0.063	4380	275.94	$33.1	None Proposed	1	63	0.063	4380	4380	275.94	275.94	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Main Office	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	13	819	0.819	4380	3587.22	$430.5	None Proposed	13	819	0.819	4380	4380	3587.22	3587.22	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Music	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	1	63	0.063	4380	275.94	$33.1	None Proposed	1	63	0.063	4380	4380	275.94	275.94	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Staff Bath	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	1	63	0.063	500	31.5	$3.8	None Proposed	1	63	0.063	500	500	31.5	31.5	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Staff Bath	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	1	63	0.063	500	31.5	$3.8	None Proposed	1	63	0.063	500	500	31.5	31.5	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	307	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	6	378	0.378	4380	1655.64	$198.7	None Proposed	6	378	0.378	4380	4380	1655.64	1655.64	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #3 - Interior	004	230B	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	1	63	0.063	4380	275.94	$33.1	None Proposed	1	63	0.063	4380	4380	275.94	275.94	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	004	230C	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	1	63	0.063	4380	275.94	$33.1	None Proposed	1	63	0.063	4380	4380	275.94	275.94	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Mens	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$9.1	None Proposed	3	152.1	0.1521	500	500	76.05	76.05	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Music	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	4380	666.198	$79.9	None Proposed	3	152.1	0.1521	4380	4380	666.198	666.198	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Womens	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$9.1	None Proposed	3	152.1	0.1521	500	500	76.05	76.05	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Womens	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$9.1	None Proposed	3	152.1	0.1521	500	500	76.05	76.05	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	212B	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$53.3	None Proposed	2	101.4	0.1014	4380	4380	444.132	444.132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	Mens	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$9.1	None Proposed	3	152.1	0.1521	500	500	76.05	76.05	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	Womens	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$9.1	None Proposed	3	152.1	0.1521	500	500	76.05	76.05	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	Janitor	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$3.0	None Proposed	1	50.7	0.0507	500	500	25.35	25.35	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	Mens	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$9.1	None Proposed	3	152.1	0.1521	500	500	76.05	76.05	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	Mens Bathroom	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$9.1	None Proposed	3	152.1	0.1521	500	500	76.05	76.05	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	Womens	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$9.1	None Proposed	3	152.1	0.1521	500	500	76.05	76.05	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	Womens Bathroom	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$9.1	None Proposed	3	152.1	0.1521	500	500	76.05	76.05	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	105	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	4380	2312.64	$277.5	None Proposed	6	528	0.528	4380	4380	2312.64	2312.64	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	117	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	11	968	0.968	4380	4239.84	$508.8	None Proposed	11	968	0.968	4380	4380	4239.84	4239.84	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	133	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	3	264	0.264	4380	1156.32	$138.8	None Proposed	3	264	0.264	4380	4380	1156.32	1156.32	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	135	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	3	264	0.264	4380	1156.32	$138.8	None Proposed	3	264	0.264	4380	4380	1156.32	1156.32	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	119A	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	4380	770.88	$92.5	None Proposed	2	176	0.176	4380	4380	770.88	770.88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	130A	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	4380	770.88	$92.5	None Proposed	2	176	0.176	4380	4380	770.88	770.88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Cafeteria	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	68	5984	5.984	4380	26209.92	$3,145.2	None Proposed	68	5984	5.984	4380	4380	26209.92	26209.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Control Room	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	1	88	0.088	4380	385.44	$46.3	None Proposed	1	88	0.088	4380	4380	385.44	385.44	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Dressing Room	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	4380	770.88	$92.5	None Proposed	2	176	0.176	4380	4380	770.88	770.88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #3 - Interior	001	Dressing Room	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	4380	770.88	$92.5	None Proposed	2	176	0.176	4380	4380	770.88	770.88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Dry Storage	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	1	88	0.088	500	44	$5.3	None Proposed	1	88	0.088	500	500	44	44	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Kitchen	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	25	2200	2.2	4444	9776.8	$1,173.2	None Proposed	25	2200	2.2	4444	4444	9776.8	9776.8	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Main Office	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	14	1232	1.232	4380	5396.16	$647.5	None Proposed	14	1232	1.232	4380	4380	5396.16	5396.16	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Music	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	4	352	0.352	4380	1541.76	$185.0	None Proposed	4	352	0.352	4380	4380	1541.76	1541.76	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Receiving	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	4380	770.88	$92.5	None Proposed	2	176	0.176	4380	3066	770.88	539.616	Ceiling Mounted Occupancy Sensor	1	231.264	27.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #3 - Interior	001	Stairwell	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	8	704	0.704	8760	6167.04	$740.0	None Proposed	8	704	0.704	8760	8760	6167.04	6167.04	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Storage	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	500	264	$31.7	None Proposed	6	528	0.528	500	500	264	264	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	201	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	3	264	0.264	4380	1156.32	$138.8	None Proposed	3	264	0.264	4380	4380	1156.32	1156.32	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	202	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	1	88	0.088	4380	385.44	$46.3	None Proposed	1	88	0.088	4380	4380	385.44	385.44	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	203	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	3	264	0.264	4380	1156.32	$138.8	None Proposed	3	264	0.264	4380	4380	1156.32	1156.32	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	204	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	1	88	0.088	4380	385.44	$46.3	None Proposed	1	88	0.088	4380	4380	385.44	385.44	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	206	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	1	88	0.088	4380	385.44	$46.3	None Proposed	1	88	0.088	4380	4380	385.44	385.44	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	208	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	1	88	0.088	4380	385.44	$46.3	None Proposed	1	88	0.088	4380	4380	385.44	385.44	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	210	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	1	88	0.088	4380	385.44	$46.3	None Proposed	1	88	0.088	4380	4380	385.44	385.44	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	212	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	1	88	0.088	4380	385.44	$46.3	None Proposed	1	88	0.088	4380	4380	385.44	385.44	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	213	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	1	88	0.088	4380	385.44	$46.3	None Proposed	1	88	0.088	4380	4380	385.44	385.44	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	216	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	1	88	0.088	4380	385.44	$46.3	None Proposed	1	88	0.088	4380	4380	385.44	385.44	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	217	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	1	88	0.088	4380	385.44	$46.3	None Proposed	1	88	0.088	4380	4380	385.44	385.44	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	Lounge	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	7	616	0.616	4380	2698.08	$323.8	None Proposed	7	616	0.616	4380	4380	2698.08	2698.08	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	302	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	1	88	0.088	4380	385.44	$46.3	None Proposed	1	88	0.088	4380	4380	385.44	385.44	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	303	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	4380	770.88	$92.5	None Proposed	2	176	0.176	4380	4380	770.88	770.88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	304	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	1	88	0.088	4380	385.44	$46.3	None Proposed	1	88	0.088	4380	4380	385.44	385.44	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	306	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	1	88	0.088	4380	385.44	$46.3	None Proposed	1	88	0.088	4380	4380	385.44	385.44	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	307	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	5	440	0.44	4380	1927.2	$231.3	None Proposed	5	440	0.44	4380	4380	1927.2	1927.2	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #3 - Interior	003	308	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	1	88	0.088	4380	385.44	$46.3	None Proposed	1	88	0.088	4380	4380	385.44	385.44	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	309	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$416.3	None Proposed	9	792	0.792	4380	4380	3468.96	3468.96	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	310	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	1	88	0.088	4380	385.44	$46.3	None Proposed	1	88	0.088	4380	4380	385.44	385.44	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	312	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	1	88	0.088	4380	385.44	$46.3	None Proposed	1	88	0.088	4380	4380	385.44	385.44	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	300A	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	3	264	0.264	4380	1156.32	$138.8	None Proposed	3	264	0.264	4380	4380	1156.32	1156.32	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	306A	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	4380	770.88	$92.5	None Proposed	2	176	0.176	4380	4380	770.88	770.88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	309A	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	4380	770.88	$92.5	None Proposed	2	176	0.176	4380	4380	770.88	770.88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	Staff	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	1	88	0.088	4380	385.44	$46.3	None Proposed	1	88	0.088	4380	4380	385.44	385.44	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	Stairwell	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	10	880	0.88	8760	7708.8	$925.1	None Proposed	10	880	0.88	8760	8760	7708.8	7708.8	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	004	221	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	14	1232	1.232	4380	5396.16	$647.5	None Proposed	14	1232	1.232	4380	4380	5396.16	5396.16	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	004	231	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	13	1144	1.144	4380	5010.72	$601.3	None Proposed	13	1144	1.144	4380	4380	5010.72	5010.72	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	004	230B	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	3	264	0.264	4380	1156.32	$138.8	None Proposed	3	264	0.264	4380	4380	1156.32	1156.32	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	004	230C	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	3	264	0.264	4380	1156.32	$138.8	None Proposed	3	264	0.264	4380	4380	1156.32	1156.32	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	004	Gym	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	3	264	0.264	4380	1156.32	$138.8	None Proposed	3	264	0.264	4380	4380	1156.32	1156.32	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	004	Gym	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	3	264	0.264	4380	1156.32	$138.8	None Proposed	3	264	0.264	4380	4380	1156.32	1156.32	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	004	Hallway	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	3	264	0.264	8760	2312.64	$277.5	None Proposed	3	264	0.264	8760	8760	2312.64	2312.64	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	102	42W CFL Fixture	3	147	0.147	4380	643.86	$77.3	None Proposed	3	147	0.147	4380	4380	643.86	643.86	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	106	42W CFL Fixture	3	147	0.147	4380	643.86	$77.3	None Proposed	3	147	0.147	4380	4380	643.86	643.86	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	107	42W CFL Fixture	3	147	0.147	4380	643.86	$77.3	None Proposed	3	147	0.147	4380	4380	643.86	643.86	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	108	42W CFL Fixture	3	147	0.147	4380	643.86	$77.3	None Proposed	3	147	0.147	4380	4380	643.86	643.86	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	109	42W CFL Fixture	3	147	0.147	4380	643.86	$77.3	None Proposed	3	147	0.147	4380	4380	643.86	643.86	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	110	42W CFL Fixture	3	147	0.147	4380	643.86	$77.3	None Proposed	3	147	0.147	4380	4380	643.86	643.86	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	111	42W CFL Fixture	3	147	0.147	4380	643.86	$77.3	None Proposed	3	147	0.147	4380	4380	643.86	643.86	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Auditorium	42W CFL Fixture	23	1127	1.127	4380	4936.26	$592.4	None Proposed	23	1127	1.127	4380	4380	4936.26	4936.26	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Auditorium	42W CFL Fixture	13	637	0.637	4380	2790.06	$334.8	None Proposed	13	637	0.637	4380	4380	2790.06	2790.06	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Cafeteria	42W CFL Fixture	36	1764	1.764	4380	7726.32	$927.2	None Proposed	36	1764	1.764	4380	4380	7726.32	7726.32	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Dock	42W CFL Fixture	4	196	0.196	4380	858.48	$103.0	None Proposed	4	196	0.196	4380	4380	858.48	858.48	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Hallway	42W CFL Fixture	4	196	0.196	8760	1716.96	$206.0	None Proposed	4	196	0.196	8760	8760	1716.96	1716.96	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Hallway	42W CFL Fixture	8	392	0.392	8760	3433.92	$412.1	None Proposed	8	392	0.392	8760	8760	3433.92	3433.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Hallway	42W CFL Fixture	10	490	0.49	8760	4292.4	$515.1	None Proposed	10	490	0.49	8760	8760	4292.4	4292.4	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Hallway	42W CFL Fixture	20	980	0.98	8760	8584.8	$1,030.2	None Proposed	20	980	0.98	8760	8760	8584.8	8584.8	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Hallway	42W CFL Fixture	20	980	0.98	8760	8584.8	$1,030.2	None Proposed	20	980	0.98	8760	8760	8584.8	8584.8	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Kitchen	42W CFL Fixture	12	588	0.588	4443	2612.484	$313.5	None Proposed	12	588	0.588	4443	4443	2612.484	2612.484	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Main Office	42W CFL Fixture	3	147	0.147	4380	643.86	$77.3	None Proposed	3	147	0.147	4380	4380	643.86	643.86	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	001	Stage	42W CFL Fixture	6	294	0.294	4380	1287.72	$154.5	None Proposed	6	294	0.294	4380	4380	1287.72	1287.72	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	201	42W CFL Fixture	6	294	0.294	4380	1287.72	$154.5	None Proposed	6	294	0.294	4380	4380	1287.72	1287.72	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	Hallway	42W CFL Fixture	15	735	0.735	8760	6438.6	$772.6	None Proposed	15	735	0.735	8760	8760	6438.6	6438.6	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	Hallway	42W CFL Fixture	12	588	0.588	8760	5150.88	$618.1	None Proposed	12	588	0.588	8760	8760	5150.88	5150.88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	Hallway	42W CFL Fixture	10	490	0.49	8760	4292.4	$515.1	None Proposed	10	490	0.49	8760	8760	4292.4	4292.4	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	Hallway	42W CFL Fixture	6	294	0.294	8760	2575.44	$309.1	None Proposed	6	294	0.294	8760	8760	2575.44	2575.44	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	002	Hallway	42W CFL Fixture	6	294	0.294	8760	2575.44	$309.1	None Proposed	6	294	0.294	8760	8760	2575.44	2575.44	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	303	42W CFL Fixture	10	490	0.49	4380	2146.2	$257.5	None Proposed	10	490	0.49	4380	4380	2146.2	2146.2	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	308	42W CFL Fixture	2	98	0.098	4380	429.24	$51.5	None Proposed	2	98	0.098	4380	4380	429.24	429.24	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	Hallway	42W CFL Fixture	6	294	0.294	8760	2575.44	$309.1	None Proposed	6	294	0.294	8760	8760	2575.44	2575.44	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	003	Hallway	42W CFL Fixture	10	490	0.49	8760	4292.4	$515.1	None Proposed	10	490	0.49	8760	8760	4292.4	4292.4	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #3 - Interior	004	Gym	42W CFL Fixture	24	1176	1.176	4380	5150.88	$618.1	None Proposed	24	1176	1.176	4380	4380	5150.88	5150.88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Exterior	522	Exterior	Exterior Wall Packs (Assume 70w)	15	1350	1.35	4380	5913	$768.7	Replace 70W Fixture with 45W Induction Light Fixture	15	660	0.66	4380	4380	2890.8	2890.8	None Proposed	0	3022.2	392.9	$0.0	$380.0	$137.0	$0.0	$0.0	$2,055.0	$5,700.0	$7,755.0
PS #37 - Interior	001	Bathroom	13W CFL Fixture	1	13	0.013	500	6.5	$0.8	None Proposed	1	13	0.013	500	500	6.5	6.5	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #37 - Interior	001	Auditorium	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	24	609.6	0.6096	4380	2670.048	$347.1	None Proposed	24	609.6	0.6096	4380	4380	2670.048	2670.048	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	001	109	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	342.4	0.3424	4380	1499.712	$195.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	4	194.4	0.1944	4380	4380	851.472	851.472	None Proposed	0	648.24	84.3	$70.0	$10.0	$65.0	$0.0	$0.0	$260.0	$320.0	$580.0
PS #37 - Interior	000	Boiler Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$9.9	None Proposed	3	152.1	0.1521	500	500	76.05	76.05	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	000	Boiler Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	500	101.4	$13.2	None Proposed	4	202.8	0.2028	500	500	101.4	101.4	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	000	Cafeteria	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$606.2	None Proposed	21	1064.7	1.0647	4380	4380	4663.386	4663.386	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	000	Electrical Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	500	101.4	$13.2	None Proposed	4	202.8	0.2028	500	500	101.4	101.4	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	000	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	8760	1776.528	$230.9	None Proposed	4	202.8	0.2028	8760	8760	1776.528	1776.528	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	000	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	8760	888.264	$115.5	None Proposed	2	101.4	0.1014	8760	8760	888.264	888.264	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	000	Locker Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	9	456.3	0.4563	4380	1998.594	$259.8	None Proposed	9	456.3	0.4563	4380	4380	1998.594	1998.594	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	000	Locker Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	10	507	0.507	4380	2220.66	$288.7	None Proposed	10	507	0.507	4380	4380	2220.66	2220.66	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	000	Locker Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	9	456.3	0.4563	4380	1998.594	$259.8	None Proposed	9	456.3	0.4563	4380	4380	1998.594	1998.594	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	000	Locker Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	405.6	0.4056	4380	1776.528	$230.9	None Proposed	8	405.6	0.4056	4380	4380	1776.528	1776.528	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	000	Monitor Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$115.5	None Proposed	4	202.8	0.2028	4380	4380	888.264	888.264	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	000	Stairwell	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	405.6	0.4056	8760	3553.056	$461.9	None Proposed	8	405.6	0.4056	8760	8760	3553.056	3553.056	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	000	Stairwell	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	8760	444.132	$57.7	None Proposed	1	50.7	0.0507	8760	8760	444.132	444.132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	000	Storage Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	500	101.4	$13.2	None Proposed	4	202.8	0.2028	500	500	101.4	101.4	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	001	100	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$28.9	None Proposed	1	50.7	0.0507	4380	4380	222.066	222.066	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	001	101	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$28.9	None Proposed	1	50.7	0.0507	4380	4380	222.066	222.066	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	001	102	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$28.9	None Proposed	1	50.7	0.0507	4380	4380	222.066	222.066	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	001	103	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$28.9	None Proposed	1	50.7	0.0507	4380	4380	222.066	222.066	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	001	105	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$28.9	None Proposed	1	50.7	0.0507	4380	4380	222.066	222.066	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	001	107	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$28.9	None Proposed	1	50.7	0.0507	4380	4380	222.066	222.066	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	001	108	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$28.9	None Proposed	1	50.7	0.0507	4380	4380	222.066	222.066	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	001	109	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$28.9	None Proposed	1	50.7	0.0507	4380	4380	222.066	222.066	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	001	111	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$28.9	None Proposed	1	50.7	0.0507	4380	4380	222.066	222.066	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	001	Backstage	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	405.6	0.4056	4380	1776.528	$230.9	None Proposed	8	405.6	0.4056	4380	4380	1776.528	1776.528	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	001	Office	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	4380	1332.396	$173.2	None Proposed	6	304.2	0.3042	4380	4380	1332.396	1332.396	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	001	Stairwell	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	8760	888.264	$115.5	None Proposed	2	101.4	0.1014	8760	8760	888.264	888.264	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	001	Stairwell	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	405.6	0.4056	8760	3553.056	$461.9	None Proposed	8	405.6	0.4056	8760	8760	3553.056	3553.056	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	001	Teachers	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	4380	666.198	$86.6	None Proposed	3	152.1	0.1521	4380	4380	666.198	666.198	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	002	207	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$28.9	None Proposed	1	50.7	0.0507	4380	4380	222.066	222.066	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	002	211	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$57.7	None Proposed	2	101.4	0.1014	4380	4380	444.132	444.132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	002	212	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$28.9	None Proposed	1	50.7	0.0507	4380	4380	222.066	222.066	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	002	209W	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$57.7	None Proposed	2	101.4	0.1014	4380	4380	444.132	444.132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	002	Boys Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$9.9	None Proposed	3	152.1	0.1521	500	500	76.05	76.05	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	003	303	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$28.9	None Proposed	1	50.7	0.0507	4380	4380	222.066	222.066	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	003	304	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$28.9	None Proposed	1	50.7	0.0507	4380	4380	222.066	222.066	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	003	306	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$28.9	None Proposed	1	50.7	0.0507	4380	4380	222.066	222.066	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	003	307	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$28.9	None Proposed	1	50.7	0.0507	4380	4380	222.066	222.066	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	003	308	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$28.9	None Proposed	1	50.7	0.0507	4380	4380	222.066	222.066	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	003	311	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$57.7	None Proposed	2	101.4	0.1014	4380	4380	444.132	444.132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	003	312	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$57.7	None Proposed	2	101.4	0.1014	4380	4380	444.132	444.132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	003	314	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$57.7	None Proposed	2	101.4	0.1014	4380	4380	444.132	444.132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	003	315	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$57.7	None Proposed	2	101.4	0.1014	4380	4380	444.132	444.132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	003	Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$9.9	None Proposed	3	152.1	0.1521	500	500	76.05	76.05	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	003	Mens Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$9.9	None Proposed	3	152.1	0.1521	500	500	76.05	76.05	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	003	Stairwell	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	405.6	0.4056	8760	3553.056	$461.9	None Proposed	8	405.6	0.4056	8760	8760	3553.056	3553.056	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	003	Teachers Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$28.9	None Proposed	1	50.7	0.0507	4380	4380	222.066	222.066	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #37 - Interior	004	Stairwell	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	8760	1776.528	$230.9	None Proposed	4	202.8	0.2028	8760	8760	1776.528	1776.528	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	004	Stairwell	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	8760	888.264	$115.5	None Proposed	2	101.4	0.1014	8760	8760	888.264	888.264	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	000	Janitors Room	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	500	792	$103.0	None Proposed	18	1584	1.584	500	500	792	792	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	001	104	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	1	88	0.088	4380	385.44	$50.1	None Proposed	1	88	0.088	4380	4380	385.44	385.44	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	001	Hallway	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	2	171.2	0.1712	8760	1499.712	$195.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	2	97.28	0.09728	8760	8760	852.1728	852.1728	None Proposed	0	647.5392	84.2	$55.0	$10.0	$65.0	$0.0	$0.0	$130.0	$130.0	$260.0
PS #37 - Interior	001	Stage	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	6	513.6	0.5136	4380	2249.568	$292.4	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	6	291.84	0.29184	4380	4380	1278.2592	1278.2592	None Proposed	0	971.3088	126.3	$55.0	$10.0	$65.0	$0.0	$0.0	$390.0	$390.0	$780.0
PS #37 - Interior	003	Teachers Room	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	2	171.2	0.1712	4380	749.856	$97.5	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	2	97.28	0.09728	4380	4380	426.0864	426.0864	None Proposed	0	323.7696	42.1	$55.0	$10.0	$65.0	$0.0	$0.0	$130.0	$130.0	$260.0
PS #37 - Interior	000	Hallway	2X2 Fixtures w/ 2-T8 Lamp Fixture w/ Electronic Ballasts	4	202.8	0.2028	8760	1776.528	$230.9	Replace T8 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	4	194.56	0.19456	8760	8760	1704.3456	1704.3456	None Proposed	0	72.1824	9.4	$15.0	$10.0	$65.0	$0.0	$0.0	$260.0	$100.0	$360.0
PS #37 - Interior	003	314	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$346.4	None Proposed	12	608.4	0.6084	4380	4380	2664.792	2664.792	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	003	Hallway	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	9	456.3	0.4563	8760	3997.188	$519.6	None Proposed	9	456.3	0.4563	8760	8760	3997.188	3997.188	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	003	Hallway	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	9	456.3	0.4563	8760	3997.188	$519.6	None Proposed	9	456.3	0.4563	8760	8760	3997.188	3997.188	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	003	Hallway	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	9	456.3	0.4563	8760	3997.188	$519.6	None Proposed	9	456.3	0.4563	8760	8760	3997.188	3997.188	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	004	413	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$57.7	None Proposed	2	101.4	0.1014	4380	4380	444.132	444.132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	004	Bathroom	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	10	507	0.507	500	253.5	$33.0	None Proposed	10	507	0.507	500	500	253.5	253.5	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	004	Bathroom	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	500	101.4	$13.2	None Proposed	4	202.8	0.2028	500	500	101.4	101.4	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	004	Bathroom	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$9.9	None Proposed	3	152.1	0.1521	500	500	76.05	76.05	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	004	Bathroom	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	405.6	0.4056	500	202.8	$26.4	None Proposed	8	405.6	0.4056	500	500	202.8	202.8	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	004	Hallway	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	11	557.7	0.5577	8760	4885.452	$635.1	None Proposed	11	557.7	0.5577	8760	8760	4885.452	4885.452	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	004	Hallway	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	10	507	0.507	8760	4441.32	$577.4	None Proposed	10	507	0.507	8760	8760	4441.32	4441.32	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	004	Storage	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$9.9	None Proposed	3	152.1	0.1521	500	500	76.05	76.05	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	001	101	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	001	102	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	001	103	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	001	102	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	001	103	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	001	104	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	001	105	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	001	106	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	001	107	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	001	108	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	001	109	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	001	110	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	001	111	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	001	112	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	001	Office	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	1	88	0.088	4380	385.44	$50.1	None Proposed	1	88	0.088	4380	4380	385.44	385.44	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	002	207	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	002	208	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	002	209	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	002	210	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	002	211	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	002	212	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	002	213	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	002	215	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	14	1232	1.232	4380	5396.16	$701.5	None Proposed	14	1232	1.232	4380	4380	5396.16	5396.16	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	003	301	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	003	303	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	003	304	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	003	305	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	003	306	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	003	307	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	003	308	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #37 - Interior	003	311	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	003	312	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	003	313	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	003	315	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	003	Office	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$451.0	None Proposed	9	792	0.792	4380	4380	3468.96	3468.96	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	004	402	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	004	405	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	14	1232	1.232	4380	5396.16	$701.5	None Proposed	14	1232	1.232	4380	4380	5396.16	5396.16	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	004	406	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	004	408	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	004	409	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	14	1232	1.232	4380	5396.16	$701.5	None Proposed	14	1232	1.232	4380	4380	5396.16	5396.16	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	004	410	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	004	411	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	004	412	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	004	413	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	004	414	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	004	415	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$601.3	None Proposed	12	1056	1.056	4380	4380	4625.28	4625.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	004	Library	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	67	5896	5.896	4380	25824.48	$3,357.2	None Proposed	67	5896	5.896	4380	4380	25824.48	25824.48	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	004	Library	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	4	352	0.352	4380	1541.76	$200.4	None Proposed	4	352	0.352	4380	4380	1541.76	1541.76	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	001	Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	10	1120	1.12	8760	9811.2	$1,275.5	None Proposed	10	1120	1.12	8760	8760	9811.2	9811.2	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	001	Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	8	896	0.896	8760	7848.96	$1,020.4	None Proposed	8	896	0.896	8760	8760	7848.96	7848.96	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	002	Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	8	896	0.896	8760	7848.96	$1,020.4	None Proposed	8	896	0.896	8760	8760	7848.96	7848.96	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	002	Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	8760	8830.08	$1,147.9	None Proposed	9	1008	1.008	8760	8760	8830.08	8830.08	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	001	Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Magnetic Ballasts	9	0	0	8760	0	$0.0	0	9	0	0	8760	8760	0	0	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	002	Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	8760	8830.08	$1,147.9	None Proposed	9	1008	1.008	8760	8760	8830.08	8830.08	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	001	Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Magnetic Ballasts	9	0	0	8760	0	$0.0	0	9	0	0	8760	8760	0	0	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #37 - Interior	000	Gym	400W MH High Bay Fixture	20	9160	9.16	4380	40120.8	$5,215.7	Replace 400W Fixture with 250W Induction Light Fixture	20	4300	4.3	4380	4380	18834	18834	None Proposed	0	21286.8	2,767.3	$0.0	$485.0	$137.0	$0.0	$0.0	$2,740.0	$9,700.0	$12,440.0
PS #37 - Interior	001	Janitors Room	60W Incandescent Fixture	1	60	0.06	500	30	$3.9	Replace 60W Incandescent Fixture with 13W CFL	1	13	0.013	500	500	6.5	6.5	None Proposed	0	23.5	3.1	$0.0	$5.0	$20.0	$0.0	$0.0	$20.0	$5.0	$25.0
PS #37 - Interior	001	Janitors Room	60W Incandescent Fixture	1	60	0.06	500	30	$3.9	Replace 60W Incandescent Fixture with 13W CFL	1	13	0.013	500	500	6.5	6.5	None Proposed	0	23.5	3.1	$0.0	$5.0	$20.0	$0.0	$0.0	$20.0	$5.0	$25.0
PS #37 - Interior	004	Storage	60W Incandescent Fixture	1	60	0.06	500	30	$3.9	Replace 60W Incandescent Fixture with 13W CFL	1	13	0.013	500	500	6.5	6.5	None Proposed	0	23.5	3.1	$0.0	$5.0	$20.0	$0.0	$0.0	$20.0	$5.0	$25.0
PS #7 - Exterior	133	Exterior	Exterior Wall Packs (Assume 70w)	15	1350	1.35	4380	5913	$887.0	Replace 70W Fixture with 45W Induction Light Fixture	15	660	0.66	4380	4380	2890.8	2890.8	None Proposed	0	3022.2	453.3	$0.0	$380.0	$137.0	$0.0	$0.0	$2,055.0	$5,700.0	$7,755.0
PS #7 - Interior	001	Auditorium	13W CFL Fixture	46	598	0.598	4380	2619.24	$392.9	None Proposed	46	598	0.598	4380	3066	2619.24	1833.468	Ceiling Mounted Occupancy Sensor	1	785.772	117.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	Boys Locker Room	13W CFL Fixture	1	13	0.013	500	6.5	$1.0	None Proposed	1	13	0.013	500	350	6.5	4.55	Ceiling Mounted Occupancy Sensor	1	1.95	0.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	Boys Locker Room	13W CFL Fixture	1	13	0.013	500	6.5	$1.0	None Proposed	1	13	0.013	500	350	6.5	4.55	Ceiling Mounted Occupancy Sensor	1	1.95	0.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	Conference Room	13W CFL Fixture	16	208	0.208	4380	911.04	$136.7	None Proposed	16	208	0.208	4380	3066	911.04	637.728	Ceiling Mounted Occupancy Sensor	1	273.312	41.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	Conference Room	13W CFL Fixture	8	104	0.104	4380	455.52	$68.3	None Proposed	8	104	0.104	4380	3066	455.52	318.864	Ceiling Mounted Occupancy Sensor	1	136.656	20.5	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	Girls	13W CFL Fixture	1	13	0.013	500	6.5	$1.0	None Proposed	1	13	0.013	500	350	6.5	4.55	Ceiling Mounted Occupancy Sensor	1	1.95	0.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	Hallway	13W CFL Fixture	4	52	0.052	8760	455.52	$68.3	None Proposed	4	52	0.052	8760	8760	455.52	455.52	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #7 - Interior	001	Hallway	13W CFL Fixture	6	78	0.078	8760	683.28	$102.5	None Proposed	6	78	0.078	8760	8760	683.28	683.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #7 - Interior	001	Library	13W CFL Fixture	35	455	0.455	4380	1992.9	$298.9	None Proposed	35	455	0.455	4380	3066	1992.9	1395.03	Ceiling Mounted Occupancy Sensor	1	597.87	89.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	Lobby	13W CFL Fixture	28	364	0.364	4380	1594.32	$239.1	None Proposed	28	364	0.364	4380	3066	1594.32	1116.024	Ceiling Mounted Occupancy Sensor	1	478.296	71.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	Lobby	13W CFL Fixture	15	195	0.195	4380	854.1	$128.1	None Proposed	15	195	0.195	4380	3066	854.1	597.87	Ceiling Mounted Occupancy Sensor	1	256.23	38.4	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	Lobby	13W CFL Fixture	7	91	0.091	4380	398.58	$59.8	None Proposed	7	91	0.091	4380	3066	398.58	279.006	Ceiling Mounted Occupancy Sensor	1	119.574	17.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	Lobby	13W CFL Fixture	9	117	0.117	4380	512.46	$76.9	None Proposed	9	117	0.117	4380	3066	512.46	358.722	Ceiling Mounted Occupancy Sensor	1	153.738	23.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	Main Office	13W CFL Fixture	4	52	0.052	4380	227.76	$34.2	None Proposed	4	52	0.052	4380	3066	227.76	159.432	Ceiling Mounted Occupancy Sensor	1	68.328	10.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	Music	13W CFL Fixture	30	390	0.39	4380	1708.2	$256.2	None Proposed	30	390	0.39	4380	3066	1708.2	1195.74	Ceiling Mounted Occupancy Sensor	1	512.46	76.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	110	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	10	254	0.254	4380	1112.52	$166.9	None Proposed	10	254	0.254	4380	3066	1112.52	778.764	Ceiling Mounted Occupancy Sensor	1	333.756	50.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	113	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	18	457.2	0.4572	4380	2002.536	$300.4	None Proposed	18	457.2	0.4572	4380	3066	2002.536	1401.7752	Ceiling Mounted Occupancy Sensor	1	600.7608	90.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	115	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	15	381	0.381	4380	1668.78	$250.3	None Proposed	15	381	0.381	4380	3066	1668.78	1168.146	Ceiling Mounted Occupancy Sensor	1	500.634	75.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	116	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	15	381	0.381	4380	1668.78	$250.3	None Proposed	15	381	0.381	4380	3066	1668.78	1168.146	Ceiling Mounted Occupancy Sensor	1	500.634	75.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	118	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	15	381	0.381	4380	1668.78	$250.3	None Proposed	15	381	0.381	4380	3066	1668.78	1168.146	Ceiling Mounted Occupancy Sensor	1	500.634	75.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #7 - Interior	001	120	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	15	381	0.381	4380	1668.78	$250.3	None Proposed	15	381	0.381	4380	3066	1668.78	1168.146	Ceiling Mounted Occupancy Sensor	1	500.634	75.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	130	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	20	508	0.508	4380	2225.04	$333.8	None Proposed	20	508	0.508	4380	3066	2225.04	1557.528	Ceiling Mounted Occupancy Sensor	1	667.512	100.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	132	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	16	406.4	0.4064	4380	1780.032	$267.0	None Proposed	16	406.4	0.4064	4380	3066	1780.032	1246.0224	Ceiling Mounted Occupancy Sensor	1	534.0096	80.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	134	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	12	304.8	0.3048	4380	1335.024	$200.3	None Proposed	12	304.8	0.3048	4380	3066	1335.024	934.5168	Ceiling Mounted Occupancy Sensor	1	400.5072	60.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	135	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	15	381	0.381	4380	1668.78	$250.3	None Proposed	15	381	0.381	4380	3066	1668.78	1168.146	Ceiling Mounted Occupancy Sensor	1	500.634	75.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	136	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	15	381	0.381	4380	1668.78	$250.3	None Proposed	15	381	0.381	4380	3066	1668.78	1168.146	Ceiling Mounted Occupancy Sensor	1	500.634	75.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	137	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	15	381	0.381	4380	1668.78	$250.3	None Proposed	15	381	0.381	4380	3066	1668.78	1168.146	Ceiling Mounted Occupancy Sensor	1	500.634	75.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	138	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	15	381	0.381	4380	1668.78	$250.3	None Proposed	15	381	0.381	4380	3066	1668.78	1168.146	Ceiling Mounted Occupancy Sensor	1	500.634	75.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	143	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	15	381	0.381	4380	1668.78	$250.3	None Proposed	15	381	0.381	4380	3066	1668.78	1168.146	Ceiling Mounted Occupancy Sensor	1	500.634	75.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	191	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	2	50.8	0.0508	4380	222.504	$33.4	None Proposed	2	50.8	0.0508	4380	3066	222.504	155.7528	Ceiling Mounted Occupancy Sensor	1	66.7512	10.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	193	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	2	50.8	0.0508	4380	222.504	$33.4	None Proposed	2	50.8	0.0508	4380	3066	222.504	155.7528	Ceiling Mounted Occupancy Sensor	1	66.7512	10.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	195	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	2	50.8	0.0508	4380	222.504	$33.4	None Proposed	2	50.8	0.0508	4380	3066	222.504	155.7528	Ceiling Mounted Occupancy Sensor	1	66.7512	10.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	196	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	4	101.6	0.1016	4380	445.008	$66.8	None Proposed	4	101.6	0.1016	4380	3066	445.008	311.5056	Ceiling Mounted Occupancy Sensor	1	133.5024	20.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	203	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	16	406.4	0.4064	4380	1780.032	$267.0	None Proposed	16	406.4	0.4064	4380	3066	1780.032	1246.0224	Ceiling Mounted Occupancy Sensor	1	534.0096	80.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	204	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	19	482.6	0.4826	4380	2113.788	$317.1	None Proposed	19	482.6	0.4826	4380	3066	2113.788	1479.6516	Ceiling Mounted Occupancy Sensor	1	634.1364	95.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	205	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	3	76.2	0.0762	4380	333.756	$50.1	None Proposed	3	76.2	0.0762	4380	3066	333.756	233.6292	Ceiling Mounted Occupancy Sensor	1	100.1268	15.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	207	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	11	279.4	0.2794	4380	1223.772	$183.6	None Proposed	11	279.4	0.2794	4380	3066	1223.772	856.6404	Ceiling Mounted Occupancy Sensor	1	367.1316	55.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	213	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	18	457.2	0.4572	4380	2002.536	$300.4	None Proposed	18	457.2	0.4572	4380	3066	2002.536	1401.7752	Ceiling Mounted Occupancy Sensor	1	600.7608	90.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	214	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	10	254	0.254	4380	1112.52	$166.9	None Proposed	10	254	0.254	4380	3066	1112.52	778.764	Ceiling Mounted Occupancy Sensor	1	333.756	50.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	215	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	15	381	0.381	4380	1668.78	$250.3	None Proposed	15	381	0.381	4380	3066	1668.78	1168.146	Ceiling Mounted Occupancy Sensor	1	500.634	75.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	216	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	15	381	0.381	4380	1668.78	$250.3	None Proposed	15	381	0.381	4380	3066	1668.78	1168.146	Ceiling Mounted Occupancy Sensor	1	500.634	75.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	217	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	12	304.8	0.3048	4380	1335.024	$200.3	None Proposed	12	304.8	0.3048	4380	3066	1335.024	934.5168	Ceiling Mounted Occupancy Sensor	1	400.5072	60.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	218	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	15	381	0.381	4380	1668.78	$250.3	None Proposed	15	381	0.381	4380	3066	1668.78	1168.146	Ceiling Mounted Occupancy Sensor	1	500.634	75.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	219	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	15	381	0.381	4380	1668.78	$250.3	None Proposed	15	381	0.381	4380	3066	1668.78	1168.146	Ceiling Mounted Occupancy Sensor	1	500.634	75.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	220	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	15	381	0.381	4380	1668.78	$250.3	None Proposed	15	381	0.381	4380	3066	1668.78	1168.146	Ceiling Mounted Occupancy Sensor	1	500.634	75.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	227	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	3	76.2	0.0762	4380	333.756	$50.1	None Proposed	3	76.2	0.0762	4380	3066	333.756	233.6292	Ceiling Mounted Occupancy Sensor	1	100.1268	15.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	300	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	4	101.6	0.1016	4380	445.008	$66.8	None Proposed	4	101.6	0.1016	4380	3066	445.008	311.5056	Ceiling Mounted Occupancy Sensor	1	133.5024	20.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	310	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	18	457.2	0.4572	4380	2002.536	$300.4	None Proposed	18	457.2	0.4572	4380	3066	2002.536	1401.7752	Ceiling Mounted Occupancy Sensor	1	600.7608	90.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	313	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	18	457.2	0.4572	4380	2002.536	$300.4	None Proposed	18	457.2	0.4572	4380	3066	2002.536	1401.7752	Ceiling Mounted Occupancy Sensor	1	600.7608	90.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	315	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	15	381	0.381	4380	1668.78	$250.3	None Proposed	15	381	0.381	4380	3066	1668.78	1168.146	Ceiling Mounted Occupancy Sensor	1	500.634	75.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	316	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	15	381	0.381	4380	1668.78	$250.3	None Proposed	15	381	0.381	4380	3066	1668.78	1168.146	Ceiling Mounted Occupancy Sensor	1	500.634	75.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	317	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	15	381	0.381	4380	1668.78	$250.3	None Proposed	15	381	0.381	4380	3066	1668.78	1168.146	Ceiling Mounted Occupancy Sensor	1	500.634	75.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	318	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	15	381	0.381	4380	1668.78	$250.3	None Proposed	15	381	0.381	4380	3066	1668.78	1168.146	Ceiling Mounted Occupancy Sensor	1	500.634	75.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	319	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	15	381	0.381	4380	1668.78	$250.3	None Proposed	15	381	0.381	4380	3066	1668.78	1168.146	Ceiling Mounted Occupancy Sensor	1	500.634	75.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	320	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	15	381	0.381	4380	1668.78	$250.3	None Proposed	15	381	0.381	4380	3066	1668.78	1168.146	Ceiling Mounted Occupancy Sensor	1	500.634	75.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	330	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	25	635	0.635	4380	2781.3	$417.2	None Proposed	25	635	0.635	4380	3066	2781.3	1946.91	Ceiling Mounted Occupancy Sensor	1	834.39	125.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	330	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	8	203.2	0.2032	4380	890.016	$133.5	None Proposed	8	203.2	0.2032	4380	3066	890.016	623.0112	Ceiling Mounted Occupancy Sensor	1	267.0048	40.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	330	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	15	381	0.381	4380	1668.78	$250.3	None Proposed	15	381	0.381	4380	3066	1668.78	1168.146	Ceiling Mounted Occupancy Sensor	1	500.634	75.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	331	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	1	25.4	0.0254	4380	111.252	$16.7	None Proposed	1	25.4	0.0254	4380	3066	111.252	77.8764	Ceiling Mounted Occupancy Sensor	1	33.3756	5.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	331	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	25	635	0.635	4380	2781.3	$417.2	None Proposed	25	635	0.635	4380	3066	2781.3	1946.91	Ceiling Mounted Occupancy Sensor	1	834.39	125.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	332	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	18	457.2	0.4572	4380	2002.536	$300.4	None Proposed	18	457.2	0.4572	4380	3066	2002.536	1401.7752	Ceiling Mounted Occupancy Sensor	1	600.7608	90.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	333	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	10	254	0.254	4380	1112.52	$166.9	None Proposed	10	254	0.254	4380	3066	1112.52	778.764	Ceiling Mounted Occupancy Sensor	1	333.756	50.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	334	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	15	381	0.381	4380	1668.78	$250.3	None Proposed	15	381	0.381	4380	3066	1668.78	1168.146	Ceiling Mounted Occupancy Sensor	1	500.634	75.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	336	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	15	381	0.381	4380	1668.78	$250.3	None Proposed	15	381	0.381	4380	3066	1668.78	1168.146	Ceiling Mounted Occupancy Sensor	1	500.634	75.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	339	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	15	381	0.381	4380	1668.78	$250.3	None Proposed	15	381	0.381	4380	3066	1668.78	1168.146	Ceiling Mounted Occupancy Sensor	1	500.634	75.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	343	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	15	381	0.381	4380	1668.78	$250.3	None Proposed	15	381	0.381	4380	3066	1668.78	1168.146	Ceiling Mounted Occupancy Sensor	1	500.634	75.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	161A	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	6	152.4	0.1524	4380	667.512	$100.1	None Proposed	6	152.4	0.1524	4380	3066	667.512	467.2584	Ceiling Mounted Occupancy Sensor	1	200.2536	30.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	161B	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	6	152.4	0.1524	4380	667.512	$100.1	None Proposed	6	152.4	0.1524	4380	3066	667.512	467.2584	Ceiling Mounted Occupancy Sensor	1	200.2536	30.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #7 - Interior	001	201D	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	30	762	0.762	4380	3337.56	$500.6	None Proposed	30	762	0.762	4380	3066	3337.56	2336.292	Ceiling Mounted Occupancy Sensor	1	1001.268	150.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	206A	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	2	50.8	0.0508	4380	222.504	$33.4	None Proposed	2	50.8	0.0508	4380	3066	222.504	155.7528	Ceiling Mounted Occupancy Sensor	1	66.7512	10.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	Auditorium	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	21	533.4	0.5334	4380	2336.292	$350.4	None Proposed	21	533.4	0.5334	4380	3066	2336.292	1635.4044	Ceiling Mounted Occupancy Sensor	1	700.8876	105.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	Boys Locker Room	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	4	101.6	0.1016	500	50.8	$7.6	None Proposed	4	101.6	0.1016	500	350	50.8	35.56	Ceiling Mounted Occupancy Sensor	1	15.24	2.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	Boys Locker Room	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	4	101.6	0.1016	500	50.8	$7.6	None Proposed	4	101.6	0.1016	500	350	50.8	35.56	Ceiling Mounted Occupancy Sensor	1	15.24	2.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	Break Room	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	35	889	0.889	4380	3893.82	$584.1	None Proposed	35	889	0.889	4380	3066	3893.82	2725.674	Ceiling Mounted Occupancy Sensor	1	1168.146	175.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	Conference Room	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	124	3149.6	3.1496	4380	13795.248	$2,069.3	None Proposed	124	3149.6	3.1496	4380	3066	13795.248	9656.6736	Ceiling Mounted Occupancy Sensor	1	4138.5744	620.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	Conference Room	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	8	203.2	0.2032	4380	890.016	$133.5	None Proposed	8	203.2	0.2032	4380	3066	890.016	623.0112	Ceiling Mounted Occupancy Sensor	1	267.0048	40.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	Conference Room	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	10	254	0.254	4380	1112.52	$166.9	None Proposed	10	254	0.254	4380	3066	1112.52	778.764	Ceiling Mounted Occupancy Sensor	1	333.756	50.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	Custodian Office	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	2	50.8	0.0508	4380	222.504	$33.4	None Proposed	2	50.8	0.0508	4380	3066	222.504	155.7528	Ceiling Mounted Occupancy Sensor	1	66.7512	10.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	Faculty Dining	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	9	228.6	0.2286	4380	1001.268	$150.2	None Proposed	9	228.6	0.2286	4380	3066	1001.268	700.8876	Ceiling Mounted Occupancy Sensor	1	300.3804	45.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	Girls	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	8	203.2	0.2032	500	101.6	$15.2	None Proposed	8	203.2	0.2032	500	350	101.6	71.12	Ceiling Mounted Occupancy Sensor	1	30.48	4.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	Girls Room	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	4	101.6	0.1016	500	50.8	$7.6	None Proposed	4	101.6	0.1016	500	350	50.8	35.56	Ceiling Mounted Occupancy Sensor	1	15.24	2.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	Hallway	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	2	50.8	0.0508	8760	445.008	$66.8	None Proposed	2	50.8	0.0508	8760	8760	445.008	445.008	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #7 - Interior	001	Hallway	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	8	203.2	0.2032	8760	1780.032	$267.0	None Proposed	8	203.2	0.2032	8760	8760	1780.032	1780.032	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #7 - Interior	001	Hallway	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	34	863.6	0.8636	8760	7565.136	$1,134.8	None Proposed	34	863.6	0.8636	8760	8760	7565.136	7565.136	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #7 - Interior	001	Hallway	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	21	533.4	0.5334	8760	4672.584	$700.9	None Proposed	21	533.4	0.5334	8760	8760	4672.584	4672.584	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #7 - Interior	001	Hallway	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	12	304.8	0.3048	8760	2670.048	$400.5	None Proposed	12	304.8	0.3048	8760	8760	2670.048	2670.048	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #7 - Interior	001	Hallway	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	27	685.8	0.6858	8760	6007.608	$901.1	None Proposed	27	685.8	0.6858	8760	8760	6007.608	6007.608	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #7 - Interior	001	Hallway	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	15	381	0.381	8760	3337.56	$500.6	None Proposed	15	381	0.381	8760	8760	3337.56	3337.56	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #7 - Interior	001	Hallway	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	6	152.4	0.1524	8760	1335.024	$200.3	None Proposed	6	152.4	0.1524	8760	8760	1335.024	1335.024	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #7 - Interior	001	Hallway	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	20	508	0.508	8760	4450.08	$667.5	None Proposed	20	508	0.508	8760	8760	4450.08	4450.08	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #7 - Interior	001	Hallway	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	30	762	0.762	8760	6675.12	$1,001.3	None Proposed	30	762	0.762	8760	8760	6675.12	6675.12	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #7 - Interior	001	Hallway	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	20	508	0.508	8760	4450.08	$667.5	None Proposed	20	508	0.508	8760	8760	4450.08	4450.08	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #7 - Interior	001	Hallway	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	30	762	0.762	8760	6675.12	$1,001.3	None Proposed	30	762	0.762	8760	8760	6675.12	6675.12	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #7 - Interior	001	Hallway	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	18	457.2	0.4572	8760	4005.072	$600.8	None Proposed	18	457.2	0.4572	8760	8760	4005.072	4005.072	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #7 - Interior	001	Hallway	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	26	660.4	0.6604	8760	5785.104	$867.8	None Proposed	26	660.4	0.6604	8760	8760	5785.104	5785.104	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #7 - Interior	001	Hallway	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	20	508	0.508	8760	4450.08	$667.5	None Proposed	20	508	0.508	8760	8760	4450.08	4450.08	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #7 - Interior	001	Hallway	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	13	330.2	0.3302	8760	2892.552	$433.9	None Proposed	13	330.2	0.3302	8760	8760	2892.552	2892.552	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #7 - Interior	001	Hallway	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	7	177.8	0.1778	8760	1557.528	$233.6	None Proposed	7	177.8	0.1778	8760	8760	1557.528	1557.528	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #7 - Interior	001	Hallway	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	5	127	0.127	8760	1112.52	$166.9	None Proposed	5	127	0.127	8760	8760	1112.52	1112.52	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #7 - Interior	001	Hallway	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	18	457.2	0.4572	8760	4005.072	$600.8	None Proposed	18	457.2	0.4572	8760	8760	4005.072	4005.072	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #7 - Interior	001	Hallway	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	9	228.6	0.2286	8760	2002.536	$300.4	None Proposed	9	228.6	0.2286	8760	8760	2002.536	2002.536	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #7 - Interior	001	Hallway	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	20	508	0.508	8760	4450.08	$667.5	None Proposed	20	508	0.508	8760	8760	4450.08	4450.08	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #7 - Interior	001	Hallway	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	30	762	0.762	8760	6675.12	$1,001.3	None Proposed	30	762	0.762	8760	8760	6675.12	6675.12	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #7 - Interior	001	Hallway	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	30	762	0.762	8760	6675.12	$1,001.3	None Proposed	30	762	0.762	8760	8760	6675.12	6675.12	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #7 - Interior	001	Hallway	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	20	508	0.508	8760	4450.08	$667.5	None Proposed	20	508	0.508	8760	8760	4450.08	4450.08	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #7 - Interior	001	Kitchen	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	8	203.2	0.2032	4380	890.016	$133.5	None Proposed	8	203.2	0.2032	4380	4380	890.016	890.016	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #7 - Interior	001	Kitchen	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	5	127	0.127	4380	556.26	$83.4	None Proposed	5	127	0.127	4380	4380	556.26	556.26	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #7 - Interior	001	Kitchen	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	1	25.4	0.0254	4380	111.252	$16.7	None Proposed	1	25.4	0.0254	4380	4380	111.252	111.252	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #7 - Interior	001	Library	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	12	304.8	0.3048	4380	1335.024	$200.3	None Proposed	12	304.8	0.3048	4380	3066	1335.024	934.5168	Ceiling Mounted Occupancy Sensor	1	400.5072	60.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	Main Office	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	23	584.2	0.5842	4380	2558.796	$383.8	None Proposed	23	584.2	0.5842	4380	3066	2558.796	1791.1572	Ceiling Mounted Occupancy Sensor	1	767.6388	115.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	Mens	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	9	228.6	0.2286	500	114.3	$17.1	None Proposed	9	228.6	0.2286	500	350	114.3	80.01	Ceiling Mounted Occupancy Sensor	1	34.29	5.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	Mens Bathroom	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	5	127	0.127	500	63.5	$9.5	None Proposed	5	127	0.127	500	350	63.5	44.45	Ceiling Mounted Occupancy Sensor	1	19.05	2.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	Music	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	8	203.2	0.2032	4380	890.016	$133.5	None Proposed	8	203.2	0.2032	4380	3066	890.016	623.0112	Ceiling Mounted Occupancy Sensor	1	267.0048	40.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	Nurse	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	15	381	0.381	4380	1668.78	$250.3	None Proposed	15	381	0.381	4380	3066	1668.78	1168.146	Ceiling Mounted Occupancy Sensor	1	500.634	75.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	Office	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	22	558.8	0.5588	4380	2447.544	$367.1	None Proposed	22	558.8	0.5588	4380	3066	2447.544	1713.2808	Ceiling Mounted Occupancy Sensor	1	734.2632	110.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	Rec Room	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	4	101.6	0.1016	4380	445.008	$66.8	None Proposed	4	101.6	0.1016	4380	3066	445.008	311.5056	Ceiling Mounted Occupancy Sensor	1	133.5024	20.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	Staff Bathroom	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	1	25.4	0.0254	500	12.7	$1.9	None Proposed	1	25.4	0.0254	500	350	12.7	8.89	Ceiling Mounted Occupancy Sensor	1	3.81	0.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	Staff Bathroom	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	1	25.4	0.0254	500	12.7	$1.9	None Proposed	1	25.4	0.0254	500	350	12.7	8.89	Ceiling Mounted Occupancy Sensor	1	3.81	0.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #7 - Interior	001	Womens	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	5	127	0.127	500	63.5	$9.5	None Proposed	5	127	0.127	500	350	63.5	44.45	Ceiling Mounted Occupancy Sensor	1	19.05	2.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	Womens Bathroom	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	5	127	0.127	500	63.5	$9.5	None Proposed	5	127	0.127	500	350	63.5	44.45	Ceiling Mounted Occupancy Sensor	1	19.05	2.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	000	Boiler Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	40	2028	2.028	500	1014	$152.1	None Proposed	40	2028	2.028	500	350	1014	709.8	Ceiling Mounted Occupancy Sensor	1	304.2	45.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	000	Drawing Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	4380	666.198	$99.9	None Proposed	3	152.1	0.1521	4380	2554	666.198	388.4634	Ceiling Mounted Occupancy Sensor	1	277.7346	41.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	000	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	405.6	0.4056	8760	3553.056	$533.0	None Proposed	8	405.6	0.4056	8760	8760	3553.056	3553.056	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #7 - Interior	000	Stairwell	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	8760	2664.792	$399.7	None Proposed	6	304.2	0.3042	8760	8760	2664.792	2664.792	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #7 - Interior	001	Library	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	72	3650.4	3.6504	4380	15988.752	$2,398.3	None Proposed	72	3650.4	3.6504	4380	3066	15988.752	11192.1264	Ceiling Mounted Occupancy Sensor	1	4796.6256	719.5	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	Mechanical Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	253.5	0.2535	500	126.75	$19.0	None Proposed	5	253.5	0.2535	500	350	126.75	88.725	Ceiling Mounted Occupancy Sensor	1	38.025	5.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	Mechanical Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	500	152.1	$22.8	None Proposed	6	304.2	0.3042	500	350	152.1	106.47	Ceiling Mounted Occupancy Sensor	1	45.63	6.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	Music	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	32	1622.4	1.6224	4380	7106.112	$1,065.9	None Proposed	32	1622.4	1.6224	4380	3066	7106.112	4974.2784	Ceiling Mounted Occupancy Sensor	1	2131.8336	319.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	329	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	336	0.336	4380	1471.68	$220.8	None Proposed	3	336	0.336	4380	3066	1471.68	1030.176	Ceiling Mounted Occupancy Sensor	1	441.504	66.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #7 - Interior	001	Hallway	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	30	3360	3.36	8760	29433.6	$4,415.0	None Proposed	30	3360	3.36	8760	8760	29433.6	29433.6	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #7 - Interior	001	Kitchen	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	15	1680	1.68	4380	7358.4	$1,103.8	None Proposed	15	1680	1.68	4380	4380	7358.4	7358.4	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #7 - Interior	001	Kitchen	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	16	1792	1.792	4380	7848.96	$1,177.3	None Proposed	16	1792	1.792	4380	4380	7848.96	7848.96	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #7 - Interior	001	Auditorium	400W MH High Bay Fixture	20	9160	9.16	4380	40120.8	$6,018.1	Replace 400W Fixture with 250W Induction Light Fixture	20	4300	4.3	4380	3066	18834	13183.8	Ceiling Mounted Occupancy Sensor	1	26937	4,040.6	$0.0	$485.0	$137.0	$103.0	$73.5	$2,813.5	$9,803.0	$12,616.5
PS #7 - Interior	001	Gym	400W MH High Bay Fixture	56	25648	25.648	4380	112338.24	$16,850.7	Replace 400W Fixture with 250W Induction Light Fixture	56	12040	12.04	4380	4380	52735.2	52735.2	None Proposed	0	59603.04	8,940.5	$0.0	$485.0	$137.0	$0.0	$0.0	$7,672.0	$27,160.0	$34,832.0
PS #7 - Interior	001	Lobby	400W MH High Bay Fixture	12	5496	5.496	4380	24072.48	$3,610.9	Replace 400W Fixture with 250W Induction Light Fixture	12	2580	2.58	4380	3066	11300.4	7910.28	Ceiling Mounted Occupancy Sensor	1	16162.2	2,424.3	$0.0	$485.0	$137.0	$103.0	$73.5	$1,717.5	$5,923.0	$7,640.5
Regional Day - Exterior	215	Exterior	Exterior Wall Packs (Assume 70w)	5	450	0.45	4380	1971	$335.1	Replace 70W Fixture with 45W Induction Light Fixture	5	220	0.22	4380	4380	963.6	963.6	None Proposed	0	1007.4	171.3	$0.0	$380.0	$137.0	$0.0	$0.0	$685.0	$1,900.0	$2,585.0
Regional Day - Interior	001	Janitors	13W CFL Fixture	1	13	0.013	500	6.5	$1.1	None Proposed	1	13	0.013	500	350	6.5	4.55	Ceiling Mounted Occupancy Sensor	1	1.95	0.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Regional Day - Interior	001	Custodian Office	1x4 Fixtures w/ 1-T12 Lamp Fixture w/ Magnetic Ballast	2	85.6	0.0856	4380	374.928	$63.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	2	48.64	0.04864	4380	3066	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	38.4	$35.0	$5.0	$65.0	$103.0	$73.5	$203.5	$183.0	$386.5
Regional Day - Interior	001	Electrical	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	171.2	0.1712	500	85.6	$14.6	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	2	97.2	0.0972	500	350	48.6	34.02	Ceiling Mounted Occupancy Sensor	1	51.58	8.8	$70.0	$10.0	$65.0	$103.0	$73.5	$203.5	$263.0	$466.5
Regional Day - Interior	001	Storage	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	500	101.4	$17.2	None Proposed	4	202.8	0.2028	500	350	101.4	70.98	Ceiling Mounted Occupancy Sensor	1	30.42	5.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Regional Day - Interior	001	A119	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	2	171.2	0.1712	4380	749.856	$127.5	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	2	97.28	0.09728	4380	3066	426.0864	298.26048	Ceiling Mounted Occupancy Sensor	1	451.59552	76.8	$55.0	$10.0	$65.0	$103.0	$73.5	$203.5	$233.0	$436.5
Regional Day - Interior	001	Storage	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	16	1369.6	1.3696	500	684.8	$116.4	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	16	778.24	0.77824	500	350	389.12	272.384	Ceiling Mounted Occupancy Sensor	1	412.416	70.1	$55.0	$10.0	$65.0	$103.0	$73.5	$1,113.5	$1,143.0	$2,256.5
Regional Day - Interior	001	Bathroom	1x8 Fixture w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$4.3	Replace T8 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	500	350	24.32	17.024	Ceiling Mounted Occupancy Sensor	1	8.326	1.4	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
Regional Day - Interior	001	Bathroom	1x8 Fixture w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$4.3	Replace T8 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	500	350	24.32	17.024	Ceiling Mounted Occupancy Sensor	1	8.326	1.4	$55.0	$10.0	$65.0	$103.0	$73.5	$138.5	$168.0	$306.5
Regional Day - Interior	001	6	2' 17W Fluorescent Fixture	1	15	0.015	4380	65.7	$11.2	None Proposed	1	15	0.015	4380	3066	65.7	45.99	Ceiling Mounted Occupancy Sensor	1	19.71	3.4	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Regional Day - Interior	001	7	2' 17W Fluorescent Fixture	1	15	0.015	4380	65.7	$11.2	None Proposed	1	15	0.015	4380	3066	65.7	45.99	Ceiling Mounted Occupancy Sensor	1	19.71	3.4	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Regional Day - Interior	001	B120	2' 17W Fluorescent Fixture	1	15	0.015	4380	65.7	$11.2	None Proposed	1	15	0.015	4380	3066	65.7	45.99	Ceiling Mounted Occupancy Sensor	1	19.71	3.4	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Regional Day - Interior	001	11	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	4380	374.928	$63.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	50.7	0.0507	4380	3066	222.066	155.4462	Ceiling Mounted Occupancy Sensor	1	219.4818	37.3	$70.0	$10.0	$65.0	$103.0	$73.5	$138.5	$183.0	$321.5
Regional Day - Interior	001	12	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	4380	374.928	$63.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	50.7	0.0507	4380	3066	222.066	155.4462	Ceiling Mounted Occupancy Sensor	1	219.4818	37.3	$70.0	$10.0	$65.0	$103.0	$73.5	$138.5	$183.0	$321.5
Regional Day - Interior	001	13	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	4380	374.928	$63.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	50.7	0.0507	4380	3066	222.066	155.4462	Ceiling Mounted Occupancy Sensor	1	219.4818	37.3	$70.0	$10.0	$65.0	$103.0	$73.5	$138.5	$183.0	$321.5
Regional Day - Interior	001	14	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	4380	374.928	$63.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	50.7	0.0507	4380	3066	222.066	155.4462	Ceiling Mounted Occupancy Sensor	1	219.4818	37.3	$70.0	$10.0	$65.0	$103.0	$73.5	$138.5	$183.0	$321.5
Regional Day - Interior	001	15	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	4380	374.928	$63.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	50.7	0.0507	4380	3066	222.066	155.4462	Ceiling Mounted Occupancy Sensor	1	219.4818	37.3	$70.0	$10.0	$65.0	$103.0	$73.5	$138.5	$183.0	$321.5
Regional Day - Interior	001	16	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	4380	374.928	$63.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	50.7	0.0507	4380	3066	222.066	155.4462	Ceiling Mounted Occupancy Sensor	1	219.4818	37.3	$70.0	$10.0	$65.0	$103.0	$73.5	$138.5	$183.0	$321.5
Regional Day - Interior	001	17	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	4380	374.928	$63.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	50.7	0.0507	4380	3066	222.066	155.4462	Ceiling Mounted Occupancy Sensor	1	219.4818	37.3	$70.0	$10.0	$65.0	$103.0	$73.5	$138.5	$183.0	$321.5
Regional Day - Interior	001	19	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	4380	374.928	$63.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	50.7	0.0507	4380	3066	222.066	155.4462	Ceiling Mounted Occupancy Sensor	1	219.4818	37.3	$70.0	$10.0	$65.0	$103.0	$73.5	$138.5	$183.0	$321.5
Regional Day - Interior	001	A124	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	4380	374.928	$63.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	50.7	0.0507	4380	3066	222.066	155.4462	Ceiling Mounted Occupancy Sensor	1	219.4818	37.3	$70.0	$10.0	$65.0	$103.0	$73.5	$138.5	$183.0	$321.5
Regional Day - Interior	001	A124	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	4380	374.928	$63.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	50.7	0.0507	4380	3066	222.066	155.4462	Ceiling Mounted Occupancy Sensor	1	219.4818	37.3	$70.0	$10.0	$65.0	$103.0	$73.5	$138.5	$183.0	$321.5
Regional Day - Interior	001	A124	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	4380	374.928	$63.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	50.7	0.0507	4380	3066	222.066	155.4462	Ceiling Mounted Occupancy Sensor	1	219.4818	37.3	$70.0	$10.0	$65.0	$103.0	$73.5	$138.5	$183.0	$321.5
Regional Day - Interior	001	A124	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	4380	374.928	$63.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	50.7	0.0507	4380	3066	222.066	155.4462	Ceiling Mounted Occupancy Sensor	1	219.4818	37.3	$70.0	$10.0	$65.0	$103.0	$73.5	$138.5	$183.0	$321.5
Regional Day - Interior	001	Bathroom	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	500	42.8	$7.3	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	50.7	0.0507	500	350	25.35	17.745	Ceiling Mounted Occupancy Sensor	1	25.055	4.3	$70.0	$10.0	$65.0	$103.0	$73.5	$138.5	$183.0	$321.5
Regional Day - Interior	001	Bathroom	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	500	42.8	$7.3	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	50.7	0.0507	500	350	25.35	17.745	Ceiling Mounted Occupancy Sensor	1	25.055	4.3	$70.0	$10.0	$65.0	$103.0	$73.5	$138.5	$183.0	$321.5
Regional Day - Interior	001	Classroom	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	4380	374.928	$63.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	50.7	0.0507	4380	3066	222.066	155.4462	Ceiling Mounted Occupancy Sensor	1	219.4818	37.3	$70.0	$10.0	$65.0	$103.0	$73.5	$138.5	$183.0	$321.5
Regional Day - Interior	001	Classroom	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	8	684.8	0.6848	4380	2999.424	$509.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	8	405.6	0.4056	4380	3066	1776.528	1243.5696	Ceiling Mounted Occupancy Sensor	1	1755.8544	298.5	$70.0	$10.0	$65.0	$103.0	$73.5	$593.5	$743.0	$1,336.5
Regional Day - Interior	001	Closet	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	500	42.8	$7.3	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	50.7	0.0507	500	350	25.35	17.745	Ceiling Mounted Occupancy Sensor	1	25.055	4.3	$70.0	$10.0	$65.0	$103.0	$73.5	$138.5	$183.0	$321.5
Regional Day - Interior	001	Hallway	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	7	599.2	0.5992	8760	5248.992	$892.3	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	7	354.9	0.3549	8760	8760	3108.924	3108.924	None Proposed	0	2140.068	363.8	$70.0	$10.0	$65.0	$0.0	$0.0	$455.0	$560.0	$1,015.0
Regional Day - Interior	001	Hallway	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	17	1455.2	1.4552	8760	12747.552	$2,167.1	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	17	861.9	0.8619	8760	8760	7550.244	7550.244	None Proposed	0	5197.308	883.5	$70.0	$10.0	$65.0	$0.0	$0.0	$1,105.0	$1,360.0	$2,465.0

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
Regional Day - Interior	001	Locker Room	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	4380	374.928	$63.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	50.7	0.0507	4380	3066	222.066	155.4462	Ceiling Mounted Occupancy Sensor	1	219.4818	37.3	$70.0	$10.0	$65.0	$103.0	$73.5	$138.5	$183.0	$321.5
Regional Day - Interior	001	Nurse	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	32	2739.2	2.7392	4380	11997.696	$2,039.6	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	32	1622.4	1.6224	4380	3066	7106.112	4974.2784	Ceiling Mounted Occupancy Sensor	1	7023.4176	1,194.0	$70.0	$10.0	$65.0	$103.0	$73.5	$2,153.5	$2,663.0	$4,816.5
Regional Day - Interior	001	Storage	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	500	42.8	$7.3	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	50.7	0.0507	500	350	25.35	17.745	Ceiling Mounted Occupancy Sensor	1	25.055	4.3	$70.0	$10.0	$65.0	$103.0	$73.5	$138.5	$183.0	$321.5
Regional Day - Interior	001	Storage	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	500	42.8	$7.3	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	50.7	0.0507	500	350	25.35	17.745	Ceiling Mounted Occupancy Sensor	1	25.055	4.3	$70.0	$10.0	$65.0	$103.0	$73.5	$138.5	$183.0	$321.5
Regional Day - Interior	001	Storage	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	500	42.8	$7.3	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	50.7	0.0507	500	350	25.35	17.745	Ceiling Mounted Occupancy Sensor	1	25.055	4.3	$70.0	$10.0	$65.0	$103.0	$73.5	$138.5	$183.0	$321.5
Regional Day - Interior	001	Teachers Café	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	4380	374.928	$63.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	50.7	0.0507	4380	3066	222.066	155.4462	Ceiling Mounted Occupancy Sensor	1	219.4818	37.3	$70.0	$10.0	$65.0	$103.0	$73.5	$138.5	$183.0	$321.5
Regional Day - Interior	001	6	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	8	684.8	0.6848	4380	2999.424	$509.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	8	388.8	0.3888	4380	3066	1702.944	1192.0608	Ceiling Mounted Occupancy Sensor	1	1807.3632	307.3	$70.0	$10.0	$65.0	$103.0	$73.5	$593.5	$743.0	$1,336.5
Regional Day - Interior	001	7	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	8	684.8	0.6848	4380	2999.424	$509.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	8	388.8	0.3888	4380	3066	1702.944	1192.0608	Ceiling Mounted Occupancy Sensor	1	1807.3632	307.3	$70.0	$10.0	$65.0	$103.0	$73.5	$593.5	$743.0	$1,336.5
Regional Day - Interior	001	11	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	1027.2	1.0272	4380	4499.136	$764.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	583.2	0.5832	4380	3066	2554.416	1788.0912	Ceiling Mounted Occupancy Sensor	1	2711.0448	460.9	$70.0	$10.0	$65.0	$103.0	$73.5	$853.5	$1,063.0	$1,916.5
Regional Day - Interior	001	12	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	11	941.6	0.9416	4380	4124.208	$701.1	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	11	534.6	0.5346	4380	3066	2341.548	1639.0836	Ceiling Mounted Occupancy Sensor	1	2485.1244	422.5	$70.0	$10.0	$65.0	$103.0	$73.5	$788.5	$983.0	$1,771.5
Regional Day - Interior	001	13	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	1027.2	1.0272	4380	4499.136	$764.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	583.2	0.5832	4380	3066	2554.416	1788.0912	Ceiling Mounted Occupancy Sensor	1	2711.0448	460.9	$70.0	$10.0	$65.0	$103.0	$73.5	$853.5	$1,063.0	$1,916.5
Regional Day - Interior	001	14	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	1027.2	1.0272	4380	4499.136	$764.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	583.2	0.5832	4380	3066	2554.416	1788.0912	Ceiling Mounted Occupancy Sensor	1	2711.0448	460.9	$70.0	$10.0	$65.0	$103.0	$73.5	$853.5	$1,063.0	$1,916.5
Regional Day - Interior	001	15	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	1027.2	1.0272	4380	4499.136	$764.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	583.2	0.5832	4380	3066	2554.416	1788.0912	Ceiling Mounted Occupancy Sensor	1	2711.0448	460.9	$70.0	$10.0	$65.0	$103.0	$73.5	$853.5	$1,063.0	$1,916.5
Regional Day - Interior	001	16	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	1027.2	1.0272	4380	4499.136	$764.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	583.2	0.5832	4380	3066	2554.416	1788.0912	Ceiling Mounted Occupancy Sensor	1	2711.0448	460.9	$70.0	$10.0	$65.0	$103.0	$73.5	$853.5	$1,063.0	$1,916.5
Regional Day - Interior	001	17	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	1027.2	1.0272	4380	4499.136	$764.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	583.2	0.5832	4380	3066	2554.416	1788.0912	Ceiling Mounted Occupancy Sensor	1	2711.0448	460.9	$70.0	$10.0	$65.0	$103.0	$73.5	$853.5	$1,063.0	$1,916.5
Regional Day - Interior	001	19	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	1027.2	1.0272	4380	4499.136	$764.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	583.2	0.5832	4380	3066	2554.416	1788.0912	Ceiling Mounted Occupancy Sensor	1	2711.0448	460.9	$70.0	$10.0	$65.0	$103.0	$73.5	$853.5	$1,063.0	$1,916.5
Regional Day - Interior	001	300	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	342.4	0.3424	4380	1499.712	$255.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	4	194.4	0.1944	4380	3066	851.472	596.0304	Ceiling Mounted Occupancy Sensor	1	903.6816	153.6	$70.0	$10.0	$65.0	$103.0	$73.5	$333.5	$423.0	$756.5
Regional Day - Interior	001	301	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	171.2	0.1712	4380	749.856	$127.5	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	2	97.2	0.0972	4380	3066	425.736	298.0152	Ceiling Mounted Occupancy Sensor	1	451.8408	76.8	$70.0	$10.0	$65.0	$103.0	$73.5	$203.5	$263.0	$466.5
Regional Day - Interior	001	302	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	171.2	0.1712	4380	749.856	$127.5	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	2	97.2	0.0972	4380	3066	425.736	298.0152	Ceiling Mounted Occupancy Sensor	1	451.8408	76.8	$70.0	$10.0	$65.0	$103.0	$73.5	$203.5	$263.0	$466.5
Regional Day - Interior	001	13120	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	8	684.8	0.6848	4380	2999.424	$509.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	8	388.8	0.3888	4380	3066	1702.944	1192.0608	Ceiling Mounted Occupancy Sensor	1	1807.3632	307.3	$70.0	$10.0	$65.0	$103.0	$73.5	$593.5	$743.0	$1,336.5
Regional Day - Interior	001	A119	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	8	684.8	0.6848	4380	2999.424	$509.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	8	388.8	0.3888	4380	3066	1702.944	1192.0608	Ceiling Mounted Occupancy Sensor	1	1807.3632	307.3	$70.0	$10.0	$65.0	$103.0	$73.5	$593.5	$743.0	$1,336.5
Regional Day - Interior	001	A124	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	8	684.8	0.6848	4380	2999.424	$509.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	8	388.8	0.3888	4380	3066	1702.944	1192.0608	Ceiling Mounted Occupancy Sensor	1	1807.3632	307.3	$70.0	$10.0	$65.0	$103.0	$73.5	$593.5	$743.0	$1,336.5
Regional Day - Interior	001	A124	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	8	684.8	0.6848	4380	2999.424	$509.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	8	388.8	0.3888	4380	3066	1702.944	1192.0608	Ceiling Mounted Occupancy Sensor	1	1807.3632	307.3	$70.0	$10.0	$65.0	$103.0	$73.5	$593.5	$743.0	$1,336.5
Regional Day - Interior	001	A124	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	8	684.8	0.6848	4380	2999.424	$509.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	8	388.8	0.3888	4380	3066	1702.944	1192.0608	Ceiling Mounted Occupancy Sensor	1	1807.3632	307.3	$70.0	$10.0	$65.0	$103.0	$73.5	$593.5	$743.0	$1,336.5
Regional Day - Interior	001	Bathroom	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	171.2	0.1712	500	85.6	$14.6	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	2	97.2	0.0972	500	350	48.6	34.02	Ceiling Mounted Occupancy Sensor	1	51.58	8.8	$70.0	$10.0	$65.0	$103.0	$73.5	$203.5	$263.0	$466.5
Regional Day - Interior	001	Classroom	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	8	684.8	0.6848	4380	2999.424	$509.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	8	388.8	0.3888	4380	3066	1702.944	1192.0608	Ceiling Mounted Occupancy Sensor	1	1807.3632	307.3	$70.0	$10.0	$65.0	$103.0	$73.5	$593.5	$743.0	$1,336.5
Regional Day - Interior	001	Classroom	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	4380	374.928	$63.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.6	0.0486	4380	3066	212.868	149.0076	Ceiling Mounted Occupancy Sensor	1	225.9204	38.4	$70.0	$10.0	$65.0	$103.0	$73.5	$138.5	$183.0	$321.5
Regional Day - Interior	001	Classroom	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	4380	374.928	$63.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.6	0.0486	4380	3066	212.868	149.0076	Ceiling Mounted Occupancy Sensor	1	225.9204	38.4	$70.0	$10.0	$65.0	$103.0	$73.5	$138.5	$183.0	$321.5
Regional Day - Interior	001	Family Living	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	10	856	0.856	4380	3749.28	$637.4	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	10	486	0.486	4380	3066	2128.68	1490.076	Ceiling Mounted Occupancy Sensor	1	2259.204	384.1	$70.0	$10.0	$65.0	$103.0	$73.5	$723.5	$903.0	$1,626.5
Regional Day - Interior	001	Hallway	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	171.2	0.1712	8760	1499.712	$255.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	2	97.2	0.0972	8760	8760	851.472	851.472	None Proposed	0	648.24	110.2	$70.0	$10.0	$65.0	$0.0	$0.0	$130.0	$160.0	$290.0
Regional Day - Interior	001	Hallway	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	171.2	0.1712	8760	1499.712	$255.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	2	97.2	0.0972	8760	8760	851.472	851.472	None Proposed	0	648.24	110.2	$70.0	$10.0	$65.0	$0.0	$0.0	$130.0	$160.0	$290.0
Regional Day - Interior	001	Hallway	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	8	684.8	0.6848	8760	5998.848	$1,019.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	8	388.8	0.3888	8760	8760	3405.888	3405.888	None Proposed	0	2592.96	440.8	$70.0	$10.0	$65.0	$0.0	$0.0	$520.0	$640.0	$1,160.0
Regional Day - Interior	001	Hallway	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	342.4	0.3424	8760	2999.424	$509.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	4	194.4	0.1944	8760	8760	1702.944	1702.944	None Proposed	0	1296.48	220.4	$70.0	$10.0	$65.0	$0.0	$0.0	$260.0	$320.0	$580.0
Regional Day - Interior	001	Hallway	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	9	770.4	0.7704	8760	6748.704	$1,147.3	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	9	437.4	0.4374	8760	8760	3831.624	3831.624	None Proposed	0	2917.08	495.9	$70.0	$10.0	$65.0	$0.0	$0.0	$585.0	$720.0	$1,305.0
Regional Day - Interior	001	Locker Room	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	3	256.8	0.2568	4380	1124.784	$191.2	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	3	145.8	0.1458	4380	3066	638.604	447.0228	Ceiling Mounted Occupancy Sensor	1	677.7612	115.2	$70.0	$10.0	$65.0	$103.0	$73.5	$268.5	$343.0	$611.5
Regional Day - Interior	001	Media Center	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	11	941.6	0.9416	4380	4124.208	$701.1	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	11	534.6	0.5346	4380	3066	2341.548	1639.0836	Ceiling Mounted Occupancy Sensor	1	2485.1244	422.5	$70.0	$10.0	$65.0	$103.0	$73.5	$788.5	$983.0	$1,771.5
Regional Day - Interior	001	Nurse	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	32	2739.2	2.7392	4380	11997.696	$2,039.6	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	32	1555.2	1.5552	4380	3066	6811.776	4768.2432	Ceiling Mounted Occupancy Sensor	1	7229.4528	1,229.0	$70.0	$10.0	$65.0	$103.0	$73.5	$2,153.5	$2,663.0	$4,816.5
Regional Day - Interior	001	Office	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	6	513.6	0.5136	4380	2249.568	$382.4	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	6	291.6	0.2916	4380	3066	1277.208	894.0456	Ceiling Mounted Occupancy Sensor	1	1355.5224	230.4	$70.0	$10.0	$65.0	$103.0	$73.5	$463.5	$583.0	$1,046.5
Regional Day - Interior	001	Office	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	4380	374.928	$63.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.6	0.0486	4380	3066	212.868	149.0076	Ceiling Mounted Occupancy Sensor	1	225.9204	38.4	$70.0	$10.0	$65.0	$103.0	$73.5	$138.5	$183.0	$321.5
Regional Day - Interior	001	Storage	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	500	42.8	$7.3	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.6	0.0486	500	350	24.3	17.01	Ceiling Mounted Occupancy Sensor	1	25.79	4.4	$70.0	$10.0	$65.0	$103.0	$73.5	$138.5	$183.0	$321.5
Regional Day - Interior	001	Storage	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	500	42.8	$7.3	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.6	0.0486	500	350	24.3	17.01	Ceiling Mounted Occupancy Sensor	1	25.79	4.4	$70.0	$10.0	$65.0	$103.0	$73.5	$138.5	$183.0	$321.5
Regional Day - Interior	001	Storage	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	500	42.8	$7.3	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.6	0.0486	500	350	24.3	17.01	Ceiling Mounted Occupancy Sensor	1	25.79	4.4	$70.0	$10.0	$65.0	$103.0	$73.5	$138.5	$183.0	$321.5
Regional Day - Interior	001	Storage	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	500	42.8	$7.3	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.6	0.0486	500	350	24.3	17.01	Ceiling Mounted Occupancy Sensor	1	25.79	4.4	$70.0	$10.0	$65.0	$103.0	$73.5	$138.5	$183.0	$321.5
Regional Day - Interior	001	Teachers Café	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	342.4	0.3424	4380	1499.712	$255.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	4	194.4	0.1944	4380	3066	851.472	596.0304	Ceiling Mounted Occupancy Sensor	1	903.6816	153.6	$70.0	$10.0	$65.0	$103.0	$73.5	$333.5	$423.0	$756.5
Regional Day - Interior	001	Therapy	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	4380	374.928	$63.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.6	0.0486	4380	4380	212.868	212.868	None Proposed	0	162.06	27.6	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0
Regional Day - Interior	001	Office	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	4380	981.12	$166.8	None Proposed	2	224	0.224	4380	3066	981.12	686.784	Ceiling Mounted Occupancy Sensor	1	294.336	50.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Regional Day - Interior	001	Gym / Multi-use	400W MH Fixture	9	4122	4.122	4380	18054.36	$3,069.2	None Proposed	9	4122	4.122	4380	4380	18054.36	18054.36	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
Regional Day - Interior	001	A119	8' T12 Fixture w/ 1-T12 Lamp	1	112	0.112	4380	490.56	$83.4	Replace 8' T12 Fixture with 1 Tandem Double-Length 1-T8 Lamp Fixture	1	64	0.064	4380	3066	280.32	196.224	Ceiling Mounted Occupancy Sensor	1	294.336	$0.0	$65.1	$82.0	$93.0	$103.0	$73.5	$166.5	$250.1	$416.6

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
Lincoln - Interior	000	53	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$513.0	None Proposed	21	1064.7	1.0647	4380	4380	4663.386	4663.386	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Exterior	003	Exterior	Exterior Wall Packs (Assume 70w)	25	2250	2.25	4380	9855	$1,084.1	Replace 70W Fixture with Induction Light Fixture	25	1100	1.1	4380	4380	4818	4818	None Proposed	0	5037	554.1	$0.0	$380.0	$137.0	$0.0	$0.0	$3,425.0	$9,500.0	$12,925.0
Lincoln - Interior	000	57	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$439.7	None Proposed	18	912.6	0.9126	4380	4380	3997.188	3997.188	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	000	58	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$439.7	None Proposed	18	912.6	0.9126	4380	4380	3997.188	3997.188	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	000	61	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	22	1115.4	1.1154	4380	4885.452	$537.4	None Proposed	22	1115.4	1.1154	4380	3066	4885.452	3419.8164	Ceiling Mounted Occupancy Sensor	1	1465.6356	161.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	000	108	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$647.5	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	194.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	000	109	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	10	1120	1.12	4380	4905.6	$539.6	None Proposed	10	1120	1.12	4380	3066	4905.6	3433.92	Ceiling Mounted Occupancy Sensor	1	1471.68	161.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	000	112	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$647.5	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	194.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	000	113	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$647.5	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	194.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	000	114	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	10	1120	1.12	4380	4905.6	$539.6	None Proposed	10	1120	1.12	4380	3066	4905.6	3433.92	Ceiling Mounted Occupancy Sensor	1	1471.68	161.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	000	118	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	4380	981.12	$107.9	None Proposed	2	224	0.224	4380	3066	981.12	686.784	Ceiling Mounted Occupancy Sensor	1	294.336	32.4	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	000	Auditorium	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	50	2535	2.535	4380	11103.3	$1,221.4	None Proposed	50	2535	2.535	4380	3066	11103.3	7772.31	Ceiling Mounted Occupancy Sensor	1	3330.99	366.4	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	000	Auditorium	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	105	5323.5	5.3235	4380	23316.93	$2,564.9	None Proposed	105	5323.5	5.3235	4380	3066	23316.93	16321.851	Ceiling Mounted Occupancy Sensor	1	6995.079	769.5	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	000	Auto Shop	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	24	1216.8	1.2168	4380	5329.584	$586.3	None Proposed	24	1216.8	1.2168	4380	3066	5329.584	3730.7088	Ceiling Mounted Occupancy Sensor	1	1598.8752	175.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	000	Auto Shop	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	44	2230.8	2.2308	4380	9770.904	$1,074.8	None Proposed	44	2230.8	2.2308	4380	3066	9770.904	6839.6328	Ceiling Mounted Occupancy Sensor	1	2931.2712	322.4	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	000	Back Stage	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	7	354.9	0.3549	4380	1554.462	$171.0	None Proposed	7	354.9	0.3549	4380	3066	1554.462	1088.1234	Ceiling Mounted Occupancy Sensor	1	466.3386	51.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	000	Back Stage	300W Incandescent Fixture	1	300	0.3	4380	1314	$144.5	Replace 300W Incandescent Fixture with 65W CFL	1	65	0.065	4380	3066	284.7	199.29	Ceiling Mounted Occupancy Sensor	1	1114.71	122.6	$0.0	$25.0	$16.0	$103.0	$73.5	$89.5	$128.0	$217.5
Lincoln - Interior	000	Bathroom	8' T8 Fixture w/ 2-8' T8 Lamp	4	377.6	0.3776	500	188.8	$20.8	None Proposed	4	377.6	0.3776	500	350	188.8	132.16	Ceiling Mounted Occupancy Sensor	1	56.64	6.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	000	Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$2.8	None Proposed	1	50.7	0.0507	500	350	25.35	17.745	Ceiling Mounted Occupancy Sensor	1	7.605	0.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	000	Boiler Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	10	507	0.507	500	253.5	$27.9	None Proposed	10	507	0.507	500	350	253.5	177.45	Ceiling Mounted Occupancy Sensor	1	76.05	8.4	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	000	Boiler Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$5.6	None Proposed	2	101.4	0.1014	500	350	50.7	35.49	Ceiling Mounted Occupancy Sensor	1	15.21	1.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	000	Elevator	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$2.8	None Proposed	1	50.7	0.0507	500	350	25.35	17.745	Ceiling Mounted Occupancy Sensor	1	7.605	0.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	000	Gym	400W MH High Bay Fixture	25	11450	11.45	4380	50151	$5,516.6	Replace 400W Fixture with Induction Light Fixture	25	5375	5.375	4380	3066	23542.5	16479.75	Ceiling Mounted Occupancy Sensor	1	33671.25	3,703.8	$0.0	$485.0	$137.0	$103.0	$73.5	$3,498.5	$12,228.0	$15,726.5
Lincoln - Interior	000	Gym	400W MH Fixture	24	10992	10.992	4380	48144.96	$5,295.9	None Proposed	24	10992	10.992	4380	3066	48144.96	33701.472	Ceiling Mounted Occupancy Sensor	1	14443.488	1,588.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	000	Gym	400W MH High Bay Fixture	15	6870	6.87	4380	30090.6	$3,310.0	Replace 400W Fixture with Induction Light Fixture	15	3225	3.225	4380	3066	14125.5	9887.85	Ceiling Mounted Occupancy Sensor	1	20202.75	2,222.3	$0.0	$485.0	$137.0	$103.0	$73.5	$2,128.5	$7,378.0	$9,506.5
Lincoln - Interior	000	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	13	659.1	0.6591	8760	5773.716	$635.1	None Proposed	13	659.1	0.6591	8760	8760	5773.716	5773.716	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	000	Hallway	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	8760	888.264	$97.7	None Proposed	2	101.4	0.1014	8760	8760	888.264	888.264	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	000	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	11	557.7	0.5577	8760	4885.452	$537.4	None Proposed	11	557.7	0.5577	8760	8760	4885.452	4885.452	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	000	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	8760	2664.792	$293.1	None Proposed	6	304.2	0.3042	8760	8760	2664.792	2664.792	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	000	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	7	354.9	0.3549	8760	3108.924	$342.0	None Proposed	7	354.9	0.3549	8760	8760	3108.924	3108.924	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	000	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	10	507	0.507	8760	4441.32	$488.5	None Proposed	10	507	0.507	8760	8760	4441.32	4441.32	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	000	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	16	811.2	0.8112	8760	7106.112	$781.7	None Proposed	16	811.2	0.8112	8760	8760	7106.112	7106.112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	000	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	253.5	0.2535	8760	2220.66	$244.3	None Proposed	5	253.5	0.2535	8760	8760	2220.66	2220.66	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	000	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	11	557.7	0.5577	8760	4885.452	$537.4	None Proposed	11	557.7	0.5577	8760	8760	4885.452	4885.452	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	000	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	405.6	0.4056	8760	3553.056	$390.8	None Proposed	8	405.6	0.4056	8760	8760	3553.056	3553.056	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	000	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	8760	1776.528	$195.4	None Proposed	4	202.8	0.2028	8760	8760	1776.528	1776.528	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	000	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	8760	7994.376	$879.4	None Proposed	18	912.6	0.9126	8760	8760	7994.376	7994.376	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	000	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	8760	2664.792	$293.1	None Proposed	6	304.2	0.3042	8760	8760	2664.792	2664.792	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	000	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	8760	2664.792	$293.1	None Proposed	6	304.2	0.3042	8760	8760	2664.792	2664.792	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	000	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	8760	1332.396	$146.6	None Proposed	3	152.1	0.1521	8760	8760	1332.396	1332.396	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	000	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	405.6	0.4056	8760	3553.056	$390.8	None Proposed	8	405.6	0.4056	8760	8760	3553.056	3553.056	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	000	Locker	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	12	1027.2	1.0272	4380	4499.136	$494.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	583.68	0.58368	4380	3066	2556.5184	1789.56288	Ceiling Mounted Occupancy Sensor	1	2709.57312	298.1	$55.0	$10.0	$32.0	$103.0	$73.5	$457.5	$883.0	$1,340.5
Lincoln - Interior	000	Locker	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	4	342.4	0.3424	4380	1499.712	$165.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	4	194.56	0.19456	4380	3066	852.1728	596.52096	Ceiling Mounted Occupancy Sensor	1	903.19104	99.4	$55.0	$10.0	$32.0	$103.0	$73.5	$201.5	$363.0	$564.5
Lincoln - Interior	000	Locker	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$24.4	None Proposed	1	50.7	0.0507	4380	3066	222.066	155.4462	Ceiling Mounted Occupancy Sensor	1	66.6198	7.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	000	Main Office	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	96	10752	10.752	4380	47093.76	$5,180.3	None Proposed	96	10752	10.752	4380	3066	47093.76	32965.632	Ceiling Mounted Occupancy Sensor	1	14128.128	1,554.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	000	Mechanical Room	8' T8 Fixture w/ 2-8' T8 Lamp	2	188.8	0.1888	500	94.4	$10.4	None Proposed	2	188.8	0.1888	500	350	94.4	66.08	Ceiling Mounted Occupancy Sensor	1	28.32	3.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	000	Mens	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	1	25.4	0.0254	500	12.7	$1.4	None Proposed	1	25.4	0.0254	500	350	12.7	8.89	Ceiling Mounted Occupancy Sensor	1	3.81	0.4	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	000	Mens Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$5.6	None Proposed	2	101.4	0.1014	500	350	50.7	35.49	Ceiling Mounted Occupancy Sensor	1	15.21	1.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
Lincoln - Interior	000	Mens Locker	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	405.6	0.4056	4380	1776.528	$195.4	None Proposed	8	405.6	0.4056	4380	3066	1776.528	1243.5696	Ceiling Mounted Occupancy Sensor	1	532.9584	58.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	000	Nurse Office	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	8	896	0.896	4380	3924.48	$431.7	None Proposed	8	896	0.896	4380	3066	3924.48	2747.136	Ceiling Mounted Occupancy Sensor	1	1177.344	129.5	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	000	Office	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	336	0.336	4380	1471.68	$161.9	None Proposed	3	336	0.336	4380	3066	1471.68	1030.176	Ceiling Mounted Occupancy Sensor	1	441.504	48.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	000	Office	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	1	63	0.063	4380	275.94	$30.4	None Proposed	1	63	0.063	4380	3066	275.94	193.158	Ceiling Mounted Occupancy Sensor	1	82.782	9.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	000	Office	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$48.9	None Proposed	2	101.4	0.1014	4380	3066	444.132	310.8924	Ceiling Mounted Occupancy Sensor	1	133.2396	14.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	000	Office	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$647.5	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	194.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	000	Pool	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	10	507	0.507	4380	2220.66	$244.3	None Proposed	10	507	0.507	4380	3066	2220.66	1554.462	Ceiling Mounted Occupancy Sensor	1	666.198	73.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	000	Safety Room	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	4380	981.12	$107.9	None Proposed	2	224	0.224	4380	3066	981.12	686.784	Ceiling Mounted Occupancy Sensor	1	294.336	32.4	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	000	Shower Area	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	12	1027.2	1.0272	4380	4499.136	$494.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	583.68	0.58368	4380	2554	2556.5184	1490.71872	Ceiling Mounted Occupancy Sensor	1	3008.41728	330.9	$55.0	$10.0	$32.0	$103.0	$73.5	$457.5	$883.0	$1,340.5
Lincoln - Interior	000	Stairwell	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	8760	888.264	$97.7	None Proposed	2	101.4	0.1014	8760	8760	888.264	888.264	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	000	Stairwell	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	8760	888.264	$97.7	None Proposed	2	101.4	0.1014	8760	8760	888.264	888.264	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	000	Teacher Lounge	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	7	784	0.784	4380	3433.92	$377.7	None Proposed	7	784	0.784	4380	3066	3433.92	2403.744	Ceiling Mounted Occupancy Sensor	1	1030.176	113.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	000	Teacher Lounge	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$24.4	None Proposed	1	50.7	0.0507	4380	3066	222.066	155.4462	Ceiling Mounted Occupancy Sensor	1	66.6198	7.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	000	Teacher Lounge	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	1	63	0.063	4380	275.94	$30.4	None Proposed	1	63	0.063	4380	3066	275.94	193.158	Ceiling Mounted Occupancy Sensor	1	82.782	9.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	000	Weight Room	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$971.3	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Ceiling Mounted Occupancy Sensor	1	2649.024	291.4	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	000	Womens	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	1	25.4	0.0254	500	12.7	$1.4	None Proposed	1	25.4	0.0254	500	350	12.7	8.89	Ceiling Mounted Occupancy Sensor	1	3.81	0.4	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	000	Womens Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$5.6	None Proposed	2	101.4	0.1014	500	350	50.7	35.49	Ceiling Mounted Occupancy Sensor	1	15.21	1.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	000	Wood Shop	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	48	2433.6	2.4336	500	1216.8	$133.8	None Proposed	48	2433.6	2.4336	500	350	1216.8	851.76	Ceiling Mounted Occupancy Sensor	1	365.04	40.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	001	103	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	10	880	0.88	4380	3854.4	$424.0	None Proposed	10	880	0.88	4380	3066	3854.4	2698.08	Ceiling Mounted Occupancy Sensor	1	1156.32	127.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	001	104	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$381.6	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Ceiling Mounted Occupancy Sensor	1	1040.688	114.5	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	001	105	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$293.1	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Ceiling Mounted Occupancy Sensor	1	799.4376	87.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	001	106	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	14	1232	1.232	4380	5396.16	$593.6	None Proposed	14	1232	1.232	4380	3066	5396.16	3777.312	Ceiling Mounted Occupancy Sensor	1	1618.848	178.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	001	106	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	4	352	0.352	4380	1541.76	$169.6	None Proposed	4	352	0.352	4380	3066	1541.76	1079.232	Ceiling Mounted Occupancy Sensor	1	462.528	50.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	001	108	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	8	704	0.704	4380	3083.52	$339.2	None Proposed	8	704	0.704	4380	3066	3083.52	2158.464	Ceiling Mounted Occupancy Sensor	1	925.056	101.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	001	110	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$381.6	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Ceiling Mounted Occupancy Sensor	1	1040.688	114.5	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	001	112	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	3	264	0.264	4380	1156.32	$127.2	None Proposed	3	264	0.264	4380	3066	1156.32	809.424	Ceiling Mounted Occupancy Sensor	1	346.896	38.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	001	115	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$381.6	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Ceiling Mounted Occupancy Sensor	1	1040.688	114.5	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	001	119	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$381.6	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Ceiling Mounted Occupancy Sensor	1	1040.688	114.5	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	001	121	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	3	264	0.264	4380	1156.32	$127.2	None Proposed	3	264	0.264	4380	3066	1156.32	809.424	Ceiling Mounted Occupancy Sensor	1	346.896	38.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	001	121	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	7	441	0.441	4380	1931.58	$212.5	None Proposed	7	441	0.441	4380	3066	1931.58	1352.106	Ceiling Mounted Occupancy Sensor	1	579.474	63.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	001	123	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	405.6	0.4056	4380	1776.528	$195.4	None Proposed	8	405.6	0.4056	4380	3066	1776.528	1243.5696	Ceiling Mounted Occupancy Sensor	1	532.9584	58.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	001	169	150W Incandescent Fixture	25	3750	3.75	4380	16425	$1,806.8	Replace 150W Incandescent Fixture with 25W CFL	25	625	0.625	4380	3066	2737.5	1916.25	Ceiling Mounted Occupancy Sensor	1	14508.75	1,596.0	$0.0	$7.0	$16.0	$103.0	$73.5	$473.5	$278.0	$751.5
Lincoln - Interior	001	169	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$48.9	None Proposed	2	101.4	0.1014	4380	3066	444.132	310.8924	Ceiling Mounted Occupancy Sensor	1	133.2396	14.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	001	169	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	336	0.336	4380	1471.68	$161.9	None Proposed	3	336	0.336	4380	3066	1471.68	1030.176	Ceiling Mounted Occupancy Sensor	1	441.504	48.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	001	179	150W Incandescent Fixture	25	3750	3.75	4380	16425	$1,806.8	Replace 150W Incandescent Fixture with 25W CFL	25	625	0.625	4380	3066	2737.5	1916.25	Ceiling Mounted Occupancy Sensor	1	14508.75	1,596.0	$0.0	$7.0	$16.0	$103.0	$73.5	$473.5	$278.0	$751.5
Lincoln - Interior	001	181	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	36	1825.2	1.8252	4380	7994.376	$879.4	None Proposed	36	1825.2	1.8252	4380	3066	7994.376	5596.0632	Ceiling Mounted Occupancy Sensor	1	2398.3128	263.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	001	182	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	30	1521	1.521	4380	6661.98	$732.8	None Proposed	30	1521	1.521	4380	3066	6661.98	4663.386	Ceiling Mounted Occupancy Sensor	1	1998.594	219.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	001	182	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	16	811.2	0.8112	4380	3553.056	$390.8	None Proposed	16	811.2	0.8112	4380	3066	3553.056	2487.1392	Ceiling Mounted Occupancy Sensor	1	1065.9168	117.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	001	184	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$439.7	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Ceiling Mounted Occupancy Sensor	1	1199.1564	131.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	001	Cosmetology	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	39	1977.3	1.9773	4380	8660.574	$952.7	None Proposed	39	1977.3	1.9773	4380	3066	8660.574	6062.4018	Ceiling Mounted Occupancy Sensor	1	2598.1722	285.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	001	Gym	400W MH Fixture	40	18320	18.32	4380	80241.6	$8,826.6	None Proposed	40	18320	18.32	4380	3066	80241.6	56169.12	Ceiling Mounted Occupancy Sensor	1	24072.48	2,648.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	001	Hallway	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	9	567	0.567	8760	4966.92	$546.4	None Proposed	9	567	0.567	8760	8760	4966.92	4966.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	001	Hallway	42W CFL Fixture	3	147	0.147	8760	1287.72	$141.6	None Proposed	3	147	0.147	8760	8760	1287.72	1287.72	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	001	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	8760	5329.584	$586.3	None Proposed	12	608.4	0.6084	8760	8760	5329.584	5329.584	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	001	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	11	557.7	0.5577	8760	4885.452	$537.4	None Proposed	11	557.7	0.5577	8760	8760	4885.452	4885.452	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	001	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	8760	2664.792	$293.1	None Proposed	6	304.2	0.3042	8760	8760	2664.792	2664.792	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	001	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	8760	2664.792	$293.1	None Proposed	6	304.2	0.3042	8760	8760	2664.792	2664.792	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	001	Hallway	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	10	254	0.254	8760	2225.04	$244.8	None Proposed	10	254	0.254	8760	8760	2225.04	2225.04	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
Lincoln - Interior	001	Mens	2' 17W Fluorescent Fixture	3	45	0.045	500	22.5	$2.5	None Proposed	3	45	0.045	500	350	22.5	15.75	Ceiling Mounted Occupancy Sensor	1	6.75	0.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	001	Slop Sink	60W Incandescent Fixture	1	60	0.06	500	30	$3.3	Replace 60W Incandescent Fixture with 13W CFL	1	13	0.013	500	350	6.5	4.55	Ceiling Mounted Occupancy Sensor	1	25.45	2.8	$0.0	$5.0	$16.0	$103.0	$73.5	$89.5	$108.0	$197.5
Lincoln - Interior	001	Stairwell	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	253.5	0.2535	8760	2220.66	$244.3	None Proposed	5	253.5	0.2535	8760	8760	2220.66	2220.66	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	001	Stairwell	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	8760	1332.396	$146.6	None Proposed	3	152.1	0.1521	8760	8760	1332.396	1332.396	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	001	Stairwell	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	2	126	0.126	8760	1103.76	$121.4	None Proposed	2	126	0.126	8760	8760	1103.76	1103.76	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	001	Stairwell	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	253.5	0.2535	8760	2220.66	$244.3	None Proposed	5	253.5	0.2535	8760	8760	2220.66	2220.66	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	001	Womens	2' 17W Fluorescent Fixture	3	45	0.045	500	22.5	$2.5	None Proposed	3	45	0.045	500	350	22.5	15.75	Ceiling Mounted Occupancy Sensor	1	6.75	0.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	002	201	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$24.4	None Proposed	1	50.7	0.0507	4380	3066	222.066	155.4462	Ceiling Mounted Occupancy Sensor	1	66.6198	7.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	002	204	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	8	704	0.704	4380	3083.52	$339.2	None Proposed	8	704	0.704	4380	3066	3083.52	2158.464	Ceiling Mounted Occupancy Sensor	1	925.056	101.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	002	205	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$381.6	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Ceiling Mounted Occupancy Sensor	1	1040.688	114.5	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	002	207	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	3	264	0.264	4380	1156.32	$127.2	None Proposed	3	264	0.264	4380	3066	1156.32	809.424	Ceiling Mounted Occupancy Sensor	1	346.896	38.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	002	208	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	14	1232	1.232	4380	5396.16	$593.6	None Proposed	14	1232	1.232	4380	3066	5396.16	3777.312	Ceiling Mounted Occupancy Sensor	1	1618.848	178.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	002	209	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	4	352	0.352	4380	1541.76	$169.6	None Proposed	4	352	0.352	4380	3066	1541.76	1079.232	Ceiling Mounted Occupancy Sensor	1	462.528	50.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	002	211	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	10	880	0.88	4380	3854.4	$424.0	None Proposed	10	880	0.88	4380	3066	3854.4	2698.08	Ceiling Mounted Occupancy Sensor	1	1156.32	127.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	002	214	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	8	704	0.704	4380	3083.52	$339.2	None Proposed	8	704	0.704	4380	3066	3083.52	2158.464	Ceiling Mounted Occupancy Sensor	1	925.056	101.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	002	214	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$24.4	None Proposed	1	50.7	0.0507	4380	3066	222.066	155.4462	Ceiling Mounted Occupancy Sensor	1	66.6198	7.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	002	221	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	4380	770.88	$84.8	None Proposed	2	176	0.176	4380	3066	770.88	539.616	Ceiling Mounted Occupancy Sensor	1	231.264	25.4	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	002	225	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$381.6	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Ceiling Mounted Occupancy Sensor	1	1040.688	114.5	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	002	227	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$381.6	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Ceiling Mounted Occupancy Sensor	1	1040.688	114.5	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	002	231	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	8	704	0.704	4380	3083.52	$339.2	None Proposed	8	704	0.704	4380	3066	3083.52	2158.464	Ceiling Mounted Occupancy Sensor	1	925.056	101.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	002	256	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	45	5040	5.04	4380	22075.2	$2,428.3	None Proposed	45	5040	5.04	4380	3066	22075.2	15452.64	Ceiling Mounted Occupancy Sensor	1	6622.56	728.5	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	002	207A	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	4380	770.88	$84.8	None Proposed	2	176	0.176	4380	3066	770.88	539.616	Ceiling Mounted Occupancy Sensor	1	231.264	25.4	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	002	211A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$48.9	None Proposed	2	101.4	0.1014	4380	3066	444.132	310.8924	Ceiling Mounted Occupancy Sensor	1	133.2396	14.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	002	216A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$24.4	None Proposed	1	50.7	0.0507	4380	3066	222.066	155.4462	Ceiling Mounted Occupancy Sensor	1	66.6198	7.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	002	216A	2' 17W Fluorescent Fixture	4	60	0.06	4380	262.8	$28.9	None Proposed	4	60	0.06	4380	3066	262.8	183.96	Ceiling Mounted Occupancy Sensor	1	78.84	8.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	002	256A	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	4380	981.12	$107.9	None Proposed	2	224	0.224	4380	3066	981.12	686.784	Ceiling Mounted Occupancy Sensor	1	294.336	32.4	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	002	Custodian	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	500	528	$58.1	None Proposed	12	1056	1.056	500	350	528	369.6	Ceiling Mounted Occupancy Sensor	1	158.4	17.4	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	002	Custodian	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$2.8	None Proposed	1	50.7	0.0507	500	350	25.35	17.745	Ceiling Mounted Occupancy Sensor	1	7.605	0.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	002	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	8760	5329.584	$586.3	None Proposed	12	608.4	0.6084	8760	8760	5329.584	5329.584	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	002	Hallway	42W CFL Fixture	10	490	0.49	8760	4292.4	$472.2	None Proposed	10	490	0.49	8760	8760	4292.4	4292.4	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	002	Hallway	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	2	126	0.126	8760	1103.76	$121.4	None Proposed	2	126	0.126	8760	8760	1103.76	1103.76	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	002	Hallway	42W CFL Fixture	8	392	0.392	8760	3433.92	$377.7	None Proposed	8	392	0.392	8760	8760	3433.92	3433.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	002	Hallway	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	8760	888.264	$97.7	None Proposed	2	101.4	0.1014	8760	8760	888.264	888.264	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	002	Kitchen	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	36	1825.2	1.8252	4380	7994.376	$879.4	None Proposed	36	1825.2	1.8252	4380	3066	7994.376	5596.0632	Ceiling Mounted Occupancy Sensor	1	2398.3128	263.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	002	Kitchen	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	27	1368.9	1.3689	4380	5995.782	$659.5	None Proposed	27	1368.9	1.3689	4380	3066	5995.782	4197.0474	Ceiling Mounted Occupancy Sensor	1	1798.7346	197.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	002	Mens Bathroom	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	3	189	0.189	500	94.5	$10.4	None Proposed	3	189	0.189	500	350	94.5	66.15	Ceiling Mounted Occupancy Sensor	1	28.35	3.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	002	Office	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	7	784	0.784	4380	3433.92	$377.7	None Proposed	7	784	0.784	4380	3066	3433.92	2403.744	Ceiling Mounted Occupancy Sensor	1	1030.176	113.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	002	Office	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	1	63	0.063	4380	275.94	$30.4	None Proposed	1	63	0.063	4380	3066	275.94	193.158	Ceiling Mounted Occupancy Sensor	1	82.782	9.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	002	Reading Room	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	24	609.6	0.6096	4380	2670.048	$293.7	None Proposed	24	609.6	0.6096	4380	3066	2670.048	1869.0336	Ceiling Mounted Occupancy Sensor	1	801.0144	88.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	002	Slop Sink	60W Incandescent Fixture	1	60	0.06	500	30	$3.3	Replace 60W Incandescent Fixture with 13W CFL	1	13	0.013	500	350	6.5	4.55	Ceiling Mounted Occupancy Sensor	1	25.45	2.8	$0.0	$5.0	$16.0	$103.0	$73.5	$89.5	$108.0	$197.5
Lincoln - Interior	002	Staff	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$24.4	None Proposed	1	50.7	0.0507	4380	3066	222.066	155.4462	Ceiling Mounted Occupancy Sensor	1	66.6198	7.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	002	Stairs	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	8760	888.264	$97.7	None Proposed	2	101.4	0.1014	8760	8760	888.264	888.264	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	002	Stairs	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	8760	1776.528	$195.4	None Proposed	4	202.8	0.2028	8760	8760	1776.528	1776.528	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	002	Storage	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	500	152.1	$16.7	None Proposed	6	304.2	0.3042	500	350	152.1	106.47	Ceiling Mounted Occupancy Sensor	1	45.63	5.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	002	Womens Bathroom	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	3	189	0.189	500	94.5	$10.4	None Proposed	3	189	0.189	500	350	94.5	66.15	Ceiling Mounted Occupancy Sensor	1	28.35	3.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	003	300	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$24.4	None Proposed	1	50.7	0.0507	4380	3066	222.066	155.4462	Ceiling Mounted Occupancy Sensor	1	66.6198	7.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	003	301	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	14	1232	1.232	4380	5396.16	$593.6	None Proposed	14	1232	1.232	4380	3066	5396.16	3777.312	Ceiling Mounted Occupancy Sensor	1	1618.848	178.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	003	302	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$381.6	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Ceiling Mounted Occupancy Sensor	1	1040.688	114.5	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
Lincoln - Interior	003	303	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$508.8	None Proposed	12	1056	1.056	4380	3066	4625.28	3237.696	Ceiling Mounted Occupancy Sensor	1	1387.584	152.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	003	304	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	10	880	0.88	4380	3854.4	$424.0	None Proposed	10	880	0.88	4380	3066	3854.4	2698.08	Ceiling Mounted Occupancy Sensor	1	1156.32	127.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	003	318	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	3	264	0.264	4380	1156.32	$127.2	None Proposed	3	264	0.264	4380	3066	1156.32	809.424	Ceiling Mounted Occupancy Sensor	1	346.896	38.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	003	320	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	4380	2312.64	$254.4	None Proposed	6	528	0.528	4380	3066	2312.64	1618.848	Ceiling Mounted Occupancy Sensor	1	693.792	76.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	003	Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$2.8	None Proposed	1	50.7	0.0507	500	350	25.35	17.745	Ceiling Mounted Occupancy Sensor	1	7.605	0.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	003	Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$2.8	None Proposed	1	50.7	0.0507	500	350	25.35	17.745	Ceiling Mounted Occupancy Sensor	1	7.605	0.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
Lincoln - Interior	003	Hallway	2' 17W Fluorescent Fixture	3	45	0.045	8760	394.2	$43.4	None Proposed	3	45	0.045	8760	8760	394.2	394.2	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	003	Hallway	13W CFL Fixture	2	26	0.026	8760	227.76	$25.1	None Proposed	2	26	0.026	8760	8760	227.76	227.76	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	003	Hallway	42W CFL Fixture	8	392	0.392	8760	3433.92	$377.7	None Proposed	8	392	0.392	8760	8760	3433.92	3433.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	003	Hallway	42W CFL Fixture	8	392	0.392	8760	3433.92	$377.7	None Proposed	8	392	0.392	8760	8760	3433.92	3433.92	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Lincoln - Interior	003	Hallway	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	6	378	0.378	8760	3311.28	$364.2	None Proposed	6	378	0.378	8760	8760	3311.28	3311.28	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
McNair - Exterior	000	Exterior	Exterior Wall Packs (Assume 70w)	15	1350	1.35	4380	5913	$887.0	Replace 70W Fixture with Induction Light Fixture	15	660	0.66	4380	4380	2890.8	2890.8	None Proposed	0	3022.2	453.3	$0.0	$380.0	$137.0	$0.0	$0.0	$2,055.0	$5,700.0	$7,755.0
McNair - Interior	000	Art Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	26	1318.2	1.3182	4380	5773.716	$866.1	None Proposed	26	1318.2	1.3182	4380	3066	5773.716	4041.6012	Ceiling Mounted Occupancy Sensor	1	1732.1148	259.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	000	B-11	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	000	B-4	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	000	Boiler Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	9	456.3	0.4563	500	228.15	$34.2	None Proposed	9	456.3	0.4563	500	350	228.15	159.705	Ceiling Mounted Occupancy Sensor	1	68.445	10.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	000	Boiler Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	17	861.9	0.8619	500	430.95	$64.6	None Proposed	17	861.9	0.8619	500	350	430.95	301.665	Ceiling Mounted Occupancy Sensor	1	129.285	19.4	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	000	Boiler Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	17	861.9	0.8619	500	430.95	$64.6	None Proposed	17	861.9	0.8619	500	350	430.95	301.665	Ceiling Mounted Occupancy Sensor	1	129.285	19.4	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	000	Boys	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	2	126	0.126	500	63	$9.5	None Proposed	2	126	0.126	500	350	63	44.1	Ceiling Mounted Occupancy Sensor	1	18.9	2.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	000	Boys Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	405.6	0.4056	500	202.8	$30.4	None Proposed	8	405.6	0.4056	500	350	202.8	141.96	Ceiling Mounted Occupancy Sensor	1	60.84	9.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	000	Boys Locker	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	4380	770.88	$115.6	None Proposed	2	176	0.176	4380	3066	770.88	539.616	Ceiling Mounted Occupancy Sensor	1	231.264	34.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	000	Boys Locker	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	13	659.1	0.6591	4380	2886.858	$433.0	None Proposed	13	659.1	0.6591	4380	3066	2886.858	2020.8006	Ceiling Mounted Occupancy Sensor	1	866.0574	129.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	000	Cafeteria	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	41	4592	4.592	4380	20112.96	$3,016.9	None Proposed	41	4592	4.592	4380	3066	20112.96	14079.072	Ceiling Mounted Occupancy Sensor	1	6033.888	905.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	000	Cafeteria	13W CFL Fixture	11	143	0.143	4380	626.34	$94.0	None Proposed	11	143	0.143	4380	3066	626.34	438.438	Ceiling Mounted Occupancy Sensor	1	187.902	28.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	000	Girls Locker	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	336	0.336	4380	1471.68	$220.8	None Proposed	3	336	0.336	4380	3066	1471.68	1030.176	Ceiling Mounted Occupancy Sensor	1	441.504	66.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	000	Girls Locker	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	405.6	0.4056	4380	1776.528	$266.5	None Proposed	8	405.6	0.4056	4380	3066	1776.528	1243.5696	Ceiling Mounted Occupancy Sensor	1	532.9584	79.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	000	H20	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	7	354.9	0.3549	4380	1554.462	$233.2	None Proposed	7	354.9	0.3549	4380	3066	1554.462	1088.1234	Ceiling Mounted Occupancy Sensor	1	466.3386	70.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	000	Hallway	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	12	756	0.756	8760	6622.56	$993.4	None Proposed	12	756	0.756	8760	8760	6622.56	6622.56	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
McNair - Interior	000	Hallway	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	10	630	0.63	8760	5518.8	$827.8	None Proposed	10	630	0.63	8760	8760	5518.8	5518.8	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
McNair - Interior	000	Kiln Room	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	4380	981.12	$147.2	None Proposed	2	224	0.224	4380	3066	981.12	686.784	Ceiling Mounted Occupancy Sensor	1	294.336	44.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	000	Kitchen	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	20	2240	2.24	4380	9811.2	$1,471.7	None Proposed	20	2240	2.24	4380	3066	9811.2	6867.84	Ceiling Mounted Occupancy Sensor	1	2943.36	441.5	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	000	Mens	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$3.8	None Proposed	1	50.7	0.0507	500	350	25.35	17.745	Ceiling Mounted Occupancy Sensor	1	7.605	1.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	000	Office	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	336	0.336	4380	1471.68	$220.8	None Proposed	3	336	0.336	4380	3066	1471.68	1030.176	Ceiling Mounted Occupancy Sensor	1	441.504	66.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	000	Trainer	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	4380	770.88	$115.6	None Proposed	2	176	0.176	4380	3066	770.88	539.616	Ceiling Mounted Occupancy Sensor	1	231.264	34.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	001	202	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	336	0.336	4380	1471.68	$220.8	None Proposed	3	336	0.336	4380	3066	1471.68	1030.176	Ceiling Mounted Occupancy Sensor	1	441.504	66.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	001	203	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	001	204	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	001	205	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	001	206	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	001	207	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	001	208	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	001	210	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	001	215	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	28	3136	3.136	4380	13735.68	$2,060.4	None Proposed	28	3136	3.136	4380	3066	13735.68	9614.976	Ceiling Mounted Occupancy Sensor	1	4120.704	618.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	001	215	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	4380	981.12	$147.2	None Proposed	2	224	0.224	4380	3066	981.12	686.784	Ceiling Mounted Occupancy Sensor	1	294.336	44.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	001	Art Room	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	001	Art Room	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	001	Bathroom	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	1	63	0.063	500	31.5	$4.7	None Proposed	1	63	0.063	500	350	31.5	22.05	Ceiling Mounted Occupancy Sensor	1	9.45	1.4	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	001	Class Room	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
McNair - Interior	001	Computer Lab	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	001	Computer Lab	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	336	0.336	4380	1471.68	$220.8	None Proposed	3	336	0.336	4380	3066	1471.68	1030.176	Ceiling Mounted Occupancy Sensor	1	441.504	66.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	001	Conference Room	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$441.5	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Ceiling Mounted Occupancy Sensor	1	883.008	132.5	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	001	Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	8760	11773.44	$1,766.0	None Proposed	12	1344	1.344	8760	8760	11773.44	11773.44	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
McNair - Interior	001	Lobby	42W CFL Fixture	10	490	0.49	4380	2146.2	$321.9	None Proposed	10	490	0.49	4380	3066	2146.2	1502.34	Ceiling Mounted Occupancy Sensor	1	643.86	96.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	001	Lobby	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	6	378	0.378	4380	1655.64	$248.3	None Proposed	6	378	0.378	4380	3066	1655.64	1158.948	Ceiling Mounted Occupancy Sensor	1	496.692	74.5	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	001	Nurse	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	001	Office	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	4	252	0.252	4380	1103.76	$165.6	None Proposed	4	252	0.252	4380	3066	1103.76	772.632	Ceiling Mounted Occupancy Sensor	1	331.128	49.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	001	Office	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	7	784	0.784	4380	3433.92	$515.1	None Proposed	7	784	0.784	4380	3066	3433.92	2403.744	Ceiling Mounted Occupancy Sensor	1	1030.176	154.5	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	001	Office	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$441.5	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Ceiling Mounted Occupancy Sensor	1	883.008	132.5	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	001	Principal Office	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	7	784	0.784	4380	3433.92	$515.1	None Proposed	7	784	0.784	4380	3066	3433.92	2403.744	Ceiling Mounted Occupancy Sensor	1	1030.176	154.5	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	001	Security	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$66.6	None Proposed	2	101.4	0.1014	4380	3066	444.132	310.8924	Ceiling Mounted Occupancy Sensor	1	133.2396	20.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	002	107	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	5	560	0.56	4380	2452.8	$367.9	None Proposed	5	560	0.56	4380	3066	2452.8	1716.96	Ceiling Mounted Occupancy Sensor	1	735.84	110.4	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	002	108	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	002	110	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	002	111	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	8	896	0.896	4380	3924.48	$588.7	None Proposed	8	896	0.896	4380	3066	3924.48	2747.136	Ceiling Mounted Occupancy Sensor	1	1177.344	176.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	002	112	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	002	113	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$441.5	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Ceiling Mounted Occupancy Sensor	1	883.008	132.5	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	002	114	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	002	115	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$441.5	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Ceiling Mounted Occupancy Sensor	1	883.008	132.5	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	002	117	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$441.5	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Ceiling Mounted Occupancy Sensor	1	883.008	132.5	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	002	118	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	002	211	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	002	213	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	4380	981.12	$147.2	None Proposed	2	224	0.224	4380	3066	981.12	686.784	Ceiling Mounted Occupancy Sensor	1	294.336	44.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	002	213	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	2	126	0.126	4380	551.88	$82.8	None Proposed	2	126	0.126	4380	3066	551.88	386.316	Ceiling Mounted Occupancy Sensor	1	165.564	24.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	002	Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$3.8	None Proposed	1	50.7	0.0507	500	350	25.35	17.745	Ceiling Mounted Occupancy Sensor	1	7.605	1.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	002	Computer Lab	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	16	1792	1.792	4380	7848.96	$1,177.3	None Proposed	16	1792	1.792	4380	3066	7848.96	5494.272	Ceiling Mounted Occupancy Sensor	1	2354.688	353.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	002	Computer Lab	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	1	63	0.063	4380	275.94	$41.4	None Proposed	1	63	0.063	4380	3066	275.94	193.158	Ceiling Mounted Occupancy Sensor	1	82.782	12.4	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	002	Electrical	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$3.8	None Proposed	1	50.7	0.0507	500	350	25.35	17.745	Ceiling Mounted Occupancy Sensor	1	7.605	1.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	002	Gym	400W MH High Bay Fixture	23	10534	10.534	4380	46138.92	$6,920.8	Replace 400W Fixture with Induction Light Fixture	23	4945	4.945	4380	3066	21659.1	15161.37	Ceiling Mounted Occupancy Sensor	1	30977.55	4,646.6	$0.0	$485.0	$137.0	$103.0	$73.5	$3,224.5	$11,258.0	$14,482.5
McNair - Interior	002	Hallway	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	10	630	0.63	8760	5518.8	$827.8	None Proposed	10	630	0.63	8760	8760	5518.8	5518.8	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
McNair - Interior	002	Hallway	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	10	630	0.63	8760	5518.8	$827.8	None Proposed	10	630	0.63	8760	8760	5518.8	5518.8	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
McNair - Interior	002	Hallway	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	10	630	0.63	8760	5518.8	$827.8	None Proposed	10	630	0.63	8760	8760	5518.8	5518.8	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
McNair - Interior	002	Lobby	13W CFL Fixture	8	104	0.104	4380	455.52	$68.3	None Proposed	8	104	0.104	4380	3066	455.52	318.864	Ceiling Mounted Occupancy Sensor	1	136.656	20.5	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	002	Mens Bathroom	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$3.8	None Proposed	1	50.7	0.0507	500	350	25.35	17.745	Ceiling Mounted Occupancy Sensor	1	7.605	1.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	002	Office	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	448	0.448	4380	1962.24	$294.3	None Proposed	4	448	0.448	4380	3066	1962.24	1373.568	Ceiling Mounted Occupancy Sensor	1	588.672	88.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	002	Office	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	002	Storage	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	336	0.336	500	168	$25.2	None Proposed	3	336	0.336	500	350	168	117.6	Ceiling Mounted Occupancy Sensor	1	50.4	7.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	002	Storage	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$3.8	None Proposed	1	50.7	0.0507	500	350	25.35	17.745	Ceiling Mounted Occupancy Sensor	1	7.605	1.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	003	108	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	8	504	0.504	4380	2207.52	$331.1	None Proposed	8	504	0.504	4380	3066	2207.52	1545.264	Ceiling Mounted Occupancy Sensor	1	662.256	99.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	003	303	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	003	304	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	003	304	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	003	305	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	003	306	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	003	307	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	003	310	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	10	1120	1.12	4380	4905.6	$735.8	None Proposed	10	1120	1.12	4380	3066	4905.6	3433.92	Ceiling Mounted Occupancy Sensor	1	1471.68	220.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	003	310	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
McNair - Interior	003	311	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	003	311	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	003	312	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	003	Hallway	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	10	630	0.63	8760	5518.8	$827.8	None Proposed	10	630	0.63	8760	8760	5518.8	5518.8	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
McNair - Interior	003	Ladies	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$11.4	None Proposed	3	152.1	0.1521	500	350	76.05	53.235	Ceiling Mounted Occupancy Sensor	1	22.815	3.4	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	003	Principal Office	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	13	1456	1.456	4380	6377.28	$956.6	None Proposed	13	1456	1.456	4380	3066	6377.28	4464.096	Ceiling Mounted Occupancy Sensor	1	1913.184	287.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	003	ROTC	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	3	189	0.189	4380	827.82	$124.2	None Proposed	3	189	0.189	4380	3066	827.82	579.474	Ceiling Mounted Occupancy Sensor	1	248.346	37.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	004	400	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	448	0.448	4380	1962.24	$294.3	None Proposed	4	448	0.448	4380	3066	1962.24	1373.568	Ceiling Mounted Occupancy Sensor	1	588.672	88.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	004	401	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Ceiling Mounted Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	004	401	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	336	0.336	4380	1471.68	$220.8	None Proposed	3	336	0.336	4380	3066	1471.68	1030.176	Ceiling Mounted Occupancy Sensor	1	441.504	66.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	004	402	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	4380	981.12	$147.2	None Proposed	2	224	0.224	4380	3066	981.12	686.784	Ceiling Mounted Occupancy Sensor	1	294.336	44.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	004	403	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	24	2688	2.688	4380	11773.44	$1,766.0	None Proposed	24	2688	2.688	4380	3066	11773.44	8241.408	Ceiling Mounted Occupancy Sensor	1	3532.032	529.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	004	404	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	4380	981.12	$147.2	None Proposed	2	224	0.224	4380	3066	981.12	686.784	Ceiling Mounted Occupancy Sensor	1	294.336	44.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	004	405	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	24	2688	2.688	4380	11773.44	$1,766.0	None Proposed	24	2688	2.688	4380	3066	11773.44	8241.408	Ceiling Mounted Occupancy Sensor	1	3532.032	529.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	004	406	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Ceiling Mounted Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	004	409	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	24	2688	2.688	4380	11773.44	$1,766.0	None Proposed	24	2688	2.688	4380	3066	11773.44	8241.408	Ceiling Mounted Occupancy Sensor	1	3532.032	529.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	004	410	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	24	2688	2.688	4380	11773.44	$1,766.0	None Proposed	24	2688	2.688	4380	3066	11773.44	8241.408	Ceiling Mounted Occupancy Sensor	1	3532.032	529.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	004	412	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	24	2688	2.688	4380	11773.44	$1,766.0	None Proposed	24	2688	2.688	4380	3066	11773.44	8241.408	Ceiling Mounted Occupancy Sensor	1	3532.032	529.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	004	Corridor	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	13	1456	1.456	4380	6377.28	$956.6	None Proposed	13	1456	1.456	4380	3066	6377.28	4464.096	Ceiling Mounted Occupancy Sensor	1	1913.184	287.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
McNair - Interior	004	Hallway	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	10	630	0.63	8760	5518.8	$827.8	None Proposed	10	630	0.63	8760	8760	5518.8	5518.8	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
McNair - Interior	004	Hallway	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	11	693	0.693	8760	6070.68	$910.6	None Proposed	11	693	0.693	8760	8760	6070.68	6070.68	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
McNair - Interior	004	Hallway	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	11	693	0.693	8760	6070.68	$910.6	None Proposed	11	693	0.693	8760	8760	6070.68	6070.68	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
McNair - Interior	004	Hallway	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	11	693	0.693	8760	6070.68	$910.6	None Proposed	11	693	0.693	8760	8760	6070.68	6070.68	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #5 - Exterior	000	Exterior	Exterior Wall Packs (Assume 70w)	15	1350	1.35	4380	5913	$709.6	Replace 70W Fixture with Induction Light Fixture	15	660	0.66	4380	4380	2890.8	2890.8	None Proposed	0	3022.2	362.7	$0.0	$380.0	$137.0	$0.0	$0.0	$2,055.0	$5,700.0	$7,755.0
PS #5 - Interior	000	Bathroom	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	171.2	0.1712	500	85.6	$10.3	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	2	97.2	0.0972	500	500	48.6	48.6	None Proposed	0	37	4.4	$70.0	$10.0	$32.0	$0.0	$0.0	$64.0	$160.0	$224.0
PS #5 - Interior	000	Bathroom	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	500	42.8	$5.1	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.6	0.0486	500	500	24.3	24.3	None Proposed	0	18.5	2.2	$70.0	$10.0	$32.0	$0.0	$0.0	$32.0	$80.0	$112.0
PS #5 - Interior	000	Boiler Room	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	6	513.6	0.5136	500	256.8	$30.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	6	291.84	0.29184	500	500	145.92	145.92	None Proposed	0	110.88	13.3	$55.0	$10.0	$32.0	$0.0	$0.0	$192.0	$390.0	$582.0
PS #5 - Interior	000	Boiler Room	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	8	684.8	0.6848	500	342.4	$41.1	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	8	389.12	0.38912	500	500	194.56	194.56	None Proposed	0	147.84	17.7	$55.0	$10.0	$32.0	$0.0	$0.0	$256.0	$520.0	$776.0
PS #5 - Interior	000	Boys Bathroom	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	8	684.8	0.6848	500	342.4	$41.1	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	8	388.8	0.3888	500	500	194.4	194.4	None Proposed	0	148	17.8	$70.0	$10.0	$32.0	$0.0	$0.0	$256.0	$640.0	$896.0
PS #5 - Interior	000	Cafeteria	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	21	1797.6	1.7976	4380	7873.488	$944.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	21	1020.6	1.0206	4380	3066	4470.228	3129.1596	Ceiling Mounted Occupancy Sensor	1	4744.3284	569.3	$70.0	$10.0	$32.0	$103.0	$73.5	$745.5	$1,783.0	$2,528.5
PS #5 - Interior	000	Drama	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	1027.2	1.0272	4380	4499.136	$539.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	583.2	0.5832	4380	3066	2554.416	1788.0912	Ceiling Mounted Occupancy Sensor	1	2711.0448	325.3	$70.0	$10.0	$32.0	$103.0	$73.5	$457.5	$1,063.0	$1,520.5
PS #5 - Interior	000	Girls Bathroom	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	8	684.8	0.6848	500	342.4	$41.1	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	8	388.8	0.3888	500	350	194.4	136.08	Ceiling Mounted Occupancy Sensor	1	206.32	24.8	$70.0	$10.0	$32.0	$103.0	$73.5	$329.5	$743.0	$1,072.5
PS #5 - Interior	000	Gym	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	13	1112.8	1.1128	4380	4874.064	$584.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	13	631.8	0.6318	4380	3066	2767.284	1937.0988	Ceiling Mounted Occupancy Sensor	1	2936.9652	352.4	$70.0	$10.0	$32.0	$103.0	$73.5	$489.5	$1,143.0	$1,632.5
PS #5 - Interior	000	Gym	400W MH Fixture	13	5954	5.954	4380	26078.52	$3,129.4	None Proposed	13	5954	5.954	4380	3066	26078.52	18254.964	Ceiling Mounted Occupancy Sensor	1	7823.556	938.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	000	Gym	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	342.4	0.3424	4380	1499.712	$180.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	4	194.4	0.1944	4380	3066	851.472	596.0304	Ceiling Mounted Occupancy Sensor	1	903.6816	108.4	$70.0	$10.0	$32.0	$103.0	$73.5	$201.5	$423.0	$624.5
PS #5 - Interior	000	Hallway	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	1027.2	1.0272	8760	8998.272	$1,079.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	583.2	0.5832	8760	8760	5108.832	5108.832	None Proposed	0	3889.44	466.7	$70.0	$10.0	$32.0	$0.0	$0.0	$384.0	$960.0	$1,344.0
PS #5 - Interior	000	Hallway	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	20	1712	1.712	8760	14997.12	$1,799.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	20	972	0.972	8760	8760	8514.72	8514.72	None Proposed	0	6482.4	777.9	$70.0	$10.0	$32.0	$0.0	$0.0	$640.0	$1,600.0	$2,240.0
PS #5 - Interior	000	Music Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	405.6	0.4056	4380	1776.528	$213.2	None Proposed	8	405.6	0.4056	4380	3066	1776.528	1243.5696	Ceiling Mounted Occupancy Sensor	1	532.9584	64.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	000	Reading	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	8	684.8	0.6848	4380	2999.424	$359.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	8	388.8	0.3888	4380	3066	1702.944	1192.0608	Ceiling Mounted Occupancy Sensor	1	1807.3632	216.9	$70.0	$10.0	$32.0	$103.0	$73.5	$329.5	$743.0	$1,072.5
PS #5 - Interior	000	Reading	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	1027.2	1.0272	4380	4499.136	$539.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	583.2	0.5832	4380	3066	2554.416	1788.0912	Ceiling Mounted Occupancy Sensor	1	2711.0448	325.3	$70.0	$10.0	$32.0	$103.0	$73.5	$457.5	$1,063.0	$1,520.5
PS #5 - Interior	000	Stairs	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	171.2	0.1712	8760	1499.712	$180.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	2	97.2	0.0972	8760	6132	851.472	596.0304	Ceiling Mounted Occupancy Sensor	1	903.6816	108.4	$70.0	$10.0	$32.0	$103.0	$73.5	$137.5	$263.0	$400.5
PS #5 - Interior	000	Stairwell	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	171.2	0.1712	8760	1499.712	$180.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	2	97.2	0.0972	8760	6132	851.472	596.0304	Ceiling Mounted Occupancy Sensor	1	903.6816	108.4	$70.0	$10.0	$32.0	$103.0	$73.5	$137.5	$263.0	$400.5
PS #5 - Interior	000	Storage	13W CFL Fixture	2	26	0.026	500	13	$1.6	None Proposed	2	26	0.026	500	350	13	9.1	Ceiling Mounted Occupancy Sensor	1	3.9	0.5	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	000	Storage	13W CFL Fixture	3	39	0.039	500	19.5	$2.3	None Proposed	3	39	0.039	500	350	19.5	13.65	Ceiling Mounted Occupancy Sensor	1	5.85	0.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	000	Storage	13W CFL Fixture	1	13	0.013	500	6.5	$0.8	None Proposed	1	13	0.013	500	350	6.5	4.55	Ceiling Mounted Occupancy Sensor	1	1.95	0.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	000	Storage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	500	42.8	$5.1	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.6	0.0486	500	350	24.3	17.01	Ceiling Mounted Occupancy Sensor	1	25.79	3.1	$70.0	$10.0	$32.0	$103.0	$73.5	$105.5	$183.0	$288.5
PS #5 - Interior	000	Storage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	3	256.8	0.2568	500	128.4	$15.4	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	3	145.8	0.1458	500	350	72.9	51.03	Ceiling Mounted Occupancy Sensor	1	77.37	9.3	$70.0	$10.0	$32.0	$103.0	$73.5	$169.5	$343.0	$512.5
PS #5 - Interior	000	Storage	13W CFL Fixture	4	52	0.052	500	26	$3.1	None Proposed	4	52	0.052	500	350	26	18.2	Ceiling Mounted Occupancy Sensor	1	7.8	0.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	001	101	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	4380	374.928	$45.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	50.7	0.0507	4380	3066	222.066	155.4462	Ceiling Mounted Occupancy Sensor	1	219.4818	26.3	$70.0	$10.0	$32.0	$103.0	$73.5	$105.5	$183.0	$288.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #5 - Interior	001	102	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,079.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	650.2	$105.0	$20.0	$32.0	$103.0	$73.5	$457.5	$1,603.0	$2,060.5
PS #5 - Interior	001	103	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	8	1369.6	1.3696	4380	5998.848	$719.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	8	778.4	0.7784	4380	3066	3409.392	2386.5744	Ceiling Mounted Occupancy Sensor	1	3612.2736	433.5	$105.0	$20.0	$32.0	$103.0	$73.5	$329.5	$1,103.0	$1,432.5
PS #5 - Interior	001	104	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	6	1027.2	1.0272	4380	4499.136	$539.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	6	583.8	0.5838	4380	3066	2557.044	1789.9308	Ceiling Mounted Occupancy Sensor	1	2709.2052	325.1	$105.0	$20.0	$32.0	$103.0	$73.5	$265.5	$853.0	$1,118.5
PS #5 - Interior	001	104	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	5	856	0.856	4380	3749.28	$449.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	5	486.5	0.4865	4380	3066	2130.87	1491.609	Ceiling Mounted Occupancy Sensor	1	2257.671	270.9	$105.0	$20.0	$32.0	$103.0	$73.5	$233.5	$728.0	$961.5
PS #5 - Interior	001	105	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,079.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	650.2	$105.0	$20.0	$32.0	$103.0	$73.5	$457.5	$1,603.0	$2,060.5
PS #5 - Interior	001	106	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,079.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	650.2	$105.0	$20.0	$32.0	$103.0	$73.5	$457.5	$1,603.0	$2,060.5
PS #5 - Interior	001	107	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,079.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	650.2	$105.0	$20.0	$32.0	$103.0	$73.5	$457.5	$1,603.0	$2,060.5
PS #5 - Interior	001	108	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,079.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	650.2	$105.0	$20.0	$32.0	$103.0	$73.5	$457.5	$1,603.0	$2,060.5
PS #5 - Interior	001	109	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,079.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	650.2	$105.0	$20.0	$32.0	$103.0	$73.5	$457.5	$1,603.0	$2,060.5
PS #5 - Interior	001	110	13W CFL Fixture	1	13	0.013	4380	56.94	$6.8	None Proposed	1	13	0.013	4380	3066	56.94	39.858	Ceiling Mounted Occupancy Sensor	1	17.082	2.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	001	111	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,079.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	650.2	$105.0	$20.0	$32.0	$103.0	$73.5	$457.5	$1,603.0	$2,060.5
PS #5 - Interior	001	112	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,079.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	650.2	$105.0	$20.0	$32.0	$103.0	$73.5	$457.5	$1,603.0	$2,060.5
PS #5 - Interior	001	113	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,079.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	650.2	$105.0	$20.0	$32.0	$103.0	$73.5	$457.5	$1,603.0	$2,060.5
PS #5 - Interior	001	114	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$706.4	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	211.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	001	116	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,079.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	650.2	$105.0	$20.0	$32.0	$103.0	$73.5	$457.5	$1,603.0	$2,060.5
PS #5 - Interior	001	101B	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,079.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	650.2	$105.0	$20.0	$32.0	$103.0	$73.5	$457.5	$1,603.0	$2,060.5
PS #5 - Interior	001	102A	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	4	684.8	0.6848	4380	2999.424	$359.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	4	389.2	0.3892	4380	3066	1704.696	1193.2872	Ceiling Mounted Occupancy Sensor	1	1806.1368	216.7	$105.0	$20.0	$32.0	$103.0	$73.5	$201.5	$603.0	$804.5
PS #5 - Interior	001	102B	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	4380	374.928	$45.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	50.7	0.0507	4380	3066	222.066	155.4462	Ceiling Mounted Occupancy Sensor	1	219.4818	26.3	$70.0	$10.0	$32.0	$103.0	$73.5	$105.5	$183.0	$288.5
PS #5 - Interior	001	104B	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	6	1027.2	1.0272	4380	4499.136	$539.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	6	583.8	0.5838	4380	3066	2557.044	1789.9308	Ceiling Mounted Occupancy Sensor	1	2709.2052	325.1	$105.0	$20.0	$32.0	$103.0	$73.5	$265.5	$853.0	$1,118.5
PS #5 - Interior	001	105B	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	4380	374.928	$45.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	50.7	0.0507	4380	3066	222.066	155.4462	Ceiling Mounted Occupancy Sensor	1	219.4818	26.3	$70.0	$10.0	$32.0	$103.0	$73.5	$105.5	$183.0	$288.5
PS #5 - Interior	001	106B	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	4380	374.928	$45.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	50.7	0.0507	4380	3066	222.066	155.4462	Ceiling Mounted Occupancy Sensor	1	219.4818	26.3	$70.0	$10.0	$32.0	$103.0	$73.5	$105.5	$183.0	$288.5
PS #5 - Interior	001	116B	13W CFL Fixture	1	13	0.013	4380	56.94	$6.8	None Proposed	1	13	0.013	4380	3066	56.94	39.858	Ceiling Mounted Occupancy Sensor	1	17.082	2.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	001	Auditorium	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	6	513.6	0.5136	4380	2249.568	$269.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	6	291.6	0.2916	4380	3066	1277.208	894.0456	Ceiling Mounted Occupancy Sensor	1	1355.5224	162.7	$70.0	$10.0	$32.0	$103.0	$73.5	$265.5	$583.0	$848.5
PS #5 - Interior	001	Auditorium	13W CFL Fixture	12	156	0.156	4380	683.28	$82.0	None Proposed	12	156	0.156	4380	3066	683.28	478.296	Ceiling Mounted Occupancy Sensor	1	204.984	24.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	001	Auditorium	400W MH Fixture	3	1374	1.374	4380	6018.12	$722.2	None Proposed	3	1374	1.374	4380	3066	6018.12	4212.684	Ceiling Mounted Occupancy Sensor	1	1805.436	216.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	001	Auditorium	13W CFL Fixture	8	104	0.104	4380	455.52	$54.7	None Proposed	8	104	0.104	4380	3066	455.52	318.864	Ceiling Mounted Occupancy Sensor	1	136.656	16.4	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	001	Bathroom	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	85.6	0.0856	500	42.8	$5.1	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	50.7	0.0507	500	350	25.35	17.745	Ceiling Mounted Occupancy Sensor	1	25.055	3.0	$70.0	$10.0	$32.0	$103.0	$73.5	$105.5	$183.0	$288.5
PS #5 - Interior	001	Bathroom	13W CFL Fixture	1	13	0.013	500	6.5	$0.8	None Proposed	1	13	0.013	500	350	6.5	4.55	Ceiling Mounted Occupancy Sensor	1	1.95	0.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	001	Cafeteria	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	171.2	0.1712	4380	749.856	$90.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	2	97.2	0.0972	4380	3066	425.736	298.0152	Ceiling Mounted Occupancy Sensor	1	451.8408	54.2	$70.0	$10.0	$32.0	$103.0	$73.5	$137.5	$263.0	$400.5
PS #5 - Interior	001	Closet	1x4 Fixtures w/ 1-T12 Lamp Fixture w/ Magnetic Ballast	1	42.8	0.0428	4380	187.464	$22.5	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	24.32	0.02432	4380	3066	106.5216	74.56512	Ceiling Mounted Occupancy Sensor	1	112.89888	13.5	$35.0	$5.0	$32.0	$103.0	$73.5	$105.5	$143.0	$248.5
PS #5 - Interior	001	Girls Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$6.1	None Proposed	2	101.4	0.1014	500	350	50.7	35.49	Ceiling Mounted Occupancy Sensor	1	15.21	1.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	001	Hallway	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	11	1883.2	1.8832	8760	16496.832	$1,979.6	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	11	1070.3	1.0703	8760	8760	9375.828	9375.828	None Proposed	0	7121.004	854.5	$105.0	$20.0	$32.0	$0.0	$0.0	$352.0	$1,375.0	$1,727.0
PS #5 - Interior	001	Hallway	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	9	1540.8	1.5408	8760	13497.408	$1,619.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	9	875.7	0.8757	8760	8760	7671.132	7671.132	None Proposed	0	5826.276	699.2	$105.0	$20.0	$32.0	$0.0	$0.0	$288.0	$1,125.0	$1,413.0
PS #5 - Interior	001	Mens Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$9.1	None Proposed	3	152.1	0.1521	500	350	76.05	53.235	Ceiling Mounted Occupancy Sensor	1	22.815	2.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	001	Nurse	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	5	428	0.428	4380	1874.64	$225.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	5	243	0.243	4380	3066	1064.34	745.038	Ceiling Mounted Occupancy Sensor	1	1129.602	135.6	$70.0	$10.0	$32.0	$103.0	$73.5	$233.5	$503.0	$736.5
PS #5 - Interior	001	Office	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,079.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	650.2	$105.0	$20.0	$32.0	$103.0	$73.5	$457.5	$1,603.0	$2,060.5
PS #5 - Interior	001	Office	13W CFL Fixture	1	13	0.013	4380	56.94	$6.8	None Proposed	1	13	0.013	4380	3066	56.94	39.858	Ceiling Mounted Occupancy Sensor	1	17.082	2.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	001	Principal	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	8	684.8	0.6848	4380	2999.424	$359.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	8	388.8	0.3888	4380	3066	1702.944	1192.0608	Ceiling Mounted Occupancy Sensor	1	1807.3632	216.9	$70.0	$10.0	$32.0	$103.0	$73.5	$329.5	$743.0	$1,072.5
PS #5 - Interior	001	Stair	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	171.2	0.1712	8760	1499.712	$180.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	2	97.2	0.0972	8760	6132	851.472	596.0304	Ceiling Mounted Occupancy Sensor	1	903.6816	108.4	$70.0	$10.0	$32.0	$103.0	$73.5	$137.5	$263.0	$400.5
PS #5 - Interior	001	Stock Room	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	342.4	0.3424	500	171.2	$20.5	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	4	194.4	0.1944	500	350	97.2	68.04	Ceiling Mounted Occupancy Sensor	1	103.16	12.4	$70.0	$10.0	$32.0	$103.0	$73.5	$201.5	$423.0	$624.5
PS #5 - Interior	001	Storage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	171.2	0.1712	500	85.6	$10.3	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	2	97.2	0.0972	500	350	48.6	34.02	Ceiling Mounted Occupancy Sensor	1	51.58	6.2	$70.0	$10.0	$32.0	$103.0	$73.5	$137.5	$263.0	$400.5
PS #5 - Interior	001	Storage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	171.2	0.1712	500	85.6	$10.3	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	2	97.2	0.0972	500	350	48.6	34.02	Ceiling Mounted Occupancy Sensor	1	51.58	6.2	$70.0	$10.0	$32.0	$103.0	$73.5	$137.5	$263.0	$400.5
PS #5 - Interior	001	Storage	100W Incandescent Fixture	2	200	0.2	500	100	$12.0	Replace 100W Incandescent Fixture with 25W CFL	2	50	0.05	500	350	25	17.5	Ceiling Mounted Occupancy Sensor	1	82.5	9.9	$0.0	$7.0	$16.0	$103.0	$73.5	$105.5	$117.0	$222.5
PS #5 - Interior	001	Storage	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$6.1	None Proposed	2	101.4	0.1014	500	350	50.7	35.49	Ceiling Mounted Occupancy Sensor	1	15.21	1.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	001	Storage Hall	100W Incandescent Fixture	2	200	0.2	500	100	$12.0	Replace 100W Incandescent Fixture with 25W CFL	2	50	0.05	500	350	25	17.5	Ceiling Mounted Occupancy Sensor	1	82.5	9.9	$0.0	$7.0	$16.0	$103.0	$73.5	$105.5	$117.0	$222.5
PS #5 - Interior	001	Storage Hall	2' 17W Fluorescent Fixture	1	15	0.015	500	7.5	$0.9	None Proposed	1	15	0.015	500	350	7.5	5.25	Ceiling Mounted Occupancy Sensor	1	2.25	0.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	001	Teachers Lounge	13W CFL Fixture	5	65	0.065	4380	284.7	$34.2	None Proposed	5	65	0.065	4380	3066	284.7	199.29	Ceiling Mounted Occupancy Sensor	1	85.41	10.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	001	W100	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,079.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	650.2	$105.0	$20.0	$32.0	$103.0	$73.5	$457.5	$1,603.0	$2,060.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #5 - Interior	001	W101	13W CFL Fixture	1	13	0.013	4380	56.94	$6.8	None Proposed	1	13	0.013	4380	3066	56.94	39.858	Ceiling Mounted Occupancy Sensor	1	17.082	2.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	001	W102	13W CFL Fixture	1	13	0.013	4380	56.94	$6.8	None Proposed	1	13	0.013	4380	3066	56.94	39.858	Ceiling Mounted Occupancy Sensor	1	17.082	2.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	001	W104	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	171.2	0.1712	4380	749.856	$90.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	2	97.2	0.0972	4380	3066	425.736	298.0152	Ceiling Mounted Occupancy Sensor	1	451.8408	54.2	$70.0	$10.0	$32.0	$103.0	$73.5	$137.5	$263.0	$400.5
PS #5 - Interior	001	W106	13W CFL Fixture	2	26	0.026	4380	113.88	$13.7	None Proposed	2	26	0.026	4380	3066	113.88	79.716	Ceiling Mounted Occupancy Sensor	1	34.164	4.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	001	W107	13W CFL Fixture	1	13	0.013	4380	56.94	$6.8	None Proposed	1	13	0.013	4380	3066	56.94	39.858	Ceiling Mounted Occupancy Sensor	1	17.082	2.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	001	W108	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	171.2	0.1712	4380	749.856	$90.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	2	97.2	0.0972	4380	3066	425.736	298.0152	Ceiling Mounted Occupancy Sensor	1	451.8408	54.2	$70.0	$10.0	$32.0	$103.0	$73.5	$137.5	$263.0	$400.5
PS #5 - Interior	001	W109	13W CFL Fixture	1	13	0.013	4380	56.94	$6.8	None Proposed	1	13	0.013	4380	3066	56.94	39.858	Ceiling Mounted Occupancy Sensor	1	17.082	2.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	001	W111	13W CFL Fixture	1	13	0.013	4380	56.94	$6.8	None Proposed	1	13	0.013	4380	3066	56.94	39.858	Ceiling Mounted Occupancy Sensor	1	17.082	2.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	001	W112	13W CFL Fixture	1	13	0.013	4380	56.94	$6.8	None Proposed	1	13	0.013	4380	3066	56.94	39.858	Ceiling Mounted Occupancy Sensor	1	17.082	2.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	001	W113	13W CFL Fixture	1	13	0.013	4380	56.94	$6.8	None Proposed	1	13	0.013	4380	3066	56.94	39.858	Ceiling Mounted Occupancy Sensor	1	17.082	2.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	001	W114	13W CFL Fixture	1	13	0.013	4380	56.94	$6.8	None Proposed	1	13	0.013	4380	3066	56.94	39.858	Ceiling Mounted Occupancy Sensor	1	17.082	2.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	001	W116	13W CFL Fixture	1	13	0.013	4380	56.94	$6.8	None Proposed	1	13	0.013	4380	3066	56.94	39.858	Ceiling Mounted Occupancy Sensor	1	17.082	2.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	002	201	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$53.3	None Proposed	2	101.4	0.1014	4380	3066	444.132	310.8924	Ceiling Mounted Occupancy Sensor	1	133.2396	16.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	002	201	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$706.4	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	211.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	002	202	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$706.4	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	211.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	002	203	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,079.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	650.2	$105.0	$20.0	$32.0	$103.0	$73.5	$457.5	$1,603.0	$2,060.5
PS #5 - Interior	002	205	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,079.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	650.2	$105.0	$20.0	$32.0	$103.0	$73.5	$457.5	$1,603.0	$2,060.5
PS #5 - Interior	002	206	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,079.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	650.2	$105.0	$20.0	$32.0	$103.0	$73.5	$457.5	$1,603.0	$2,060.5
PS #5 - Interior	002	207	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,079.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	650.2	$105.0	$20.0	$32.0	$103.0	$73.5	$457.5	$1,603.0	$2,060.5
PS #5 - Interior	002	209	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,079.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	650.2	$105.0	$20.0	$32.0	$103.0	$73.5	$457.5	$1,603.0	$2,060.5
PS #5 - Interior	002	210	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,079.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	650.2	$105.0	$20.0	$32.0	$103.0	$73.5	$457.5	$1,603.0	$2,060.5
PS #5 - Interior	002	211	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$706.4	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	211.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	002	212	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$706.4	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	211.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	002	213	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$706.4	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	211.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	002	214	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$706.4	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	211.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	002	216	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$706.4	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	211.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	002	217	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$706.4	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	211.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	002	219	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$706.4	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	211.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	002	204A	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,079.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	650.2	$105.0	$20.0	$32.0	$103.0	$73.5	$457.5	$1,603.0	$2,060.5
PS #5 - Interior	002	Assistant Principal	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	6	1027.2	1.0272	4380	4499.136	$539.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	6	583.8	0.5838	4380	3066	2557.044	1789.9308	Ceiling Mounted Occupancy Sensor	1	2709.2052	325.1	$105.0	$20.0	$32.0	$103.0	$73.5	$265.5	$853.0	$1,118.5
PS #5 - Interior	002	Bathroom	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$9.1	None Proposed	3	152.1	0.1521	500	350	76.05	53.235	Ceiling Mounted Occupancy Sensor	1	22.815	2.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	002	Computer	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$706.4	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	211.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	002	Computer	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$53.3	None Proposed	2	101.4	0.1014	4380	3066	444.132	310.8924	Ceiling Mounted Occupancy Sensor	1	133.2396	16.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	002	Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	21	2352	2.352	8760	20603.52	$2,472.4	None Proposed	21	2352	2.352	8760	8760	20603.52	20603.52	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #5 - Interior	002	Hallway	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	8760	17996.544	$2,159.6	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	8760	8760	10228.176	10228.176	None Proposed	0	7768.368	932.2	$105.0	$20.0	$32.0	$0.0	$0.0	$384.0	$1,500.0	$1,884.0
PS #5 - Interior	002	Mens Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$9.1	None Proposed	3	152.1	0.1521	500	350	76.05	53.235	Ceiling Mounted Occupancy Sensor	1	22.815	2.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	002	Resouce Room	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	8	704	0.704	4380	3083.52	$370.0	None Proposed	8	704	0.704	4380	3066	3083.52	2158.464	Ceiling Mounted Occupancy Sensor	1	925.056	111.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	002	Stairs	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	171.2	0.1712	8760	1499.712	$180.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	2	97.2	0.0972	8760	6132	851.472	596.0304	Ceiling Mounted Occupancy Sensor	1	903.6816	108.4	$70.0	$10.0	$32.0	$103.0	$73.5	$137.5	$263.0	$400.5
PS #5 - Interior	002	Stairs	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	171.2	0.1712	8760	1499.712	$180.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	2	97.2	0.0972	8760	6132	851.472	596.0304	Ceiling Mounted Occupancy Sensor	1	903.6816	108.4	$70.0	$10.0	$32.0	$103.0	$73.5	$137.5	$263.0	$400.5
PS #5 - Interior	002	Stairwell	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	8760	888.264	$106.6	None Proposed	2	101.4	0.1014	8760	6132	888.264	621.7848	Ceiling Mounted Occupancy Sensor	1	266.4792	32.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	002	Stairwell	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	8760	888.264	$106.6	None Proposed	2	101.4	0.1014	8760	6132	888.264	621.7848	Ceiling Mounted Occupancy Sensor	1	266.4792	32.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	002	Storage	13W CFL Fixture	2	26	0.026	500	13	$1.6	None Proposed	2	26	0.026	500	350	13	9.1	Ceiling Mounted Occupancy Sensor	1	3.9	0.5	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	002	Storage	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	85.6	0.0856	500	42.8	$5.1	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	48.64	0.04864	500	350	24.32	17.024	Ceiling Mounted Occupancy Sensor	1	25.776	3.1	$55.0	$10.0	$32.0	$103.0	$73.5	$105.5	$168.0	$273.5
PS #5 - Interior	002	Teachers Lounge	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	253.5	0.2535	4380	1110.33	$133.2	None Proposed	5	253.5	0.2535	4380	3066	1110.33	777.231	Ceiling Mounted Occupancy Sensor	1	333.099	40.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	002	Teachers Lounge	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$26.6	None Proposed	1	50.7	0.0507	4380	3066	222.066	155.4462	Ceiling Mounted Occupancy Sensor	1	66.6198	8.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	002	W202	13W CFL Fixture	1	13	0.013	4380	56.94	$6.8	None Proposed	1	13	0.013	4380	3066	56.94	39.858	Ceiling Mounted Occupancy Sensor	1	17.082	2.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	002	W204	13W CFL Fixture	1	13	0.013	4380	56.94	$6.8	None Proposed	1	13	0.013	4380	3066	56.94	39.858	Ceiling Mounted Occupancy Sensor	1	17.082	2.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	002	W206	13W CFL Fixture	1	13	0.013	4380	56.94	$6.8	None Proposed	1	13	0.013	4380	3066	56.94	39.858	Ceiling Mounted Occupancy Sensor	1	17.082	2.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #5 - Interior	002	W207	13W CFL Fixture	1	13	0.013	4380	56.94	$6.8	None Proposed	1	13	0.013	4380	3066	56.94	39.858	Ceiling Mounted Occupancy Sensor	1	17.082	2.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	002	W209	13W CFL Fixture	1	13	0.013	4380	56.94	$6.8	None Proposed	1	13	0.013	4380	3066	56.94	39.858	Ceiling Mounted Occupancy Sensor	1	17.082	2.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	002	W210	13W CFL Fixture	1	13	0.013	4380	56.94	$6.8	None Proposed	1	13	0.013	4380	3066	56.94	39.858	Ceiling Mounted Occupancy Sensor	1	17.082	2.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	002	W211	13W CFL Fixture	1	13	0.013	4380	56.94	$6.8	None Proposed	1	13	0.013	4380	3066	56.94	39.858	Ceiling Mounted Occupancy Sensor	1	17.082	2.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	002	W213	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$26.6	None Proposed	1	50.7	0.0507	4380	3066	222.066	155.4462	Ceiling Mounted Occupancy Sensor	1	66.6198	8.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	002	W214	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$26.6	None Proposed	1	50.7	0.0507	4380	3066	222.066	155.4462	Ceiling Mounted Occupancy Sensor	1	66.6198	8.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	002	W216	13W CFL Fixture	1	13	0.013	4380	56.94	$6.8	None Proposed	1	13	0.013	4380	3066	56.94	39.858	Ceiling Mounted Occupancy Sensor	1	17.082	2.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	002	W217	13W CFL Fixture	1	13	0.013	4380	56.94	$6.8	None Proposed	1	13	0.013	4380	3066	56.94	39.858	Ceiling Mounted Occupancy Sensor	1	17.082	2.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	002	Womens Bathroom	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	3	256.8	0.2568	500	128.4	$15.4	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	3	145.8	0.1458	500	350	72.9	51.03	Ceiling Mounted Occupancy Sensor	1	77.37	9.3	$70.0	$10.0	$32.0	$103.0	$73.5	$169.5	$343.0	$512.5
PS #5 - Interior	002	Womens Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$9.1	None Proposed	3	152.1	0.1521	500	350	76.05	53.235	Ceiling Mounted Occupancy Sensor	1	22.815	2.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	218	13W CFL Fixture	1	13	0.013	4380	56.94	$6.8	None Proposed	1	13	0.013	4380	3066	56.94	39.858	Ceiling Mounted Occupancy Sensor	1	17.082	2.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	300	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$353.2	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Ceiling Mounted Occupancy Sensor	1	883.008	106.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	301	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$53.3	None Proposed	2	101.4	0.1014	4380	3066	444.132	310.8924	Ceiling Mounted Occupancy Sensor	1	133.2396	16.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	301	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$706.4	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	211.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	301	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$706.4	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	211.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	302	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$706.4	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	211.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	302	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	15	1680	1.68	4380	7358.4	$883.0	None Proposed	15	1680	1.68	4380	3066	7358.4	5150.88	Ceiling Mounted Occupancy Sensor	1	2207.52	264.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	303	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$53.3	None Proposed	2	101.4	0.1014	4380	3066	444.132	310.8924	Ceiling Mounted Occupancy Sensor	1	133.2396	16.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	303	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$706.4	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	211.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	304	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$353.2	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Ceiling Mounted Occupancy Sensor	1	883.008	106.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	304	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$706.4	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	211.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	305	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$706.4	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	211.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	305	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$319.8	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Ceiling Mounted Occupancy Sensor	1	799.4376	95.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	305	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$706.4	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	211.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	306	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	15	1680	1.68	4380	7358.4	$883.0	None Proposed	15	1680	1.68	4380	3066	7358.4	5150.88	Ceiling Mounted Occupancy Sensor	1	2207.52	264.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	307	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$706.4	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	211.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	307	13W CFL Fixture	2	26	0.026	4380	113.88	$13.7	None Proposed	2	26	0.026	4380	3066	113.88	79.716	Ceiling Mounted Occupancy Sensor	1	34.164	4.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	307	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$706.4	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	211.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	308	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$706.4	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	211.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	308	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$706.4	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	211.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	308	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	8	896	0.896	4380	3924.48	$470.9	None Proposed	8	896	0.896	4380	3066	3924.48	2747.136	Ceiling Mounted Occupancy Sensor	1	1177.344	141.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	309	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$706.4	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	211.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	309	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$706.4	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	211.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	310	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$706.4	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	211.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	311	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	2054.4	2.0544	4380	8998.272	$1,079.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	1167.6	1.1676	4380	3066	5114.088	3579.8616	Ceiling Mounted Occupancy Sensor	1	5418.4104	650.2	$105.0	$20.0	$32.0	$103.0	$73.5	$457.5	$1,603.0	$2,060.5
PS #5 - Interior	003	311	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	15	1680	1.68	4380	7358.4	$883.0	None Proposed	15	1680	1.68	4380	3066	7358.4	5150.88	Ceiling Mounted Occupancy Sensor	1	2207.52	264.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	312	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$706.4	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	211.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	312	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	15	1680	1.68	4380	7358.4	$883.0	None Proposed	15	1680	1.68	4380	3066	7358.4	5150.88	Ceiling Mounted Occupancy Sensor	1	2207.52	264.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	313	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$706.4	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	211.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	313	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$706.4	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	211.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	314	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$706.4	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	211.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	315	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$706.4	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	211.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	315	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	8	896	0.896	4380	3924.48	$470.9	None Proposed	8	896	0.896	4380	3066	3924.48	2747.136	Ceiling Mounted Occupancy Sensor	1	1177.344	141.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	316	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$706.4	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	211.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	316	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$706.4	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	211.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	317	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$706.4	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	211.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	317	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	15	1680	1.68	4380	7358.4	$883.0	None Proposed	15	1680	1.68	4380	3066	7358.4	5150.88	Ceiling Mounted Occupancy Sensor	1	2207.52	264.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	318	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$706.4	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	211.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #5 - Interior	003	318	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$706.4	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	211.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	319	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$53.3	None Proposed	2	101.4	0.1014	4380	3066	444.132	310.8924	Ceiling Mounted Occupancy Sensor	1	133.2396	16.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	319	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$706.4	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	211.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	319	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	24	2688	2.688	4380	11773.44	$1,412.8	None Proposed	24	2688	2.688	4380	3066	11773.44	8241.408	Ceiling Mounted Occupancy Sensor	1	3532.032	423.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	320	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	15	1680	1.68	4380	7358.4	$883.0	None Proposed	15	1680	1.68	4380	3066	7358.4	5150.88	Ceiling Mounted Occupancy Sensor	1	2207.52	264.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	321	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$706.4	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Ceiling Mounted Occupancy Sensor	1	1766.016	211.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	322	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$529.8	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Ceiling Mounted Occupancy Sensor	1	1324.512	158.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	386	13W CFL Fixture	1	13	0.013	4380	56.94	$6.8	None Proposed	1	13	0.013	4380	3066	56.94	39.858	Ceiling Mounted Occupancy Sensor	1	17.082	2.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	301W	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$53.3	None Proposed	2	101.4	0.1014	4380	3066	444.132	310.8924	Ceiling Mounted Occupancy Sensor	1	133.2396	16.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	302W	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$53.3	None Proposed	2	101.4	0.1014	4380	3066	444.132	310.8924	Ceiling Mounted Occupancy Sensor	1	133.2396	16.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	303A	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$353.2	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Ceiling Mounted Occupancy Sensor	1	883.008	106.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	Cafeteria	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	95	10640	10.64	4380	46603.2	$5,592.4	None Proposed	95	10640	10.64	4380	3066	46603.2	32622.24	Ceiling Mounted Occupancy Sensor	1	13980.96	1,677.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	Cafeteria	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	10	507	0.507	4380	2220.66	$266.5	None Proposed	10	507	0.507	4380	3066	2220.66	1554.462	Ceiling Mounted Occupancy Sensor	1	666.198	79.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	Cafeteria	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	35	1774.5	1.7745	4380	7772.31	$932.7	None Proposed	35	1774.5	1.7745	4380	3066	7772.31	5440.617	Ceiling Mounted Occupancy Sensor	1	2331.693	279.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	Elevator Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$3.0	None Proposed	1	50.7	0.0507	500	350	25.35	17.745	Ceiling Mounted Occupancy Sensor	1	7.605	0.9	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	Girls	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$9.1	None Proposed	3	152.1	0.1521	500	350	76.05	53.235	Ceiling Mounted Occupancy Sensor	1	22.815	2.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	Girls	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$6.1	None Proposed	2	101.4	0.1014	500	350	50.7	35.49	Ceiling Mounted Occupancy Sensor	1	15.21	1.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	Girls	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	500	101.4	$12.2	None Proposed	4	202.8	0.2028	500	350	101.4	70.98	Ceiling Mounted Occupancy Sensor	1	30.42	3.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	8760	11773.44	$1,412.8	None Proposed	12	1344	1.344	8760	8760	11773.44	11773.44	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #5 - Interior	003	Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	8760	8830.08	$1,059.6	None Proposed	9	1008	1.008	8760	8760	8830.08	8830.08	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #5 - Interior	003	Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	8	896	0.896	8760	7848.96	$941.9	None Proposed	8	896	0.896	8760	6132	7848.96	5494.272	Ceiling Mounted Occupancy Sensor	1	2354.688	282.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	10	1120	1.12	8760	9811.2	$1,177.3	None Proposed	10	1120	1.12	8760	6132	9811.2	6867.84	Ceiling Mounted Occupancy Sensor	1	2943.36	353.2	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	Hallway	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	4	684.8	0.6848	8760	5998.848	$719.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	4	389.2	0.3892	8760	6132	3409.392	2386.5744	Ceiling Mounted Occupancy Sensor	1	3612.2736	433.5	$105.0	$20.0	$32.0	$103.0	$73.5	$201.5	$603.0	$804.5
PS #5 - Interior	003	Hallway	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	8	1369.6	1.3696	8760	11997.696	$1,439.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	8	778.4	0.7784	8760	6132	6818.784	4773.1488	Ceiling Mounted Occupancy Sensor	1	7224.5472	866.9	$105.0	$20.0	$32.0	$103.0	$73.5	$329.5	$1,103.0	$1,432.5
PS #5 - Interior	003	Hallway	1X4 Fixtures w/ 2-T12 Lamps w/ Electronic Ballasts	16	811.2	0.8112	8760	7106.112	$852.7	None Proposed	16	811.2	0.8112	8760	6132	7106.112	4974.2784	Ceiling Mounted Occupancy Sensor	1	2131.8336	255.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	Hallway	1x4 Fixtures w/ 1-T12 Lamp Fixture w/ Magnetic Ballast	4	171.2	0.1712	8760	1499.712	$180.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	4	97.28	0.09728	8760	6132	852.1728	596.52096	Ceiling Mounted Occupancy Sensor	1	903.19104	108.4	$35.0	$5.0	$32.0	$103.0	$73.5	$201.5	$263.0	$464.5
PS #5 - Interior	003	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	32	1622.4	1.6224	8760	14212.224	$1,705.5	None Proposed	32	1622.4	1.6224	8760	6132	14212.224	9948.5568	Ceiling Mounted Occupancy Sensor	1	4263.6672	511.6	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	Hallway	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	10	254	0.254	8760	2225.04	$267.0	None Proposed	10	254	0.254	8760	6132	2225.04	1557.528	Ceiling Mounted Occupancy Sensor	1	667.512	80.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	Janitors	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	1	25.4	0.0254	500	12.7	$1.5	None Proposed	1	25.4	0.0254	500	350	12.7	8.89	Ceiling Mounted Occupancy Sensor	1	3.81	0.5	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	Janitors	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	342.4	0.3424	500	171.2	$20.5	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	4	194.4	0.1944	500	350	97.2	68.04	Ceiling Mounted Occupancy Sensor	1	103.16	12.4	$70.0	$10.0	$32.0	$103.0	$73.5	$201.5	$423.0	$624.5
PS #5 - Interior	003	Kitchen	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	88	9856	9.856	4380	43169.28	$5,180.3	None Proposed	88	9856	9.856	4380	3066	43169.28	30218.496	Ceiling Mounted Occupancy Sensor	1	12950.784	1,554.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	Library	300W Incandescent Fixture	3	900	0.9	4380	3942	$473.0	Replace 300W Incandescent Fixture with 65W CFL	3	195	0.195	4380	3066	854.1	597.87	Ceiling Mounted Occupancy Sensor	1	3344.13	401.3	$0.0	$25.0	$16.0	$103.0	$73.5	$121.5	$178.0	$299.5
PS #5 - Interior	003	Library	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$26.6	None Proposed	1	50.7	0.0507	4380	3066	222.066	155.4462	Ceiling Mounted Occupancy Sensor	1	66.6198	8.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	Library	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$26.6	None Proposed	1	50.7	0.0507	4380	3066	222.066	155.4462	Ceiling Mounted Occupancy Sensor	1	66.6198	8.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	Library	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	1	112	0.112	4380	490.56	$58.9	None Proposed	1	112	0.112	4380	3066	490.56	343.392	Ceiling Mounted Occupancy Sensor	1	147.168	17.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	Mens Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$9.1	None Proposed	3	152.1	0.1521	500	350	76.05	53.235	Ceiling Mounted Occupancy Sensor	1	22.815	2.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	Stairs	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	8760	888.264	$106.6	None Proposed	2	101.4	0.1014	8760	6132	888.264	621.7848	Ceiling Mounted Occupancy Sensor	1	266.4792	32.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	Stairs	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	8760	888.264	$106.6	None Proposed	2	101.4	0.1014	8760	6132	888.264	621.7848	Ceiling Mounted Occupancy Sensor	1	266.4792	32.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	Stairs	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	8760	888.264	$106.6	None Proposed	2	101.4	0.1014	8760	6132	888.264	621.7848	Ceiling Mounted Occupancy Sensor	1	266.4792	32.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	Stairs	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	8760	888.264	$106.6	None Proposed	2	101.4	0.1014	8760	6132	888.264	621.7848	Ceiling Mounted Occupancy Sensor	1	266.4792	32.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	Stairs	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	171.2	0.1712	8760	1499.712	$180.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	2	97.2	0.0972	8760	6132	851.472	596.0304	Ceiling Mounted Occupancy Sensor	1	903.6816	108.4	$70.0	$10.0	$32.0	$103.0	$73.5	$137.5	$263.0	$400.5
PS #5 - Interior	003	Stairwell	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	8760	888.264	$106.6	None Proposed	2	101.4	0.1014	8760	6132	888.264	621.7848	Ceiling Mounted Occupancy Sensor	1	266.4792	32.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	Stairwell	1x4 Fixtures w/ 1-T12 Lamp Fixture w/ Magnetic Ballast	1	42.8	0.0428	8760	374.928	$45.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	24.32	0.02432	8760	6132	213.0432	149.13024	Ceiling Mounted Occupancy Sensor	1	225.79776	27.1	$35.0	$5.0	$32.0	$103.0	$73.5	$105.5	$143.0	$248.5
PS #5 - Interior	003	Stairwell	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	8760	444.132	$53.3	None Proposed	1	50.7	0.0507	8760	6132	444.132	310.8924	Ceiling Mounted Occupancy Sensor	1	133.2396	16.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	Stairwell	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	8760	444.132	$53.3	None Proposed	1	50.7	0.0507	8760	6132	444.132	310.8924	Ceiling Mounted Occupancy Sensor	1	133.2396	16.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	Stairwell	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	8760	444.132	$53.3	None Proposed	1	50.7	0.0507	8760	6132	444.132	310.8924	Ceiling Mounted Occupancy Sensor	1	133.2396	16.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	Storage	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	2	126	0.126	500	63	$7.6	None Proposed	2	126	0.126	500	350	63	44.1	Ceiling Mounted Occupancy Sensor	1	18.9	2.3	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	Supply	1x4 Fixtures w/ 1-T12 Lamp Fixture w/ Magnetic Ballast	1	42.8	0.0428	500	21.4	$2.6	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	24.32	0.02432	500	350	12.16	8.512	Ceiling Mounted Occupancy Sensor	1	12.888	1.5	$35.0	$5.0	$32.0	$103.0	$73.5	$105.5	$143.0	$248.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #5 - Interior	003	Supply	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	3	256.8	0.2568	500	128.4	$15.4	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	3	145.8	0.1458	500	350	72.9	51.03	Ceiling Mounted Occupancy Sensor	1	77.37	9.3	$70.0	$10.0	$32.0	$103.0	$73.5	$169.5	$343.0	$512.5
PS #5 - Interior	003	Teachers Lounge	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$53.3	None Proposed	2	101.4	0.1014	4380	3066	444.132	310.8924	Ceiling Mounted Occupancy Sensor	1	133.2396	16.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	Tunnel	60W Incandescent Fixture	15	900	0.9	4380	3942	$473.0	Replace 60W Incandescent Fixture with 13W CFL	15	195	0.195	4380	3066	854.1	597.87	Ceiling Mounted Occupancy Sensor	1	3344.13	401.3	$0.0	$5.0	$16.0	$103.0	$73.5	$313.5	$178.0	$491.5
PS #5 - Interior	003	W308	13W CFL Fixture	2	26	0.026	4380	113.88	$13.7	None Proposed	2	26	0.026	4380	3066	113.88	79.716	Ceiling Mounted Occupancy Sensor	1	34.164	4.1	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	W309	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$53.3	None Proposed	2	101.4	0.1014	4380	3066	444.132	310.8924	Ceiling Mounted Occupancy Sensor	1	133.2396	16.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	W310	13W CFL Fixture	1	13	0.013	4380	56.94	$6.8	None Proposed	1	13	0.013	4380	3066	56.94	39.858	Ceiling Mounted Occupancy Sensor	1	17.082	2.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	W311	13W CFL Fixture	1	13	0.013	4380	56.94	$6.8	None Proposed	1	13	0.013	4380	3066	56.94	39.858	Ceiling Mounted Occupancy Sensor	1	17.082	2.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	W312	13W CFL Fixture	1	13	0.013	4380	56.94	$6.8	None Proposed	1	13	0.013	4380	3066	56.94	39.858	Ceiling Mounted Occupancy Sensor	1	17.082	2.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	W313	13W CFL Fixture	1	13	0.013	4380	56.94	$6.8	None Proposed	1	13	0.013	4380	3066	56.94	39.858	Ceiling Mounted Occupancy Sensor	1	17.082	2.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	W314	13W CFL Fixture	1	13	0.013	4380	56.94	$6.8	None Proposed	1	13	0.013	4380	3066	56.94	39.858	Ceiling Mounted Occupancy Sensor	1	17.082	2.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	W315	13W CFL Fixture	1	13	0.013	4380	56.94	$6.8	None Proposed	1	13	0.013	4380	3066	56.94	39.858	Ceiling Mounted Occupancy Sensor	1	17.082	2.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	W316	13W CFL Fixture	1	13	0.013	4380	56.94	$6.8	None Proposed	1	13	0.013	4380	3066	56.94	39.858	Ceiling Mounted Occupancy Sensor	1	17.082	2.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	W317	13W CFL Fixture	1	13	0.013	4380	56.94	$6.8	None Proposed	1	13	0.013	4380	3066	56.94	39.858	Ceiling Mounted Occupancy Sensor	1	17.082	2.0	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #5 - Interior	003	Womens Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$6.1	None Proposed	2	101.4	0.1014	500	350	50.7	35.49	Ceiling Mounted Occupancy Sensor	1	15.21	1.8	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS 15 (Whitney M. Young Jr.) - Exterior	000	Exterior	250W MH Fixture	8	4380	Replace 250W Fixture with Induction Light Fixture	None Proposed	0	1.4	6132	735.8	$0.0	$390.0	$137.0	$0.0	$0.0	$1,096.0	$3,120.0	$4,216.0
PS 15 (Whitney M. Young Jr.) - Exterior	000	Exterior	Exterior Wall Packs (Assume 70w)	16	4380	Replace 70W Fixture with Induction Light Fixture	None Proposed	0	0.736	3223.68	386.8	$0.0	$380.0	$137.0	$0.0	$0.0	$2,192.0	$6,080.0	$8,272.0
PS 15 (Whitney M. Young Jr.) - Interior	001	Aduitorium	1000W Incandescent Fixture	6	500	Replace 1000W Incandescent Fixture with 65W CFL	None Proposed	0	5.61	2805	336.6	$0.0	$25.0	$16.0	$0.0	$0.0	$96.0	$150.0	$246.0
PS 15 (Whitney M. Young Jr.) - Interior	001	Aduitorium	150W Incandescent Fixture	40	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	5	2500	300.0	$0.0	$7.0	$16.0	$0.0	$0.0	$640.0	$280.0	$920.0
PS 15 (Whitney M. Young Jr.) - Interior	002	Balcony	150W Incandescent Fixture	18	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	2.25	1125	135.0	$0.0	$7.0	$16.0	$0.0	$0.0	$288.0	$126.0	$414.0
PS 15 (Whitney M. Young Jr.) - Interior	000	Boiler Room	150W Incandescent Fixture	17	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	2.125	1062.5	127.5	$0.0	$7.0	$16.0	$0.0	$0.0	$272.0	$119.0	$391.0
PS 15 (Whitney M. Young Jr.) - Interior	000	Storrage (All)	150W Incandescent Fixture	33	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	4.125	2062.5	247.5	$0.0	$7.0	$16.0	$0.0	$0.0	$528.0	$231.0	$759.0
PS 15 (Whitney M. Young Jr.) - Interior	001	101	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	000	102	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	36	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2398.3128	287.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	001	103	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	001	105	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	001	106	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	36	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2398.3128	287.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	001	107	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	001	109	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	001	110	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	36	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2398.3128	287.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	001	111	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	001	113	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	001	114	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	36	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2398.3128	287.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	001	115	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	001	117	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	36	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2398.3128	287.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	001	118	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	001	120	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	001	121	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	36	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2398.3128	287.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	001	122	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	001	124	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	001	125	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	36	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2398.3128	287.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	001	126	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	19	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1265.7762	151.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	001	128	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	001	129	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	26	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1732.1148	207.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	001	130	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	001	132	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS 15 (Whitney M. Young Jr.) - Interior	001	133	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	001	134	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	002	201	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	002	202	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	002	203	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	002	204	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	002	205	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	002	206	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	002	207	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	002	208	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	002	209	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	002	210	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	002	211	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	002	212	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	002	213	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	002	214	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	002	215	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	002	216	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	002	217	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	002	218	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	002	219	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	002	220	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	002	221	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	002	222	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	002	223	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	002	224	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	002	225	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	002	226	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	002	227	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	002	228	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	002	229	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS 15 (Whitney M. Young Jr.) - Interior	002	230	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	002	231	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	002	232	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	002	233	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	001	101A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	66.6198	8.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	001	102A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	66.6198	8.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	001	Boys Bath Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	10	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 15 (Whitney M. Young Jr.) - Interior	000	Boys Locker Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 15 (Whitney M. Young Jr.) - Interior	000	Classroom 1	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	000	Classroom 2	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	000	Classroom 3	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	000	Classroom 4	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	143.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	000	Custodial Office	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 15 (Whitney M. Young Jr.) - Interior	000	Electrical Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 15 (Whitney M. Young Jr.) - Interior	001	Girls Bath Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	10	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 15 (Whitney M. Young Jr.) - Interior	000	Girls Locker Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 15 (Whitney M. Young Jr.) - Interior	001	Girls Locker Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	22	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 15 (Whitney M. Young Jr.) - Interior	002	Library	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	36	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 15 (Whitney M. Young Jr.) - Interior	002	Mechanical Rooms	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 15 (Whitney M. Young Jr.) - Interior	001	Nurse	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 15 (Whitney M. Young Jr.) - Interior	000	Office	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 15 (Whitney M. Young Jr.) - Interior	002	Offices	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	24	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 15 (Whitney M. Young Jr.) - Interior	001	Stairwell (All)	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	60	8760	None Proposed	None Proposed	1	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 15 (Whitney M. Young Jr.) - Interior	000	Storrage (All)	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 15 (Whitney M. Young Jr.) - Interior	002	Storrage (All)	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	16	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 15 (Whitney M. Young Jr.) - Interior	001	Storrage (All)	1X4 Suspended Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	11	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 15 (Whitney M. Young Jr.) - Interior	001	Aduitorium	250W MH Fixture	24	500	Replace 250W Fixture with Induction Light Fixture	None Proposed	0	4.2	2100	252.0	$0.0	$390.0	$137.0	$0.0	$0.0	$3,288.0	$9,360.0	$12,648.0
PS 15 (Whitney M. Young Jr.) - Interior	001	Teachers Lounge	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	6	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	496.692	59.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	000	Cafeteria 1	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	40	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 15 (Whitney M. Young Jr.) - Interior	000	Cafeteria 2	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	40	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 15 (Whitney M. Young Jr.) - Interior	000	Hallways	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	37	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS 15 (Whitney M. Young Jr.) - Interior	000	Kitchen	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	16	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 15 (Whitney M. Young Jr.) - Interior	000	Pool	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	25	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 15 (Whitney M. Young Jr.) - Interior	002	Boys Bath Room	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	14	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 15 (Whitney M. Young Jr.) - Interior	001	Confrence room	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 15 (Whitney M. Young Jr.) - Interior	002	Girls Bath Room	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	14	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 15 (Whitney M. Young Jr.) - Interior	001	Hallways	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	106	8760	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	31199.616	3,744.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	002	Hallways	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	106	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 15 (Whitney M. Young Jr.) - Interior	002	Mechanical Rooms	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 15 (Whitney M. Young Jr.) - Interior	001	Office	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	10	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 15 (Whitney M. Young Jr.) - Interior	002	Offices	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	10	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1471.68	176.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	001	Principals Office	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 15 (Whitney M. Young Jr.) - Interior	002	Teachers Lounge	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	10	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1471.68	176.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 15 (Whitney M. Young Jr.) - Interior	001	Gym	400W MH High Bay Fixture	18	4380	Replace 400W Fixture with Induction Light Fixture	None Proposed	0	4.374	19158.12	2,299.0	$0.0	$485.0	$137.0	$0.0	$0.0	$2,466.0	$8,730.0	$11,196.0
PS 15 (Whitney M. Young Jr.) - Interior	001	Aduitorium	8' T12 Fixture w/ 2-T12 Lamps	24	500	Replace 8' T12 Fixture with 1 Tandem Double-Length 2-T8 Lamp Fixture	None Proposed	0	2.568	1284	154.1	$44.8	$105.0	$64.0	$0.0	$0.0	$1,536.0	$3,595.2	$5,131.2
PS 17 (Joseph H. Brensinger) - Exterior	003	Exterior	250W MH Fixture	8	4380	Replace 250W Fixture with Induction Light Fixture	None Proposed	0	1.4	6132	674.5	$0.0	$390.0	$137.0	$0.0	$0.0	$1,096.0	$3,120.0	$4,216.0
PS 17 (Joseph H. Brensinger) - Exterior	003	Exterior	Exterior Wall Packs (Assume 70w)	12	4380	Replace 70W Fixture with Induction Light Fixture	None Proposed	0	0.552	2417.76	266.0	$0.0	$380.0	$137.0	$0.0	$0.0	$1,644.0	$4,560.0	$6,204.0
PS 17 (Joseph H. Brensinger) - Exterior	003	Exterior	Flood Lights (Assume 400W MH)	6	4380	Replace 400W Fixture with Induction Light Fixture	None Proposed	0	1.458	6386.04	702.5	$0.0	$485.0	$137.0	$0.0	$0.0	$822.0	$2,910.0	$3,732.0
PS 17 (Joseph H. Brensinger) - Interior	001	Lobby	13W CFL Fixture	12	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 17 (Joseph H. Brensinger) - Interior	001	Auditorium	150W Incandescent Fixture	47	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	5.875	2937.5	323.1	$0.0	$7.0	$16.0	$0.0	$0.0	$752.0	$329.0	$1,081.0
PS 17 (Joseph H. Brensinger) - Interior	000	Paint Room	150W Incandescent Fixture	3	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	0.375	187.5	20.6	$0.0	$7.0	$16.0	$0.0	$0.0	$48.0	$21.0	$69.0
PS 17 (Joseph H. Brensinger) - Interior	001	162	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.074	451.8408	49.7	$70.0	$10.0	$32.0	$63.5	$45.0	$109.0	$223.5	$332.5
PS 17 (Joseph H. Brensinger) - Interior	001	199	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	5	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.185	1129.602	124.3	$70.0	$10.0	$32.0	$63.5	$45.0	$205.0	$463.5	$668.5
PS 17 (Joseph H. Brensinger) - Interior	001	Boys	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	3	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.111	677.7612	74.6	$70.0	$10.0	$32.0	$63.5	$45.0	$141.0	$303.5	$444.5
PS 17 (Joseph H. Brensinger) - Interior	000	Boys Locker Room	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.444	1944.72	213.9	$70.0	$10.0	$32.0	$0.0	$0.0	$384.0	$960.0	$1,344.0
PS 17 (Joseph H. Brensinger) - Interior	000	Elevator Rm	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	8	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.296	148	16.3	$70.0	$10.0	$32.0	$0.0	$0.0	$256.0	$640.0	$896.0
PS 17 (Joseph H. Brensinger) - Interior	001	Girls	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	3	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.111	677.7612	74.6	$70.0	$10.0	$32.0	$63.5	$45.0	$141.0	$303.5	$444.5
PS 17 (Joseph H. Brensinger) - Interior	000	Girls Locker Room	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.444	1944.72	213.9	$70.0	$10.0	$32.0	$0.0	$0.0	$384.0	$960.0	$1,344.0
PS 17 (Joseph H. Brensinger) - Interior	000	Gym Storage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	8	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.296	148	16.3	$70.0	$10.0	$32.0	$0.0	$0.0	$256.0	$640.0	$896.0
PS 17 (Joseph H. Brensinger) - Interior	000	Hallways	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	34	8760	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	1.258	11020.08	1,212.2	$70.0	$10.0	$32.0	$0.0	$0.0	$1,088.0	$2,720.0	$3,808.0
PS 17 (Joseph H. Brensinger) - Interior	000	Induatrial Arts	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	37	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	1.369	5996.22	659.6	$70.0	$10.0	$32.0	$0.0	$0.0	$1,184.0	$2,960.0	$4,144.0
PS 17 (Joseph H. Brensinger) - Interior	000	Storage (All)	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.444	222	24.4	$70.0	$10.0	$32.0	$0.0	$0.0	$384.0	$960.0	$1,344.0

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS 17 (Joseph H. Brensinger) - Interior	002	Library	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.444	2711.0448	298.2	$70.0	$10.0	$32.0	$63.5	$45.0	$429.0	$1,023.5	$1,452.5
PS 17 (Joseph H. Brensinger) - Interior	000	Boys Locker Room	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	6	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.2094	917.172	100.9	$70.0	$10.0	$32.0	$0.0	$0.0	$192.0	$480.0	$672.0
PS 17 (Joseph H. Brensinger) - Interior	000	Girls Locker Room	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	6	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.2094	917.172	100.9	$70.0	$10.0	$32.0	$0.0	$0.0	$192.0	$480.0	$672.0
PS 17 (Joseph H. Brensinger) - Interior	002	Library	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	70	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	2.443	15363.726	1,690.0	$70.0	$10.0	$32.0	$63.5	$45.0	$2,285.0	$5,663.5	$7,948.5
PS 17 (Joseph H. Brensinger) - Interior	001	Lunch Room	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	117	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	4.0833	17884.854	1,967.3	$70.0	$10.0	$32.0	$0.0	$0.0	$3,744.0	$9,360.0	$13,104.0
PS 17 (Joseph H. Brensinger) - Interior	000	Mechanical Spcace	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.6282	314.1	34.6	$70.0	$10.0	$32.0	$0.0	$0.0	$576.0	$1,440.0	$2,016.0
PS 17 (Joseph H. Brensinger) - Interior	001	100	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.444	2711.0448	298.2	$70.0	$10.0	$32.0	$63.5	$45.0	$429.0	$1,023.5	$1,452.5
PS 17 (Joseph H. Brensinger) - Interior	001	129	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.444	2711.0448	298.2	$70.0	$10.0	$32.0	$63.5	$45.0	$429.0	$1,023.5	$1,452.5
PS 17 (Joseph H. Brensinger) - Interior	001	131	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.444	2711.0448	298.2	$70.0	$10.0	$32.0	$63.5	$45.0	$429.0	$1,023.5	$1,452.5
PS 17 (Joseph H. Brensinger) - Interior	001	132	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.444	2711.0448	298.2	$70.0	$10.0	$32.0	$63.5	$45.0	$429.0	$1,023.5	$1,452.5
PS 17 (Joseph H. Brensinger) - Interior	001	133	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.444	2711.0448	298.2	$70.0	$10.0	$32.0	$63.5	$45.0	$429.0	$1,023.5	$1,452.5
PS 17 (Joseph H. Brensinger) - Interior	001	163	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.148	903.6816	99.4	$70.0	$10.0	$32.0	$63.5	$45.0	$173.0	$383.5	$556.5
PS 17 (Joseph H. Brensinger) - Interior	001	165	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.148	903.6816	99.4	$70.0	$10.0	$32.0	$63.5	$45.0	$173.0	$383.5	$556.5
PS 17 (Joseph H. Brensinger) - Interior	001	194	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.148	903.6816	99.4	$70.0	$10.0	$32.0	$63.5	$45.0	$173.0	$383.5	$556.5
PS 17 (Joseph H. Brensinger) - Interior	001	196	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	9	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.333	2033.2836	223.7	$70.0	$10.0	$32.0	$63.5	$45.0	$333.0	$783.5	$1,116.5
PS 17 (Joseph H. Brensinger) - Interior	001	197	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	9	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.333	2033.2836	223.7	$70.0	$10.0	$32.0	$63.5	$45.0	$333.0	$783.5	$1,116.5
PS 17 (Joseph H. Brensinger) - Interior	001	198	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	9	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.333	2033.2836	223.7	$70.0	$10.0	$32.0	$63.5	$45.0	$333.0	$783.5	$1,116.5
PS 17 (Joseph H. Brensinger) - Interior	000	Boys Locker Room	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	6	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.222	972.36	107.0	$70.0	$10.0	$32.0	$0.0	$0.0	$192.0	$480.0	$672.0
PS 17 (Joseph H. Brensinger) - Interior	000	Computer Room	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	6	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.222	1355.5224	149.1	$70.0	$10.0	$32.0	$63.5	$45.0	$237.0	$543.5	$780.5
PS 17 (Joseph H. Brensinger) - Interior	001	Confrence room	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.148	648.24	71.3	$70.0	$10.0	$32.0	$0.0	$0.0	$128.0	$320.0	$448.0
PS 17 (Joseph H. Brensinger) - Interior	001	CST	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	15	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.555	3388.806	372.8	$70.0	$10.0	$32.0	$63.5	$45.0	$525.0	$1,263.5	$1,788.5
PS 17 (Joseph H. Brensinger) - Interior	000	Girls Locker Room	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	6	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.222	972.36	107.0	$70.0	$10.0	$32.0	$0.0	$0.0	$192.0	$480.0	$672.0
PS 17 (Joseph H. Brensinger) - Interior	001	Hallways	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	66	8760	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	2.442	21391.92	2,353.1	$70.0	$10.0	$32.0	$0.0	$0.0	$2,112.0	$5,280.0	$7,392.0
PS 17 (Joseph H. Brensinger) - Interior	001	Lunch Room	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.444	1944.72	213.9	$70.0	$10.0	$32.0	$0.0	$0.0	$384.0	$960.0	$1,344.0
PS 17 (Joseph H. Brensinger) - Interior	000	Mechanical Spcace	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.444	1944.72	213.9	$70.0	$10.0	$32.0	$0.0	$0.0	$384.0	$960.0	$1,344.0
PS 17 (Joseph H. Brensinger) - Interior	000	Office	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.074	324.12	35.7	$70.0	$10.0	$32.0	$0.0	$0.0	$64.0	$160.0	$224.0
PS 17 (Joseph H. Brensinger) - Interior	001	Principals Office	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.148	648.24	71.3	$70.0	$10.0	$32.0	$0.0	$0.0	$128.0	$320.0	$448.0
PS 17 (Joseph H. Brensinger) - Interior	001	Storage (All)	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	16	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.592	296	32.6	$70.0	$10.0	$32.0	$0.0	$0.0	$512.0	$1,280.0	$1,792.0
PS 17 (Joseph H. Brensinger) - Interior	001	153	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5
PS 17 (Joseph H. Brensinger) - Interior	001	154	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5
PS 17 (Joseph H. Brensinger) - Interior	001	155	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS 17 (Joseph H. Brensinger) - Interior	001	156	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5
PS 17 (Joseph H. Brensinger) - Interior	001	158	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5
PS 17 (Joseph H. Brensinger) - Interior	001	160	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5
PS 17 (Joseph H. Brensinger) - Interior	001	161	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5
PS 17 (Joseph H. Brensinger) - Interior	002	200	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5
PS 17 (Joseph H. Brensinger) - Interior	002	201	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5
PS 17 (Joseph H. Brensinger) - Interior	002	202	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5
PS 17 (Joseph H. Brensinger) - Interior	002	203	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5
PS 17 (Joseph H. Brensinger) - Interior	002	204	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5
PS 17 (Joseph H. Brensinger) - Interior	002	206	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5
PS 17 (Joseph H. Brensinger) - Interior	002	207	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5
PS 17 (Joseph H. Brensinger) - Interior	002	208	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5
PS 17 (Joseph H. Brensinger) - Interior	002	209	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	5	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.277	1692.87	186.2	$85.0	$15.0	$32.0	$63.5	$45.0	$205.0	$563.5	$768.5
PS 17 (Joseph H. Brensinger) - Interior	002	219	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5
PS 17 (Joseph H. Brensinger) - Interior	002	225	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5
PS 17 (Joseph H. Brensinger) - Interior	002	226	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5
PS 17 (Joseph H. Brensinger) - Interior	002	227	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5
PS 17 (Joseph H. Brensinger) - Interior	002	229	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5
PS 17 (Joseph H. Brensinger) - Interior	002	230	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5
PS 17 (Joseph H. Brensinger) - Interior	002	231	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5
PS 17 (Joseph H. Brensinger) - Interior	002	232	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5
PS 17 (Joseph H. Brensinger) - Interior	002	235	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	4	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.2216	1354.296	149.0	$85.0	$15.0	$32.0	$63.5	$45.0	$173.0	$463.5	$636.5
PS 17 (Joseph H. Brensinger) - Interior	002	236	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	5	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.277	1692.87	186.2	$85.0	$15.0	$32.0	$63.5	$45.0	$205.0	$563.5	$768.5
PS 17 (Joseph H. Brensinger) - Interior	002	237	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	4	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.2216	1354.296	149.0	$85.0	$15.0	$32.0	$63.5	$45.0	$173.0	$463.5	$636.5
PS 17 (Joseph H. Brensinger) - Interior	002	240	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	3	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.1662	1015.722	111.7	$85.0	$15.0	$32.0	$63.5	$45.0	$141.0	$363.5	$504.5
PS 17 (Joseph H. Brensinger) - Interior	002	241	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	3	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.1662	1015.722	111.7	$85.0	$15.0	$32.0	$63.5	$45.0	$141.0	$363.5	$504.5
PS 17 (Joseph H. Brensinger) - Interior	002	249	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5
PS 17 (Joseph H. Brensinger) - Interior	002	252	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5
PS 17 (Joseph H. Brensinger) - Interior	002	253	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5
PS 17 (Joseph H. Brensinger) - Interior	003	300	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.9972	6094.332	670.4	$85.0	$15.0	$32.0	$63.5	$45.0	$621.0	$1,863.5	$2,484.5
PS 17 (Joseph H. Brensinger) - Interior	003	302	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	16	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.8864	5417.184	595.9	$85.0	$15.0	$32.0	$63.5	$45.0	$557.0	$1,663.5	$2,220.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS 17 (Joseph H. Brensinger) - Interior	003	305	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	20	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	1.108	6771.48	744.9	$85.0	$15.0	$32.0	$63.5	$45.0	$685.0	$2,063.5	$2,748.5
PS 17 (Joseph H. Brensinger) - Interior	003	307	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	6	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.3324	2031.444	223.5	$85.0	$15.0	$32.0	$63.5	$45.0	$237.0	$663.5	$900.5
PS 17 (Joseph H. Brensinger) - Interior	003	308	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	1	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.0554	338.574	37.2	$85.0	$15.0	$32.0	$63.5	$45.0	$77.0	$163.5	$240.5
PS 17 (Joseph H. Brensinger) - Interior	003	309	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	6	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.3324	2031.444	223.5	$85.0	$15.0	$32.0	$63.5	$45.0	$237.0	$663.5	$900.5
PS 17 (Joseph H. Brensinger) - Interior	003	310	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	48	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	2.6592	16251.552	1,787.7	$85.0	$15.0	$32.0	$63.5	$45.0	$1,581.0	$4,863.5	$6,444.5
PS 17 (Joseph H. Brensinger) - Interior	003	311	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	2	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.1108	677.148	74.5	$85.0	$15.0	$32.0	$63.5	$45.0	$109.0	$263.5	$372.5
PS 17 (Joseph H. Brensinger) - Interior	003	319	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5
PS 17 (Joseph H. Brensinger) - Interior	003	321	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5
PS 17 (Joseph H. Brensinger) - Interior	003	323	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	3	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.1662	1015.722	111.7	$85.0	$15.0	$32.0	$63.5	$45.0	$141.0	$363.5	$504.5
PS 17 (Joseph H. Brensinger) - Interior	003	326	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5
PS 17 (Joseph H. Brensinger) - Interior	003	327	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5
PS 17 (Joseph H. Brensinger) - Interior	003	328	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5
PS 17 (Joseph H. Brensinger) - Interior	003	330	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5
PS 17 (Joseph H. Brensinger) - Interior	003	331	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5
PS 17 (Joseph H. Brensinger) - Interior	003	332	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5
PS 17 (Joseph H. Brensinger) - Interior	003	333	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5
PS 17 (Joseph H. Brensinger) - Interior	003	334	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	1	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.0554	338.574	37.2	$85.0	$15.0	$32.0	$63.5	$45.0	$77.0	$163.5	$240.5
PS 17 (Joseph H. Brensinger) - Interior	003	335	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	4	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.2216	1354.296	149.0	$85.0	$15.0	$32.0	$63.5	$45.0	$173.0	$463.5	$636.5
PS 17 (Joseph H. Brensinger) - Interior	003	336	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	4	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.2216	1354.296	149.0	$85.0	$15.0	$32.0	$63.5	$45.0	$173.0	$463.5	$636.5
PS 17 (Joseph H. Brensinger) - Interior	003	337	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	4	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.2216	1354.296	149.0	$85.0	$15.0	$32.0	$63.5	$45.0	$173.0	$463.5	$636.5
PS 17 (Joseph H. Brensinger) - Interior	003	338	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	6	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.3324	2031.444	223.5	$85.0	$15.0	$32.0	$63.5	$45.0	$237.0	$663.5	$900.5
PS 17 (Joseph H. Brensinger) - Interior	003	339	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	6	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.3324	2031.444	223.5	$85.0	$15.0	$32.0	$63.5	$45.0	$237.0	$663.5	$900.5
PS 17 (Joseph H. Brensinger) - Interior	003	340	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	2	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.1108	677.148	74.5	$85.0	$15.0	$32.0	$63.5	$45.0	$109.0	$263.5	$372.5
PS 17 (Joseph H. Brensinger) - Interior	003	342	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	20	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	1.108	6771.48	744.9	$85.0	$15.0	$32.0	$63.5	$45.0	$685.0	$2,063.5	$2,748.5
PS 17 (Joseph H. Brensinger) - Interior	003	343	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	4	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.2216	1354.296	149.0	$85.0	$15.0	$32.0	$63.5	$45.0	$173.0	$463.5	$636.5
PS 17 (Joseph H. Brensinger) - Interior	003	344	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	4	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.2216	1354.296	149.0	$85.0	$15.0	$32.0	$63.5	$45.0	$173.0	$463.5	$636.5
PS 17 (Joseph H. Brensinger) - Interior	003	345	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	6	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.3324	2031.444	223.5	$85.0	$15.0	$32.0	$63.5	$45.0	$237.0	$663.5	$900.5
PS 17 (Joseph H. Brensinger) - Interior	003	346	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	4	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.2216	1354.296	149.0	$85.0	$15.0	$32.0	$63.5	$45.0	$173.0	$463.5	$636.5
PS 17 (Joseph H. Brensinger) - Interior	003	349	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5
PS 17 (Joseph H. Brensinger) - Interior	003	350	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5
PS 17 (Joseph H. Brensinger) - Interior	003	352	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS 17 (Joseph H. Brensinger) - Interior	003	Boys Bath Room	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	4	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.2216	110.8	12.2	$85.0	$15.0	$32.0	$0.0	$0.0	$128.0	$400.0	$528.0
PS 17 (Joseph H. Brensinger) - Interior	003	Boys Bath Room	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	4	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.2216	110.8	12.2	$85.0	$15.0	$32.0	$0.0	$0.0	$128.0	$400.0	$528.0
PS 17 (Joseph H. Brensinger) - Interior	002	Boys Restroom	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	3	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.1662	83.1	9.1	$85.0	$15.0	$32.0	$0.0	$0.0	$96.0	$300.0	$396.0
PS 17 (Joseph H. Brensinger) - Interior	003	Girls Bath Room	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	4	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.2216	110.8	12.2	$85.0	$15.0	$32.0	$0.0	$0.0	$128.0	$400.0	$528.0
PS 17 (Joseph H. Brensinger) - Interior	003	Girls Bath Room	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	4	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.2216	110.8	12.2	$85.0	$15.0	$32.0	$0.0	$0.0	$128.0	$400.0	$528.0
PS 17 (Joseph H. Brensinger) - Interior	002	Girls Restroom	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	6	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.3324	166.2	18.3	$85.0	$15.0	$32.0	$0.0	$0.0	$192.0	$600.0	$792.0
PS 17 (Joseph H. Brensinger) - Interior	002	Hallways	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	66	8760	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	3.6564	32030.064	3,523.3	$85.0	$15.0	$32.0	$0.0	$0.0	$2,112.0	$6,600.0	$8,712.0
PS 17 (Joseph H. Brensinger) - Interior	003	Hallways	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	66	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	3.6564	16015.032	1,761.7	$85.0	$15.0	$32.0	$0.0	$0.0	$2,112.0	$6,600.0	$8,712.0
PS 17 (Joseph H. Brensinger) - Interior	002	Lounge	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.6648	4062.888	446.9	$85.0	$15.0	$32.0	$63.5	$45.0	$429.0	$1,263.5	$1,692.5
PS 17 (Joseph H. Brensinger) - Interior	001	Stage	300W Incandescent Fixture	12	4380	Replace 300W Incandescent Fixture with 65W CFL	None Proposed	0	2.82	12351.6	1,358.7	$0.0	$25.0	$16.0	$0.0	$0.0	$192.0	$300.0	$492.0
PS 17 (Joseph H. Brensinger) - Interior	001	Auditorium	400W MH High Bay Fixture	49	500	Replace 400W Fixture with Induction Light Fixture	None Proposed	0	11.907	5953.5	654.9	$0.0	$485.0	$137.0	$0.0	$0.0	$6,713.0	$23,765.0	$30,478.0
PS 17 (Joseph H. Brensinger) - Interior	000	Gym	400W MH High Bay Fixture	21	4380	Replace 400W Fixture with Induction Light Fixture	None Proposed	1	5.103	22351.14	2,458.6	$0.0	$485.0	$137.0	$0.0	$0.0	$2,877.0	$10,185.0	$13,062.0
PS 34 - Exterior	000	Exterior	Exterior Wall Packs (Assume 70w)	8	4380	Replace 70W Fixture with Induction Light Fixture	None Proposed	0	0.368	1611.84	257.9	$0.0	$380.0	$137.0	$0.0	$0.0	$1,096.0	$3,040.0	$4,136.0
PS 34 - Exterior	000	Exterior	Flood Lights (Assume 400W MH)	4	4380	Replace 400W Fixture with Induction Light Fixture	None Proposed	0	0.972	4257.36	681.2	$0.0	$485.0	$137.0	$0.0	$0.0	$548.0	$1,940.0	$2,488.0
PS 34 - Exterior	000	Exterior	Pole Mounted Luminare - 2 Head (250W MH)	6	4380	Replace 250W Fixture with Induction Light Fixture	None Proposed	0	2.4	10512	1,681.9	$0.0	$780.0	$274.0	$0.0	$0.0	$1,644.0	$4,680.0	$6,324.0
PS 34 - Interior	001	101	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1399.0158	223.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	001	102	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	799.4376	127.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	001	103	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	799.4376	127.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	001	104	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	24	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1598.8752	255.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	001	105	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1399.0158	223.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	001	107	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	191.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	001	108	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	24	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1598.8752	255.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	001	109	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	799.4376	127.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	001	110	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	799.4376	127.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	001	111	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1399.0158	223.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	001	112	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	191.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	002	112	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 34 - Interior	001	113	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	191.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	002	113	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 34 - Interior	001	114	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	191.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	002	114	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	191.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS 34 - Interior	002	201	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1399.0158	223.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	002	202	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	799.4376	127.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	002	203	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	799.4376	127.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	002	204	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	24	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1598.8752	255.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	002	205	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1399.0158	223.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	002	207	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1399.0158	223.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	002	208	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	24	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1598.8752	255.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	002	209	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	799.4376	127.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	002	210	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	799.4376	127.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	002	211	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1399.0158	223.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	002	215	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	191.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	002	217	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	9	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	599.5782	95.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	002	219	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	9	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	599.5782	95.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	003	301	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1399.0158	223.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	003	304	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1399.0158	223.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	003	305	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	500	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	15.21	2.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	003	306	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	24	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1598.8752	255.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	003	307	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	799.4376	127.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	003	308	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	799.4376	127.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	003	311	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1399.0158	223.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	003	312	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	500	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	15.21	2.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	003	313	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	191.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	003	314	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	191.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	003	315	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	9	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	599.5782	95.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	003	301B	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	799.4376	127.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	003	301C	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	799.4376	127.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	003	301D	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	24	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1598.8752	255.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	003	Auditorium	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	30	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 34 - Interior	001	Boys Bath Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 34 - Interior	002	Boys Bath Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 34 - Interior	003	Boys Bath Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS 34 - Interior	001	Girls Bath Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 34 - Interior	002	Girls Bath Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 34 - Interior	003	Girls Bath Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 34 - Interior	001	Hallways	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	20	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 34 - Interior	002	Hallways	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	32	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 34 - Interior	003	Hallways	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	26	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 34 - Interior	000	Mechanical Spcace	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 34 - Interior	001	Offices	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	532.9584	85.3	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	001	Principals Office	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	266.4792	42.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	000	Stairwell (All)	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	48	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 34 - Interior	001	Storage (All)	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 34 - Interior	002	Storage (All)	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 34 - Interior	003	Storage (All)	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 34 - Interior	002	Teachers Lounge	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	532.9584	85.3	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	000	Bathrooms	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	16	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 34 - Interior	000	Hallways	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 34 - Interior	000	Library	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	28	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1865.3544	298.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 34 - Interior	000	Lunch Room	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 34 - Interior	000	Lunch Room	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 34 - Interior	000	Gym	400W MH High Bay Fixture	9	4380	Replace 400W Fixture with Induction Light Fixture	None Proposed	0	2.187	9579.06	1,532.6	$0.0	$485.0	$137.0	$0.0	$0.0	$1,233.0	$4,365.0	$5,598.0
PS 38 (James F. Murry) - Exterior	000	Exterior	250W MH Fixture	8	4380	Replace 250W Fixture with Induction Light Fixture	None Proposed	0	1.4	6132	797.2	$0.0	$390.0	$137.0	$0.0	$0.0	$1,096.0	$3,120.0	$4,216.0
PS 38 (James F. Murry) - Exterior	000	Exterior	Exterior Wall Packs (Assume 70w)	16	4380	Replace 70W Fixture with Induction Light Fixture	None Proposed	0	0.736	3223.68	419.1	$0.0	$380.0	$137.0	$0.0	$0.0	$2,192.0	$6,080.0	$8,272.0
PS 38 (James F. Murry) - Interior	001	Boys Restroom	150W Incandescent Fixture	2	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	0.25	125	16.3	$0.0	$7.0	$16.0	$0.0	$0.0	$32.0	$14.0	$46.0
PS 38 (James F. Murry) - Interior	002	Boys Restroom	150W Incandescent Fixture	2	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	0.25	125	16.3	$0.0	$7.0	$16.0	$0.0	$0.0	$32.0	$14.0	$46.0
PS 38 (James F. Murry) - Interior	003	Boys Restroom	150W Incandescent Fixture	2	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	0.25	125	16.3	$0.0	$7.0	$16.0	$0.0	$0.0	$32.0	$14.0	$46.0
PS 38 (James F. Murry) - Interior	001	Girls Restroom	150W Incandescent Fixture	2	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	0.25	125	16.3	$0.0	$7.0	$16.0	$0.0	$0.0	$32.0	$14.0	$46.0
PS 38 (James F. Murry) - Interior	002	Girls Restroom	150W Incandescent Fixture	2	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	0.25	125	16.3	$0.0	$7.0	$16.0	$0.0	$0.0	$32.0	$14.0	$46.0
PS 38 (James F. Murry) - Interior	003	Girls Restroom	150W Incandescent Fixture	2	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	0.25	125	16.3	$0.0	$7.0	$16.0	$0.0	$0.0	$32.0	$14.0	$46.0
PS 38 (James F. Murry) - Interior	000	Pump Room	150W Incandescent Fixture	2	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	0.25	125	16.3	$0.0	$7.0	$16.0	$0.0	$0.0	$32.0	$14.0	$46.0
PS 38 (James F. Murry) - Interior	001	Stage	150W Incandescent Fixture	6	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	0.75	375	48.8	$0.0	$7.0	$16.0	$0.0	$0.0	$96.0	$42.0	$138.0
PS 38 (James F. Murry) - Interior	002	Storage	150W Incandescent Fixture	4	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	0.5	250	32.5	$0.0	$7.0	$16.0	$0.0	$0.0	$64.0	$28.0	$92.0

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS 38 (James F. Murry) - Interior	003	Storage	150W Incandescent Fixture	4	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	0.5	250	32.5	$0.0	$7.0	$16.0	$0.0	$0.0	$64.0	$28.0	$92.0
PS 38 (James F. Murry) - Interior	001	Storrage (All)	150W Incandescent Fixture	8	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	1	500	65.0	$0.0	$7.0	$16.0	$0.0	$0.0	$128.0	$56.0	$184.0
PS 38 (James F. Murry) - Interior	000	35	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	10	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	666.198	86.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	002	210	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	133.2396	17.3	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	003	310	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	133.2396	17.3	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	000	B10	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 38 (James F. Murry) - Interior	000	B23	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 38 (James F. Murry) - Interior	000	Boiler Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 38 (James F. Murry) - Interior	001	Boys Restroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 38 (James F. Murry) - Interior	002	Boys Restroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 38 (James F. Murry) - Interior	003	Boys Restroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 38 (James F. Murry) - Interior	000	Computer Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	30	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1998.594	259.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	000	Custodial Office	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 38 (James F. Murry) - Interior	001	Girls Restroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 38 (James F. Murry) - Interior	002	Girls Restroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 38 (James F. Murry) - Interior	003	Girls Restroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 38 (James F. Murry) - Interior	000	Gym Office	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 38 (James F. Murry) - Interior	001	Office	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	3	0	799.4376	103.9	$0.0	$0.0	$0.0	$190.5	$135.0	$405.0	$571.5	$976.5
PS 38 (James F. Murry) - Interior	000	Reading Skills	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	20	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1332.396	173.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	000	S1	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 38 (James F. Murry) - Interior	000	S2	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 38 (James F. Murry) - Interior	000	S4	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 38 (James F. Murry) - Interior	001	Stage	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 38 (James F. Murry) - Interior	001	101	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	15	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2207.52	287.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	001	102	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	001	103	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 38 (James F. Murry) - Interior	001	105	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 38 (James F. Murry) - Interior	001	106	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	001	121	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 38 (James F. Murry) - Interior	001	139	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	001	143	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS 38 (James F. Murry) - Interior	001	146	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	15	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2207.52	287.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	002	201	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	002	202	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	002	203	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	588.672	76.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	002	206	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	002	218	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	002	219	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	002	220	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	002	224	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	002	225	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	294.336	38.3	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	002	226	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	003	301	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	003	302	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	003	303	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	588.672	76.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	003	306	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	003	307	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	003	311	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	003	312	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	003	313	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	003	317	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	003	318-319	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	294.336	38.3	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	001	A1	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	15	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2207.52	287.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	002	A2	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	003	A3	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	002	B2	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	003	B3	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	001	C1	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	002	C2	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	003	C3	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	001	D1	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	002	D2	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS 38 (James F. Murry) - Interior	003	D3	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS 38 (James F. Murry) - Interior	000	Gym	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 38 (James F. Murry) - Interior	000	Hallways	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	10	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 38 (James F. Murry) - Interior	002	Hallways	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	27	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 38 (James F. Murry) - Interior	003	Hallways	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	27	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 38 (James F. Murry) - Interior	000	Lunch Room	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	26	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 38 (James F. Murry) - Interior	001	Teachers Lounge	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS 38 (James F. Murry) - Interior	001	Auditorium	400W MH High Bay Fixture	28	500	Replace 400W Fixture with Induction Light Fixture	None Proposed	0	6.804	3402	442.3	$0.0	$485.0	$137.0	$0.0	$0.0	$3,836.0	$13,580.0	$17,416.0
PS 38 (James F. Murry) - Interior	000	Gym	400W MH High Bay Fixture	12	4380	Replace 400W Fixture with Induction Light Fixture	None Proposed	0	2.916	12772.08	1,660.4	$0.0	$485.0	$137.0	$0.0	$0.0	$1,644.0	$5,820.0	$7,464.0

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #27 - Interior	000	Sprinkler Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	4380	666.198	$99.9	None Proposed	3	152.1	0.1521	4380	3066	666.198	466.3386	Automatic Wall Switch Occupancy Sensor	1	199.8594	30.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	000	Boy's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	253.5	0.2535	500	126.75	$19.0	None Proposed	5	253.5	0.2535	500	350	126.75	88.725	Automatic Wall Switch Occupancy Sensor	1	38.025	5.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	000	Girl's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	253.5	0.2535	500	126.75	$19.0	None Proposed	5	253.5	0.2535	500	350	126.75	88.725	Automatic Wall Switch Occupancy Sensor	1	38.025	5.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	000	B-1	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$133.2	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Automatic Wall Switch Occupancy Sensor	1	266.4792	40.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	000	B-2	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$66.6	None Proposed	2	101.4	0.1014	4380	4380	444.132	444.132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #27 - Interior	000	B-3	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$66.6	None Proposed	2	101.4	0.1014	4380	4380	444.132	444.132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #27 - Interior	000	B-4	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$133.2	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Automatic Wall Switch Occupancy Sensor	1	266.4792	40.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	000	B-5	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	4380	666.198	$99.9	None Proposed	3	152.1	0.1521	4380	3066	666.198	466.3386	Automatic Wall Switch Occupancy Sensor	1	199.8594	30.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	000	Mechanical Room	1x4 Fixtures w/ 1-T12 Lamp Fixture w/ Magnetic Ballast	1	42.8	0.0428	4380	187.464	$28.1	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	1	24.32	0.02432	4380	4380	106.5216	106.5216	None Proposed	0	80.9424	12.1	$35.0	$5.0	$65.0	$0.0	$0.0	$65.0	$40.0	$105.0
PS #27 - Interior	000	Caffeteria	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	17	861.9	0.8619	4380	3775.122	$566.3	None Proposed	17	861.9	0.8619	4380	3066	3775.122	2642.5854	Automatic Wall Switch Occupancy Sensor	1	1132.5366	169.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	000	B-6	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	000	B-7	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	11	557.7	0.5577	4380	2442.726	$366.4	None Proposed	11	557.7	0.5577	4380	3066	2442.726	1709.9082	Automatic Wall Switch Occupancy Sensor	1	732.8178	109.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	000	B-8	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	4380	3330.99	$499.6	None Proposed	15	760.5	0.7605	4380	3066	3330.99	2331.693	Automatic Wall Switch Occupancy Sensor	1	999.297	149.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	000	B-10	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	30	1521	1.521	4380	6661.98	$999.3	None Proposed	30	1521	1.521	4380	3066	6661.98	4663.386	Automatic Wall Switch Occupancy Sensor	1	1998.594	299.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	000	B-11 (Library)	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	42	2129.4	2.1294	4380	9326.772	$1,399.0	None Proposed	42	2129.4	2.1294	4380	3066	9326.772	6528.7404	Automatic Wall Switch Occupancy Sensor	2	2798.0316	419.7	$0.0	$0.0	$0.0	$127.0	$90.0	$180.0	$254.0	$434.0
PS #27 - Interior	000	Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	500	101.4	$15.2	None Proposed	4	202.8	0.2028	500	350	101.4	70.98	Automatic Wall Switch Occupancy Sensor	1	30.42	4.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	000	B-12	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	10	507	0.507	4380	2220.66	$333.1	None Proposed	10	507	0.507	4380	3066	2220.66	1554.462	Automatic Wall Switch Occupancy Sensor	1	666.198	99.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	000	B-13	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	4380	1332.396	$199.9	None Proposed	6	304.2	0.3042	4380	3066	1332.396	932.6772	Automatic Wall Switch Occupancy Sensor	1	399.7188	60.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	000	B-14	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	4380	1332.396	$199.9	None Proposed	6	304.2	0.3042	4380	3066	1332.396	932.6772	Automatic Wall Switch Occupancy Sensor	1	399.7188	60.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	000	B-15	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	4380	1332.396	$199.9	None Proposed	6	304.2	0.3042	4380	3066	1332.396	932.6772	Automatic Wall Switch Occupancy Sensor	1	399.7188	60.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	000	B-16	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	10	507	0.507	4380	2220.66	$333.1	None Proposed	10	507	0.507	4380	3066	2220.66	1554.462	Automatic Wall Switch Occupancy Sensor	1	666.198	99.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	000	B-21	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	4380	1332.396	$199.9	None Proposed	6	304.2	0.3042	4380	3066	1332.396	932.6772	Automatic Wall Switch Occupancy Sensor	1	399.7188	60.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	000	Pool Area	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	37	1875.9	1.8759	4380	8216.442	$1,232.5	None Proposed	37	1875.9	1.8759	4380	3066	8216.442	5751.5094	Automatic Wall Switch Occupancy Sensor	2	2464.9326	369.7	$0.0	$0.0	$0.0	$127.0	$90.0	$180.0	$254.0	$434.0
PS #27 - Interior	000	Halway Lights	2X2 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	10	507	0.507	8760	4441.32	$666.2	None Proposed	10	507	0.507	8760	6132	4441.32	3108.924	Automatic Wall Switch Occupancy Sensor	1	1332.396	199.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	000	Halway Lights	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	22	1115.4	1.1154	8760	9770.904	$1,465.6	None Proposed	22	1115.4	1.1154	8760	6132	9770.904	6839.6328	Automatic Wall Switch Occupancy Sensor	1	2931.2712	439.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	000	Modular: M-1	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	11	968	0.968	4380	4239.84	$636.0	None Proposed	11	968	0.968	4380	3066	4239.84	2967.888	Automatic Wall Switch Occupancy Sensor	1	1271.952	190.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	000	Modular: M-2	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	11	968	0.968	4380	4239.84	$636.0	None Proposed	11	968	0.968	4380	3066	4239.84	2967.888	Automatic Wall Switch Occupancy Sensor	1	1271.952	190.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	000	Modular: Boy's Bathroom	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	3	264	0.264	500	132	$19.8	None Proposed	3	264	0.264	500	350	132	92.4	Automatic Wall Switch Occupancy Sensor	1	39.6	5.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	000	Modular: Girl's Bathroom	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	3	264	0.264	500	132	$19.8	None Proposed	3	264	0.264	500	350	132	92.4	Automatic Wall Switch Occupancy Sensor	1	39.6	5.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	001	Boy's Bathroom	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	3	264	0.264	500	132	$19.8	None Proposed	3	264	0.264	500	350	132	92.4	Automatic Wall Switch Occupancy Sensor	1	39.6	5.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	001	Girl's Bathroom	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	3	264	0.264	500	132	$19.8	None Proposed	3	264	0.264	500	350	132	92.4	Automatic Wall Switch Occupancy Sensor	1	39.6	5.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	001	Room 100	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	10	1120	1.12	4380	4905.6	$735.8	None Proposed	10	1120	1.12	4380	3066	4905.6	3433.92	Automatic Wall Switch Occupancy Sensor	1	1471.68	220.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	001	Room 100A	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$441.5	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Automatic Wall Switch Occupancy Sensor	1	883.008	132.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	001	Room 101	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	4380	1332.396	$199.9	None Proposed	6	304.2	0.3042	4380	3066	1332.396	932.6772	Automatic Wall Switch Occupancy Sensor	1	399.7188	60.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	001	Room 102	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$399.7	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Automatic Wall Switch Occupancy Sensor	1	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	001	Teacher's Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	7	354.9	0.3549	4380	1554.462	$233.2	None Proposed	7	354.9	0.3549	4380	3066	1554.462	1088.1234	Automatic Wall Switch Occupancy Sensor	1	466.3386	70.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	001	Room 103	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	13	659.1	0.6591	4380	2886.858	$433.0	None Proposed	13	659.1	0.6591	4380	3066	2886.858	2020.8006	Automatic Wall Switch Occupancy Sensor	1	866.0574	129.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	001	Room 104	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	4380	1332.396	$199.9	None Proposed	6	304.2	0.3042	4380	3066	1332.396	932.6772	Automatic Wall Switch Occupancy Sensor	1	399.7188	60.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	001	Room 105	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	13	659.1	0.6591	4380	2886.858	$433.0	None Proposed	13	659.1	0.6591	4380	3066	2886.858	2020.8006	Automatic Wall Switch Occupancy Sensor	1	866.0574	129.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	001	Room 106	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$399.7	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Automatic Wall Switch Occupancy Sensor	1	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	001	Room 107	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	4380	3330.99	$499.6	None Proposed	15	760.5	0.7605	4380	3066	3330.99	2331.693	Automatic Wall Switch Occupancy Sensor	1	999.297	149.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	001	Room 108	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	4380	3330.99	$499.6	None Proposed	15	760.5	0.7605	4380	3066	3330.99	2331.693	Automatic Wall Switch Occupancy Sensor	1	999.297	149.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	001	Room 109	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	4380	3330.99	$499.6	None Proposed	15	760.5	0.7605	4380	3066	3330.99	2331.693	Automatic Wall Switch Occupancy Sensor	1	999.297	149.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	001	Boy's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	253.5	0.2535	500	126.75	$19.0	None Proposed	5	253.5	0.2535	500	350	126.75	88.725	Automatic Wall Switch Occupancy Sensor	1	38.025	5.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	001	Girl's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	500	152.1	$22.8	None Proposed	6	304.2	0.3042	500	350	152.1	106.47	Automatic Wall Switch Occupancy Sensor	1	45.63	6.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	001	Room 110	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	4380	3330.99	$499.6	None Proposed	15	760.5	0.7605	4380	3066	3330.99	2331.693	Automatic Wall Switch Occupancy Sensor	1	999.297	149.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	001	Room 111	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$399.7	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Automatic Wall Switch Occupancy Sensor	1	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	001	Room 112	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #27 - Interior	001	Room 113	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	001	Gym	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	42	2129.4	2.1294	4380	9326.772	$1,399.0	None Proposed	42	2129.4	2.1294	4380	3066	9326.772	6528.7404	Automatic Wall Switch Occupancy Sensor	2	2798.0316	419.7	$0.0	$0.0	$0.0	$127.0	$90.0	$180.0	$254.0	$434.0
PS #27 - Interior	001	Stage	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	4380	666.198	$99.9	None Proposed	3	152.1	0.1521	4380	3066	666.198	466.3386	Automatic Wall Switch Occupancy Sensor	1	199.8594	30.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	001	Principal's Office	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	6	378	0.378	4380	1655.64	$248.3	None Proposed	6	378	0.378	4380	3066	1655.64	1158.948	Automatic Wall Switch Occupancy Sensor	1	496.692	74.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	001	Air Handler Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	4380	666.198	$99.9	None Proposed	3	152.1	0.1521	4380	3066	666.198	466.3386	Automatic Wall Switch Occupancy Sensor	1	199.8594	30.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	001	1st Floor Halway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	34	1723.8	1.7238	8760	15100.488	$2,265.1	None Proposed	34	1723.8	1.7238	8760	6132	15100.488	10570.3416	Automatic Wall Switch Occupancy Sensor	2	4530.1464	679.5	$0.0	$0.0	$0.0	$127.0	$90.0	$180.0	$254.0	$434.0
PS #27 - Interior	002	Room 201	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	002	Boy's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	500	101.4	$15.2	None Proposed	4	202.8	0.2028	500	350	101.4	70.98	Automatic Wall Switch Occupancy Sensor	1	30.42	4.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	002	Girl's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	500	101.4	$15.2	None Proposed	4	202.8	0.2028	500	350	101.4	70.98	Automatic Wall Switch Occupancy Sensor	1	30.42	4.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	002	Room 202	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	002	Room 203	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	002	Room 204	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	002	Room 205	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	002	Room 207	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	15	1320	1.32	4380	5781.6	$867.2	None Proposed	15	1320	1.32	4380	3066	5781.6	4047.12	Automatic Wall Switch Occupancy Sensor	1	1734.48	260.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	002	Room 208	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	15	1320	1.32	4380	5781.6	$867.2	None Proposed	15	1320	1.32	4380	3066	5781.6	4047.12	Automatic Wall Switch Occupancy Sensor	1	1734.48	260.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	002	Room 209	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	15	1320	1.32	4380	5781.6	$867.2	None Proposed	15	1320	1.32	4380	3066	5781.6	4047.12	Automatic Wall Switch Occupancy Sensor	1	1734.48	260.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	002	Room 210	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$1,040.7	None Proposed	18	1584	1.584	4380	3066	6937.92	4856.544	Automatic Wall Switch Occupancy Sensor	1	2081.376	312.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	002	Boy's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	253.5	0.2535	500	126.75	$19.0	None Proposed	5	253.5	0.2535	500	350	126.75	88.725	Automatic Wall Switch Occupancy Sensor	1	38.025	5.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	002	Girl's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	253.5	0.2535	500	126.75	$19.0	None Proposed	5	253.5	0.2535	500	350	126.75	88.725	Automatic Wall Switch Occupancy Sensor	1	38.025	5.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	002	2nd Floor Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	8760	6661.98	$999.3	None Proposed	15	760.5	0.7605	8760	6132	6661.98	4663.386	Automatic Wall Switch Occupancy Sensor	1	1998.594	299.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	003	Boy's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	500	152.1	$22.8	None Proposed	6	304.2	0.3042	500	350	152.1	106.47	Automatic Wall Switch Occupancy Sensor	1	45.63	6.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	003	Girl's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	500	152.1	$22.8	None Proposed	6	304.2	0.3042	500	350	152.1	106.47	Automatic Wall Switch Occupancy Sensor	1	45.63	6.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	003	Room 301	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	003	Teacher's Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$133.2	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Automatic Wall Switch Occupancy Sensor	1	266.4792	40.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	003	Room 302	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	003	Room 303	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	003	Room 304	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	003	Room 305	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	003	Room 306	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	15	1320	1.32	4380	5781.6	$867.2	None Proposed	15	1320	1.32	4380	3066	5781.6	4047.12	Automatic Wall Switch Occupancy Sensor	1	1734.48	260.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	003	Room 307	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	15	1320	1.32	4380	5781.6	$867.2	None Proposed	15	1320	1.32	4380	3066	5781.6	4047.12	Automatic Wall Switch Occupancy Sensor	1	1734.48	260.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	003	Room 308	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	15	1320	1.32	4380	5781.6	$867.2	None Proposed	15	1320	1.32	4380	3066	5781.6	4047.12	Automatic Wall Switch Occupancy Sensor	1	1734.48	260.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	003	Room 309	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	15	1320	1.32	4380	5781.6	$867.2	None Proposed	15	1320	1.32	4380	3066	5781.6	4047.12	Automatic Wall Switch Occupancy Sensor	1	1734.48	260.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	003	Room 310	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	003	Room 311	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	003	Girl's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	500	101.4	$15.2	None Proposed	4	202.8	0.2028	500	350	101.4	70.98	Automatic Wall Switch Occupancy Sensor	1	30.42	4.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #27 - Interior	003	3rd Floor Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	8760	6661.98	$999.3	None Proposed	15	760.5	0.7605	8760	6132	6661.98	4663.386	Automatic Wall Switch Occupancy Sensor	1	1998.594	299.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
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PS #28 - Interior	000	Caffeteria Hall	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	34	2992	2.992	4380	13104.96	$1,703.6	None Proposed	34	2992	2.992	4380	3066	13104.96	9173.472	Automatic Wall Switch Occupancy Sensor	2	3931.488	511.1	$0.0	$0.0	$0.0	$127.0	$90.0	$180.0	$254.0	$434.0
PS #28 - Interior	000	Caffeteria	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	17	861.9	0.8619	4380	3775.122	$490.8	None Proposed	17	861.9	0.8619	4380	3066	3775.122	2642.5854	Automatic Wall Switch Occupancy Sensor	1	1132.5366	147.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	000	Teacher's Caffe	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	7	616	0.616	4380	2698.08	$350.8	None Proposed	7	616	0.616	4380	3066	2698.08	1888.656	Automatic Wall Switch Occupancy Sensor	1	809.424	105.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	000	Girl's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	500	101.4	$13.2	None Proposed	4	202.8	0.2028	500	350	101.4	70.98	Automatic Wall Switch Occupancy Sensor	1	30.42	4.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	000	Storage Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	500	152.1	$19.8	None Proposed	6	304.2	0.3042	500	350	152.1	106.47	Automatic Wall Switch Occupancy Sensor	1	45.63	5.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	000	Meeting Room	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	4380	770.88	$100.2	None Proposed	2	176	0.176	4380	4380	770.88	770.88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #28 - Interior	000	Boy's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$9.9	None Proposed	3	152.1	0.1521	500	350	76.05	53.235	Automatic Wall Switch Occupancy Sensor	1	22.815	3.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	000	Industrial/Art Room	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	20	1760	1.76	4380	7708.8	$1,002.1	None Proposed	20	1760	1.76	4380	3066	7708.8	5396.16	Automatic Wall Switch Occupancy Sensor	1	2312.64	300.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	000	Electrical Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	4380	3330.99	$433.0	None Proposed	15	760.5	0.7605	4380	3066	3330.99	2331.693	Automatic Wall Switch Occupancy Sensor	1	999.297	129.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	000	Generator Room	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	10	880	0.88	4380	3854.4	$501.1	None Proposed	10	880	0.88	4380	3066	3854.4	2698.08	Automatic Wall Switch Occupancy Sensor	1	1156.32	150.3	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	000	Switchgear Room	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	3	264	0.264	4380	1156.32	$150.3	None Proposed	3	264	0.264	4380	3066	1156.32	809.424	Automatic Wall Switch Occupancy Sensor	1	346.896	45.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #28 - Interior	000	Recycle Area	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	253.5	0.2535	4380	1110.33	$144.3	None Proposed	5	253.5	0.2535	4380	3066	1110.33	777.231	Automatic Wall Switch Occupancy Sensor	1	333.099	43.3	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	000	Basement Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	24	1216.8	1.2168	8760	10659.168	$1,385.7	None Proposed	24	1216.8	1.2168	8760	6132	10659.168	7461.4176	Automatic Wall Switch Occupancy Sensor	1	3197.7504	415.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	001	Main Office	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	20	1760	1.76	4380	7708.8	$1,002.1	None Proposed	20	1760	1.76	4380	3066	7708.8	5396.16	Automatic Wall Switch Occupancy Sensor	1	2312.64	300.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	001	Nurse Room	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	14	1232	1.232	4380	5396.16	$701.5	None Proposed	14	1232	1.232	4380	3066	5396.16	3777.312	Automatic Wall Switch Occupancy Sensor	1	1618.848	210.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	001	Reading Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	7	354.9	0.3549	4380	1554.462	$202.1	None Proposed	7	354.9	0.3549	4380	3066	1554.462	1088.1234	Automatic Wall Switch Occupancy Sensor	1	466.3386	60.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	001	Custodian Office	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	253.5	0.2535	500	126.75	$16.5	None Proposed	5	253.5	0.2535	500	350	126.75	88.725	Automatic Wall Switch Occupancy Sensor	1	38.025	4.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	001	Women's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$9.9	None Proposed	3	152.1	0.1521	500	350	76.05	53.235	Automatic Wall Switch Occupancy Sensor	1	22.815	3.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	001	Men's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$6.6	None Proposed	2	101.4	0.1014	500	500	50.7	50.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #28 - Interior	001	Pool & Gym	1x4 Fixtures w/ 1-T12 Lamp Fixture w/ Magnetic Ballast	18	770.4	0.7704	4380	3374.352	$438.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	18	437.76	0.43776	4380	3066	1917.3888	1342.17216	Automatic Wall Switch Occupancy Sensor	1	2032.17984	-	$35.0	$5.0	$65.0	$63.5	$45.0	$1,215.0	$783.5	$1,998.5
PS #28 - Interior	001	Boy's Locker	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	10	507	0.507	4380	2220.66	$288.7	None Proposed	10	507	0.507	4380	3066	2220.66	1554.462	Automatic Wall Switch Occupancy Sensor	1	666.198	86.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	001	Girl's Locker	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$346.4	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Automatic Wall Switch Occupancy Sensor	1	799.4376	103.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	001	Room 102	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$765.3	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	001	Room 103	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$765.3	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	001	Room 104	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$765.3	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	-	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	001	Room 105	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$765.3	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	001	Room 106	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$765.3	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	001	Girl's Bathroom	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	500	672	$87.4	None Proposed	12	1344	1.344	500	350	672	470.4	Automatic Wall Switch Occupancy Sensor	1	201.6	26.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	001	Room 107	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$765.3	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	001	Room 108	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,147.9	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	344.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	001	Room 109	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	16	1792	1.792	4380	7848.96	$1,020.4	None Proposed	16	1792	1.792	4380	3066	7848.96	5494.272	Automatic Wall Switch Occupancy Sensor	1	2354.688	306.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	001	Room 110	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,147.9	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	344.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	001	Room 111	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$765.3	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	001	Room 112	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$765.3	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	001	Girl's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	500	101.4	$13.2	None Proposed	4	202.8	0.2028	500	350	101.4	70.98	Automatic Wall Switch Occupancy Sensor	1	30.42	4.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	001	Room 113	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$765.3	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	001	Room 114	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$765.3	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	001	Room 115	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	13	1456	1.456	4380	6377.28	$829.0	None Proposed	13	1456	1.456	4380	3066	6377.28	4464.096	Automatic Wall Switch Occupancy Sensor	1	1913.184	248.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	001	Room 116	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$765.3	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	001	Teacher's Bathroom	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$765.3	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	001	Room 117	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$765.3	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	001	Teacher's Room	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	7	784	0.784	4380	3433.92	$446.4	None Proposed	7	784	0.784	4380	3066	3433.92	2403.744	Automatic Wall Switch Occupancy Sensor	1	1030.176	133.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	001	Room 118	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$765.3	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	001	Room 119	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$765.3	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	001	Room 120	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$765.3	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	001	Room 121	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$765.3	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	001	Room 122	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$765.3	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	001	Room 123	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$765.3	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	001	Room 124	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$765.3	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	001	Room 125	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$765.3	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	001	1st Floor Hallways	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	25	2800	2.8	8760	24528	$3,188.6	None Proposed	25	2800	2.8	8760	6132	24528	17169.6	Automatic Wall Switch Occupancy Sensor	1	7358.4	956.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	002	Room 201	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$765.3	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	002	Room 202	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$765.3	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	002	Room 203	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$765.3	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	002	Room 204	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$765.3	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	002	Room 205	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$765.3	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	002	Boy's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	500	101.4	$13.2	None Proposed	4	202.8	0.2028	500	350	101.4	70.98	Automatic Wall Switch Occupancy Sensor	1	30.42	4.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	002	Room 206	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$765.3	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	002	Room 207	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$765.3	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #28 - Interior	002	Room 209	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	448	0.448	4380	1962.24	$255.1	None Proposed	4	448	0.448	4380	3066	1962.24	1373.568	Automatic Wall Switch Occupancy Sensor	1	588.672	76.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	002	Electrical Rooms (2)	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	5	560	0.56	4380	2452.8	$318.9	None Proposed	5	560	0.56	4380	3066	2452.8	1716.96	Automatic Wall Switch Occupancy Sensor	1	735.84	95.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	002	Room 210	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	24	2688	2.688	4380	11773.44	$1,530.5	None Proposed	24	2688	2.688	4380	3066	11773.44	8241.408	Automatic Wall Switch Occupancy Sensor	1	3532.032	459.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	002	Utility Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$3.3	None Proposed	1	50.7	0.0507	500	500	25.35	25.35	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #28 - Interior	002	Room 211	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$765.3	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	002	Meeting Room	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	1	112	0.112	4380	490.56	$63.8	None Proposed	1	112	0.112	4380	4380	490.56	490.56	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #28 - Interior	002	Room 214	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$765.3	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	002	Room 215	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$765.3	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	002	Room 216	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$765.3	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	002	Room 217	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$765.3	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	002	Teacher's Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$28.9	None Proposed	1	50.7	0.0507	4380	4380	222.066	222.066	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #28 - Interior	002	Library	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	21	2352	2.352	4380	10301.76	$1,339.2	None Proposed	21	2352	2.352	4380	3066	10301.76	7211.232	Automatic Wall Switch Occupancy Sensor	1	3090.528	401.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	002	Boy's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	500	101.4	$13.2	None Proposed	4	202.8	0.2028	500	350	101.4	70.98	Automatic Wall Switch Occupancy Sensor	1	30.42	4.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	002	Girl's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	500	101.4	$13.2	None Proposed	4	202.8	0.2028	500	350	101.4	70.98	Automatic Wall Switch Occupancy Sensor	1	30.42	4.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	002	Music Room	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	28	3136	3.136	4380	13735.68	$1,785.6	None Proposed	28	3136	3.136	4380	3066	13735.68	9614.976	Automatic Wall Switch Occupancy Sensor	1	4120.704	535.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	002	Room 218A	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	4380	2312.64	$300.6	None Proposed	6	528	0.528	4380	3066	2312.64	1618.848	Automatic Wall Switch Occupancy Sensor	1	693.792	90.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	002	Room 218B (Guidance)	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	7	616	0.616	4380	2698.08	$350.8	None Proposed	7	616	0.616	4380	3066	2698.08	1888.656	Automatic Wall Switch Occupancy Sensor	1	809.424	105.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	002	Room 219	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$765.3	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	002	Room 223	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$765.3	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	002	Room 224	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$765.3	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	229.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	002	Room 225	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$382.6	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Automatic Wall Switch Occupancy Sensor	1	883.008	114.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	002	VP's Office	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	4380	2312.64	$300.6	None Proposed	6	528	0.528	4380	3066	2312.64	1618.848	Automatic Wall Switch Occupancy Sensor	1	693.792	90.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	002	Auditarium	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	25	2800	2.8	4380	12264	$1,594.3	None Proposed	25	2800	2.8	4380	3066	12264	8584.8	Automatic Wall Switch Occupancy Sensor	1	3679.2	478.3	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #28 - Interior	002	Stage	400W MH High Bay Fixture	12	5496	5.496	4380	24072.48	$3,129.4	Replace 400W Fixture with Induction Light Fixture	12	2580	2.58	4380	3066	11300.4	7910.28	Automatic Wall Switch Occupancy Sensor	1	16162.2	2,101.1	$0.0	$485.0	$137.0	$63.5	$45.0	$1,689.0	$5,883.5	$7,572.5
PS #28 - Interior	002	2nd Floor Hallways	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	27	3024	3.024	8760	26490.24	$3,443.7	None Proposed	27	3024	3.024	8760	6132	26490.24	18543.168	Automatic Wall Switch Occupancy Sensor	1	7947.072	1,033.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
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PS #31 - Interior	000	B-1	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$500.4	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Automatic Wall Switch Occupancy Sensor	1	883.008	150.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #31 - Interior	000	B-2	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	8	896	0.896	4380	3924.48	$667.2	None Proposed	8	896	0.896	4380	3066	3924.48	2747.136	Automatic Wall Switch Occupancy Sensor	1	1177.344	200.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #31 - Interior	000	B-3	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$500.4	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Automatic Wall Switch Occupancy Sensor	1	883.008	150.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #31 - Interior	000	B-4 (Boiler Room)	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$500.4	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Automatic Wall Switch Occupancy Sensor	1	883.008	150.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #31 - Interior	000	B-5	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$500.4	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Automatic Wall Switch Occupancy Sensor	1	883.008	150.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #31 - Interior	000	Boy's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$12.9	None Proposed	3	152.1	0.1521	500	350	76.05	53.235	Automatic Wall Switch Occupancy Sensor	1	22.815	3.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #31 - Interior	000	Girl's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$8.6	None Proposed	2	101.4	0.1014	500	500	50.7	50.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #31 - Interior	000	Caffeteria	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	4380	1332.396	$226.5	None Proposed	6	304.2	0.3042	4380	3066	1332.396	932.6772	Automatic Wall Switch Occupancy Sensor	1	399.7188	68.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #31 - Interior	000	Basement Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	7	784	0.784	8760	6867.84	$1,167.5	None Proposed	7	784	0.784	8760	6132	6867.84	4807.488	Automatic Wall Switch Occupancy Sensor	1	2060.352	350.3	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #31 - Interior	001	Room 11	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$1,000.7	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	300.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #31 - Interior	001	Room 12	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$1,000.7	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	300.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #31 - Interior	001	Room 12W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$19.0	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #31 - Interior	001	Room 13	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$1,000.7	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	300.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #31 - Interior	001	Room 13W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$19.0	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #31 - Interior	001	Room 14	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$1,000.7	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	300.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #31 - Interior	001	Health Room	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	336	0.336	4380	1471.68	$250.2	None Proposed	3	336	0.336	4380	3066	1471.68	1030.176	Automatic Wall Switch Occupancy Sensor	1	441.504	75.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #31 - Interior	001	Room 15	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$500.4	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Automatic Wall Switch Occupancy Sensor	1	883.008	150.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #31 - Interior	001	Room 16	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$1,000.7	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	300.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #31 - Interior	001	Room 16W	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$4.3	None Proposed	1	50.7	0.0507	500	500	25.35	25.35	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #31 - Interior	001	Room 17	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$500.4	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Automatic Wall Switch Occupancy Sensor	1	883.008	150.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #31 - Interior	001	Room 17W	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$4.3	None Proposed	1	50.7	0.0507	500	500	25.35	25.35	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #31 - Interior	001	1st Floor Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	8	896	0.896	8760	7848.96	$1,334.3	None Proposed	8	896	0.896	8760	6132	7848.96	5494.272	Automatic Wall Switch Occupancy Sensor	1	2354.688	400.3	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #31 - Interior	002	Room 20	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	1	112	0.112	4380	490.56	$83.4	None Proposed	1	112	0.112	4380	4380	490.56	490.56	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #31 - Interior	002	Room 21	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$1,000.7	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	300.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #31 - Interior	002	Room 22	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$1,000.7	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	300.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #31 - Interior	002	Room 22W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	1	112	0.112	500	56	$9.5	None Proposed	1	112	0.112	500	500	56	56	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #31 - Interior	002	Room 23	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$1,000.7	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	300.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #31 - Interior	002	Room 24	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	15	1680	1.68	4380	7358.4	$1,250.9	None Proposed	15	1680	1.68	4380	3066	7358.4	5150.88	Automatic Wall Switch Occupancy Sensor	1	2207.52	375.3	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #31 - Interior	002	Room 25	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	8	896	0.896	4380	3924.48	$667.2	None Proposed	8	896	0.896	4380	3066	3924.48	2747.136	Automatic Wall Switch Occupancy Sensor	1	1177.344	200.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #31 - Interior	002	Room 25W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	448	0.448	500	224	$38.1	None Proposed	4	448	0.448	500	350	224	156.8	Automatic Wall Switch Occupancy Sensor	1	67.2	11.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #31 - Interior	002	Room 26	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$1,000.7	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	300.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #31 - Interior	002	Room 26W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	336	0.336	500	168	$28.6	None Proposed	3	336	0.336	500	350	168	117.6	Automatic Wall Switch Occupancy Sensor	1	50.4	8.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #31 - Interior	002	Ladies Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$8.6	None Proposed	2	101.4	0.1014	4380	4380	444.132	444.132	None Proposed	0	-393.432	-66.9	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #31 - Interior	002	2nd Floor Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	8	896	0.896	8760	7848.96	$1,334.3	None Proposed	8	896	0.896	8760	6132	7848.96	5494.272	Automatic Wall Switch Occupancy Sensor	1	2354.688	400.3	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #31 - Interior	003	Room 31	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$1,000.7	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	300.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #31 - Interior	003	Room 32	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$1,000.7	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	300.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #31 - Interior	003	Room 32C	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	1	112	0.112	500	56	$9.5	None Proposed	1	112	0.112	500	500	56	56	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #31 - Interior	003	Room 32W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	1	112	0.112	500	56	$9.5	None Proposed	1	112	0.112	500	500	56	56	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #31 - Interior	003	Room 33	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	448	0.448	4380	1962.24	$333.6	None Proposed	4	448	0.448	4380	3066	1962.24	1373.568	Automatic Wall Switch Occupancy Sensor	1	588.672	100.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #31 - Interior	003	Room 34	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	1	112	0.112	4380	490.56	$83.4	None Proposed	1	112	0.112	4380	4380	490.56	490.56	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #31 - Interior	003	Room 35	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	8	896	0.896	4380	3924.48	$667.2	None Proposed	8	896	0.896	4380	3066	3924.48	2747.136	Automatic Wall Switch Occupancy Sensor	1	1177.344	200.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #31 - Interior	003	Room 36A	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$500.4	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Automatic Wall Switch Occupancy Sensor	1	883.008	150.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #31 - Interior	003	Room 36B	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$500.4	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Automatic Wall Switch Occupancy Sensor	1	883.008	150.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #31 - Interior	003	Room 36W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$19.0	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #31 - Interior	003	Boy's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$12.9	None Proposed	3	152.1	0.1521	500	350	76.05	53.235	Automatic Wall Switch Occupancy Sensor	1	22.815	3.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #31 - Interior	003	3rd Floor Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	8760	11773.44	$2,001.5	None Proposed	12	1344	1.344	8760	6132	11773.44	8241.408	Automatic Wall Switch Occupancy Sensor	1	3532.032	600.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
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PS #33 - Interior	000	Caffeteria	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	11	557.7	0.5577	4380	2442.726	$268.7	None Proposed	11	557.7	0.5577	4380	3066	2442.726	1709.9082	Automatic Wall Switch Occupancy Sensor	1	732.8178	80.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #33 - Interior	000	Men's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$8.4	None Proposed	3	152.1	0.1521	500	350	76.05	53.235	Automatic Wall Switch Occupancy Sensor	1	22.815	2.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #33 - Interior	000	Kitchen	60W Incandescent Fixture	5	300	0.3	4380	1314	$144.5	Replace 60W Incandescent Fixture with 13W CFL	5	65	0.065	4380	3066	284.7	199.29	Automatic Wall Switch Occupancy Sensor	1	1114.71	122.6	$0.0	$5.0	$20.0	$63.5	$45.0	$145.0	$88.5	$233.5
PS #33 - Interior	000	Boiler Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	4380	666.198	$73.3	None Proposed	3	152.1	0.1521	4380	3066	666.198	466.3386	Automatic Wall Switch Occupancy Sensor	1	199.8594	22.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #33 - Interior	000	Basement Hallways	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	8760	6217.848	$684.0	None Proposed	14	709.8	0.7098	8760	6132	6217.848	4352.4936	Automatic Wall Switch Occupancy Sensor	1	1865.3544	205.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #33 - Interior	001	Room 1	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$513.0	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Automatic Wall Switch Occupancy Sensor	1	1399.0158	153.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #33 - Interior	001	Room 1A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$5.6	None Proposed	2	101.4	0.1014	500	500	50.7	50.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #33 - Interior	001	Room 2	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$513.0	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Automatic Wall Switch Occupancy Sensor	1	1399.0158	153.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #33 - Interior	001	Room 2A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$5.6	None Proposed	2	101.4	0.1014	500	500	50.7	50.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #33 - Interior	001	Room 3	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$513.0	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Automatic Wall Switch Occupancy Sensor	1	1399.0158	153.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #33 - Interior	001	Room 3A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$5.6	None Proposed	2	101.4	0.1014	500	500	50.7	50.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #33 - Interior	001	Room 4	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$513.0	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Automatic Wall Switch Occupancy Sensor	1	1399.0158	153.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #33 - Interior	001	Room 4A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$5.6	None Proposed	2	101.4	0.1014	500	500	50.7	50.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #33 - Interior	001	Nurse Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	253.5	0.2535	4380	1110.33	$122.1	None Proposed	5	253.5	0.2535	4380	3066	1110.33	777.231	Automatic Wall Switch Occupancy Sensor	1	333.099	36.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #33 - Interior	001	1st Floor Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	8760	6217.848	$684.0	None Proposed	14	709.8	0.7098	8760	6132	6217.848	4352.4936	Automatic Wall Switch Occupancy Sensor	1	1865.3544	205.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #33 - Interior	002	Main Office	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$97.7	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Automatic Wall Switch Occupancy Sensor	1	266.4792	29.3	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #33 - Interior	002	Room 5	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$513.0	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Automatic Wall Switch Occupancy Sensor	1	1399.0158	153.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #33 - Interior	002	Room 5A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$8.4	None Proposed	3	152.1	0.1521	500	350	76.05	53.235	Automatic Wall Switch Occupancy Sensor	1	22.815	2.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #33 - Interior	002	Room 6	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$513.0	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Automatic Wall Switch Occupancy Sensor	1	1399.0158	153.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #33 - Interior	002	Principal's Office	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$97.7	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Automatic Wall Switch Occupancy Sensor	1	266.4792	29.3	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #33 - Interior	002	Room 7	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$513.0	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Automatic Wall Switch Occupancy Sensor	1	1399.0158	153.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #33 - Interior	002	Room 7A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$5.6	None Proposed	2	101.4	0.1014	500	350	50.7	35.49	Automatic Wall Switch Occupancy Sensor	1	15.21	1.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #33 - Interior	002	Room 8	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$513.0	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Automatic Wall Switch Occupancy Sensor	1	1399.0158	153.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #33 - Interior	002	Room 8A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$8.4	None Proposed	3	152.1	0.1521	500	350	76.05	53.235	Automatic Wall Switch Occupancy Sensor	1	22.815	2.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #33 - Interior	002	2nd Floor Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	7	354.9	0.3549	8760	3108.924	$342.0	None Proposed	7	354.9	0.3549	8760	6132	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	102.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #33 - Interior	003	Library	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	72	3650.4	3.6504	4380	15988.752	$1,758.8	None Proposed	72	3650.4	3.6504	4380	3066	15988.752	11192.1264	Automatic Wall Switch Occupancy Sensor	1	4796.6256	527.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #33 - Interior	003	Room 9	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	24	1216.8	1.2168	4380	5329.584	$586.3	None Proposed	24	1216.8	1.2168	4380	3066	5329.584	3730.7088	Automatic Wall Switch Occupancy Sensor	1	1598.8752	175.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #33 - Interior	003	Room 9A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$8.4	None Proposed	3	152.1	0.1521	500	350	76.05	53.235	Automatic Wall Switch Occupancy Sensor	1	22.815	2.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #33 - Interior	003	Teacher's Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$97.7	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Automatic Wall Switch Occupancy Sensor	1	266.4792	29.3	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #33 - Interior	003	Room 10	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$513.0	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Automatic Wall Switch Occupancy Sensor	1	1399.0158	153.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #33 - Interior	003	Room 10A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	500	101.4	$11.2	None Proposed	4	202.8	0.2028	500	350	101.4	70.98	Automatic Wall Switch Occupancy Sensor	1	30.42	3.3	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #33 - Interior	003	3rd Floor Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	7	354.9	0.3549	8760	3108.924	$342.0	None Proposed	7	354.9	0.3549	8760	6132	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	102.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
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PS #39 - Interior	000	Computer Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	10	507	0.507	4380	2220.66	$355.3	None Proposed	10	507	0.507	4380	3066	2220.66	1554.462	Automatic Wall Switch Occupancy Sensor	1	666.198	106.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	000	Media Center	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	24	1216.8	1.2168	4380	5329.584	$852.7	None Proposed	24	1216.8	1.2168	4380	3066	5329.584	3730.7088	Automatic Wall Switch Occupancy Sensor	1	1598.8752	255.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	000	R-28	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$71.1	None Proposed	2	101.4	0.1014	4380	3066	444.132	310.8924	Automatic Wall Switch Occupancy Sensor	1	133.2396	21.3	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	000	Caffeteria	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	24	1216.8	1.2168	4380	5329.584	$852.7	None Proposed	24	1216.8	1.2168	4380	3066	5329.584	3730.7088	Automatic Wall Switch Occupancy Sensor	1	1598.8752	255.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	000	Pool	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	4380	3330.99	$533.0	None Proposed	15	760.5	0.7605	4380	3066	3330.99	2331.693	Automatic Wall Switch Occupancy Sensor	1	999.297	159.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	000	Locker Rooms	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	10	507	0.507	4380	2220.66	$355.3	None Proposed	10	507	0.507	4380	3066	2220.66	1554.462	Automatic Wall Switch Occupancy Sensor	1	666.198	106.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	000	Kinder Garten Play Area	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	253.5	0.2535	4380	1110.33	$177.7	None Proposed	5	253.5	0.2535	4380	3066	1110.33	777.231	Automatic Wall Switch Occupancy Sensor	1	333.099	53.3	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	000	Storage Area	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$8.1	None Proposed	2	101.4	0.1014	500	500	50.7	50.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #39 - Interior	000	Boiler Room	60W Incandescent Fixture	15	900	0.9	4380	3942	$630.7	Replace 60W Incandescent Fixture with 13W CFL	15	195	0.195	4380	3066	854.1	597.87	Automatic Wall Switch Occupancy Sensor	1	3344.13	535.1	$0.0	$5.0	$20.0	$63.5	$45.0	$345.0	$138.5	$483.5
PS #39 - Interior	000	Basement Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	23	1166.1	1.1661	8760	10215.036	$1,634.4	None Proposed	23	1166.1	1.1661	8760	6132	10215.036	7150.5252	Automatic Wall Switch Occupancy Sensor	1	3064.5108	490.3	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	001	Room 101	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	10	1120	1.12	4380	4905.6	$784.9	None Proposed	10	1120	1.12	4380	3066	4905.6	3433.92	Automatic Wall Switch Occupancy Sensor	1	1471.68	235.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	001	Room 103	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$497.4	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	149.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	001	Room 104	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$497.4	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	149.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	001	Room 105	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$497.4	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	149.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	001	Room 106	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$426.4	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Automatic Wall Switch Occupancy Sensor	1	799.4376	127.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	001	Room 107	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	22	1115.4	1.1154	4380	4885.452	$781.7	None Proposed	22	1115.4	1.1154	4380	3066	4885.452	3419.8164	Automatic Wall Switch Occupancy Sensor	1	1465.6356	234.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	001	Room 108	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	22	1115.4	1.1154	4380	4885.452	$781.7	None Proposed	22	1115.4	1.1154	4380	3066	4885.452	3419.8164	Automatic Wall Switch Occupancy Sensor	1	1465.6356	234.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	001	Room 112	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	22	2464	2.464	4380	10792.32	$1,726.8	None Proposed	22	2464	2.464	4380	3066	10792.32	7554.624	Automatic Wall Switch Occupancy Sensor	1	3237.696	518.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	001	Room 123	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$71.1	None Proposed	2	101.4	0.1014	4380	4380	444.132	444.132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #39 - Interior	001	Room 125	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$35.5	None Proposed	1	50.7	0.0507	4380	4380	222.066	222.066	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #39 - Interior	001	Room 132	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$71.1	None Proposed	2	101.4	0.1014	4380	4380	444.132	444.132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #39 - Interior	001	Room 166	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$497.4	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	149.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	001	Gym (Weight Training)	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	13	659.1	0.6591	4380	2886.858	$461.9	None Proposed	13	659.1	0.6591	4380	3066	2886.858	2020.8006	Automatic Wall Switch Occupancy Sensor	1	866.0574	138.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	001	Gym	250W MH Fixture	30	8550	8.55	4380	37449	$5,991.8	Replace 250W Fixture with Induction Light Fixture	30	3300	3.3	4380	3066	14454	10117.8	Automatic Wall Switch Occupancy Sensor	1	27331.2	4,373.0	$0.0	$390.0	$137.0	$63.5	$45.0	$4,155.0	$11,763.5	$15,918.5
PS #39 - Interior	001	Boy's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$8.1	None Proposed	2	101.4	0.1014	500	500	50.7	50.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #39 - Interior	001	1st Floor Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	25	1267.5	1.2675	8760	11103.3	$1,776.5	None Proposed	25	1267.5	1.2675	8760	6132	11103.3	7772.31	Automatic Wall Switch Occupancy Sensor	1	3330.99	533.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	002	Room 201	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$497.4	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	149.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	002	Room 202	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$497.4	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	149.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	002	Room 203	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$497.4	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	149.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	002	Room 204	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$497.4	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	149.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	002	Room 205	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	22	1115.4	1.1154	4380	4885.452	$781.7	None Proposed	22	1115.4	1.1154	4380	3066	4885.452	3419.8164	Automatic Wall Switch Occupancy Sensor	1	1465.6356	234.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	002	Room 206	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$497.4	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	149.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	002	Room 207	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$497.4	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	149.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	002	Room 208	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$497.4	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	149.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	002	Room 209	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$497.4	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	149.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	002	Rooms 209A & 209B	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$497.4	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	149.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	002	Room 210	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$497.4	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	149.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	002	Room 211	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$497.4	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	149.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #39 - Interior	002	Room 213	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$497.4	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	149.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	002	Room 214	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$71.1	None Proposed	2	101.4	0.1014	4380	4380	444.132	444.132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #39 - Interior	002	Girl's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$8.1	None Proposed	2	101.4	0.1014	500	500	50.7	50.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #39 - Interior	002	2nd Floor Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	25	1267.5	1.2675	8760	11103.3	$1,776.5	None Proposed	25	1267.5	1.2675	8760	6132	11103.3	7772.31	Automatic Wall Switch Occupancy Sensor	1	3330.99	533.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	003	Room 301	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$497.4	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	149.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	003	Room 302	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$497.4	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	149.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	003	Room 303	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$497.4	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	149.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	003	Room 304	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$497.4	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	149.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	003	Room 305	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$497.4	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	149.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	003	Room 306	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$497.4	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	149.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	003	Room 308	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$497.4	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	149.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	003	Room 309	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$497.4	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	149.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	003	Room 310	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$497.4	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	149.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	003	Room 311	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$497.4	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	149.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	003	Room 312	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$497.4	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	149.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	003	Room 313	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$497.4	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	149.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	003	Room 316	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	4380	666.198	$106.6	None Proposed	3	152.1	0.1521	4380	3066	666.198	466.3386	Automatic Wall Switch Occupancy Sensor	1	199.8594	32.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #39 - Interior	003	Boy's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$8.1	None Proposed	2	101.4	0.1014	500	500	50.7	50.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #39 - Interior	003	Girl's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$8.1	None Proposed	2	101.4	0.1014	500	500	50.7	50.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #27 - Exterior	000	Exterior	250W MH Fixture	6	1710	1.71	4380	7489.8	$1,123.5	Replace 250W Fixture with Induction Light Fixture	6	660	0.66	4380	4380	2890.8	2890.8	None Proposed	0	4599	689.9	$0.0	$390.0	$137.0	$0.0	$0.0	$822.0	$2,340.0	$3,162.0
PS #28 - Exterior	000	Exterior	250W MH Fixture	8	2280	2.28	4380	9986.4	$1,298.2	Replace 250W Fixture with Induction Light Fixture	8	880	0.88	4380	4380	3854.4	3854.4	None Proposed	0	6132	797.2	$0.0	$390.0	$137.0	$0.0	$0.0	$1,096.0	$3,120.0	$4,216.0
PS #31 - Exterior	000	Exterior	250W MH Fixture	4	1140	1.14	4380	4993.2	$848.8	Replace 250W Fixture with Induction Light Fixture	4	440	0.44	4380	4380	1927.2	1927.2	None Proposed	0	3066	521.2	$0.0	$390.0	$137.0	$0.0	$0.0	$548.0	$1,560.0	$2,108.0
PS #28 - Exterior	000	Exterior	250W MH Fixture	8	2280	2.28	4380	9986.4	$1,298.2	Replace 250W Fixture with Induction Light Fixture	8	880	0.88	4380	4380	3854.4	3854.4	None Proposed	0	6132	797.2	$0.0	$390.0	$137.0	$0.0	$0.0	$1,096.0	$3,120.0	$4,216.0
PS #31 - Exterior	000	Exterior	250W MH Fixture	4	1140	1.14	4380	4993.2	$848.8	Replace 250W Fixture with Induction Light Fixture	4	440	0.44	4380	4380	1927.2	1927.2	None Proposed	0	3066	521.2	$0.0	$390.0	$137.0	$0.0	$0.0	$548.0	$1,560.0	$2,108.0
PS #33 - Exterior	000	Exterior	250W MH Fixture	4	1140	1.14	4380	4993.2	$549.3	Replace 250W Fixture with Induction Light Fixture	4	440	0.44	4380	4380	1927.2	1927.2	None Proposed	0	3066	337.3	$0.0	$390.0	$137.0	$0.0	$0.0	$548.0	$1,560.0	$2,108.0
PS #39 - Exterior	000	Exterior	250W MH Fixture	10	2850	2.85	4380	12483	$1,997.3	Replace 250W Fixture with Induction Light Fixture	10	1100	1.1	4380	4380	4818	4818	None Proposed	0	7665	1,226.4	$0.0	$390.0	$137.0	$0.0	$0.0	$1,370.0	$3,900.0	$5,270.0

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
Dickinson High School - Exterior	000	Exterior	250W MH Fixture	18	5130	5.13	4380	22469.4	$3,370.4	Replace 250W Fixture with Induction Light Fixture	18	1980	1.98	4380	4380	8672.4	8672.4	None Proposed	0	13797	2,069.6	$0.0	$390.0	$137.0	$0.0	$0.0	$2,466.0	$7,020.0	$9,486.0
Dickinson High School - Interior	000	Storage	1x4 Fixtures w/ 1-T12 Lamp Fixture w/ Magnetic Ballast	24	1027.2	1.0272	500	513.6	$77.0	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	24	583.68	0.58368	500	350	291.84	204.288	Automatic Wall Switch Occupancy Sensor	1	309.312	46.4	$35.0	$5.0	$65.0	$63.5	$45.0	$1,605.0	$1,023.5	$2,628.5
Dickinson High School - Interior	000	Elevator Room	1x4 Fixtures w/ 1-T12 Lamp Fixture w/ Magnetic Ballast	5	214	0.214	500	107	$16.1	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	5	121.6	0.1216	500	350	60.8	42.56	Automatic Wall Switch Occupancy Sensor	1	64.44	9.7	$35.0	$5.0	$65.0	$63.5	$45.0	$370.0	$263.5	$633.5
Dickinson High School - Interior	000	Shop	1x4 Fixtures w/ 1-T12 Lamp Fixture w/ Magnetic Ballast	28	1198.4	1.1984	500	599.2	$89.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	28	680.96	0.68096	500	350	340.48	238.336	Automatic Wall Switch Occupancy Sensor	1	360.864	54.1	$35.0	$5.0	$65.0	$63.5	$45.0	$1,865.0	$1,183.5	$3,048.5
Dickinson High School - Interior	000	Old shop	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	32	2816	2.816	500	1408	$211.2	None Proposed	32	2816	2.816	500	350	1408	985.6	Automatic Wall Switch Occupancy Sensor	2	422.4	63.4	$0.0	$0.0	$0.0	$127.0	$90.0	$180.0	$254.0	$434.0
Dickinson High School - Interior	000	Room B6A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	10	507	0.507	4380	2220.66	$333.1	None Proposed	10	507	0.507	4380	3066	2220.66	1554.462	Automatic Wall Switch Occupancy Sensor	1	666.198	99.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	000	Room B6B	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	9	456.3	0.4563	4380	1998.594	$299.8	None Proposed	9	456.3	0.4563	4380	3066	1998.594	1399.0158	Automatic Wall Switch Occupancy Sensor	1	599.5782	89.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	000	Men's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	500	101.4	$15.2	None Proposed	4	202.8	0.2028	500	350	101.4	70.98	Automatic Wall Switch Occupancy Sensor	1	30.42	4.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	000	Womens Bathroom	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	3	264	0.264	500	132	$19.8	None Proposed	3	264	0.264	500	350	132	92.4	Automatic Wall Switch Occupancy Sensor	1	39.6	5.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	000	Room B7A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$466.3	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	139.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	000	Room B7B	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$466.3	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	139.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	000	Room B9A	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	000	Room B9B	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	000	Room B9C	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	000	Men's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	500	101.4	$15.2	None Proposed	4	202.8	0.2028	500	350	101.4	70.98	Automatic Wall Switch Occupancy Sensor	1	30.42	4.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	000	Gym	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$693.8	None Proposed	12	1056	1.056	4380	3066	4625.28	3237.696	Automatic Wall Switch Occupancy Sensor	1	1387.584	208.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	000	Men's Locker Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$466.3	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	139.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	000	Women's Locker Room	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	16	811.2	0.8112	4380	3553.056	$533.0	None Proposed	16	811.2	0.8112	4380	3066	3553.056	2487.1392	Automatic Wall Switch Occupancy Sensor	1	1065.9168	159.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	000	Room B11E	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	4	352	0.352	4380	1541.76	$231.3	None Proposed	4	352	0.352	4380	3066	1541.76	1079.232	Automatic Wall Switch Occupancy Sensor	1	462.528	69.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	000	Room B11F	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	4	352	0.352	4380	1541.76	$231.3	None Proposed	4	352	0.352	4380	3066	1541.76	1079.232	Automatic Wall Switch Occupancy Sensor	1	462.528	69.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	000	Room B12B	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	4	352	0.352	4380	1541.76	$231.3	None Proposed	4	352	0.352	4380	3066	1541.76	1079.232	Automatic Wall Switch Occupancy Sensor	1	462.528	69.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	000	Room B12C	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	4	352	0.352	4380	1541.76	$231.3	None Proposed	4	352	0.352	4380	3066	1541.76	1079.232	Automatic Wall Switch Occupancy Sensor	1	462.528	69.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	000	Room B13A	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	4	352	0.352	4380	1541.76	$231.3	None Proposed	4	352	0.352	4380	3066	1541.76	1079.232	Automatic Wall Switch Occupancy Sensor	1	462.528	69.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	000	Room B13B	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	4	352	0.352	4380	1541.76	$231.3	None Proposed	4	352	0.352	4380	3066	1541.76	1079.232	Automatic Wall Switch Occupancy Sensor	1	462.528	69.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	000	Room B13C	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	4	352	0.352	4380	1541.76	$231.3	None Proposed	4	352	0.352	4380	3066	1541.76	1079.232	Automatic Wall Switch Occupancy Sensor	1	462.528	69.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	000	Women's Bathroom	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	4	352	0.352	4380	1541.76	$231.3	None Proposed	4	352	0.352	4380	3066	1541.76	1079.232	Automatic Wall Switch Occupancy Sensor	1	462.528	69.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	000	Room B114	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	5	440	0.44	4380	1927.2	$289.1	None Proposed	5	440	0.44	4380	3066	1927.2	1349.04	Automatic Wall Switch Occupancy Sensor	1	578.16	86.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	000	Room B14A	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	4	352	0.352	4380	1541.76	$231.3	None Proposed	4	352	0.352	4380	3066	1541.76	1079.232	Automatic Wall Switch Occupancy Sensor	1	462.528	69.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	000	Room B115C	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	4	352	0.352	4380	1541.76	$231.3	None Proposed	4	352	0.352	4380	3066	1541.76	1079.232	Automatic Wall Switch Occupancy Sensor	1	462.528	69.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	000	Caffeteria	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	42	3696	3.696	4380	16188.48	$2,428.3	None Proposed	42	3696	3.696	4380	3066	16188.48	11331.936	Automatic Wall Switch Occupancy Sensor	2	4856.544	728.5	$0.0	$0.0	$0.0	$127.0	$90.0	$180.0	$254.0	$434.0
Dickinson High School - Interior	000	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	405.6	0.4056	8760	3553.056	$533.0	None Proposed	8	405.6	0.4056	8760	6132	3553.056	2487.1392	Automatic Wall Switch Occupancy Sensor	1	1065.9168	159.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	000	Hallway	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	10	507	0.507	8760	4441.32	$666.2	None Proposed	10	507	0.507	8760	6132	4441.32	3108.924	Automatic Wall Switch Occupancy Sensor	1	1332.396	199.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	001	Room 114	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	5	440	0.44	4380	1927.2	$289.1	None Proposed	5	440	0.44	4380	3066	1927.2	1349.04	Automatic Wall Switch Occupancy Sensor	1	578.16	86.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	001	Room 113C	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	4380	2312.64	$346.9	None Proposed	6	528	0.528	4380	3066	2312.64	1618.848	Automatic Wall Switch Occupancy Sensor	1	693.792	104.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	001	Room 115	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$693.8	None Proposed	12	1056	1.056	4380	3066	4625.28	3237.696	Automatic Wall Switch Occupancy Sensor	1	1387.584	208.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	001	Room 113B	1x4 Fixtures w/ 1-T12 Lamp Fixture w/ Magnetic Ballast	12	513.6	0.5136	4380	2249.568	$337.4	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	291.84	0.29184	4380	3066	1278.2592	894.78144	Automatic Wall Switch Occupancy Sensor	1	1354.78656	203.2	$35.0	$5.0	$65.0	$63.5	$45.0	$825.0	$543.5	$1,368.5
Dickinson High School - Interior	001	Room 113A	1x4 Fixtures w/ 1-T12 Lamp Fixture w/ Magnetic Ballast	14	599.2	0.5992	4380	2624.496	$393.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	14	340.48	0.34048	4380	3066	1491.3024	1043.91168	Automatic Wall Switch Occupancy Sensor	1	1580.58432	237.1	$35.0	$5.0	$65.0	$63.5	$45.0	$955.0	$623.5	$1,578.5
Dickinson High School - Interior	001	Room 112	1X4 Suspended Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	16	1792	1.792	4380	7848.96	$1,177.3	None Proposed	16	1792	1.792	4380	3066	7848.96	5494.272	Automatic Wall Switch Occupancy Sensor	1	2354.688	353.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	001	Room 111	1X4 Suspended Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	001	Room 110	1X4 Suspended Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	36	4032	4.032	4380	17660.16	$2,649.0	None Proposed	36	4032	4.032	4380	3066	17660.16	12362.112	Automatic Wall Switch Occupancy Sensor	1	5298.048	794.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	001	Room 109	1X4 Suspended Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	001	Room 108	1X4 Suspended Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	001	Room 107B	1X4 Suspended Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	001	Room 107A	1X4 Suspended Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	001	Room 106	1x4 Fixtures w/ 1-T12 Lamp Fixture w/ Magnetic Ballast	18	770.4	0.7704	4380	3374.352	$506.2	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	18	437.76	0.43776	4380	3066	1917.3888	1342.17216	Automatic Wall Switch Occupancy Sensor	1	2032.17984	304.8	$35.0	$5.0	$65.0	$63.5	$45.0	$1,215.0	$783.5	$1,998.5
Dickinson High School - Interior	001	Room 105	1x4 Fixtures w/ 1-T12 Lamp Fixture w/ Magnetic Ballast	18	770.4	0.7704	4380	3374.352	$506.2	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	18	437.76	0.43776	4380	3066	1917.3888	1342.17216	Automatic Wall Switch Occupancy Sensor	1	2032.17984	304.8	$35.0	$5.0	$65.0	$63.5	$45.0	$1,215.0	$783.5	$1,998.5
Dickinson High School - Interior	001	Room 104	1x4 Fixtures w/ 1-T12 Lamp Fixture w/ Magnetic Ballast	18	770.4	0.7704	4380	3374.352	$506.2	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	18	437.76	0.43776	4380	3066	1917.3888	1342.17216	Automatic Wall Switch Occupancy Sensor	1	2032.17984	304.8	$35.0	$5.0	$65.0	$63.5	$45.0	$1,215.0	$783.5	$1,998.5
Dickinson High School - Interior	001	Room 102	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	8	704	0.704	4380	3083.52	$462.5	None Proposed	8	704	0.704	4380	3066	3083.52	2158.464	Automatic Wall Switch Occupancy Sensor	1	925.056	138.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
Dickinson High School - Interior	001	Compartment Rooms	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	11	968	0.968	4380	4239.84	$636.0	None Proposed	11	968	0.968	4380	3066	4239.84	2967.888	Automatic Wall Switch Occupancy Sensor	1	1271.952	190.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	001	Room 126	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$33.3	None Proposed	1	50.7	0.0507	4380	4380	222.066	222.066	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Dickinson High School - Interior	001	Room 126	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	001	Room 125	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	4380	3330.99	$499.6	None Proposed	15	760.5	0.7605	4380	3066	3330.99	2331.693	Automatic Wall Switch Occupancy Sensor	1	999.297	149.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	001	Room 124	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	4380	3330.99	$499.6	None Proposed	15	760.5	0.7605	4380	3066	3330.99	2331.693	Automatic Wall Switch Occupancy Sensor	1	999.297	149.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	001	Room 123	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	4380	3330.99	$499.6	None Proposed	15	760.5	0.7605	4380	3066	3330.99	2331.693	Automatic Wall Switch Occupancy Sensor	1	999.297	149.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	001	Room 122A	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	4380	2312.64	$346.9	None Proposed	6	528	0.528	4380	3066	2312.64	1618.848	Automatic Wall Switch Occupancy Sensor	1	693.792	104.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	001	Room 122B	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	4380	2312.64	$346.9	None Proposed	6	528	0.528	4380	3066	2312.64	1618.848	Automatic Wall Switch Occupancy Sensor	1	693.792	104.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	001	Room 121A	1x4 Fixtures w/ 1-T12 Lamp Fixture w/ Magnetic Ballast	12	513.6	0.5136	4380	2249.568	$337.4	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	291.84	0.29184	4380	3066	1278.2592	894.78144	Automatic Wall Switch Occupancy Sensor	1	1354.78656	203.2	$35.0	$5.0	$65.0	$63.5	$45.0	$825.0	$543.5	$1,368.5
Dickinson High School - Interior	001	Room 121B	1x4 Fixtures w/ 1-T12 Lamp Fixture w/ Magnetic Ballast	12	513.6	0.5136	4380	2249.568	$337.4	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	291.84	0.29184	4380	3066	1278.2592	894.78144	Automatic Wall Switch Occupancy Sensor	1	1354.78656	203.2	$35.0	$5.0	$65.0	$63.5	$45.0	$825.0	$543.5	$1,368.5
Dickinson High School - Interior	001	Room 120	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$693.8	None Proposed	12	1056	1.056	4380	3066	4625.28	3237.696	Automatic Wall Switch Occupancy Sensor	1	1387.584	208.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	001	Room 119	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$693.8	None Proposed	12	1056	1.056	4380	3066	4625.28	3237.696	Automatic Wall Switch Occupancy Sensor	1	1387.584	208.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	001	Room 118A	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	500	264	$39.6	None Proposed	6	528	0.528	500	350	264	184.8	Automatic Wall Switch Occupancy Sensor	1	79.2	11.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	001	Room 118B	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	500	264	$39.6	None Proposed	6	528	0.528	500	350	264	184.8	Automatic Wall Switch Occupancy Sensor	1	79.2	11.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	001	Room 117A	1x4 Fixtures w/ 1-T12 Lamp Fixture w/ Magnetic Ballast	12	513.6	0.5136	4380	2249.568	$337.4	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	291.84	0.29184	4380	3066	1278.2592	894.78144	Automatic Wall Switch Occupancy Sensor	1	1354.78656	203.2	$35.0	$5.0	$65.0	$63.5	$45.0	$825.0	$543.5	$1,368.5
Dickinson High School - Interior	001	Room 117B	1x4 Fixtures w/ 1-T12 Lamp Fixture w/ Magnetic Ballast	12	513.6	0.5136	4380	2249.568	$337.4	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	291.84	0.29184	4380	3066	1278.2592	894.78144	Automatic Wall Switch Occupancy Sensor	1	1354.78656	203.2	$35.0	$5.0	$65.0	$63.5	$45.0	$825.0	$543.5	$1,368.5
Dickinson High School - Interior	001	Room 116C	1x4 Fixtures w/ 1-T12 Lamp Fixture w/ Magnetic Ballast	31	1326.8	1.3268	4380	5811.384	$871.7	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	31	753.92	0.75392	4380	3066	3302.1696	2311.51872	Automatic Wall Switch Occupancy Sensor	2	3499.86528	525.0	$35.0	$5.0	$65.0	$127.0	$90.0	$2,195.0	$1,494.0	$3,689.0
Dickinson High School - Interior	001	Room 116	1x4 Fixtures w/ 1-T12 Lamp Fixture w/ Magnetic Ballast	12	513.6	0.5136	4380	2249.568	$337.4	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	291.84	0.29184	4380	3066	1278.2592	894.78144	Automatic Wall Switch Occupancy Sensor	1	1354.78656	203.2	$35.0	$5.0	$65.0	$63.5	$45.0	$825.0	$543.5	$1,368.5
Dickinson High School - Interior	001	Theater	150W Incandescent Fixture	43	6450	6.45	4380	28251	$4,237.7	Replace 150W Incandescent Fixture with 25W CFL	43	1075	1.075	4380	3066	4708.5	3295.95	Automatic Wall Switch Occupancy Sensor	2	24955.05	3,743.3	$0.0	$7.0	$20.0	$127.0	$90.0	$1,040.0	$555.0	$1,595.0
Dickinson High School - Interior	001	Theater	1X4 Suspended Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$399.7	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Automatic Wall Switch Occupancy Sensor	1	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	001	First Floor Hallways	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	42	3696	3.696	8760	32376.96	$4,856.5	None Proposed	42	3696	3.696	8760	6132	32376.96	22663.872	Automatic Wall Switch Occupancy Sensor	2	9713.088	1,457.0	$0.0	$0.0	$0.0	$127.0	$90.0	$180.0	$254.0	$434.0
Dickinson High School - Interior	001	PE Rooms	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	8	704	0.704	4380	3083.52	$462.5	None Proposed	8	704	0.704	4380	3066	3083.52	2158.464	Automatic Wall Switch Occupancy Sensor	1	925.056	138.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	001	Storage Office	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	10	507	0.507	500	253.5	$38.0	None Proposed	10	507	0.507	500	350	253.5	177.45	Automatic Wall Switch Occupancy Sensor	1	76.05	11.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	001	Room B10A	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	4	352	0.352	4380	1541.76	$231.3	None Proposed	4	352	0.352	4380	3066	1541.76	1079.232	Automatic Wall Switch Occupancy Sensor	1	462.528	69.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	001	Room B10B	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	4	352	0.352	4380	1541.76	$231.3	None Proposed	4	352	0.352	4380	3066	1541.76	1079.232	Automatic Wall Switch Occupancy Sensor	1	462.528	69.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	001	Room B11	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	8	704	0.704	4380	3083.52	$462.5	None Proposed	8	704	0.704	4380	3066	3083.52	2158.464	Automatic Wall Switch Occupancy Sensor	1	925.056	138.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	001	Room B11A	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	4	352	0.352	4380	1541.76	$231.3	None Proposed	4	352	0.352	4380	3066	1541.76	1079.232	Automatic Wall Switch Occupancy Sensor	1	462.528	69.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	001	Room B11C	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	4	352	0.352	4380	1541.76	$231.3	None Proposed	4	352	0.352	4380	3066	1541.76	1079.232	Automatic Wall Switch Occupancy Sensor	1	462.528	69.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	002	Room 216A	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	15	1680	1.68	4380	7358.4	$1,103.8	None Proposed	15	1680	1.68	4380	3066	7358.4	5150.88	Automatic Wall Switch Occupancy Sensor	1	2207.52	331.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	002	Room 215	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	4380	3330.99	$499.6	None Proposed	15	760.5	0.7605	4380	3066	3330.99	2331.693	Automatic Wall Switch Occupancy Sensor	1	999.297	149.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	002	Room 213	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	4380	3330.99	$499.6	None Proposed	15	760.5	0.7605	4380	3066	3330.99	2331.693	Automatic Wall Switch Occupancy Sensor	1	999.297	149.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	002	Room 210	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	4380	3330.99	$499.6	None Proposed	15	760.5	0.7605	4380	3066	3330.99	2331.693	Automatic Wall Switch Occupancy Sensor	1	999.297	149.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	002	Room 209	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	4380	3330.99	$499.6	None Proposed	15	760.5	0.7605	4380	3066	3330.99	2331.693	Automatic Wall Switch Occupancy Sensor	1	999.297	149.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	002	Room 208	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	4380	3330.99	$499.6	None Proposed	15	760.5	0.7605	4380	3066	3330.99	2331.693	Automatic Wall Switch Occupancy Sensor	1	999.297	149.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	002	Room 207	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	4380	3330.99	$499.6	None Proposed	15	760.5	0.7605	4380	3066	3330.99	2331.693	Automatic Wall Switch Occupancy Sensor	1	999.297	149.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	002	Room 206	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	4380	3330.99	$499.6	None Proposed	15	760.5	0.7605	4380	3066	3330.99	2331.693	Automatic Wall Switch Occupancy Sensor	1	999.297	149.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	002	Room 205	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	4380	3330.99	$499.6	None Proposed	15	760.5	0.7605	4380	3066	3330.99	2331.693	Automatic Wall Switch Occupancy Sensor	1	999.297	149.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	002	Room 203	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	4380	3330.99	$499.6	None Proposed	15	760.5	0.7605	4380	3066	3330.99	2331.693	Automatic Wall Switch Occupancy Sensor	1	999.297	149.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	002	Room 202	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	4380	3330.99	$499.6	None Proposed	15	760.5	0.7605	4380	3066	3330.99	2331.693	Automatic Wall Switch Occupancy Sensor	1	999.297	149.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	002	Room 201	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	4380	3330.99	$499.6	None Proposed	15	760.5	0.7605	4380	3066	3330.99	2331.693	Automatic Wall Switch Occupancy Sensor	1	999.297	149.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	002	Library	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$699.5	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Automatic Wall Switch Occupancy Sensor	1	1399.0158	209.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	002	Room 200	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	11	968	0.968	4380	4239.84	$636.0	None Proposed	11	968	0.968	4380	3066	4239.84	2967.888	Automatic Wall Switch Occupancy Sensor	1	1271.952	190.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	002	Room 235	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	16	1408	1.408	4380	6167.04	$925.1	None Proposed	16	1408	1.408	4380	3066	6167.04	4316.928	Automatic Wall Switch Occupancy Sensor	1	1850.112	277.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	002	Room 234	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	002	Room 233	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	002	Room 231	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	15	1320	1.32	4380	5781.6	$867.2	None Proposed	15	1320	1.32	4380	3066	5781.6	4047.12	Automatic Wall Switch Occupancy Sensor	1	1734.48	260.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	002	Room 230	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	002	Room 229	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	16	1408	1.408	4380	6167.04	$925.1	None Proposed	16	1408	1.408	4380	3066	6167.04	4316.928	Automatic Wall Switch Occupancy Sensor	1	1850.112	277.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
Dickinson High School - Interior	002	Room 228B	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$399.7	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Automatic Wall Switch Occupancy Sensor	1	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	002	Room 228	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	16	1408	1.408	4380	6167.04	$925.1	None Proposed	16	1408	1.408	4380	3066	6167.04	4316.928	Automatic Wall Switch Occupancy Sensor	1	1850.112	277.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	002	Room 227	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	16	1408	1.408	4380	6167.04	$925.1	None Proposed	16	1408	1.408	4380	3066	6167.04	4316.928	Automatic Wall Switch Occupancy Sensor	1	1850.112	277.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	002	Room 226	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	002	Room 223	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	002	Room 222	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	002	Room 221	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	002	Room 220	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	002	Room 219	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	15	1320	1.32	4380	5781.6	$867.2	None Proposed	15	1320	1.32	4380	3066	5781.6	4047.12	Automatic Wall Switch Occupancy Sensor	1	1734.48	260.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	002	Room 218	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	002	Room 217A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	4380	3330.99	$499.6	None Proposed	15	760.5	0.7605	4380	3066	3330.99	2331.693	Automatic Wall Switch Occupancy Sensor	1	999.297	149.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	002	Room 217	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	002	2nd Floor Hallways & stairways	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	45	3960	3.96	4380	17344.8	$2,601.7	None Proposed	45	3960	3.96	4380	3066	17344.8	12141.36	Automatic Wall Switch Occupancy Sensor	1	5203.44	780.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	002	Room B11B	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	4	352	0.352	4380	1541.76	$231.3	None Proposed	4	352	0.352	4380	3066	1541.76	1079.232	Automatic Wall Switch Occupancy Sensor	1	462.528	69.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	002	Room B11D	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	4	352	0.352	4380	1541.76	$231.3	None Proposed	4	352	0.352	4380	3066	1541.76	1079.232	Automatic Wall Switch Occupancy Sensor	1	462.528	69.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	003	Room 318	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	003	Room 317	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	003	Room 316	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	003	Room 315	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	003	Room 312	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	003	Room 311	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	003	Room 310	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	16	1792	1.792	4380	7848.96	$1,177.3	None Proposed	16	1792	1.792	4380	3066	7848.96	5494.272	Automatic Wall Switch Occupancy Sensor	1	2354.688	353.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	003	Room 310A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$399.7	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Automatic Wall Switch Occupancy Sensor	1	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	003	Room 309	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	003	Room 309A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$399.7	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Automatic Wall Switch Occupancy Sensor	1	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	003	Room 307	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	003	Room 306	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	003	Room 304	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	003	Room 303	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	003	Room 302	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	20	1760	1.76	4380	7708.8	$1,156.3	None Proposed	20	1760	1.76	4380	3066	7708.8	5396.16	Automatic Wall Switch Occupancy Sensor	1	2312.64	346.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	003	Vice Principal's Office	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	4380	2312.64	$346.9	None Proposed	6	528	0.528	4380	3066	2312.64	1618.848	Automatic Wall Switch Occupancy Sensor	1	693.792	104.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	003	Room 341	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	003	Room 340	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	003	Room 339	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	003	Room 338	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	003	Room 337	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	003	Room 336	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	003	Room 335	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	003	Room 333	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	003	Room 342	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	003	Room 331	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$699.5	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Automatic Wall Switch Occupancy Sensor	1	1399.0158	209.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	003	Room 330	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$699.5	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Automatic Wall Switch Occupancy Sensor	1	1399.0158	209.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	003	Room 329	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$699.5	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Automatic Wall Switch Occupancy Sensor	1	1399.0158	209.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	003	Room 326	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$699.5	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Automatic Wall Switch Occupancy Sensor	1	1399.0158	209.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	003	Room 325	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$699.5	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Automatic Wall Switch Occupancy Sensor	1	1399.0158	209.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	003	Room 323A	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	7	784	0.784	4380	3433.92	$515.1	None Proposed	7	784	0.784	4380	3066	3433.92	2403.744	Automatic Wall Switch Occupancy Sensor	1	1030.176	154.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	003	Room 323	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	003	Room 322	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$699.5	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Automatic Wall Switch Occupancy Sensor	1	1399.0158	209.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
Dickinson High School - Interior	003	Room 321	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$699.5	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Automatic Wall Switch Occupancy Sensor	1	1399.0158	209.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	003	Room 319	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$699.5	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Automatic Wall Switch Occupancy Sensor	1	1399.0158	209.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	004	Room 401	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	33	4237.2	4.2372	4380	18558.936	$2,783.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	33	2409	2.409	4380	2554	10551.42	6152.586	Automatic Wall Switch Occupancy Sensor	2	12406.35	1,861.0	$85.0	$15.0	$65.0	$127.0	$90.0	$2,325.0	$3,554.0	$5,879.0
Dickinson High School - Interior	004	Room 401	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	10	507	0.507	4380	2220.66	$333.1	None Proposed	10	507	0.507	4380	3066	2220.66	1554.462	Automatic Wall Switch Occupancy Sensor	1	666.198	99.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	004	Womens Bathroom	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$7.6	None Proposed	2	101.4	0.1014	500	500	50.7	50.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Dickinson High School - Interior	004	Room 403A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$399.7	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Automatic Wall Switch Occupancy Sensor	1	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	004	Room 408	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$1,040.7	None Proposed	18	1584	1.584	4380	3066	6937.92	4856.544	Automatic Wall Switch Occupancy Sensor	1	2081.376	312.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	004	Room 403B	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$399.7	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Automatic Wall Switch Occupancy Sensor	1	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	004	Room 407	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	23	1166.1	1.1661	4380	5107.518	$766.1	None Proposed	23	1166.1	1.1661	4380	3066	5107.518	3575.2626	Automatic Wall Switch Occupancy Sensor	1	1532.2554	229.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	004	Room 410	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	004	Room 414	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	004	Room 416A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$399.7	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Automatic Wall Switch Occupancy Sensor	1	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	004	Room 416B	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$399.7	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Automatic Wall Switch Occupancy Sensor	1	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	004	Room 418	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	24	1216.8	1.2168	4380	5329.584	$799.4	None Proposed	24	1216.8	1.2168	4380	3066	5329.584	3730.7088	Automatic Wall Switch Occupancy Sensor	1	1598.8752	239.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	004	Men's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$7.6	None Proposed	2	101.4	0.1014	500	500	50.7	50.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Dickinson High School - Interior	004	Room 412	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Dickinson High School - Interior	004	4th Floor Hallways & Stairwell	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	45	3960	3.96	8760	34689.6	$5,203.4	None Proposed	45	3960	3.96	8760	6132	34689.6	24282.72	Automatic Wall Switch Occupancy Sensor	2	10406.88	1,561.0	$0.0	$0.0	$0.0	$127.0	$90.0	$180.0	$254.0	$434.0
Liberty High School - Exterior	000	Exterior	250W MH Fixture	6	1710	1.71	4380	7489.8	$1,123.5	Replace 250W Fixture with Induction Light Fixture	6	660	0.66	4380	4380	2890.8	2890.8	None Proposed	0	4599	689.9	$0.0	$390.0	$137.0	$0.0	$0.0	$822.0	$2,340.0	$3,162.0
Liberty High School - Interior	000	Custodian	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	6	513.6	0.5136	500	256.8	$38.5	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	6	291.6	0.2916	500	350	145.8	102.06	Automatic Wall Switch Occupancy Sensor	1	154.74	23.2	$70.0	$10.0	$65.0	$63.5	$45.0	$435.0	$543.5	$978.5
Liberty High School - Interior	000	Women's Bathroom	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	336	0.336	500	168	$25.2	None Proposed	3	336	0.336	500	350	168	117.6	Automatic Wall Switch Occupancy Sensor	1	50.4	7.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Liberty High School - Interior	000	Men's Bathroom	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	336	0.336	500	168	$25.2	None Proposed	3	336	0.336	500	350	168	117.6	Automatic Wall Switch Occupancy Sensor	1	50.4	7.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Liberty High School - Interior	000	Electrical Room (SWGR Room)	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	10	1120	1.12	4380	4905.6	$735.8	None Proposed	10	1120	1.12	4380	3066	4905.6	3433.92	Automatic Wall Switch Occupancy Sensor	1	1471.68	220.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Liberty High School - Interior	000	Caffeteria	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$441.5	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Automatic Wall Switch Occupancy Sensor	1	883.008	132.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Liberty High School - Interior	000	Classroom	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$441.5	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Automatic Wall Switch Occupancy Sensor	1	883.008	132.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Liberty High School - Interior	001	Room 101	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$441.5	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Automatic Wall Switch Occupancy Sensor	1	883.008	132.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Liberty High School - Interior	001	Room 102	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	4380	981.12	$147.2	None Proposed	2	224	0.224	4380	4380	981.12	981.12	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Liberty High School - Interior	001	Room 103	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	4380	981.12	$147.2	None Proposed	2	224	0.224	4380	4380	981.12	981.12	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Liberty High School - Interior	001	Room 104	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$441.5	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Automatic Wall Switch Occupancy Sensor	1	883.008	132.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Liberty High School - Interior	001	Room 105	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	448	0.448	4380	1962.24	$294.3	None Proposed	4	448	0.448	4380	3066	1962.24	1373.568	Automatic Wall Switch Occupancy Sensor	1	588.672	88.3	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Liberty High School - Interior	001	Room 106	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$441.5	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Automatic Wall Switch Occupancy Sensor	1	883.008	132.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Liberty High School - Interior	001	Room 107	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	4380	981.12	$147.2	None Proposed	2	224	0.224	4380	4380	981.12	981.12	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Liberty High School - Interior	001	Room 108	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	336	0.336	4380	1471.68	$220.8	None Proposed	3	336	0.336	4380	4380	1471.68	1471.68	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Liberty High School - Interior	001	Room 109	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$441.5	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Automatic Wall Switch Occupancy Sensor	1	883.008	132.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Liberty High School - Interior	001	1st Floor Hallway & Stairway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	8760	5886.72	$883.0	None Proposed	6	672	0.672	8760	6132	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Liberty High School - Interior	002	Room 200	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	336	0.336	4380	1471.68	$220.8	None Proposed	3	336	0.336	4380	3066	1471.68	1030.176	Automatic Wall Switch Occupancy Sensor	1	441.504	66.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Liberty High School - Interior	002	Room 201	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$441.5	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Automatic Wall Switch Occupancy Sensor	1	883.008	132.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Liberty High School - Interior	002	Room 202	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	4380	981.12	$147.2	None Proposed	2	224	0.224	4380	4380	981.12	981.12	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Liberty High School - Interior	002	Room 203	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	8	896	0.896	4380	3924.48	$588.7	None Proposed	8	896	0.896	4380	3066	3924.48	2747.136	Automatic Wall Switch Occupancy Sensor	1	1177.344	176.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Liberty High School - Interior	002	Room 204	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$441.5	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Automatic Wall Switch Occupancy Sensor	1	883.008	132.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Liberty High School - Interior	002	Room 205	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	4380	981.12	$147.2	None Proposed	2	224	0.224	4380	4380	981.12	981.12	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Liberty High School - Interior	002	Room 206	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	9	456.3	0.4563	4380	1998.594	$299.8	None Proposed	9	456.3	0.4563	4380	3066	1998.594	1399.0158	Automatic Wall Switch Occupancy Sensor	1	599.5782	89.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Liberty High School - Interior	002	Room 206	2X2 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	405.6	0.4056	4380	1776.528	$266.5	None Proposed	8	405.6	0.4056	4380	3066	1776.528	1243.5696	Automatic Wall Switch Occupancy Sensor	1	532.9584	79.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Liberty High School - Interior	002	Room 207	2X2 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	4380	666.198	$99.9	None Proposed	3	152.1	0.1521	4380	3066	666.198	466.3386	Automatic Wall Switch Occupancy Sensor	1	199.8594	30.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Liberty High School - Interior	002	Room 208	2X2 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$33.3	None Proposed	1	50.7	0.0507	4380	4380	222.066	222.066	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Liberty High School - Interior	002	Room 208	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	4380	770.88	$115.6	None Proposed	2	176	0.176	4380	4380	770.88	770.88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Liberty High School - Interior	002	Room 209	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$441.5	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Automatic Wall Switch Occupancy Sensor	1	883.008	132.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Liberty High School - Interior	002	2nd Floor Hallway & Stairway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	8	896	0.896	8760	7848.96	$1,177.3	None Proposed	8	896	0.896	8760	6132	7848.96	5494.272	Automatic Wall Switch Occupancy Sensor	1	2354.688	353.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Liberty High School - Interior	003	Room 300	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	4380	981.12	$147.2	None Proposed	2	224	0.224	4380	3066	981.12	686.784	Automatic Wall Switch Occupancy Sensor	1	294.336	44.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
Liberty High School - Interior	003	Room 301	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$441.5	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Automatic Wall Switch Occupancy Sensor	1	883.008	132.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Liberty High School - Interior	003	Room 302	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$441.5	None Proposed	6	672	0.672	4380	4380	2943.36	2943.36	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Liberty High School - Interior	003	Men's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$7.6	None Proposed	2	101.4	0.1014	500	500	50.7	50.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Liberty High School - Interior	003	Women's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$7.6	None Proposed	2	101.4	0.1014	500	500	50.7	50.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Liberty High School - Interior	003	Room 305	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	15	1680	1.68	4380	7358.4	$1,103.8	None Proposed	15	1680	1.68	4380	3066	7358.4	5150.88	Automatic Wall Switch Occupancy Sensor	1	2207.52	331.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Liberty High School - Interior	003	Room 305A	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	448	0.448	4380	1962.24	$294.3	None Proposed	4	448	0.448	4380	3066	1962.24	1373.568	Automatic Wall Switch Occupancy Sensor	1	588.672	88.3	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Liberty High School - Interior	003	Room 305B	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$441.5	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Automatic Wall Switch Occupancy Sensor	1	883.008	132.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Liberty High School - Interior	003	Room 308	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	336	0.336	4380	1471.68	$220.8	None Proposed	3	336	0.336	4380	4380	1471.68	1471.68	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Liberty High School - Interior	003	Room 309	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$441.5	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Automatic Wall Switch Occupancy Sensor	1	883.008	132.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
Liberty High School - Interior	003	3rd Floor Hallway & Stairway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	8760	5886.72	$883.0	None Proposed	6	672	0.672	8760	6132	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #1 - Exterior	000	Exterior	250W MH Fixture	8	2280	2.28	4380	9986.4	$1,498.0	Replace 250W Fixture with Induction Light Fixture	8	880	0.88	4380	4380	3854.4	3854.4	None Proposed	0	6132	919.8	$0.0	$390.0	$137.0	$0.0	$0.0	$1,096.0	$3,120.0	$4,216.0
PS #1 - Interior	000	Caffeteria A	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	8	896	0.896	4380	3924.48	$588.7	None Proposed	8	896	0.896	4380	3066	3924.48	2747.136	Automatic Wall Switch Occupancy Sensor	1	1177.344	176.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #1 - Interior	000	Caffeteria B	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #1 - Interior	000	Caffeteria C	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #1 - Interior	000	Boy's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	500	101.4	$15.2	None Proposed	4	202.8	0.2028	500	350	101.4	70.98	Automatic Wall Switch Occupancy Sensor	1	30.42	4.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #1 - Interior	000	Girl's Bathroom	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	448	0.448	500	224	$33.6	None Proposed	4	448	0.448	500	350	224	156.8	Automatic Wall Switch Occupancy Sensor	1	67.2	10.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #1 - Interior	000	Gym	400W MH High Bay Fixture	6	2748	2.748	4380	12036.24	$1,805.4	Replace 400W Fixture with Induction Light Fixture	6	1290	1.29	4380	3066	5650.2	3955.14	Automatic Wall Switch Occupancy Sensor	1	8081.1	1,212.2	$0.0	$485.0	$137.0	$63.5	$45.0	$867.0	$2,973.5	$3,840.5
PS #1 - Interior	000	Boiler Room	60W Incandescent Fixture	4	240	0.24	4380	1051.2	$157.7	Replace 60W Incandescent Fixture with 13W CFL	4	52	0.052	4380	3066	227.76	159.432	Automatic Wall Switch Occupancy Sensor	1	891.768	133.8	$0.0	$5.0	$20.0	$63.5	$45.0	$125.0	$83.5	$208.5
PS #1 - Interior	000	Basement Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	15	1680	1.68	8760	14716.8	$2,207.5	None Proposed	15	1680	1.68	8760	6132	14716.8	10301.76	Automatic Wall Switch Occupancy Sensor	1	4415.04	662.3	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #1 - Interior	001	Room 101	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,324.5	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	397.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #1 - Interior	001	Room 101A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$7.6	None Proposed	2	101.4	0.1014	500	500	50.7	50.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #1 - Interior	001	Room 102	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	15	1680	1.68	4380	7358.4	$1,103.8	None Proposed	15	1680	1.68	4380	3066	7358.4	5150.88	Automatic Wall Switch Occupancy Sensor	1	2207.52	331.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #1 - Interior	001	Room 102A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$7.6	None Proposed	2	101.4	0.1014	500	500	50.7	50.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #1 - Interior	001	Room 103	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	15	1680	1.68	4380	7358.4	$1,103.8	None Proposed	15	1680	1.68	4380	3066	7358.4	5150.88	Automatic Wall Switch Occupancy Sensor	1	2207.52	331.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #1 - Interior	001	Room 104	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	15	1680	1.68	4380	7358.4	$1,103.8	None Proposed	15	1680	1.68	4380	3066	7358.4	5150.88	Automatic Wall Switch Occupancy Sensor	1	2207.52	331.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #1 - Interior	001	Room 105	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	15	1680	1.68	4380	7358.4	$1,103.8	None Proposed	15	1680	1.68	4380	3066	7358.4	5150.88	Automatic Wall Switch Occupancy Sensor	1	2207.52	331.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #1 - Interior	001	Room 106	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	15	1680	1.68	4380	7358.4	$1,103.8	None Proposed	15	1680	1.68	4380	3066	7358.4	5150.88	Automatic Wall Switch Occupancy Sensor	1	2207.52	331.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #1 - Interior	001	Room 107	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	15	1680	1.68	4380	7358.4	$1,103.8	None Proposed	15	1680	1.68	4380	3066	7358.4	5150.88	Automatic Wall Switch Occupancy Sensor	1	2207.52	331.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #1 - Interior	001	Room 107A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$7.6	None Proposed	2	101.4	0.1014	500	500	50.7	50.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #1 - Interior	001	Room 108	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	15	1680	1.68	4380	7358.4	$1,103.8	None Proposed	15	1680	1.68	4380	3066	7358.4	5150.88	Automatic Wall Switch Occupancy Sensor	1	2207.52	331.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #1 - Interior	001	Room 108A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$7.6	None Proposed	2	101.4	0.1014	500	500	50.7	50.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #1 - Interior	001	Nurse Office	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	448	0.448	4380	1962.24	$294.3	None Proposed	4	448	0.448	4380	3066	1962.24	1373.568	Automatic Wall Switch Occupancy Sensor	1	588.672	88.3	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #1 - Interior	001	Custodian Closet	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$7.6	None Proposed	2	101.4	0.1014	500	500	50.7	50.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #1 - Interior	001	1st Floor Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	21	2352	2.352	8760	20603.52	$3,090.5	None Proposed	21	2352	2.352	8760	6132	20603.52	14422.464	Automatic Wall Switch Occupancy Sensor	1	6181.056	927.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #1 - Interior	002	Room 201	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	15	1680	1.68	4380	7358.4	$1,103.8	None Proposed	15	1680	1.68	4380	3066	7358.4	5150.88	Automatic Wall Switch Occupancy Sensor	1	2207.52	331.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #1 - Interior	002	Staff Bathroom	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	1	112	0.112	500	56	$8.4	None Proposed	1	112	0.112	500	500	56	56	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #1 - Interior	002	Teacher's Room	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	336	0.336	4380	1471.68	$220.8	None Proposed	3	336	0.336	4380	4380	1471.68	1471.68	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #1 - Interior	002	Room 202	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,324.5	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	397.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #1 - Interior	002	Room 202A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$11.4	None Proposed	3	152.1	0.1521	500	500	76.05	76.05	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #1 - Interior	002	Room 203	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	15	1680	1.68	4380	7358.4	$1,103.8	None Proposed	15	1680	1.68	4380	3066	7358.4	5150.88	Automatic Wall Switch Occupancy Sensor	1	2207.52	331.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #1 - Interior	002	Room 203A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	500	101.4	$15.2	None Proposed	4	202.8	0.2028	500	500	101.4	101.4	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #1 - Interior	002	Room 204	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	15	1680	1.68	4380	7358.4	$1,103.8	None Proposed	15	1680	1.68	4380	3066	7358.4	5150.88	Automatic Wall Switch Occupancy Sensor	1	2207.52	331.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #1 - Interior	002	Room 204A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$11.4	None Proposed	3	152.1	0.1521	500	500	76.05	76.05	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #1 - Interior	002	VP's Office	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	336	0.336	4380	1471.68	$220.8	None Proposed	3	336	0.336	4380	4380	1471.68	1471.68	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #1 - Interior	002	Secretary Office	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	1	112	0.112	4380	490.56	$73.6	None Proposed	1	112	0.112	4380	4380	490.56	490.56	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #1 - Interior	002	Room 205	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	15	1680	1.68	4380	7358.4	$1,103.8	None Proposed	15	1680	1.68	4380	3066	7358.4	5150.88	Automatic Wall Switch Occupancy Sensor	1	2207.52	331.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #1 - Interior	002	2nd Floor Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	20	2240	2.24	8760	19622.4	$2,943.4	None Proposed	20	2240	2.24	8760	6132	19622.4	13735.68	Automatic Wall Switch Occupancy Sensor	1	5886.72	883.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #1 - Interior	003	Room 301	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #1 - Interior	003	Room 301A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$7.6	None Proposed	2	101.4	0.1014	500	500	50.7	50.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #1 - Interior	003	Room 302	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$441.5	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Automatic Wall Switch Occupancy Sensor	1	883.008	132.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #1 - Interior	003	Room 302A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	500	304.2	$45.6	None Proposed	12	608.4	0.6084	500	350	304.2	212.94	Automatic Wall Switch Occupancy Sensor	1	91.26	13.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #1 - Interior	003	Auditarium	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,324.5	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	397.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #1 - Interior	003	Room 304	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #1 - Interior	003	Room 305	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #1 - Interior	003	Girl's Bathroom	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	336	0.336	500	168	$25.2	None Proposed	3	336	0.336	500	350	168	117.6	Automatic Wall Switch Occupancy Sensor	1	50.4	7.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #1 - Interior	003	Boy's Bathroom	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	336	0.336	500	168	$25.2	None Proposed	3	336	0.336	500	350	168	117.6	Automatic Wall Switch Occupancy Sensor	1	50.4	7.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #1 - Interior	003	Room 306	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #1 - Interior	003	Room 307	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$662.3	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	198.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #1 - Interior	003	Room 307A	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	500	504	$75.6	None Proposed	9	1008	1.008	500	350	504	352.8	Automatic Wall Switch Occupancy Sensor	1	151.2	22.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #1 - Interior	003	Room 308	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #1 - Interior	003	Faculty Bathroom	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	1	112	0.112	500	56	$8.4	None Proposed	1	112	0.112	500	500	56	56	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #1 - Interior	003	3rd Floor Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	8760	17660.16	$2,649.0	None Proposed	18	2016	2.016	8760	6132	17660.16	12362.112	Automatic Wall Switch Occupancy Sensor	1	5298.048	794.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #1 - Interior	004	Room 401	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	10	507	0.507	4380	2220.66	$333.1	None Proposed	10	507	0.507	4380	3066	2220.66	1554.462	Automatic Wall Switch Occupancy Sensor	1	666.198	99.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #1 - Interior	004	Room 408	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$399.7	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Automatic Wall Switch Occupancy Sensor	1	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #1 - Interior	004	4th Floor Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	8760	1962.24	$294.3	None Proposed	2	224	0.224	8760	8760	1962.24	1962.24	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #11 - Exterior	000	Exterior	250W MH Fixture	10	2850	2.85	4380	12483	$1,872.5	Replace 250W Fixture with Induction Light Fixture	10	1100	1.1	4380	4380	4818	4818	None Proposed	0	7665	1,149.8	$0.0	$390.0	$137.0	$0.0	$0.0	$1,370.0	$3,900.0	$5,270.0
PS #11 - Interior	000	B-101	1X4 Suspended Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$699.5	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Automatic Wall Switch Occupancy Sensor	1	1399.0158	209.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	000	B-102B	1X4 Suspended Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	20	1014	1.014	4380	4441.32	$666.2	None Proposed	20	1014	1.014	4380	3066	4441.32	3108.924	Automatic Wall Switch Occupancy Sensor	1	1332.396	199.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	000	B-103	1X4 Suspended Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$133.2	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Automatic Wall Switch Occupancy Sensor	1	266.4792	40.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	000	B-104	1X4 Suspended Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	4380	1332.396	$199.9	None Proposed	6	304.2	0.3042	4380	3066	1332.396	932.6772	Automatic Wall Switch Occupancy Sensor	1	399.7188	60.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	000	B-105	1X4 Suspended Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	24	1216.8	1.2168	4380	5329.584	$799.4	None Proposed	24	1216.8	1.2168	4380	3066	5329.584	3730.7088	Automatic Wall Switch Occupancy Sensor	1	1598.8752	239.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	000	B-106	1X4 Suspended Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	24	1216.8	1.2168	4380	5329.584	$799.4	None Proposed	24	1216.8	1.2168	4380	3066	5329.584	3730.7088	Automatic Wall Switch Occupancy Sensor	1	1598.8752	239.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	000	B-107	1X4 Suspended Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	9	456.3	0.4563	4380	1998.594	$299.8	None Proposed	9	456.3	0.4563	4380	3066	1998.594	1399.0158	Automatic Wall Switch Occupancy Sensor	1	599.5782	89.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	000	B-108	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	36	1825.2	1.8252	4380	7994.376	$1,199.2	None Proposed	36	1825.2	1.8252	4380	3066	7994.376	5596.0632	Automatic Wall Switch Occupancy Sensor	1	2398.3128	359.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	000	B-109	1x4 Fixtures w/ 1-T12 Lamp Fixture w/ Magnetic Ballast	12	513.6	0.5136	4380	2249.568	$337.4	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	12	291.84	0.29184	4380	3066	1278.2592	894.78144	Automatic Wall Switch Occupancy Sensor	1	1354.78656	203.2	$35.0	$5.0	$65.0	$63.5	$45.0	$825.0	$543.5	$1,368.5
PS #11 - Interior	000	B-110	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	20	1014	1.014	4380	4441.32	$666.2	None Proposed	20	1014	1.014	4380	3066	4441.32	3108.924	Automatic Wall Switch Occupancy Sensor	1	1332.396	199.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	000	B-111	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$133.2	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Automatic Wall Switch Occupancy Sensor	1	266.4792	40.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	000	B-112	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	42	2129.4	2.1294	4380	9326.772	$1,399.0	None Proposed	42	2129.4	2.1294	4380	3066	9326.772	6528.7404	Automatic Wall Switch Occupancy Sensor	1	2798.0316	419.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	000	B-113	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	405.6	0.4056	4380	1776.528	$266.5	None Proposed	8	405.6	0.4056	4380	3066	1776.528	1243.5696	Automatic Wall Switch Occupancy Sensor	1	532.9584	79.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	000	B-114	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	4380	1332.396	$199.9	None Proposed	6	304.2	0.3042	4380	3066	1332.396	932.6772	Automatic Wall Switch Occupancy Sensor	1	399.7188	60.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	000	Custodian/Lockers	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	253.5	0.2535	500	126.75	$19.0	None Proposed	5	253.5	0.2535	500	350	126.75	88.725	Automatic Wall Switch Occupancy Sensor	1	38.025	5.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	000	Music Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$66.6	None Proposed	2	101.4	0.1014	4380	4380	444.132	444.132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #11 - Interior	000	Caffeteria (inluding Kitchen & Storage)	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	125	6337.5	6.3375	4380	27758.25	$4,163.7	None Proposed	125	6337.5	6.3375	4380	3066	27758.25	19430.775	Ceiling Mounted Occupancy Sensor	4	8327.475	1,249.1	$0.0	$0.0	$0.0	$412.0	$294.0	$1,176.0	$1,648.0	$2,824.0
PS #11 - Interior	000	Caffeteria Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$66.6	None Proposed	2	101.4	0.1014	4380	4380	444.132	444.132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #11 - Interior	000	Boy's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	253.5	0.2535	500	126.75	$19.0	None Proposed	5	253.5	0.2535	500	350	126.75	88.725	Automatic Wall Switch Occupancy Sensor	1	38.025	5.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	000	Girl's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	253.5	0.2535	500	126.75	$19.0	None Proposed	5	253.5	0.2535	500	350	126.75	88.725	Automatic Wall Switch Occupancy Sensor	1	38.025	5.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	000	Basement Hallways	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	42	2129.4	2.1294	8760	18653.544	$2,798.0	None Proposed	42	2129.4	2.1294	8760	6132	18653.544	13057.4808	Automatic Wall Switch Occupancy Sensor	2	5596.0632	839.4	$0.0	$0.0	$0.0	$127.0	$90.0	$180.0	$254.0	$434.0
PS #11 - Interior	001	Room 101	1X4 Suspended Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	7	784	0.784	4380	3433.92	$515.1	None Proposed	7	784	0.784	4380	3066	3433.92	2403.744	Automatic Wall Switch Occupancy Sensor	1	1030.176	154.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	001	Room 102	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	72	3650.4	3.6504	4380	15988.752	$2,398.3	None Proposed	72	3650.4	3.6504	4380	3066	15988.752	11192.1264	Automatic Wall Switch Occupancy Sensor	3	4796.6256	719.5	$0.0	$0.0	$0.0	$190.5	$135.0	$405.0	$571.5	$976.5
PS #11 - Interior	001	Room 103	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	001	Room 104	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$699.5	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Automatic Wall Switch Occupancy Sensor	1	1399.0158	209.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	001	Room 105A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$699.5	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Automatic Wall Switch Occupancy Sensor	1	1399.0158	209.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	001	Room 105B	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	001	Room 106A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	16	811.2	0.8112	4380	3553.056	$533.0	None Proposed	16	811.2	0.8112	4380	3066	3553.056	2487.1392	Automatic Wall Switch Occupancy Sensor	1	1065.9168	159.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	001	Room 106B	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$466.3	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	139.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	001	Room 107A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #11 - Interior	001	Room 107B	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	17	861.9	0.8619	4380	3775.122	$566.3	None Proposed	17	861.9	0.8619	4380	3066	3775.122	2642.5854	Automatic Wall Switch Occupancy Sensor	1	1132.5366	169.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	001	Room 108	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	001	Room 109	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	001	Room 110	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	4380	3330.99	$499.6	None Proposed	15	760.5	0.7605	4380	3066	3330.99	2331.693	Automatic Wall Switch Occupancy Sensor	1	999.297	149.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	001	Room 111	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	001	Room 112	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$699.5	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Automatic Wall Switch Occupancy Sensor	1	1399.0158	209.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	001	Boy's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	253.5	0.2535	500	126.75	$19.0	None Proposed	5	253.5	0.2535	500	350	126.75	88.725	Automatic Wall Switch Occupancy Sensor	1	38.025	5.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	001	Girl's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	253.5	0.2535	500	126.75	$19.0	None Proposed	5	253.5	0.2535	500	350	126.75	88.725	Automatic Wall Switch Occupancy Sensor	1	38.025	5.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	001	Room 113	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	001	Room 114	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	001	Room 115	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	001	Room 116	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	001	Room 118	1X4 Suspended Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	10	1120	1.12	4380	4905.6	$735.8	None Proposed	10	1120	1.12	4380	3066	4905.6	3433.92	Automatic Wall Switch Occupancy Sensor	1	1471.68	220.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	001	Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$11.4	None Proposed	3	152.1	0.1521	500	500	76.05	76.05	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #11 - Interior	001	Gym	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	60	6720	6.72	4380	29433.6	$4,415.0	None Proposed	60	6720	6.72	4380	3066	29433.6	20603.52	Automatic Wall Switch Occupancy Sensor	2	8830.08	1,324.5	$0.0	$0.0	$0.0	$127.0	$90.0	$180.0	$254.0	$434.0
PS #11 - Interior	001	Secretary	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	8	896	0.896	4380	3924.48	$588.7	None Proposed	8	896	0.896	4380	3066	3924.48	2747.136	Automatic Wall Switch Occupancy Sensor	1	1177.344	176.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	001	Stage	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	4380	1332.396	$199.9	None Proposed	6	304.2	0.3042	4380	3066	1332.396	932.6772	Automatic Wall Switch Occupancy Sensor	1	399.7188	60.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	002	1st Floor Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	105	5323.5	5.3235	8760	46633.86	$6,995.1	None Proposed	105	5323.5	5.3235	8760	6132	46633.86	32643.702	Automatic Wall Switch Occupancy Sensor	3	13990.158	2,098.5	$0.0	$0.0	$0.0	$190.5	$135.0	$405.0	$571.5	$976.5
PS #11 - Interior	002	Room 201	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$699.5	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Automatic Wall Switch Occupancy Sensor	1	1399.0158	209.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	002	Room 202	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$699.5	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Automatic Wall Switch Occupancy Sensor	1	1399.0158	209.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	002	Room 202A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$66.6	None Proposed	2	101.4	0.1014	4380	4380	444.132	444.132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #11 - Interior	002	Room 203	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$699.5	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Automatic Wall Switch Occupancy Sensor	1	1399.0158	209.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	002	Room 204	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	102	5171.4	5.1714	4380	22650.732	$3,397.6	None Proposed	102	5171.4	5.1714	4380	3066	22650.732	15855.5124	Automatic Wall Switch Occupancy Sensor	3	6795.2196	1,019.3	$0.0	$0.0	$0.0	$190.5	$135.0	$405.0	$571.5	$976.5
PS #11 - Interior	002	Boy's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	500	152.1	$22.8	None Proposed	6	304.2	0.3042	500	350	152.1	106.47	Automatic Wall Switch Occupancy Sensor	1	45.63	6.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	002	Girl's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	500	152.1	$22.8	None Proposed	6	304.2	0.3042	500	350	152.1	106.47	Automatic Wall Switch Occupancy Sensor	1	45.63	6.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	002	Room 205	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$699.5	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Automatic Wall Switch Occupancy Sensor	1	1399.0158	209.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	002	Room 206	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	002	Room 207	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	002	Room 208	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	002	Room 209	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	002	Room 210	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	002	Room 211	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	002	Room 212	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	002	Room 213	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	002	Room 214	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$699.5	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Automatic Wall Switch Occupancy Sensor	1	1399.0158	209.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	002	Room 215	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	002	Room 216	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	002	Room 217	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	002	Room 218	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	002	Room 219	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #11 - Interior	002	2nd Floor Halway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	45	2281.5	2.2815	8760	19985.94	$2,997.9	None Proposed	45	2281.5	2.2815	8760	6132	19985.94	13990.158	Automatic Wall Switch Occupancy Sensor	2	5995.782	899.4	$0.0	$0.0	$0.0	$127.0	$90.0	$180.0	$254.0	$434.0
PS #23 - Exterior	000	Exterior	250W MH Fixture	12	3420	3.42	4380	14979.6	$2,246.9	Replace 250W Fixture with Induction Light Fixture	12	1320	1.32	4380	4380	5781.6	5781.6	None Proposed	0	9198	1,379.7	$0.0	$390.0	$137.0	$0.0	$0.0	$1,644.0	$4,680.0	$6,324.0
PS #23 - Interior	000	B1W	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	500	88	$13.2	None Proposed	2	176	0.176	500	500	88	88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	000	B1	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	000	B2A	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	000	B3	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	000	Caffeteria	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	36	3168	3.168	4380	13875.84	$2,081.4	None Proposed	36	3168	3.168	4380	3066	13875.84	9713.088	Automatic Wall Switch Occupancy Sensor	2	4162.752	624.4	$0.0	$0.0	$0.0	$127.0	$90.0	$180.0	$254.0	$434.0
PS #23 - Interior	000	Hallway (Caffeteria)	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	10	880	0.88	4380	3854.4	$578.2	None Proposed	10	880	0.88	4380	3066	3854.4	2698.08	Automatic Wall Switch Occupancy Sensor	1	1156.32	173.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #23 - Interior	000	B5	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	4	352	0.352	4380	1541.76	$231.3	None Proposed	4	352	0.352	4380	3066	1541.76	1079.232	Automatic Wall Switch Occupancy Sensor	1	462.528	69.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	000	B6	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	4380	2312.64	$346.9	None Proposed	6	528	0.528	4380	3066	2312.64	1618.848	Automatic Wall Switch Occupancy Sensor	1	693.792	104.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	000	Custodian Office	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	4	352	0.352	500	176	$26.4	None Proposed	4	352	0.352	500	350	176	123.2	Automatic Wall Switch Occupancy Sensor	1	52.8	7.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	000	Electrical Room	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	4	352	0.352	4380	1541.76	$231.3	None Proposed	4	352	0.352	4380	3066	1541.76	1079.232	Automatic Wall Switch Occupancy Sensor	1	462.528	69.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	000	Gym	1x4 Fixtures w/ 1-T12 Lamp Fixture w/ Magnetic Ballast	24	1027.2	1.0272	4380	4499.136	$674.9	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	24	583.68	0.58368	4380	3066	2556.5184	1789.56288	Automatic Wall Switch Occupancy Sensor	1	2709.57312	406.4	$35.0	$5.0	$65.0	$63.5	$45.0	$1,605.0	$1,023.5	$2,628.5
PS #23 - Interior	000	Gym	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	3	264	0.264	4380	1156.32	$173.4	None Proposed	3	264	0.264	4380	3066	1156.32	809.424	Automatic Wall Switch Occupancy Sensor	1	346.896	52.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	000	Pool	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	4380	3330.99	$499.6	None Proposed	15	760.5	0.7605	4380	3066	3330.99	2331.693	Automatic Wall Switch Occupancy Sensor	1	999.297	149.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	000	Boy's Locker Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$133.2	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Automatic Wall Switch Occupancy Sensor	1	266.4792	40.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	000	Girl's Locker Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$133.2	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Automatic Wall Switch Occupancy Sensor	1	266.4792	40.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	000	Filter Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	4380	1332.396	$199.9	None Proposed	6	304.2	0.3042	4380	3066	1332.396	932.6772	Automatic Wall Switch Occupancy Sensor	1	399.7188	60.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	000	Pool Office	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$33.3	None Proposed	1	50.7	0.0507	4380	4380	222.066	222.066	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	000	Computer Lab	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$399.7	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Automatic Wall Switch Occupancy Sensor	1	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	000	Library	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	28	2464	2.464	4380	10792.32	$1,618.8	None Proposed	28	2464	2.464	4380	3066	10792.32	7554.624	Automatic Wall Switch Occupancy Sensor	1	3237.696	485.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	000	Boiler Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	4380	3330.99	$499.6	None Proposed	15	760.5	0.7605	4380	3066	3330.99	2331.693	Automatic Wall Switch Occupancy Sensor	1	999.297	149.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	000	Boiler Downstair Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	000	Basement Hallways	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	23	1166.1	1.1661	8760	10215.036	$1,532.3	None Proposed	23	1166.1	1.1661	8760	6132	10215.036	7150.5252	Automatic Wall Switch Occupancy Sensor	1	3064.5108	459.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	001	Room 101	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	001	Room 101W	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	500	88	$13.2	None Proposed	2	176	0.176	500	500	88	88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	001	Room 102	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	001	Room 102W	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	500	88	$13.2	None Proposed	2	176	0.176	500	500	88	88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	001	Room 103	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	001	Room 103W	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	500	88	$13.2	None Proposed	2	176	0.176	500	500	88	88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	001	Girl's Bathroom	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	500	88	$13.2	None Proposed	2	176	0.176	500	500	88	88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	001	Room 104	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	001	Room 105	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	001	Room 105W	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	500	88	$13.2	None Proposed	2	176	0.176	500	500	88	88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	001	Room 106	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	001	Room 106W	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	500	88	$13.2	None Proposed	2	176	0.176	500	500	88	88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	001	Medical Room	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	4380	2312.64	$346.9	None Proposed	6	528	0.528	4380	3066	2312.64	1618.848	Automatic Wall Switch Occupancy Sensor	1	693.792	104.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	001	CIT	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	4380	770.88	$115.6	None Proposed	2	176	0.176	4380	4380	770.88	770.88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	001	Main Office	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	19	1672	1.672	4380	7323.36	$1,098.5	None Proposed	19	1672	1.672	4380	3066	7323.36	5126.352	Automatic Wall Switch Occupancy Sensor	1	2197.008	329.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	001	Room 108	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	001	Room 108W	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	1	88	0.088	500	44	$6.6	None Proposed	1	88	0.088	500	500	44	44	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	001	Room 109	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	001	Room 109W	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	4	352	0.352	500	176	$26.4	None Proposed	4	352	0.352	500	350	176	123.2	Automatic Wall Switch Occupancy Sensor	1	52.8	7.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	001	Auditarium	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	36	1825.2	1.8252	4380	7994.376	$1,199.2	None Proposed	36	1825.2	1.8252	4380	3066	7994.376	5596.0632	Automatic Wall Switch Occupancy Sensor	1	2398.3128	359.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	001	Auditarium	1x4 Fixtures w/ 1-T12 Lamp Fixture w/ Magnetic Ballast	15	642	0.642	4380	2811.96	$421.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	15	364.8	0.3648	4380	3066	1597.824	1118.4768	Automatic Wall Switch Occupancy Sensor	1	1693.4832	254.0	$35.0	$5.0	$65.0	$63.5	$45.0	$1,020.0	$663.5	$1,683.5
PS #23 - Interior	001	Stage	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	4380	2312.64	$346.9	None Proposed	6	528	0.528	4380	3066	2312.64	1618.848	Automatic Wall Switch Occupancy Sensor	1	693.792	104.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	001	Room 110	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	001	Room 111	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	001	Room 111W	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	500	88	$13.2	None Proposed	2	176	0.176	500	500	88	88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	001	Room 112	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	001	Room 112W	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	500	88	$13.2	None Proposed	2	176	0.176	500	500	88	88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	002	Room 201	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	002	Room 201W	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	500	88	$13.2	None Proposed	2	176	0.176	500	500	88	88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	002	Room 202	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	002	Room 202W	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	500	88	$13.2	None Proposed	2	176	0.176	500	500	88	88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	002	Room 203	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #23 - Interior	002	Room 203W	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	500	88	$13.2	None Proposed	2	176	0.176	500	500	88	88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	002	Girl's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$11.4	None Proposed	3	152.1	0.1521	500	500	76.05	76.05	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	002	Room 204	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	002	Room 204W	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	500	88	$13.2	None Proposed	2	176	0.176	500	500	88	88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	002	Storage Room	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	500	88	$13.2	None Proposed	2	176	0.176	500	500	88	88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	002	Room 205	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	002	Room 205W	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	500	88	$13.2	None Proposed	2	176	0.176	500	500	88	88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	002	Room 206	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	002	Room 206W	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	500	88	$13.2	None Proposed	2	176	0.176	500	500	88	88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	002	VP's Office	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	3	264	0.264	4380	1156.32	$173.4	None Proposed	3	264	0.264	4380	4380	1156.32	1156.32	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	002	Teacher's Lounge	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	5	440	0.44	4380	1927.2	$289.1	None Proposed	5	440	0.44	4380	3066	1927.2	1349.04	Automatic Wall Switch Occupancy Sensor	1	578.16	86.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	002	ESL Classroom	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	30	2640	2.64	4380	11563.2	$1,734.5	None Proposed	30	2640	2.64	4380	3066	11563.2	8094.24	Automatic Wall Switch Occupancy Sensor	2	3468.96	520.3	$0.0	$0.0	$0.0	$127.0	$90.0	$180.0	$254.0	$434.0
PS #23 - Interior	002	Room 207	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	3	264	0.264	4380	1156.32	$173.4	None Proposed	3	264	0.264	4380	3066	1156.32	809.424	Automatic Wall Switch Occupancy Sensor	1	346.896	52.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	002	Room 207W	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	500	88	$13.2	None Proposed	2	176	0.176	500	500	88	88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	002	Room 208	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	002	Room 208W	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	500	88	$13.2	None Proposed	2	176	0.176	500	500	88	88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	002	Room 209	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	002	Room 209W	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	500	88	$13.2	None Proposed	2	176	0.176	500	500	88	88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	002	Room 210	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	002	Room 210W	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	500	88	$13.2	None Proposed	2	176	0.176	500	500	88	88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	002	Room 211	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	002	Room 211W	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	500	88	$13.2	None Proposed	2	176	0.176	500	500	88	88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	002	Room 212	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	002	Room 212W	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	500	88	$13.2	None Proposed	2	176	0.176	500	500	88	88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	002	Science Lab	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	14	1232	1.232	4380	5396.16	$809.4	None Proposed	14	1232	1.232	4380	3066	5396.16	3777.312	Automatic Wall Switch Occupancy Sensor	1	1618.848	242.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	002	Science Lab Storage	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	500	88	$13.2	None Proposed	2	176	0.176	500	500	88	88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	002	Room 214	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	4380	770.88	$115.6	None Proposed	2	176	0.176	4380	4380	770.88	770.88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	002	Room 216	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	3	264	0.264	4380	1156.32	$173.4	None Proposed	3	264	0.264	4380	3066	1156.32	809.424	Automatic Wall Switch Occupancy Sensor	1	346.896	52.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	002	Room 217	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	4	352	0.352	4380	1541.76	$231.3	None Proposed	4	352	0.352	4380	3066	1541.76	1079.232	Automatic Wall Switch Occupancy Sensor	1	462.528	69.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	002	Boy's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$11.4	None Proposed	3	152.1	0.1521	500	350	76.05	53.235	Automatic Wall Switch Occupancy Sensor	1	22.815	3.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	002	3rd Floor Hallway	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	25	2200	2.2	8760	19272	$2,890.8	None Proposed	25	2200	2.2	8760	6132	19272	13490.4	Automatic Wall Switch Occupancy Sensor	1	5781.6	867.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	003	Room 301	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	003	Room 301W	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	500	88	$13.2	None Proposed	2	176	0.176	500	500	88	88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	003	Room 302	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	003	Room 302W	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	500	88	$13.2	None Proposed	2	176	0.176	500	500	88	88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	003	Room 303	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	003	Room 303W	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	500	88	$13.2	None Proposed	2	176	0.176	500	500	88	88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	003	Girl's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$11.4	None Proposed	3	152.1	0.1521	500	350	76.05	53.235	Automatic Wall Switch Occupancy Sensor	1	22.815	3.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	003	Kitchen	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	003	Room 304	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	003	Room 304W	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	500	88	$13.2	None Proposed	2	176	0.176	500	500	88	88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	003	Room 305	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	003	Room 305W	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	500	88	$13.2	None Proposed	2	176	0.176	500	500	88	88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	003	VP's Office	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	4	352	0.352	4380	1541.76	$231.3	None Proposed	4	352	0.352	4380	3066	1541.76	1079.232	Automatic Wall Switch Occupancy Sensor	1	462.528	69.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	003	Teacher's Lounge	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	5	440	0.44	4380	1927.2	$289.1	None Proposed	5	440	0.44	4380	3066	1927.2	1349.04	Automatic Wall Switch Occupancy Sensor	1	578.16	86.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	003	Room 306	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	003	Room 306W	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	500	88	$13.2	None Proposed	2	176	0.176	500	500	88	88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	003	Room 307	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #23 - Interior	003	Room 307W	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	500	88	$13.2	None Proposed	2	176	0.176	500	500	88	88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	003	Room 308	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	003	Room 308W	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	500	88	$13.2	None Proposed	2	176	0.176	500	500	88	88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	003	Storage Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$7.6	None Proposed	2	101.4	0.1014	500	500	50.7	50.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	003	Room 309	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	003	Room 309W	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	500	88	$13.2	None Proposed	2	176	0.176	500	500	88	88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	003	Room 310	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	003	Room 310W	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	500	88	$13.2	None Proposed	2	176	0.176	500	500	88	88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	003	Room 311	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	003	Room 311W	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	500	88	$13.2	None Proposed	2	176	0.176	500	500	88	88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	003	Room 312	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	003	Room 312W	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	500	88	$13.2	None Proposed	2	176	0.176	500	500	88	88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	003	Room 313	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	003	Room 314	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	003	Room 314W	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	500	88	$13.2	None Proposed	2	176	0.176	500	500	88	88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	003	Boy's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$11.4	None Proposed	3	152.1	0.1521	500	350	76.05	53.235	Automatic Wall Switch Occupancy Sensor	1	22.815	3.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	003	Room 315	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	003	Room 315W	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	500	88	$13.2	None Proposed	2	176	0.176	500	500	88	88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	003	Room 316	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 - Interior	003	Room 316W	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	500	88	$13.2	None Proposed	2	176	0.176	500	500	88	88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 - Interior	003	3rd Floor Hallway	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	24	2112	2.112	8760	18501.12	$2,775.2	None Proposed	24	2112	2.112	8760	6132	18501.12	12950.784	Automatic Wall Switch Occupancy Sensor	1	5550.336	832.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 Annex (Duncan) - Exterior	000	Exterior	250W MH Fixture	5	1425	1.425	4380	6241.5	$936.2	Replace 250W Fixture with Induction Light Fixture	5	550	0.55	4380	4380	2409	2409	None Proposed	0	3832.5	574.9	$0.0	$390.0	$137.0	$0.0	$0.0	$685.0	$1,950.0	$2,635.0
PS #23 Annex (Duncan) - Interior	000	Basement Room	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	26	2288	2.288	4380	10021.44	$1,503.2	None Proposed	26	2288	2.288	4380	3066	10021.44	7015.008	Automatic Wall Switch Occupancy Sensor	1	3006.432	451.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 Annex (Duncan) - Interior	001	Room 1	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$1,040.7	None Proposed	18	1584	1.584	4380	3066	6937.92	4856.544	Automatic Wall Switch Occupancy Sensor	1	2081.376	312.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 Annex (Duncan) - Interior	001	Room 2	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	1584	1.584	4380	6937.92	$1,040.7	None Proposed	18	1584	1.584	4380	3066	6937.92	4856.544	Automatic Wall Switch Occupancy Sensor	1	2081.376	312.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 Annex (Duncan) - Interior	001	Room 3	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	15	1320	1.32	4380	5781.6	$867.2	None Proposed	15	1320	1.32	4380	3066	5781.6	4047.12	Automatic Wall Switch Occupancy Sensor	1	1734.48	260.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 Annex (Duncan) - Interior	001	Room 4	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	15	1320	1.32	4380	5781.6	$867.2	None Proposed	15	1320	1.32	4380	3066	5781.6	4047.12	Automatic Wall Switch Occupancy Sensor	1	1734.48	260.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 Annex (Duncan) - Interior	001	Room 5	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$693.8	None Proposed	12	1056	1.056	4380	3066	4625.28	3237.696	Automatic Wall Switch Occupancy Sensor	1	1387.584	208.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 Annex (Duncan) - Interior	001	Room 6	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$693.8	None Proposed	12	1056	1.056	4380	3066	4625.28	3237.696	Automatic Wall Switch Occupancy Sensor	1	1387.584	208.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 Annex (Duncan) - Interior	001	Room 7	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$693.8	None Proposed	12	1056	1.056	4380	3066	4625.28	3237.696	Automatic Wall Switch Occupancy Sensor	1	1387.584	208.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 Annex (Duncan) - Interior	001	Room 8 (Office)	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	4380	770.88	$115.6	None Proposed	2	176	0.176	4380	4380	770.88	770.88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 Annex (Duncan) - Interior	001	Room 9	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	4380	770.88	$115.6	None Proposed	2	176	0.176	4380	4380	770.88	770.88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 Annex (Duncan) - Interior	001	Room 10	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	4	352	0.352	4380	1541.76	$231.3	None Proposed	4	352	0.352	4380	3066	1541.76	1079.232	Automatic Wall Switch Occupancy Sensor	1	462.528	69.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 Annex (Duncan) - Interior	001	Room 11	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	4380	770.88	$115.6	None Proposed	2	176	0.176	4380	4380	770.88	770.88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 Annex (Duncan) - Interior	001	Room 12	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	4380	770.88	$115.6	None Proposed	2	176	0.176	4380	4380	770.88	770.88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 Annex (Duncan) - Interior	001	Staff Bathroom	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	1	88	0.088	500	44	$6.6	None Proposed	1	88	0.088	500	500	44	44	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #23 Annex (Duncan) - Interior		Mechanical Room	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	27	2376	2.376	4380	10406.88	$1,561.0	None Proposed	27	2376	2.376	4380	3066	10406.88	7284.816	Automatic Wall Switch Occupancy Sensor	1	3122.064	468.3	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #23 Annex (Duncan) - Interior		Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	20	1014	1.014	8760	8882.64	$1,332.4	None Proposed	20	1014	1.014	8760	6132	8882.64	6217.848	Automatic Wall Switch Occupancy Sensor	1	2664.792	399.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Exterior	000	Exterior	250W MH Fixture	13	3705	3.705	4380	16227.9	$2,271.9	Replace 250W Fixture with Induction Light Fixture	13	1430	1.43	4380	4380	6263.4	6263.4	None Proposed	0	9964.5	1,395.0	$0.0	$390.0	$137.0	$0.0	$0.0	$1,781.0	$5,070.0	$6,851.0
PS #24 - Interior	000	Girl's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	500	152.1	$21.3	None Proposed	6	304.2	0.3042	500	350	152.1	106.47	Automatic Wall Switch Occupancy Sensor	1	45.63	6.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	000	P.E. Office	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$62.2	None Proposed	2	101.4	0.1014	4380	4380	444.132	444.132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #24 - Interior	000	Caffeteria	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	90	4563	4.563	4380	19985.94	$2,798.0	None Proposed	90	4563	4.563	4380	3066	19985.94	13990.158	Automatic Wall Switch Occupancy Sensor	1	5995.782	839.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	000	Gym	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	28	1419.6	1.4196	4380	6217.848	$870.5	None Proposed	28	1419.6	1.4196	4380	3066	6217.848	4352.4936	Automatic Wall Switch Occupancy Sensor	1	1865.3544	261.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	000	Library	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,236.2	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	370.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	000	Room B-1	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	30	3360	3.36	4380	14716.8	$2,060.4	None Proposed	30	3360	3.36	4380	3066	14716.8	10301.76	Automatic Wall Switch Occupancy Sensor	1	4415.04	618.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	000	Boy's Bathroom	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	500	672	$94.1	None Proposed	12	1344	1.344	500	350	672	470.4	Automatic Wall Switch Occupancy Sensor	1	201.6	28.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	000	Storage/Plumbing Room	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	20	2240	2.24	500	1120	$156.8	None Proposed	20	2240	2.24	500	350	1120	784	Automatic Wall Switch Occupancy Sensor	1	336	47.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	000	Storage Room	1X4 Suspended Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	19	963.3	0.9633	500	481.65	$67.4	None Proposed	19	963.3	0.9633	500	350	481.65	337.155	Automatic Wall Switch Occupancy Sensor	1	144.495	20.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #24 - Interior	000	Boiler	1x4 Fixtures w/ 1-T12 Lamp Fixture w/ Magnetic Ballast	10	428	0.428	4380	1874.64	$262.4	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	10	243.2	0.2432	4380	3066	1065.216	745.6512	Automatic Wall Switch Occupancy Sensor	1	1128.9888	158.1	$35.0	$5.0	$65.0	$63.5	$45.0	$695.0	$463.5	$1,158.5
PS #24 - Interior	000	Utility Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	405.6	0.4056	500	202.8	$28.4	None Proposed	8	405.6	0.4056	500	350	202.8	141.96	Automatic Wall Switch Occupancy Sensor	1	60.84	8.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	001	Nurse Office	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$412.1	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Automatic Wall Switch Occupancy Sensor	1	883.008	123.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	001	Girl's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$7.1	None Proposed	2	101.4	0.1014	500	500	50.7	50.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #24 - Interior	001	Room 101	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,236.2	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	370.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	001	Room 101A	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	1	112	0.112	4380	490.56	$68.7	None Proposed	1	112	0.112	4380	4380	490.56	490.56	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #24 - Interior	001	Room 102	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,236.2	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	370.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	001	Room 102A	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	1	112	0.112	500	56	$7.8	None Proposed	1	112	0.112	500	500	56	56	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #24 - Interior	001	Room 103	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,236.2	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	370.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	001	Room 103A	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	1	112	0.112	500	56	$7.8	None Proposed	1	112	0.112	500	500	56	56	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #24 - Interior	001	Room 104	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,236.2	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	370.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	001	Room 104A	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$15.7	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #24 - Interior	001	Room 105	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,236.2	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	370.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	001	Main Office	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	15	1680	1.68	4380	7358.4	$1,030.2	None Proposed	15	1680	1.68	4380	3066	7358.4	5150.88	Automatic Wall Switch Occupancy Sensor	1	2207.52	309.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	001	Guidance Office	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$124.4	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Automatic Wall Switch Occupancy Sensor	1	266.4792	37.3	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	001	Room 108	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,236.2	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	370.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	001	Room 108A	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	8	896	0.896	4380	3924.48	$549.4	None Proposed	8	896	0.896	4380	3066	3924.48	2747.136	Automatic Wall Switch Occupancy Sensor	1	1177.344	164.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	001	Room 109	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,236.2	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	370.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	001	Room 109A	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	8	896	0.896	4380	3924.48	$549.4	None Proposed	8	896	0.896	4380	3066	3924.48	2747.136	Automatic Wall Switch Occupancy Sensor	1	1177.344	164.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	001	Room 110	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,236.2	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	370.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	001	Room 110A	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	336	0.336	4380	1471.68	$206.0	None Proposed	3	336	0.336	4380	3066	1471.68	1030.176	Automatic Wall Switch Occupancy Sensor	1	441.504	61.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	001	Room 111	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,236.2	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	370.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	001	Child Safety	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	448	0.448	4380	1962.24	$274.7	None Proposed	4	448	0.448	4380	3066	1962.24	1373.568	Automatic Wall Switch Occupancy Sensor	1	588.672	82.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	001	Room 112	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,236.2	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	370.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	001	Room 113	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,236.2	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	370.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	001	Room 113A	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	336	0.336	4380	1471.68	$206.0	None Proposed	3	336	0.336	4380	3066	1471.68	1030.176	Automatic Wall Switch Occupancy Sensor	1	441.504	61.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	001	Boy's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$7.1	None Proposed	2	101.4	0.1014	500	500	50.7	50.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #24 - Interior	001	Teacher's Lounge	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$412.1	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Automatic Wall Switch Occupancy Sensor	1	883.008	123.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	001	Auditarium	400W MH High Bay Fixture	36	16488	16.488	4380	72217.44	$10,110.4	Replace 400W Fixture with Induction Light Fixture	36	7740	7.74	4380	3066	33901.2	23730.84	Automatic Wall Switch Occupancy Sensor	2	48486.6	6,788.1	$0.0	$485.0	$137.0	$127.0	$90.0	$5,112.0	$17,714.0	$22,826.0
PS #24 - Interior	001	Auditarium Hallways	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	30	1521	1.521	4380	6661.98	$932.7	None Proposed	30	1521	1.521	4380	3066	6661.98	4663.386	Automatic Wall Switch Occupancy Sensor	1	1998.594	279.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	001	Stage	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	10	507	0.507	4380	2220.66	$310.9	None Proposed	10	507	0.507	4380	3066	2220.66	1554.462	Automatic Wall Switch Occupancy Sensor	1	666.198	93.3	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	001	1st Floor Hallway	1X4 Suspended Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	41	2078.7	2.0787	8760	18209.412	$2,549.3	None Proposed	41	2078.7	2.0787	8760	6132	18209.412	12746.5884	Automatic Wall Switch Occupancy Sensor	2	5462.8236	764.8	$0.0	$0.0	$0.0	$127.0	$90.0	$180.0	$254.0	$434.0
PS #24 - Interior	002	Room 201	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,236.2	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	370.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	002	Room 201A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$3.5	None Proposed	1	50.7	0.0507	500	350	25.35	17.745	Automatic Wall Switch Occupancy Sensor	1	7.605	1.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	002	Room 202	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,236.2	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	370.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	002	Room 202A	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	10	1120	1.12	500	560	$78.4	None Proposed	10	1120	1.12	500	350	560	392	Automatic Wall Switch Occupancy Sensor	1	168	23.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	002	Room 203	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,236.2	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	370.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	002	Room 204	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,236.2	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	370.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	002	Room 204A	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	336	0.336	500	168	$23.5	None Proposed	3	336	0.336	500	350	168	117.6	Automatic Wall Switch Occupancy Sensor	1	50.4	7.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	002	Room 205	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,236.2	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	370.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	002	Room 205A	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	448	0.448	500	224	$31.4	None Proposed	4	448	0.448	500	350	224	156.8	Automatic Wall Switch Occupancy Sensor	1	67.2	9.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	002	Room 206	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,236.2	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	370.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	002	Room 207	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$824.1	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	247.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	002	Room 208	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,236.2	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	370.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	002	Room 208A	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	448	0.448	500	224	$31.4	None Proposed	4	448	0.448	500	350	224	156.8	Automatic Wall Switch Occupancy Sensor	1	67.2	9.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	002	Room 209	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,236.2	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	370.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	002	Room 210	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,236.2	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	370.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	002	Room 210A	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	336	0.336	500	168	$23.5	None Proposed	3	336	0.336	500	350	168	117.6	Automatic Wall Switch Occupancy Sensor	1	50.4	7.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #24 - Interior	002	Room 211	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,236.2	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	370.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	002	Room 211A	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	448	0.448	500	224	$31.4	None Proposed	4	448	0.448	500	350	224	156.8	Automatic Wall Switch Occupancy Sensor	1	67.2	9.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	002	Room 212	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,236.2	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	370.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	002	Boy's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$7.1	None Proposed	2	101.4	0.1014	500	500	50.7	50.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #24 - Interior	002	Teacher's Lounge	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	7	784	0.784	4380	3433.92	$480.7	None Proposed	7	784	0.784	4380	3066	3433.92	2403.744	Automatic Wall Switch Occupancy Sensor	1	1030.176	144.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	002	Room 213	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,236.2	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	370.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	002	Room 213A	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	336	0.336	500	168	$23.5	None Proposed	3	336	0.336	500	350	168	117.6	Automatic Wall Switch Occupancy Sensor	1	50.4	7.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	002	Room 214	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	16	1792	1.792	4380	7848.96	$1,098.9	None Proposed	16	1792	1.792	4380	3066	7848.96	5494.272	Automatic Wall Switch Occupancy Sensor	1	2354.688	329.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	002	Girl's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$7.1	None Proposed	2	101.4	0.1014	500	500	50.7	50.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #24 - Interior	002	Principal's Office	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$412.1	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Automatic Wall Switch Occupancy Sensor	1	883.008	123.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	002	2nd Floor Hallways	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	48	5376	5.376	8760	47093.76	$6,593.1	None Proposed	48	5376	5.376	8760	6132	47093.76	32965.632	Automatic Wall Switch Occupancy Sensor	1	14128.128	1,977.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	003	Room 301	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,236.2	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	370.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	003	Room 301A	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	336	0.336	500	168	$23.5	None Proposed	3	336	0.336	500	350	168	117.6	Automatic Wall Switch Occupancy Sensor	1	50.4	7.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	003	Room 302	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,236.2	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	370.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	003	Room 302A	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	448	0.448	500	224	$31.4	None Proposed	4	448	0.448	500	350	224	156.8	Automatic Wall Switch Occupancy Sensor	1	67.2	9.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	003	Room 303	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,236.2	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	370.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	003	Room 304	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,236.2	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	370.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	003	Room 304A	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$15.7	None Proposed	2	224	0.224	500	350	112	78.4	Automatic Wall Switch Occupancy Sensor	1	33.6	4.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	003	Room 305	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	17	1904	1.904	4380	8339.52	$1,167.5	None Proposed	17	1904	1.904	4380	3066	8339.52	5837.664	Automatic Wall Switch Occupancy Sensor	1	2501.856	350.3	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	003	Room 305A	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	8	896	0.896	500	448	$62.7	None Proposed	8	896	0.896	500	350	448	313.6	Automatic Wall Switch Occupancy Sensor	1	134.4	18.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	003	Room 306	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,236.2	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	370.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	003	Room 307	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$824.1	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	247.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	003	Room 308	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	21	2352	2.352	4380	10301.76	$1,442.2	None Proposed	21	2352	2.352	4380	3066	10301.76	7211.232	Automatic Wall Switch Occupancy Sensor	1	3090.528	432.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	003	Room 308A	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	448	0.448	500	224	$31.4	None Proposed	4	448	0.448	500	350	224	156.8	Automatic Wall Switch Occupancy Sensor	1	67.2	9.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	003	Room 309	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,236.2	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	370.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	003	Room 310	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,236.2	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	370.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	003	Room 310A	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	336	0.336	500	168	$23.5	None Proposed	3	336	0.336	500	350	168	117.6	Automatic Wall Switch Occupancy Sensor	1	50.4	7.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	003	Room 311	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,236.2	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	370.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	003	Room 311A	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	448	0.448	500	224	$31.4	None Proposed	4	448	0.448	500	350	224	156.8	Automatic Wall Switch Occupancy Sensor	1	67.2	9.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	003	Room 312	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,236.2	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	370.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	003	Room 313	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,236.2	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	370.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	003	Room 313A	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	336	0.336	500	168	$23.5	None Proposed	3	336	0.336	500	350	168	117.6	Automatic Wall Switch Occupancy Sensor	1	50.4	7.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	003	Boy's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$7.1	None Proposed	2	101.4	0.1014	500	500	50.7	50.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #24 - Interior	003	Girl's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$7.1	None Proposed	2	101.4	0.1014	500	500	50.7	50.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #24 - Interior	003	Teacher's Lounge	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	448	0.448	4380	1962.24	$274.7	None Proposed	4	448	0.448	4380	3066	1962.24	1373.568	Automatic Wall Switch Occupancy Sensor	1	588.672	82.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	003	Room 314	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	15	1680	1.68	4380	7358.4	$1,030.2	None Proposed	15	1680	1.68	4380	3066	7358.4	5150.88	Automatic Wall Switch Occupancy Sensor	1	2207.52	309.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	003	Room 315	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,236.2	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	370.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	003	Room 315A	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	336	0.336	500	168	$23.5	None Proposed	3	336	0.336	500	350	168	117.6	Automatic Wall Switch Occupancy Sensor	1	50.4	7.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	003	Room 316	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	15	1680	1.68	4380	7358.4	$1,030.2	None Proposed	15	1680	1.68	4380	3066	7358.4	5150.88	Automatic Wall Switch Occupancy Sensor	1	2207.52	309.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	003	Room 317	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,236.2	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	370.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	003	Room 335	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$412.1	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Automatic Wall Switch Occupancy Sensor	1	883.008	123.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #24 - Interior	003	3rd Floor Hallways	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	50	5600	5.6	8760	49056	$6,867.8	None Proposed	50	5600	5.6	8760	6132	49056	34339.2	Automatic Wall Switch Occupancy Sensor	2	14716.8	2,060.4	$0.0	$0.0	$0.0	$127.0	$90.0	$180.0	$254.0	$434.0
PS #25 - Exterior	000	Exterior	250W MH Fixture	15	4275	4.275	4380	18724.5	$2,808.7	Replace 250W Fixture with Induction Light Fixture	15	1650	1.65	4380	4380	7227	7227	None Proposed	0	11497.5	1,724.6	$0.0	$390.0	$137.0	$0.0	$0.0	$2,055.0	$5,850.0	$7,905.0
PS #25 - Interior	000	Boiler Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$133.2	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Automatic Wall Switch Occupancy Sensor	1	266.4792	40.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	000	Girl's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	500	152.1	$22.8	None Proposed	6	304.2	0.3042	500	350	152.1	106.47	Automatic Wall Switch Occupancy Sensor	1	45.63	6.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	000	Custodian Office	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$7.6	None Proposed	2	101.4	0.1014	500	500	50.7	50.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #25 - Interior	000	Electrical Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$33.3	None Proposed	1	50.7	0.0507	4380	4380	222.066	222.066	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #25 - Interior	000	Storage Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$7.6	None Proposed	2	101.4	0.1014	500	500	50.7	50.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #25 - Interior	000	Boy's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	500	101.4	$15.2	None Proposed	4	202.8	0.2028	500	350	101.4	70.98	Automatic Wall Switch Occupancy Sensor	1	30.42	4.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	000	Caffeteria Storage	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	253.5	0.2535	500	126.75	$19.0	None Proposed	5	253.5	0.2535	500	350	126.75	88.725	Automatic Wall Switch Occupancy Sensor	1	38.025	5.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	000	Air Compressor Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$133.2	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Automatic Wall Switch Occupancy Sensor	1	266.4792	40.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	000	B20	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$133.2	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Automatic Wall Switch Occupancy Sensor	1	266.4792	40.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	000	Staff Bathroom	100W Incandescent Fixture	1	100	0.1	500	50	$7.5	Replace 100W Incandescent Fixture with 25W CFL	1	25	0.025	500	500	12.5	12.5	None Proposed	0	37.5	5.6	$0.0	$7.0	$20.0	$0.0	$0.0	$20.0	$7.0	$27.0
PS #25 - Interior	000	Boys' Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$11.4	None Proposed	3	152.1	0.1521	500	350	76.05	53.235	Automatic Wall Switch Occupancy Sensor	1	22.815	3.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	000	Girl's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$7.6	None Proposed	2	101.4	0.1014	500	500	50.7	50.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #25 - Interior	000	Room 21	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	000	Room 22	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	000	Room 23	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	000	Room 24	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	000	Room 26	1x4 Fixtures w/ 1-T12 Lamp Fixture w/ Magnetic Ballast	15	642	0.642	4380	2811.96	$421.8	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	15	364.8	0.3648	4380	3066	1597.824	1118.4768	Automatic Wall Switch Occupancy Sensor	1	1693.4832	254.0	$35.0	$5.0	$65.0	$63.5	$45.0	$1,020.0	$663.5	$1,683.5
PS #25 - Interior	000	Shop	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	30	1521	1.521	500	760.5	$114.1	None Proposed	30	1521	1.521	500	350	760.5	532.35	Automatic Wall Switch Occupancy Sensor	1	228.15	34.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	000	Music Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	20	1014	1.014	4380	4441.32	$666.2	None Proposed	20	1014	1.014	4380	3066	4441.32	3108.924	Automatic Wall Switch Occupancy Sensor	1	1332.396	199.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	000	Pump Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	4380	3330.99	$499.6	None Proposed	15	760.5	0.7605	4380	3066	3330.99	2331.693	Automatic Wall Switch Occupancy Sensor	1	999.297	149.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	000	VP's Storage	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	4380	1332.396	$199.9	None Proposed	6	304.2	0.3042	4380	3066	1332.396	932.6772	Automatic Wall Switch Occupancy Sensor	1	399.7188	60.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	000	Electrical Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	253.5	0.2535	4380	1110.33	$166.5	None Proposed	5	253.5	0.2535	4380	3066	1110.33	777.231	Automatic Wall Switch Occupancy Sensor	1	333.099	50.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	001	101	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	9	456.3	0.4563	4380	1998.594	$299.8	None Proposed	9	456.3	0.4563	4380	3066	1998.594	1399.0158	Automatic Wall Switch Occupancy Sensor	1	599.5782	89.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	001	102	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	9	456.3	0.4563	4380	1998.594	$299.8	None Proposed	9	456.3	0.4563	4380	3066	1998.594	1399.0158	Automatic Wall Switch Occupancy Sensor	1	599.5782	89.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	001	103	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$399.7	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Automatic Wall Switch Occupancy Sensor	1	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	001	104	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$66.6	None Proposed	2	101.4	0.1014	4380	4380	444.132	444.132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #25 - Interior	001	105	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	253.5	0.2535	4380	1110.33	$166.5	None Proposed	5	253.5	0.2535	4380	4380	1110.33	1110.33	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #25 - Interior	001	107	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	13	659.1	0.6591	4380	2886.858	$433.0	None Proposed	13	659.1	0.6591	4380	3066	2886.858	2020.8006	Automatic Wall Switch Occupancy Sensor	1	866.0574	129.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	001	109	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$399.7	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Automatic Wall Switch Occupancy Sensor	1	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	001	110	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$466.3	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	139.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	001	112	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	9	456.3	0.4563	4380	1998.594	$299.8	None Proposed	9	456.3	0.4563	4380	3066	1998.594	1399.0158	Automatic Wall Switch Occupancy Sensor	1	599.5782	89.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	001	Nurse Office	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$66.6	None Proposed	2	101.4	0.1014	4380	4380	444.132	444.132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #25 - Interior	001	Boy's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$11.4	None Proposed	3	152.1	0.1521	500	500	76.05	76.05	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #25 - Interior	001	Girl's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$11.4	None Proposed	3	152.1	0.1521	500	500	76.05	76.05	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #25 - Interior	001	Rom 121	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	001	Rom 122	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$466.3	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	139.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	001	Rom 123	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$466.3	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	139.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	001	Rom 124	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$466.3	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	139.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	001	Rom 125	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	4380	3330.99	$499.6	None Proposed	15	760.5	0.7605	4380	3066	3330.99	2331.693	Automatic Wall Switch Occupancy Sensor	1	999.297	149.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	001	Rom 126	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	4380	3330.99	$499.6	None Proposed	15	760.5	0.7605	4380	3066	3330.99	2331.693	Automatic Wall Switch Occupancy Sensor	1	999.297	149.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	001	Gym	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$133.2	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Automatic Wall Switch Occupancy Sensor	1	266.4792	40.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	001	1st Floor Hallways (Old & New Wing)	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	42	2129.4	2.1294	8760	18653.544	$2,798.0	None Proposed	42	2129.4	2.1294	8760	6132	18653.544	13057.4808	Automatic Wall Switch Occupancy Sensor	1	5596.0632	839.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	002	Room 201	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$399.7	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Automatic Wall Switch Occupancy Sensor	1	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	002	Room 202	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$399.7	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Automatic Wall Switch Occupancy Sensor	1	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	002	Room 203	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$399.7	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Automatic Wall Switch Occupancy Sensor	1	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	002	Room 204	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$399.7	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Automatic Wall Switch Occupancy Sensor	1	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	002	Boy's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$11.4	None Proposed	3	152.1	0.1521	500	350	76.05	53.235	Automatic Wall Switch Occupancy Sensor	1	22.815	3.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	002	Girl's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$11.4	None Proposed	3	152.1	0.1521	500	350	76.05	53.235	Automatic Wall Switch Occupancy Sensor	1	22.815	3.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	002	Teacher's Lounge	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$133.2	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Automatic Wall Switch Occupancy Sensor	1	266.4792	40.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	002	Room 209	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$399.7	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Automatic Wall Switch Occupancy Sensor	1	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	002	Room 210	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$399.7	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Automatic Wall Switch Occupancy Sensor	1	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	002	Room 211	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	9	456.3	0.4563	4380	1998.594	$299.8	None Proposed	9	456.3	0.4563	4380	3066	1998.594	1399.0158	Automatic Wall Switch Occupancy Sensor	1	599.5782	89.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	002	Room 212	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	9	456.3	0.4563	4380	1998.594	$299.8	None Proposed	9	456.3	0.4563	4380	3066	1998.594	1399.0158	Automatic Wall Switch Occupancy Sensor	1	599.5782	89.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #25 - Interior	002	Room 220	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$133.2	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Automatic Wall Switch Occupancy Sensor	1	266.4792	40.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	002	Boy's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	500	101.4	$15.2	None Proposed	4	202.8	0.2028	500	350	101.4	70.98	Automatic Wall Switch Occupancy Sensor	1	30.42	4.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	002	Girl's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$7.6	None Proposed	2	101.4	0.1014	500	500	50.7	50.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #25 - Interior	002	Room 221	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	4380	3330.99	$499.6	None Proposed	15	760.5	0.7605	4380	3066	3330.99	2331.693	Automatic Wall Switch Occupancy Sensor	1	999.297	149.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	002	Room 222	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	4380	3330.99	$499.6	None Proposed	15	760.5	0.7605	4380	3066	3330.99	2331.693	Automatic Wall Switch Occupancy Sensor	1	999.297	149.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	002	Room 223	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	4380	3330.99	$499.6	None Proposed	15	760.5	0.7605	4380	3066	3330.99	2331.693	Automatic Wall Switch Occupancy Sensor	1	999.297	149.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	002	Room 224	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	4380	3330.99	$499.6	None Proposed	15	760.5	0.7605	4380	3066	3330.99	2331.693	Automatic Wall Switch Occupancy Sensor	1	999.297	149.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	002	Library	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	31	1571.7	1.5717	4380	6884.046	$1,032.6	None Proposed	31	1571.7	1.5717	4380	3066	6884.046	4818.8322	Automatic Wall Switch Occupancy Sensor	2	2065.2138	309.8	$0.0	$0.0	$0.0	$127.0	$90.0	$180.0	$254.0	$434.0
PS #25 - Interior	002	Art Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$133.2	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Automatic Wall Switch Occupancy Sensor	1	266.4792	40.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	002	Science Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	253.5	0.2535	4380	1110.33	$166.5	None Proposed	5	253.5	0.2535	4380	3066	1110.33	777.231	Automatic Wall Switch Occupancy Sensor	1	333.099	50.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	002	2nd Floor Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	8760	6661.98	$999.3	None Proposed	15	760.5	0.7605	8760	6132	6661.98	4663.386	Automatic Wall Switch Occupancy Sensor	1	1998.594	299.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	003	Room 301	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	9	456.3	0.4563	4380	1998.594	$299.8	None Proposed	9	456.3	0.4563	4380	3066	1998.594	1399.0158	Automatic Wall Switch Occupancy Sensor	1	599.5782	89.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	003	Room 302	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$399.7	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Automatic Wall Switch Occupancy Sensor	1	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	003	Room 303	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$399.7	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Automatic Wall Switch Occupancy Sensor	1	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	003	Room 304	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$399.7	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Automatic Wall Switch Occupancy Sensor	1	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	003	Boy's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	253.5	0.2535	500	126.75	$19.0	None Proposed	5	253.5	0.2535	500	350	126.75	88.725	Automatic Wall Switch Occupancy Sensor	1	38.025	5.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	003	Room 305	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$399.7	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Automatic Wall Switch Occupancy Sensor	1	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	003	Girl's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	253.5	0.2535	500	126.75	$19.0	None Proposed	5	253.5	0.2535	500	350	126.75	88.725	Automatic Wall Switch Occupancy Sensor	1	38.025	5.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	003	Room 307	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$399.7	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Automatic Wall Switch Occupancy Sensor	1	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	003	Room 309	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$399.7	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Automatic Wall Switch Occupancy Sensor	1	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	003	Room 310	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$399.7	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Automatic Wall Switch Occupancy Sensor	1	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	003	Room 311	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	11	557.7	0.5577	4380	2442.726	$366.4	None Proposed	11	557.7	0.5577	4380	3066	2442.726	1709.9082	Automatic Wall Switch Occupancy Sensor	1	732.8178	109.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	003	Room 312	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	11	557.7	0.5577	4380	2442.726	$366.4	None Proposed	11	557.7	0.5577	4380	3066	2442.726	1709.9082	Automatic Wall Switch Occupancy Sensor	1	732.8178	109.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	003	Room 320	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$133.2	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Automatic Wall Switch Occupancy Sensor	1	266.4792	40.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	003	Boy's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	500	101.4	$15.2	None Proposed	4	202.8	0.2028	500	350	101.4	70.98	Automatic Wall Switch Occupancy Sensor	1	30.42	4.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	003	Girl's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	500	101.4	$15.2	None Proposed	4	202.8	0.2028	500	350	101.4	70.98	Automatic Wall Switch Occupancy Sensor	1	30.42	4.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	003	Room 321	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	4380	3330.99	$499.6	None Proposed	15	760.5	0.7605	4380	3066	3330.99	2331.693	Automatic Wall Switch Occupancy Sensor	1	999.297	149.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	003	Room 323	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	4380	3330.99	$499.6	None Proposed	15	760.5	0.7605	4380	3066	3330.99	2331.693	Automatic Wall Switch Occupancy Sensor	1	999.297	149.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	003	Room 324	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	760.5	0.7605	4380	3330.99	$499.6	None Proposed	15	760.5	0.7605	4380	3066	3330.99	2331.693	Automatic Wall Switch Occupancy Sensor	1	999.297	149.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	003	Room 325	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	30	1521	1.521	4380	6661.98	$999.3	None Proposed	30	1521	1.521	4380	3066	6661.98	4663.386	Automatic Wall Switch Occupancy Sensor	1	1998.594	299.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	003	Room 331	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	19	963.3	0.9633	4380	4219.254	$632.9	None Proposed	19	963.3	0.9633	4380	3066	4219.254	2953.4778	Automatic Wall Switch Occupancy Sensor	1	1265.7762	189.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #25 - Interior	003	3rd Floor Hallways	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	8760	7994.376	$1,199.2	None Proposed	18	912.6	0.9126	8760	6132	7994.376	5596.0632	Automatic Wall Switch Occupancy Sensor	1	2398.3128	359.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Exterior	000	Exterior	250W MH Fixture	14	3990	3.99	4380	17476.2	$3,320.5	Replace 250W Fixture with Induction Light Fixture	14	1540	1.54	4380	4380	6745.2	6745.2	None Proposed	0	10731	2,038.9	$0.0	$390.0	$137.0	$0.0	$0.0	$1,918.0	$5,460.0	$7,378.0
PS #6 - Interior	000	Kitchen	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	4380	1332.396	$253.2	None Proposed	6	304.2	0.3042	4380	3066	1332.396	932.6772	Automatic Wall Switch Occupancy Sensor	1	399.7188	75.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	000	Caffeteria	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$886.0	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Automatic Wall Switch Occupancy Sensor	1	1399.0158	265.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	000	Caffeteria	400W MH High Bay Fixture	10	4580	4.58	4380	20060.4	$3,811.5	Replace 400W Fixture with Induction Light Fixture	10	2150	2.15	4380	3066	9417	6591.9	Automatic Wall Switch Occupancy Sensor	1	13468.5	2,559.0	$0.0	$485.0	$137.0	$63.5	$45.0	$1,415.0	$4,913.5	$6,328.5
PS #6 - Interior	000	Men's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	405.6	0.4056	500	202.8	$38.5	None Proposed	8	405.6	0.4056	500	350	202.8	141.96	Automatic Wall Switch Occupancy Sensor	1	60.84	11.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	000	Womens Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	500	152.1	$28.9	None Proposed	6	304.2	0.3042	500	350	152.1	106.47	Automatic Wall Switch Occupancy Sensor	1	45.63	8.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	000	Gym	400W MH High Bay Fixture	30	13740	13.74	4380	60181.2	$11,434.4	Replace 400W Fixture with Induction Light Fixture	30	6450	6.45	4380	3066	28251	19775.7	Automatic Wall Switch Occupancy Sensor	1	40405.5	7,677.0	$0.0	$485.0	$137.0	$63.5	$45.0	$4,155.0	$14,613.5	$18,768.5
PS #6 - Interior	000	Gym	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$506.3	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Automatic Wall Switch Occupancy Sensor	1	799.4376	151.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	000	Pool	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	11	1232	1.232	4380	5396.16	$1,025.3	None Proposed	11	1232	1.232	4380	3066	5396.16	3777.312	Automatic Wall Switch Occupancy Sensor	1	1618.848	307.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	000	Pool	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$168.8	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Automatic Wall Switch Occupancy Sensor	1	266.4792	50.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	000	Boy's Locker Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	405.6	0.4056	4380	1776.528	$337.5	None Proposed	8	405.6	0.4056	4380	3066	1776.528	1243.5696	Automatic Wall Switch Occupancy Sensor	1	532.9584	101.3	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	000	Girl's Locker Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	4380	1332.396	$253.2	None Proposed	6	304.2	0.3042	4380	3066	1332.396	932.6772	Automatic Wall Switch Occupancy Sensor	1	399.7188	75.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	000	Drama (Studio) Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	30	1521	1.521	4380	6661.98	$1,265.8	None Proposed	30	1521	1.521	4380	3066	6661.98	4663.386	Automatic Wall Switch Occupancy Sensor	1	1998.594	379.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	000	Custodian's Office	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	500	152.1	$28.9	None Proposed	6	304.2	0.3042	500	350	152.1	106.47	Automatic Wall Switch Occupancy Sensor	1	45.63	8.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	000	Boiler Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	32	1622.4	1.6224	4380	7106.112	$1,350.2	None Proposed	32	1622.4	1.6224	4380	3066	7106.112	4974.2784	Automatic Wall Switch Occupancy Sensor	1	2131.8336	405.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	001	Womens Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$9.6	None Proposed	2	101.4	0.1014	500	350	50.7	35.49	Automatic Wall Switch Occupancy Sensor	1	15.21	2.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #6 - Interior	001	Room 99	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,677.7	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	503.3	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	001	Room 100	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,677.7	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	503.3	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	001	Room 101	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	001	Room 101W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	001	Room 102	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	001	Room 102W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	001	Teacher's Room	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	001	Storage Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$14.4	None Proposed	3	152.1	0.1521	500	350	76.05	53.235	Automatic Wall Switch Occupancy Sensor	1	22.815	4.3	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	001	Storage Room	250W Metal Halide Fixtures	1	285	0.285	500	142.5	$27.1	Replace Metal Halide Fixtures with 4-Lamp Fluorescent Highbay Fixtures	1	110	0.11	500	500	55	55	None Proposed	0	87.5	16.6	$145.0	$70.0	$100.0	$0.0	$0.0	$100.0	$215.0	$315.0
PS #6 - Interior	001	Teacher's Lounge	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	336	0.336	4380	1471.68	$279.6	None Proposed	3	336	0.336	4380	3066	1471.68	1030.176	Automatic Wall Switch Occupancy Sensor	1	441.504	83.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	001	Girl's Bathroom	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	001	Room 104	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	001	Storage Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	253.5	0.2535	500	126.75	$24.1	None Proposed	5	253.5	0.2535	500	350	126.75	88.725	Automatic Wall Switch Occupancy Sensor	1	38.025	7.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	001	Storage Room	250W Metal Halide Fixtures	1	285	0.285	500	142.5	$27.1	Replace Metal Halide Fixtures with 4-Lamp Fluorescent Highbay Fixtures	1	110	0.11	500	500	55	55	None Proposed	0	87.5	16.6	$145.0	$70.0	$100.0	$0.0	$0.0	$100.0	$215.0	$315.0
PS #6 - Interior	001	Auditarium	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	10	507	0.507	4380	2220.66	$421.9	None Proposed	10	507	0.507	4380	3066	2220.66	1554.462	Automatic Wall Switch Occupancy Sensor	1	666.198	126.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	001	Auditarium	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$168.8	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Automatic Wall Switch Occupancy Sensor	1	266.4792	50.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	001	Room 105	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	001	Room 105W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	001	Room 106	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	001	Room 106W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	001	Room 107	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	001	Room 107W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	001	Boy's Bathroom	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	001	Room 108	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	001	Room 108W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	001	Room 109	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	001	Room 109W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	001	Room 110	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	001	Room 110W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	001	Principal's Office	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	448	0.448	4380	1962.24	$372.8	None Proposed	4	448	0.448	4380	4380	1962.24	1962.24	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	001	Attendance Office	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	4380	981.12	$186.4	None Proposed	2	224	0.224	4380	4380	981.12	981.12	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	001	Room 111	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Ceiling Mounted Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$103.0	$73.5	$73.5	$103.0	$176.5
PS #6 - Interior	001	Room 111W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	001	Room 112	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	001	Room 112W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	001	Room 113	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	001	Room 113W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	001	1st Floor Hallway & Stairways	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	32	3584	3.584	8760	31395.84	$5,965.2	None Proposed	32	3584	3.584	8760	6132	31395.84	21977.088	Automatic Wall Switch Occupancy Sensor	2	9418.752	1,789.6	$0.0	$0.0	$0.0	$127.0	$90.0	$180.0	$254.0	$434.0
PS #6 - Interior	002	Room 201	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	002	Room 201W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	002	Room 202	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	002	Room 202W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	002	Room 203	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	002	Room 203W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	002	Girl's Bathroom	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	002	Teacher's Lounge	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	336	0.336	4380	1471.68	$279.6	None Proposed	3	336	0.336	4380	4380	1471.68	1471.68	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	002	Room 204	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	002	Room 204W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #6 - Interior	002	Room 205	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	002	Room 205W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	002	Room 206	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	002	Room 206W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	002	Room 207	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	002	Room 207W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	002	Boy's Bathroom	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	002	Room 208	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	002	Room 208W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	002	Room 209W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	002	Balcony	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	7	354.9	0.3549	500	177.45	$33.7	None Proposed	7	354.9	0.3549	500	500	177.45	177.45	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	002	Room 210	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	002	Room 210W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	002	Room 211	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	002	Room 211W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	002	Room 212	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	002	Room 212W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	002	Room 213	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	002	Room 213W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	002	Room 214	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$1,118.5	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	335.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	002	Hallway (leading to Library)	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$559.2	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Automatic Wall Switch Occupancy Sensor	1	883.008	167.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	002	Library	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	33	3696	3.696	4380	16188.48	$3,075.8	None Proposed	33	3696	3.696	4380	3066	16188.48	11331.936	Automatic Wall Switch Occupancy Sensor	2	4856.544	922.7	$0.0	$0.0	$0.0	$127.0	$90.0	$180.0	$254.0	$434.0
PS #6 - Interior	002	Boy's Bathroom	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	002	Girl's Bathroom	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	002	2nd Floor Hallway & Stairways	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	36	4032	4.032	8760	35320.32	$6,710.9	None Proposed	36	4032	4.032	8760	6132	35320.32	24724.224	Automatic Wall Switch Occupancy Sensor	2	10596.096	2,013.3	$0.0	$0.0	$0.0	$127.0	$90.0	$180.0	$254.0	$434.0
PS #6 - Interior	003	Room 301	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	003	Room 301W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	003	Room 302	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	003	Room 302W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	003	Room 303	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	003	Room 303W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	003	Room 304	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	003	Room 304W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	003	Room 305	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	003	Room 305W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	003	Girl's Bathroom	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	003	Room 306	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	003	Room 306W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	003	Room 307	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	003	Room 307W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	003	Room 308	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	003	Room 308W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	003	Room 309	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	003	Room 309W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	003	Boy's Bathroom	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	003	Room 310	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	003	Room 310W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	003	Room 310C	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	448	0.448	4380	1962.24	$372.8	None Proposed	4	448	0.448	4380	3066	1962.24	1373.568	Automatic Wall Switch Occupancy Sensor	1	588.672	111.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #6 - Interior	003	Room 311	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	003	Room 311W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	4380	981.12	$186.4	None Proposed	2	224	0.224	4380	4380	981.12	981.12	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	003	Room 312	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	003	Room 312W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	003	Storage Room	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	1	112	0.112	500	56	$10.6	None Proposed	1	112	0.112	500	500	56	56	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	003	Teacher's Lounge	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	500	336	$63.8	None Proposed	6	672	0.672	500	350	336	235.2	Automatic Wall Switch Occupancy Sensor	1	100.8	19.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	003	Science Lab	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	17	1904	1.904	4380	8339.52	$1,584.5	None Proposed	17	1904	1.904	4380	4380	8339.52	8339.52	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	003	Room 313	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	003	Room 313W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	003	Room 314	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	003	Room 314W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	003	Room 315	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	1008	1.008	4380	4415.04	$838.9	None Proposed	9	1008	1.008	4380	3066	4415.04	3090.528	Automatic Wall Switch Occupancy Sensor	1	1324.512	251.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	003	Room 315W	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	003	Room 319	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	20	2240	2.24	4380	9811.2	$1,864.1	None Proposed	20	2240	2.24	4380	3066	9811.2	6867.84	Automatic Wall Switch Occupancy Sensor	1	2943.36	559.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	003	Room 320	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	20	2240	2.24	4380	9811.2	$1,864.1	None Proposed	20	2240	2.24	4380	3066	9811.2	6867.84	Automatic Wall Switch Occupancy Sensor	1	2943.36	559.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #6 - Interior	003	Girl's Bathroom	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	003	Girl's Bathroom	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	1	63	0.063	500	31.5	$6.0	None Proposed	1	63	0.063	500	500	31.5	31.5	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	003	Boy's Bathroom	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$21.3	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	003	Boy's Bathroom	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	1	63	0.063	500	31.5	$6.0	None Proposed	1	63	0.063	500	500	31.5	31.5	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #6 - Interior	003	3rd Floor Hallways & Stairways	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	24	2688	2.688	8760	23546.88	$4,473.9	None Proposed	24	2688	2.688	8760	6132	23546.88	16482.816	Automatic Wall Switch Occupancy Sensor	1	7064.064	1,342.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Exterior	000	Exterior	250W MH Fixture	12	3420	3.42	4380	14979.6	$2,246.9	Replace 250W Fixture with Induction Light Fixture	12	1320	1.32	4380	4380	5781.6	5781.6	None Proposed	0	9198	1,379.7	$0.0	$390.0	$137.0	$0.0	$0.0	$1,644.0	$4,680.0	$6,324.0
PS #8 - Interior	000	B-1	1X4 Suspended Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	709.8	0.7098	4380	3108.924	$466.3	None Proposed	14	709.8	0.7098	4380	3066	3108.924	2176.2468	Automatic Wall Switch Occupancy Sensor	1	932.6772	139.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	000	B-2	1X4 Suspended Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$399.7	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Automatic Wall Switch Occupancy Sensor	1	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	000	Kitchen	1X4 Suspended Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	405.6	0.4056	4380	1776.528	$266.5	None Proposed	8	405.6	0.4056	4380	3066	1776.528	1243.5696	Automatic Wall Switch Occupancy Sensor	1	532.9584	79.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	000	Caffeteria	1X4 Suspended Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	50	2535	2.535	4380	11103.3	$1,665.5	None Proposed	50	2535	2.535	4380	3066	11103.3	7772.31	Automatic Wall Switch Occupancy Sensor	2	3330.99	499.6	$0.0	$0.0	$0.0	$127.0	$90.0	$180.0	$254.0	$434.0
PS #8 - Interior	000	Caffeteria	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	30	3360	3.36	4380	14716.8	$2,207.5	None Proposed	30	3360	3.36	4380	3066	14716.8	10301.76	Automatic Wall Switch Occupancy Sensor	2	4415.04	662.3	$0.0	$0.0	$0.0	$127.0	$90.0	$180.0	$254.0	$434.0
PS #8 - Interior	000	B-7	1X4 Suspended Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$699.5	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Automatic Wall Switch Occupancy Sensor	1	1399.0158	209.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	000	B-8	1X4 Suspended Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$699.5	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Automatic Wall Switch Occupancy Sensor	1	1399.0158	209.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	000	B-9	1X4 Suspended Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	000	B-10	1X4 Suspended Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	13	659.1	0.6591	4380	2886.858	$433.0	None Proposed	13	659.1	0.6591	4380	3066	2886.858	2020.8006	Automatic Wall Switch Occupancy Sensor	1	866.0574	129.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	000	B-22	1X4 Suspended Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	405.6	0.4056	4380	1776.528	$266.5	None Proposed	8	405.6	0.4056	4380	3066	1776.528	1243.5696	Automatic Wall Switch Occupancy Sensor	1	532.9584	79.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	000	B-23	1X4 Suspended Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$133.2	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Automatic Wall Switch Occupancy Sensor	1	266.4792	40.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	000	B-24	1X4 Suspended Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	405.6	0.4056	4380	1776.528	$266.5	None Proposed	8	405.6	0.4056	4380	3066	1776.528	1243.5696	Automatic Wall Switch Occupancy Sensor	1	532.9584	79.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	000	Supply Room	1X4 Suspended Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	500	101.4	$15.2	None Proposed	4	202.8	0.2028	500	350	101.4	70.98	Automatic Wall Switch Occupancy Sensor	1	30.42	4.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	000	Custodian's Office	1X4 Suspended Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	2	50.8	0.0508	500	25.4	$3.8	None Proposed	2	50.8	0.0508	500	500	25.4	25.4	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #8 - Interior	000	B-26	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	19	2128	2.128	4380	9320.64	$1,398.1	None Proposed	19	2128	2.128	4380	3066	9320.64	6524.448	Automatic Wall Switch Occupancy Sensor	1	2796.192	419.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	000	B-27	1X4 Suspended Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$33.3	None Proposed	1	50.7	0.0507	4380	4380	222.066	222.066	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #8 - Interior	000	B-29	1X4 Suspended Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	4380	666.198	$99.9	None Proposed	3	152.1	0.1521	4380	4380	666.198	666.198	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #8 - Interior	000	Boy's Bathroom	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	336	0.336	500	168	$25.2	None Proposed	3	336	0.336	500	500	168	168	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #8 - Interior	000	Lavatory	1X4 Suspended Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	1	25.4	0.0254	500	12.7	$1.9	None Proposed	1	25.4	0.0254	500	500	12.7	12.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #8 - Interior	000	Head Custodian	1X4 Suspended Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$7.6	None Proposed	2	101.4	0.1014	500	500	50.7	50.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #8 - Interior	000	Boiler Room	1X4 Suspended Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	912.6	0.9126	4380	3997.188	$599.6	None Proposed	18	912.6	0.9126	4380	3066	3997.188	2798.0316	Automatic Wall Switch Occupancy Sensor	1	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	000	Electrical Room	1X4 Suspended Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$66.6	None Proposed	2	101.4	0.1014	4380	4380	444.132	444.132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #8 - Interior	000	Mechanical Room	1X4 Suspended Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	253.5	0.2535	4380	1110.33	$166.5	None Proposed	5	253.5	0.2535	4380	3066	1110.33	777.231	Automatic Wall Switch Occupancy Sensor	1	333.099	50.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	000	Elevator Room	1X4 Suspended Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$3.8	None Proposed	1	50.7	0.0507	500	500	25.35	25.35	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #8 - Interior	000	Middle Room	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	4	352	0.352	4380	1541.76	$231.3	None Proposed	4	352	0.352	4380	4380	1541.76	1541.76	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #8 - Interior	001	195	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	1	88	0.088	4380	385.44	$57.8	None Proposed	1	88	0.088	4380	4380	385.44	385.44	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #8 - Interior	001	Room 196	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	12	1056	1.056	4380	4625.28	$693.8	None Proposed	12	1056	1.056	4380	3066	4625.28	3237.696	Automatic Wall Switch Occupancy Sensor	1	1387.584	208.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #8 - Interior	001	Room 197	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	15	1320	1.32	4380	5781.6	$867.2	None Proposed	15	1320	1.32	4380	3066	5781.6	4047.12	Automatic Wall Switch Occupancy Sensor	1	1734.48	260.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	001	Room 198	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	15	1320	1.32	4380	5781.6	$867.2	None Proposed	15	1320	1.32	4380	3066	5781.6	4047.12	Automatic Wall Switch Occupancy Sensor	1	1734.48	260.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	001	Room 199	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$133.2	None Proposed	4	202.8	0.2028	4380	4380	888.264	888.264	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #8 - Interior	001	Girl's Bathroom	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	1	88	0.088	500	44	$6.6	None Proposed	1	88	0.088	500	500	44	44	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #8 - Interior	001	Room 101	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	336	0.336	4380	1471.68	$220.8	None Proposed	3	336	0.336	4380	4380	1471.68	1471.68	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #8 - Interior	001	Room 106	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	20	1014	1.014	4380	4441.32	$666.2	None Proposed	20	1014	1.014	4380	3066	4441.32	3108.924	Automatic Wall Switch Occupancy Sensor	1	1332.396	199.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	001	Room 108	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$133.2	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Automatic Wall Switch Occupancy Sensor	1	266.4792	40.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	001	Room 109	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$133.2	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Automatic Wall Switch Occupancy Sensor	1	266.4792	40.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	001	Room 115	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$133.2	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Automatic Wall Switch Occupancy Sensor	1	266.4792	40.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	001	Room 137	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$66.6	None Proposed	2	101.4	0.1014	4380	4380	444.132	444.132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #8 - Interior	001	Room 120A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$133.2	None Proposed	4	202.8	0.2028	4380	4380	888.264	888.264	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #8 - Interior	001	Room 120	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	304.2	0.3042	4380	1332.396	$199.9	None Proposed	6	304.2	0.3042	4380	3066	1332.396	932.6772	Automatic Wall Switch Occupancy Sensor	1	399.7188	60.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	001	Room 127	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	5	440	0.44	4380	1927.2	$289.1	None Proposed	5	440	0.44	4380	3066	1927.2	1349.04	Automatic Wall Switch Occupancy Sensor	1	578.16	86.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	001	Main Office	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	17	1496	1.496	4380	6552.48	$982.9	None Proposed	17	1496	1.496	4380	3066	6552.48	4586.736	Automatic Wall Switch Occupancy Sensor	1	1965.744	294.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	001	Room 131	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	9	792	0.792	4380	3468.96	$520.3	None Proposed	9	792	0.792	4380	3066	3468.96	2428.272	Automatic Wall Switch Occupancy Sensor	1	1040.688	156.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	001	Room 135	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	1	88	0.088	4380	385.44	$57.8	None Proposed	1	88	0.088	4380	4380	385.44	385.44	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #8 - Interior	001	Room 160	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	8	704	0.704	4380	3083.52	$462.5	None Proposed	8	704	0.704	4380	3066	3083.52	2158.464	Automatic Wall Switch Occupancy Sensor	1	925.056	138.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	001	Room 161	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	4380	2312.64	$346.9	None Proposed	6	528	0.528	4380	3066	2312.64	1618.848	Automatic Wall Switch Occupancy Sensor	1	693.792	104.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	001	Room 162	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	4380	2312.64	$346.9	None Proposed	6	528	0.528	4380	3066	2312.64	1618.848	Automatic Wall Switch Occupancy Sensor	1	693.792	104.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	001	Room 163	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	6	152.4	0.1524	4380	667.512	$100.1	None Proposed	6	152.4	0.1524	4380	3066	667.512	467.2584	Automatic Wall Switch Occupancy Sensor	1	200.2536	30.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	001	Room 140	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$66.6	None Proposed	2	101.4	0.1014	4380	4380	444.132	444.132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #8 - Interior	001	Auditarium	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	56	1422.4	1.4224	4380	6230.112	$934.5	None Proposed	56	1422.4	1.4224	4380	3066	6230.112	4361.0784	Automatic Wall Switch Occupancy Sensor	2	1869.0336	280.4	$0.0	$0.0	$0.0	$127.0	$90.0	$180.0	$254.0	$434.0
PS #8 - Interior	001	Auditarium Stairs	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$66.6	None Proposed	2	101.4	0.1014	4380	4380	444.132	444.132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #8 - Interior	001	Boy's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$3.8	None Proposed	1	50.7	0.0507	500	500	25.35	25.35	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #8 - Interior	001	Room 172	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$66.6	None Proposed	2	101.4	0.1014	4380	4380	444.132	444.132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #8 - Interior	001	Room 173	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$66.6	None Proposed	2	101.4	0.1014	4380	4380	444.132	444.132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #8 - Interior	001	Girl's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$11.4	None Proposed	3	152.1	0.1521	500	350	76.05	53.235	Automatic Wall Switch Occupancy Sensor	1	22.815	3.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	001	Room 138	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	4	101.6	0.1016	4380	445.008	$66.8	None Proposed	4	101.6	0.1016	4380	3066	445.008	311.5056	Automatic Wall Switch Occupancy Sensor	1	133.5024	20.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	002	Girl's Bathroom	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$16.8	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #8 - Interior	002	Boy's Bathroom	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	224	0.224	500	112	$16.8	None Proposed	2	224	0.224	500	500	112	112	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #8 - Interior	002	R-252	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	14	1568	1.568	4380	6867.84	$1,030.2	None Proposed	14	1568	1.568	4380	3066	6867.84	4807.488	Automatic Wall Switch Occupancy Sensor	1	2060.352	309.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	002	R-252A	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	1	88	0.088	4380	385.44	$57.8	None Proposed	1	88	0.088	4380	4380	385.44	385.44	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #8 - Interior	002	R-253	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	14	1568	1.568	4380	6867.84	$1,030.2	None Proposed	14	1568	1.568	4380	3066	6867.84	4807.488	Automatic Wall Switch Occupancy Sensor	1	2060.352	309.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	002	R-254	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	14	1568	1.568	4380	6867.84	$1,030.2	None Proposed	14	1568	1.568	4380	3066	6867.84	4807.488	Automatic Wall Switch Occupancy Sensor	1	2060.352	309.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	002	Room 201	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$441.5	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Automatic Wall Switch Occupancy Sensor	1	883.008	132.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	002	Room 203	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	8	896	0.896	4380	3924.48	$588.7	None Proposed	8	896	0.896	4380	3066	3924.48	2747.136	Automatic Wall Switch Occupancy Sensor	1	1177.344	176.6	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	002	Room 206	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$441.5	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Automatic Wall Switch Occupancy Sensor	1	883.008	132.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	002	Room 207	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$441.5	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Automatic Wall Switch Occupancy Sensor	1	883.008	132.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	002	Room 208	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$441.5	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Automatic Wall Switch Occupancy Sensor	1	883.008	132.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	002	Room 210	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$441.5	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Automatic Wall Switch Occupancy Sensor	1	883.008	132.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	002	Room 211	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$33.3	None Proposed	1	50.7	0.0507	4380	4380	222.066	222.066	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #8 - Interior	002	Room 212	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$441.5	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Automatic Wall Switch Occupancy Sensor	1	883.008	132.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	002	Room 220	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$441.5	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Automatic Wall Switch Occupancy Sensor	1	883.008	132.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	002	Room 222	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$441.5	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Automatic Wall Switch Occupancy Sensor	1	883.008	132.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	002	Room 214	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$441.5	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Automatic Wall Switch Occupancy Sensor	1	883.008	132.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	002	Room 215	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	672	0.672	4380	2943.36	$441.5	None Proposed	6	672	0.672	4380	3066	2943.36	2060.352	Automatic Wall Switch Occupancy Sensor	1	883.008	132.5	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	002	Room 226	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	4380	222.066	$33.3	None Proposed	1	50.7	0.0507	4380	4380	222.066	222.066	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #8 - Interior	002	Room 227	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	8	704	0.704	4380	3083.52	$462.5	None Proposed	8	704	0.704	4380	3066	3083.52	2158.464	Automatic Wall Switch Occupancy Sensor	1	925.056	138.8	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Existing Fixture Watts	Existing kW	Operating Hours	Existing kWh	Existing Annual Energy Cost	Proposed Replacement Solution	Qty of Proposed Fixtures	Proposed Fixture Watts	Proposed kW Base	Proposed Operational Hours Without Sensors	Proposed Operational Hours With Sensors	Proposed kWh Without Sensors	Proposed kWh With Sensors	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector Per Unit Price	Bulb (Per Unit Price)	Labor (Per Unit Price)	Occupancy Sensor (Per Unit Price)	Occupancy Sensor (Per Unit Labor Price)	Labor Total	Materials Total	Labor & Materials Total
PS #8 - Interior	002	Room 228	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	4380	2312.64	$346.9	None Proposed	6	528	0.528	4380	3066	2312.64	1618.848	Automatic Wall Switch Occupancy Sensor	1	693.792	104.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	002	Boy's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	500	76.05	$11.4	None Proposed	3	152.1	0.1521	500	350	76.05	53.235	Automatic Wall Switch Occupancy Sensor	1	22.815	3.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	002	Room 229	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	4380	2312.64	$346.9	None Proposed	6	528	0.528	4380	3066	2312.64	1618.848	Automatic Wall Switch Occupancy Sensor	1	693.792	104.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	002	Room 230	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	4380	2312.64	$346.9	None Proposed	6	528	0.528	4380	3066	2312.64	1618.848	Automatic Wall Switch Occupancy Sensor	1	693.792	104.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	002	Room 231	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	4380	770.88	$115.6	None Proposed	2	176	0.176	4380	4380	770.88	770.88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #8 - Interior	002	Room 232	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	176	0.176	4380	770.88	$115.6	None Proposed	2	176	0.176	4380	4380	770.88	770.88	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #8 - Interior	002	Room 233	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	4380	2312.64	$346.9	None Proposed	6	528	0.528	4380	3066	2312.64	1618.848	Automatic Wall Switch Occupancy Sensor	1	693.792	104.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	002	Room 233A	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	448	0.448	4380	1962.24	$294.3	None Proposed	4	448	0.448	4380	3066	1962.24	1373.568	Automatic Wall Switch Occupancy Sensor	1	588.672	88.3	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	002	Boy's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$7.6	None Proposed	2	101.4	0.1014	500	500	50.7	50.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #8 - Interior	002	Room 237	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$66.6	None Proposed	2	101.4	0.1014	4380	4380	444.132	444.132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #8 - Interior	002	Room 243	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	5	440	0.44	4380	1927.2	$289.1	None Proposed	5	440	0.44	4380	3066	1927.2	1349.04	Automatic Wall Switch Occupancy Sensor	1	578.16	86.7	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	002	Room 244	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	4	352	0.352	4380	1541.76	$231.3	None Proposed	4	352	0.352	4380	3066	1541.76	1079.232	Automatic Wall Switch Occupancy Sensor	1	462.528	69.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	002	Room 246	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	4380	2312.64	$346.9	None Proposed	6	528	0.528	4380	3066	2312.64	1618.848	Automatic Wall Switch Occupancy Sensor	1	693.792	104.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	002	Room 248	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	4380	444.132	$66.6	None Proposed	2	101.4	0.1014	4380	4380	444.132	444.132	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #8 - Interior	002	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	51	2585.7	2.5857	8760	22650.732	$3,397.6	None Proposed	51	2585.7	2.5857	8760	8760	22650.732	22650.732	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #8 - Interior	003	Girl's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$7.6	None Proposed	2	101.4	0.1014	500	500	50.7	50.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #8 - Interior	003	Boy's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$7.6	None Proposed	2	101.4	0.1014	500	500	50.7	50.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #8 - Interior	003	R-360	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	14	1568	1.568	4380	6867.84	$1,030.2	None Proposed	14	1568	1.568	4380	3066	6867.84	4807.488	Automatic Wall Switch Occupancy Sensor	1	2060.352	309.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	003	R-361	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	14	1568	1.568	4380	6867.84	$1,030.2	None Proposed	14	1568	1.568	4380	3066	6867.84	4807.488	Automatic Wall Switch Occupancy Sensor	1	2060.352	309.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	003	R-362	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	14	1568	1.568	4380	6867.84	$1,030.2	None Proposed	14	1568	1.568	4380	3066	6867.84	4807.488	Automatic Wall Switch Occupancy Sensor	1	2060.352	309.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	003	Room 305	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	2016	2.016	4380	8830.08	$1,324.5	None Proposed	18	2016	2.016	4380	3066	8830.08	6181.056	Automatic Wall Switch Occupancy Sensor	1	2649.024	397.4	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	003	Room 306	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	1344	1.344	4380	5886.72	$883.0	None Proposed	12	1344	1.344	4380	3066	5886.72	4120.704	Automatic Wall Switch Occupancy Sensor	1	1766.016	264.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	003	Room 308	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	152.1	0.1521	4380	666.198	$99.9	None Proposed	3	152.1	0.1521	4380	4380	666.198	666.198	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #8 - Interior	003	Room 312	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	4380	2312.64	$346.9	None Proposed	6	528	0.528	4380	3066	2312.64	1618.848	Automatic Wall Switch Occupancy Sensor	1	693.792	104.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	003	Room 313	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	4380	2312.64	$346.9	None Proposed	6	528	0.528	4380	3066	2312.64	1618.848	Automatic Wall Switch Occupancy Sensor	1	693.792	104.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	003	Room 314	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	4380	2312.64	$346.9	None Proposed	6	528	0.528	4380	3066	2312.64	1618.848	Automatic Wall Switch Occupancy Sensor	1	693.792	104.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	003	Girl's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$7.6	None Proposed	2	101.4	0.1014	500	500	50.7	50.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #8 - Interior	003	Room 316	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	4380	2312.64	$346.9	None Proposed	6	528	0.528	4380	3066	2312.64	1618.848	Automatic Wall Switch Occupancy Sensor	1	693.792	104.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	003	Room 317	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	4380	2312.64	$346.9	None Proposed	6	528	0.528	4380	3066	2312.64	1618.848	Automatic Wall Switch Occupancy Sensor	1	693.792	104.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	003	Room 318	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	4380	2312.64	$346.9	None Proposed	6	528	0.528	4380	3066	2312.64	1618.848	Automatic Wall Switch Occupancy Sensor	1	693.792	104.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	003	Room 321	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	4380	2312.64	$346.9	None Proposed	6	528	0.528	4380	3066	2312.64	1618.848	Automatic Wall Switch Occupancy Sensor	1	693.792	104.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	003	Room 323	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	4380	2312.64	$346.9	None Proposed	6	528	0.528	4380	3066	2312.64	1618.848	Automatic Wall Switch Occupancy Sensor	1	693.792	104.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	003	Girl's Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	101.4	0.1014	500	50.7	$7.6	None Proposed	2	101.4	0.1014	500	500	50.7	50.7	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #8 - Interior	003	Room 325	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	4380	2312.64	$346.9	None Proposed	6	528	0.528	4380	3066	2312.64	1618.848	Automatic Wall Switch Occupancy Sensor	1	693.792	104.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	003	Room 327	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	4380	2312.64	$346.9	None Proposed	6	528	0.528	4380	3066	2312.64	1618.848	Automatic Wall Switch Occupancy Sensor	1	693.792	104.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	003	Room 328	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$133.2	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Automatic Wall Switch Occupancy Sensor	1	266.4792	40.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	003	Room 329	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	4380	2312.64	$346.9	None Proposed	6	528	0.528	4380	3066	2312.64	1618.848	Automatic Wall Switch Occupancy Sensor	1	693.792	104.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	003	Room 333	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	4380	2312.64	$346.9	None Proposed	6	528	0.528	4380	3066	2312.64	1618.848	Automatic Wall Switch Occupancy Sensor	1	693.792	104.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	003	Room 334	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	6	528	0.528	4380	2312.64	$346.9	None Proposed	6	528	0.528	4380	3066	2312.64	1618.848	Automatic Wall Switch Occupancy Sensor	1	693.792	104.1	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	003	Room 337	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	202.8	0.2028	4380	888.264	$133.2	None Proposed	4	202.8	0.2028	4380	3066	888.264	621.7848	Automatic Wall Switch Occupancy Sensor	1	266.4792	40.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	003	Room 351	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	3	264	0.264	4380	1156.32	$173.4	None Proposed	3	264	0.264	4380	3066	1156.32	809.424	Automatic Wall Switch Occupancy Sensor	1	346.896	52.0	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	003	Room 355	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	1064.7	1.0647	4380	4663.386	$699.5	None Proposed	21	1064.7	1.0647	4380	3066	4663.386	3264.3702	Automatic Wall Switch Occupancy Sensor	1	1399.0158	209.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	003	Room 356	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	608.4	0.6084	4380	2664.792	$399.7	None Proposed	12	608.4	0.6084	4380	3066	2664.792	1865.3544	Automatic Wall Switch Occupancy Sensor	1	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	003	Gym Room	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	24	609.6	0.6096	4380	2670.048	$400.5	None Proposed	24	609.6	0.6096	4380	3066	2670.048	1869.0336	Automatic Wall Switch Occupancy Sensor	1	801.0144	120.2	$0.0	$0.0	$0.0	$63.5	$45.0	$45.0	$63.5	$108.5
PS #8 - Interior	003	3rd Floor Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	47	2382.9	2.3829	8760	20874.204	$3,131.1	None Proposed	47	2382.9	2.3829	8760	6132	20874.204	14611.9428	Automatic Wall Switch Occupancy Sensor	2	6262.2612	939.3	$0.0	$0.0	$0.0	$127.0	$90.0	$180.0	$254.0	$434.0
PS #8 - Interior		Girl's Bathroom	1X4 Suspended Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	50.7	0.0507	500	25.35	$3.8	None Proposed	1	50.7	0.0507	500	500	25.35	25.35	None Proposed	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector (Per Fixture Price)	Bulb (Per Fixture Price)	Labor (Per Fixture Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Subtotal	Materials Subtotal	Labor & Materials Subtotal	Labor Total	Materials Total	Labor & Materials Total
Academy I Middle School - Exterior	000	Exterrior	250W MH Fixture	8	4380	Replace 250W Fixture with 150W Induction Light Fixture	None Proposed	0	1.4	6132	735.8	$0.0	$390.0	$137.0	$0.0	$0.0	$137.0	$390.0	$527.0	$1,096.0	$3,120.0	$4,216.0
Academy I Middle School - Exterior	000	Exterrior	Exterior Wall Packs (Assume 70w)	10	4380	Replace 70W Fixture with 45W Induction Light Fixture	None Proposed	0	0.46	2014.8	241.8	$0.0	$380.0	$137.0	$0.0	$0.0	$137.0	$380.0	$517.0	$1,370.0	$3,800.0	$5,170.0
Academy I Middle School - Interior	000	Storage	150W Incandescent Fixture	1	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	0.125	62.5	7.5	$0.0	$7.0	$20.0	$0.0	$0.0	$20.0	$7.0	$27.0	$20.0	$7.0	$27.0
Academy I Middle School - Interior	001	Bath	150W Incandescent Fixture	1	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	0.125	62.5	7.5	$0.0	$7.0	$20.0	$0.0	$0.0	$20.0	$7.0	$27.0	$20.0	$7.0	$27.0
Academy I Middle School - Interior	001	127B	1x4 Fixtures w/ 1-T12 Lamp Fixture w/ Magnetic Ballast	2	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.03696	18.48	2.2	$35.0	$5.0	$65.0	$0.0	$0.0	$65.0	$40.0	$105.0	$130.0	$80.0	$210.0
Academy I Middle School - Interior	003	Main Stairs	1x4 Fixtures w/ 1-T12 Lamp Fixture w/ Magnetic Ballast	12	8760	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.22176	1942.6176	233.1	$35.0	$5.0	$65.0	$0.0	$0.0	$65.0	$40.0	$105.0	$780.0	$480.0	$1,260.0
Academy I Middle School - Interior	003	Mens Bathroom	1x4 Fixtures w/ 1-T12 Lamp Fixture w/ Magnetic Ballast	2	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.03696	161.8848	19.4	$35.0	$5.0	$65.0	$0.0	$0.0	$65.0	$40.0	$105.0	$130.0	$80.0	$210.0
Academy I Middle School - Interior	003	Womens Bathroom	1x4 Fixtures w/ 1-T12 Lamp Fixture w/ Magnetic Ballast	3	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.05544	242.8272	29.1	$35.0	$5.0	$65.0	$0.0	$0.0	$65.0	$40.0	$105.0	$195.0	$120.0	$315.0
Academy I Middle School - Interior	000	G-6	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	6	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.222	1355.5224	162.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$435.0	$543.5	$978.5
Academy I Middle School - Interior	000	G-7	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	6	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.222	1355.5224	162.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$435.0	$543.5	$978.5
Academy I Middle School - Interior	000	Stairwell (All)	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	30	8760	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	1.11	9723.6	1,166.8	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$1,950.0	$2,400.0	$4,350.0
Academy I Middle School - Interior	000	Storage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	14	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.518	259	31.1	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$910.0	$1,120.0	$2,030.0
Academy I Middle School - Interior	000	Band Room	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	20	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.74	370	44.4	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$1,300.0	$1,600.0	$2,900.0
Academy I Middle School - Interior	000	Elevator	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	8760	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.037	324.12	38.9	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$65.0	$80.0	$145.0
Academy I Middle School - Interior	000	G-10	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	10	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.37	2259.204	271.1	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$695.0	$863.5	$1,558.5
Academy I Middle School - Interior	000	G-11	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	15	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.555	3388.806	406.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,020.0	$1,263.5	$2,283.5
Academy I Middle School - Interior	000	G-11B	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.037	18.5	2.2	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$65.0	$80.0	$145.0
Academy I Middle School - Interior	000	G-14 Art	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	25	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Ceiling Mounted Occupancy Sensor	2	0.925	5648.01	677.8	$70.0	$10.0	$65.0	$206.0	$147.0	$65.0	$80.0	$145.0	$1,919.0	$2,412.0	$4,331.0
Academy I Middle School - Interior	000	G-5	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	9	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.333	2033.2836	244.0	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$630.0	$783.5	$1,413.5
Academy I Middle School - Interior	000	G-9	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	25	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.925	5648.01	677.8	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,670.0	$2,063.5	$3,733.5
Academy I Middle School - Interior	000	Kitchen Storage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	7	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.259	129.5	15.5	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$455.0	$560.0	$1,015.0
Academy I Middle School - Interior	000	Storage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.444	222	26.6	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$780.0	$960.0	$1,740.0
Academy I Middle School - Interior	000	Womens Locker	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	10	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	1	0.37	185	22.2	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$650.0	$800.0	$1,450.0
Academy I Middle School - Interior	001	105	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	15	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	0	0.555	3388.806	406.7	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$975.0	$1,200.0	$2,175.0
Academy I Middle School - Interior	001	106	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	15	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.555	3388.806	406.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,020.0	$1,263.5	$2,283.5
Academy I Middle School - Interior	001	107	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	15	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.555	3388.806	406.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,020.0	$1,263.5	$2,283.5
Academy I Middle School - Interior	001	108	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	15	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.555	3388.806	406.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,020.0	$1,263.5	$2,283.5
Academy I Middle School - Interior	001	109	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	15	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.555	3388.806	406.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,020.0	$1,263.5	$2,283.5
Academy I Middle School - Interior	001	110	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	15	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.555	3388.806	406.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,020.0	$1,263.5	$2,283.5
Academy I Middle School - Interior	001	111	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	15	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.555	3388.806	406.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,020.0	$1,263.5	$2,283.5
Academy I Middle School - Interior	001	112	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	15	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.555	3388.806	406.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,020.0	$1,263.5	$2,283.5
Academy I Middle School - Interior	001	114	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	15	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.555	3388.806	406.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,020.0	$1,263.5	$2,283.5
Academy I Middle School - Interior	001	127	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.148	903.6816	108.4	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$305.0	$383.5	$688.5
Academy I Middle School - Interior	001	127A	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.074	37	4.4	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$130.0	$160.0	$290.0
Academy I Middle School - Interior	001	Mens Bathroom	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	3	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.111	55.5	6.7	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$195.0	$240.0	$435.0

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector (Per Fixture Price)	Bulb (Per Fixture Price)	Labor (Per Fixture Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Subtotal	Materials Subtotal	Labor & Materials Subtotal	Labor Total	Materials Total	Labor & Materials Total
Academy I Middle School - Interior	001	Office	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.148	74	8.9	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$260.0	$320.0	$580.0
Academy I Middle School - Interior	001	Womens	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	3	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.111	55.5	6.7	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$195.0	$240.0	$435.0
Academy I Middle School - Interior	002	202	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	15	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.555	3388.806	406.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,020.0	$1,263.5	$2,283.5
Academy I Middle School - Interior	002	203	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	15	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.555	3388.806	406.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,020.0	$1,263.5	$2,283.5
Academy I Middle School - Interior	002	204	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	15	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.555	3388.806	406.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,020.0	$1,263.5	$2,283.5
Academy I Middle School - Interior	002	205	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	15	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.555	3388.806	406.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,020.0	$1,263.5	$2,283.5
Academy I Middle School - Interior	002	207	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	15	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.555	3388.806	406.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,020.0	$1,263.5	$2,283.5
Academy I Middle School - Interior	002	208	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	15	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.555	3388.806	406.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,020.0	$1,263.5	$2,283.5
Academy I Middle School - Interior	002	210	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	15	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.555	3388.806	406.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,020.0	$1,263.5	$2,283.5
Academy I Middle School - Interior	002	214	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	15	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.555	3388.806	406.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,020.0	$1,263.5	$2,283.5
Academy I Middle School - Interior	002	Hallway	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	8760	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.666	5834.16	700.1	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$1,170.0	$1,440.0	$2,610.0
Academy I Middle School - Interior	002	Mens Bathroom	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	3	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.111	55.5	6.7	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$195.0	$240.0	$435.0
Academy I Middle School - Interior	002	Womens Bathroom	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	3	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.111	55.5	6.7	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$195.0	$240.0	$435.0
Academy I Middle School - Interior	003	301	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	15	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.555	3388.806	406.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,020.0	$1,263.5	$2,283.5
Academy I Middle School - Interior	003	302	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	15	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.555	3388.806	406.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,020.0	$1,263.5	$2,283.5
Academy I Middle School - Interior	003	303	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	15	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.555	3388.806	406.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,020.0	$1,263.5	$2,283.5
Academy I Middle School - Interior	003	304	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	15	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.555	3388.806	406.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,020.0	$1,263.5	$2,283.5
Academy I Middle School - Interior	003	305	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	15	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.555	3388.806	406.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,020.0	$1,263.5	$2,283.5
Academy I Middle School - Interior	003	307	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	15	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.555	3388.806	406.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,020.0	$1,263.5	$2,283.5
Academy I Middle School - Interior	003	308	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	15	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.555	3388.806	406.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,020.0	$1,263.5	$2,283.5
Academy I Middle School - Interior	003	309	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	15	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.555	3388.806	406.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,020.0	$1,263.5	$2,283.5
Academy I Middle School - Interior	003	310	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	15	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.555	3388.806	406.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,020.0	$1,263.5	$2,283.5
Academy I Middle School - Interior	003	Hallway	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	15	8760	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.555	4861.8	583.4	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$975.0	$1,200.0	$2,175.0
Academy I Middle School - Interior	003	Teachers Lounge	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	6	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.222	111	13.3	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$390.0	$480.0	$870.0
Academy I Middle School - Interior	000	Cafeteria	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	60	3336	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Academy I Middle School - Interior	000	G-1	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	399.7188	48.0	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Academy I Middle School - Interior	000	G-2	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	133.2396	16.0	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Academy I Middle School - Interior	000	G-3	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	7	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	466.3386	56.0	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Academy I Middle School - Interior	000	G-4	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	199.8594	24.0	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Academy I Middle School - Interior	000	G-5 Bath	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Academy I Middle School - Interior	000	Kitchen Office	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Academy I Middle School - Interior	000	Mens Locker	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	10	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Academy I Middle School - Interior	000	Teachers Lounge	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Academy I Middle School - Interior	001	119	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Academy I Middle School - Interior	001	122	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector (Per Fixture Price)	Bulb (Per Fixture Price)	Labor (Per Fixture Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Subtotal	Materials Subtotal	Labor & Materials Subtotal	Labor Total	Materials Total	Labor & Materials Total
Academy I Middle School - Interior	003	Quiet Zone	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Academy I Middle School - Interior	001	Gym	250W MH Fixture	24	4380	Replace 250W Fixture with 150W Induction Light Fixture	None Proposed	0	4.2	18396	2,207.5	$0.0	$390.0	$137.0	$0.0	$0.0	$137.0	$390.0	$527.0	$3,288.0	$9,360.0	$12,648.0
Academy I Middle School - Interior	000	G-4a	60W Incandescent Fixture	3	500	Replace 60W Incandescent Fixture with 13W CFL	None Proposed	0	0.141	70.5	8.5	$0.0	$5.0	$20.0	$0.0	$0.0	$20.0	$5.0	$25.0	$60.0	$15.0	$75.0
Academy I Middle School - Interior	003	314	60W Incandescent Fixture	2	4380	Replace 60W Incandescent Fixture with 13W CFL	None Proposed	0	0.094	411.72	49.4	$0.0	$5.0	$20.0	$0.0	$0.0	$20.0	$5.0	$25.0	$40.0	$10.0	$50.0
Academy I Middle School - Interior	003	316	60W Incandescent Fixture	2	4380	Replace 60W Incandescent Fixture with 13W CFL	None Proposed	0	0.094	411.72	49.4	$0.0	$5.0	$20.0	$0.0	$0.0	$20.0	$5.0	$25.0	$40.0	$10.0	$50.0
Cunningham ECC - Exterior	001	Exterior	Exterior Wall Packs (Assume 70w)	6	4380	Replace 70W Fixture with 45W Induction Light Fixture	None Proposed	0	0.276	1208.88	181.3	$0.0	$380.0	$137.0	$0.0	$0.0	$137.0	$380.0	$517.0	$822.0	$2,280.0	$3,102.0
Cunningham ECC - Exterior	000	Exterior	Flood Lights (Assume 400W MH)	8	4380	Replace 400W Fixture with Induction Light Fixture	None Proposed	0	1.944	8514.72	1,277.2	$0.0	$485.0	$137.0	$0.0	$0.0	$137.0	$485.0	$622.0	$1,096.0	$3,880.0	$4,976.0
Cunningham ECC - Interior	001	Hallway	13W CFL Fixture	30	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Cunningham ECC - Interior	001	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Cunningham ECC - Interior	001	Class 1	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	16	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1850.112	277.5	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Cunningham ECC - Interior	001	Class 2	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	19	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2197.008	329.6	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Cunningham ECC - Interior	001	Class 3	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	19	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2197.008	329.6	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Cunningham ECC - Interior	001	Class 4	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2081.376	312.2	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Cunningham ECC - Interior	001	Class 5	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2081.376	312.2	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Cunningham ECC - Interior	001	Resource	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	8	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Cunningham ECC - Interior	001	Staff Room	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	8	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Cunningham ECC - Interior	001	Bath	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	1	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Cunningham ECC - Interior	001	Bath 1	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	1	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Cunningham ECC - Interior	001	Bath 2	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	1	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Cunningham ECC - Interior	001	Class 1 Bath	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	1	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Cunningham ECC - Interior	001	Class 2 Bath	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	1	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Cunningham ECC - Interior	001	Class 3 Bath	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	1	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Cunningham ECC - Interior	001	Class 4 Bath	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	1	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Cunningham ECC - Interior	001	Class 5 Baths	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	1	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Cunningham ECC - Interior	001	Nurse	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Cunningham ECC - Interior	001	Storage	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	1	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Cunningham ECC - Interior	001	Nurse	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	3	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Cunningham ECC - Interior	001	Administration	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	5	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Cunningham ECC - Interior	001	Custodial	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	1	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Cunningham ECC - Interior	001	Kitchen	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	4	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Cunningham ECC - Interior	001	Nurse Bathroom	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	1	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Cunningham ECC - Interior	001	Play Area	42W CFL Fixture	8	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Exterior	000	Exterrior	Exterior Wall Packs (Assume 70w)	12	4380	Replace 70W Fixture with 45W Induction Light Fixture	None Proposed	0	0.552	2417.76	362.7	$0.0	$380.0	$137.0	$0.0	$0.0	$137.0	$380.0	$517.0	$1,644.0	$4,560.0	$6,204.0
Henry Snyder High School - Exterior	000	Exterrior	Flood Lights (Assume 400W MH)	8	4380	Replace 400W Fixture with Induction Light Fixture	None Proposed	0	1.944	8514.72	1,277.2	$0.0	$485.0	$137.0	$0.0	$0.0	$137.0	$485.0	$622.0	$1,096.0	$3,880.0	$4,976.0
Henry Snyder High School - Exterior	000	Exterrior	250W MH Fixture	6	4380	Replace 250W Fixture with 150W Induction Light Fixture	None Proposed	0	1.05	4599	689.9	$0.0	$390.0	$137.0	$0.0	$0.0	$137.0	$390.0	$527.0	$822.0	$2,340.0	$3,162.0

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector (Per Fixture Price)	Bulb (Per Fixture Price)	Labor (Per Fixture Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Subtotal	Materials Subtotal	Labor & Materials Subtotal	Labor Total	Materials Total	Labor & Materials Total
Henry Snyder High School - Interior	002	Auditorium (Spot Lights)	1000W Incandescent Fixture	3	50	Replace 1000W Incandescent Fixture with 65W CFL	None Proposed	0	2.805	140.25	21.0	$0.0	$25.0	$20.0	$0.0	$0.0	$20.0	$25.0	$45.0	$60.0	$75.0	$135.0
Henry Snyder High School - Interior	001	Mop Room	100W Incandescent Fixture	1	500	Replace 100W Incandescent Fixture with 25W CFL	None Proposed	0	0.075	37.5	5.6	$0.0	$7.0	$20.0	$0.0	$0.0	$20.0	$7.0	$27.0	$20.0	$7.0	$27.0
Henry Snyder High School - Interior	003	Facility Restroom	13W CFL Fixture	5	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	004	406	13W CFL Fixture	4	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	000	Couches Storage Room	150W Incandescent Fixture	6	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	0.75	375	56.3	$0.0	$7.0	$20.0	$0.0	$0.0	$20.0	$7.0	$27.0	$120.0	$42.0	$162.0
Henry Snyder High School - Interior	004	403 TV Studio	150W Incandescent Fixture	22	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	2.75	1375	206.3	$0.0	$7.0	$20.0	$0.0	$0.0	$20.0	$7.0	$27.0	$440.0	$154.0	$594.0
Henry Snyder High School - Interior	004	403A	150W Incandescent Fixture	15	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	1.875	937.5	140.6	$0.0	$7.0	$20.0	$0.0	$0.0	$20.0	$7.0	$27.0	$300.0	$105.0	$405.0
Henry Snyder High School - Interior	000	Mens Bathroom	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	5	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	000	Womens Bathroom	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	5	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	000	Gym 37	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.148	648.24	97.2	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$260.0	$320.0	$580.0
Henry Snyder High School - Interior	000	Gym 38	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.148	648.24	97.2	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$260.0	$320.0	$580.0
Henry Snyder High School - Interior	000	ID Copy	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	3	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.111	55.5	8.3	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$195.0	$240.0	$435.0
Henry Snyder High School - Interior	000	Meeting Room	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	10	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.37	185	27.8	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$650.0	$800.0	$1,450.0
Henry Snyder High School - Interior	000	Mens Locker	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	17	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.629	314.5	47.2	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$1,105.0	$1,360.0	$2,465.0
Henry Snyder High School - Interior	000	Womens Locker Room	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	17	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.629	314.5	47.2	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$1,105.0	$1,360.0	$2,465.0
Henry Snyder High School - Interior	002	Stage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.444	222	33.3	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$780.0	$960.0	$1,740.0
Henry Snyder High School - Interior	003	307A	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.074	37	5.6	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$130.0	$160.0	$290.0
Henry Snyder High School - Interior	000	17	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	000	17B Police Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	000	35 Team Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	52	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	000	Changing Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	000	Coaches Office	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	000	Computer Lab	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	000	Kitchen	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	000	Kitchen Storage	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	000	Library	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	56	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	000	Music Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	932.6772	139.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	000	Old Boiler Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	000	Pump Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	7	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	000	Ramp	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	7	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	000	Stairwell (All)	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	60	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	000	Woodshop	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	30	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	001	103	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	001	104	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	50	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	001	106	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector (Per Fixture Price)	Bulb (Per Fixture Price)	Labor (Per Fixture Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Subtotal	Materials Subtotal	Labor & Materials Subtotal	Labor Total	Materials Total	Labor & Materials Total
Henry Snyder High School - Interior	001	107	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	001	108	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	001	109	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	001	111	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	001	115	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	001	117	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	28	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1865.3544	279.8	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	001	118	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	001	119	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	001	124	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	001	125	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	001	1 st Floor Corridor	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	88	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	001	1st Floor Facilty	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	20	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1332.396	199.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	001	AV	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	002	202	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	002	203	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	002	204	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	002	205	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	002	206	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	002	207	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	002	208	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	002	209	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	002	219	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	002	220	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	002	221	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	002	222	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	002	223	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	002	224	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	002	225	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	002	2nd Floor Corridor	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	88	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	002	Auditorium	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	152	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	002	Womens	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	003	301	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	003	302	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	003	303	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	003	304	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector (Per Fixture Price)	Bulb (Per Fixture Price)	Labor (Per Fixture Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Subtotal	Materials Subtotal	Labor & Materials Subtotal	Labor Total	Materials Total	Labor & Materials Total
Henry Snyder High School - Interior	003	305	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	003	306	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	003	308	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	932.6772	139.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	003	309	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	003	312	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	003	314	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	003	318	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	399.7188	60.0	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	003	325	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	003	327	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	003	313A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	999.297	149.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	003	313B	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	003	318B	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	399.7188	60.0	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	003	3rd Floor Corridor	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	88	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	003	Facility Restroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	003	Mens Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	003	Office 1	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	003	Teachers Lounge	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	21	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1399.0158	209.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	004	405	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	16	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1065.9168	159.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	004	406	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	24	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1598.8752	239.8	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	003	306A	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	001	123	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2649.024	397.4	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	002	218	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	264.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	004	403 TV Studio	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	000	35 Team Room	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	8	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.29568	147.84	22.2	$55.0	$10.0	$65.0	$0.0	$0.0	$65.0	$65.0	$130.0	$520.0	$520.0	$1,040.0
Henry Snyder High School - Interior	001	Clinic Office Lobby	1x8 Fixture w/ 2-T8 Lamps w/ Electronic Ballasts	11	500	Replace T8 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.02266	11.33	1.7	$55.0	$10.0	$65.0	$0.0	$0.0	$65.0	$65.0	$130.0	$715.0	$715.0	$1,430.0
Henry Snyder High School - Interior	000	15	250W MH Fixture	8	4380	Replace 250W Fixture with 150W Induction Light Fixture	None Proposed	0	1.4	6132	919.8	$0.0	$390.0	$137.0	$0.0	$0.0	$137.0	$390.0	$527.0	$1,096.0	$3,120.0	$4,216.0
Henry Snyder High School - Interior	000	Gym 37	250W MH Fixture	15	4380	Replace 250W Fixture with 150W Induction Light Fixture	None Proposed	0	2.625	11497.5	1,724.6	$0.0	$390.0	$137.0	$0.0	$0.0	$137.0	$390.0	$527.0	$2,055.0	$5,850.0	$7,905.0
Henry Snyder High School - Interior	000	Gym 38	250W MH Fixture	15	4380	Replace 250W Fixture with 150W Induction Light Fixture	None Proposed	0	2.625	11497.5	1,724.6	$0.0	$390.0	$137.0	$0.0	$0.0	$137.0	$390.0	$527.0	$2,055.0	$5,850.0	$7,905.0
Henry Snyder High School - Interior	004	403 TV Studio	250W MH Fixture	8	500	Replace 250W Fixture with 150W Induction Light Fixture	None Proposed	0	1.4	700	105.0	$0.0	$390.0	$137.0	$0.0	$0.0	$137.0	$390.0	$527.0	$1,096.0	$3,120.0	$4,216.0
Henry Snyder High School - Interior	000	Weight Room	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.0698	34.9	5.2	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$130.0	$160.0	$290.0
Henry Snyder High School - Interior	003	316	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	2	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	003	308A	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.074	37	5.6	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$130.0	$160.0	$290.0
Henry Snyder High School - Interior	000	Couches Office	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	16	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	000	Kitchen Heating	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	000	Music Room	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	27	4380	None Proposed	Ceiling Mounted Occupancy Sensor	2	0	1798.7346	269.8	$0.0	$0.0	$0.0	$206.0	$147.0	$0.0	$0.0	$0.0	$294.0	$412.0	$706.0

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector (Per Fixture Price)	Bulb (Per Fixture Price)	Labor (Per Fixture Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Subtotal	Materials Subtotal	Labor & Materials Subtotal	Labor Total	Materials Total	Labor & Materials Total
Henry Snyder High School - Interior	000	Old Fan Room	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	000	Training Room	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	001	126	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	001	103-C	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	10	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	666.198	99.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	002	210	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	002	213	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	999.297	149.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	002	226	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	002	227	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	002	228	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	11	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	732.8178	109.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	002	206a	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	002	214a	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	002	Mens Bathroom	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	003	322	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	003	Womens Bathroom	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	004	400	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	16	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	004	402	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	16	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1065.9168	159.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	004	402	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	004	404	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	004	408	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	004	410	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	004	411	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	004	412	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	004	413	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	004	403A	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	9	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	004	403C	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	004	404A	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	004	Studio A	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	13	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	004	Studio A	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	004	Studio B	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	13	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	004	Studio B	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	11	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	004	Studio B	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	000	Cafeteria	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	68	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	3.7672	16500.336	2,475.1	$85.0	$15.0	$65.0	$0.0	$0.0	$65.0	$100.0	$165.0	$4,420.0	$6,800.0	$11,220.0
Henry Snyder High School - Interior	000	Kitchen	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	22	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	1.2188	5338.344	800.8	$85.0	$15.0	$65.0	$0.0	$0.0	$65.0	$100.0	$165.0	$1,430.0	$2,200.0	$3,630.0
Henry Snyder High School - Interior	000	Kitchen Office	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	1	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	000	Rec Room	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	5	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector (Per Fixture Price)	Bulb (Per Fixture Price)	Labor (Per Fixture Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Subtotal	Materials Subtotal	Labor & Materials Subtotal	Labor Total	Materials Total	Labor & Materials Total
Henry Snyder High School - Interior	000	15	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	35	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	000	35 Team Room	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	8	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	000	41 Dance	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	24	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	000	Auditorium	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	78	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	000	B15	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	16	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2354.688	353.2	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	000	Boiler Room	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	17	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	000	Computer Room	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2649.024	397.4	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	000	Computer Room	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	8	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	000	Library Computer Room	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	8	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	000	Library Computer Room	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	26	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	000	Main Server	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	000	Music Room	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	16	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2354.688	353.2	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	000	Music Room Office	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	000	Trainers Room	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	000	Weight Room	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	11	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	001	110	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2649.024	397.4	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	001	112	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	15	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2207.52	331.1	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	001	113	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2649.024	397.4	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	001	114	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	15	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2207.52	331.1	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	001	105-B	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	001	106A	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	001	Clinic Offices	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	20	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	001	Main Office	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	19	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	001	Main Office	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	001	Nurse	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	001	Nurse	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	10	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	001	Record Room	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	5	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	002	211	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2649.024	397.4	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	002	212	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	002	214	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2649.024	397.4	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	002	215	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	15	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2207.52	331.1	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	002	216	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	15	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2207.52	331.1	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	002	217	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	264.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	002	229	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	34	4380	None Proposed	Ceiling Mounted Occupancy Sensor	2	0	5003.712	750.6	$0.0	$0.0	$0.0	$206.0	$147.0	$0.0	$0.0	$0.0	$294.0	$412.0	$706.0
Henry Snyder High School - Interior	002	230	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	34	4380	None Proposed	Ceiling Mounted Occupancy Sensor	2	0	5003.712	750.6	$0.0	$0.0	$0.0	$206.0	$147.0	$0.0	$0.0	$0.0	$294.0	$412.0	$706.0

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector (Per Fixture Price)	Bulb (Per Fixture Price)	Labor (Per Fixture Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Subtotal	Materials Subtotal	Labor & Materials Subtotal	Labor Total	Materials Total	Labor & Materials Total
Henry Snyder High School - Interior	003	307	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	14	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2060.352	309.1	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	003	310	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2649.024	397.4	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	003	311	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2649.024	397.4	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	003	316	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	21	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	3090.528	463.6	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	003	317	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2649.024	397.4	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	003	319	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	8	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1177.344	176.6	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	003	320	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2649.024	397.4	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	003	321	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2649.024	397.4	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	003	323	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2649.024	397.4	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	003	324	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2649.024	397.4	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	003	326	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2649.024	397.4	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	003	316C	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	003	319B	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	883.008	132.5	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Henry Snyder High School - Interior	004	403 TV Studio	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	21	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Henry Snyder High School - Interior	000	Meeting Room	60W Incandescent Fixture	9	500	Replace 60W Incandescent Fixture with 13W CFL	None Proposed	0	0.423	211.5	31.7	$0.0	$5.0	$20.0	$0.0	$0.0	$20.0	$5.0	$25.0	$180.0	$45.0	$225.0
Henry Snyder High School - Interior	000	Mop Room	60W Incandescent Fixture	1	500	Replace 60W Incandescent Fixture with 13W CFL	None Proposed	0	0.047	23.5	3.5	$0.0	$5.0	$20.0	$0.0	$0.0	$20.0	$5.0	$25.0	$20.0	$5.0	$25.0
Henry Snyder High School - Interior	000	Electric Room	8' T12 Fixture w/ 2-T12 Lamps	2	500	Replace 8' T12 Fixture with 1 Tandem Double-Length 2-T8 Lamp Fixture	None Proposed	0	0.214	107	16.1	$65.1	$105.0	$93.0	$0.0	$0.0	$93.0	$170.1	$263.1	$186.0	$340.2	$526.2
Infinity Institute - Exterior	000	Exterrior	250W MH Fixture	6	4380	Replace 250W Fixture with 150W Induction Light Fixture	None Proposed	0	1.05	4599	689.9	$0.0	$390.0	$137.0	$0.0	$0.0	$137.0	$390.0	$527.0	$822.0	$2,340.0	$3,162.0
Infinity Institute - Exterior	000	Exterrior	Exterior Wall Packs (Assume 70w)	12	4380	Replace 70W Fixture with 45W Induction Light Fixture	None Proposed	0	0.552	2417.76	362.7	$0.0	$380.0	$137.0	$0.0	$0.0	$137.0	$380.0	$517.0	$1,644.0	$4,560.0	$6,204.0
Infinity Institute - Interior	001	Hallway	13W CFL Fixture	13	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Infinity Institute - Interior	001	Womens	13W CFL Fixture	1	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Infinity Institute - Interior	002	Balcony	150W Incandescent Fixture	30	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	3.75	1875	281.3	$0.0	$7.0	$20.0	$0.0	$0.0	$20.0	$7.0	$27.0	$600.0	$210.0	$810.0
Infinity Institute - Interior	000	Office	1X4 Fixtures w/ 1-T8 Lamps w/ Electronic Ballasts	4	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Infinity Institute - Interior	000	2-B	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	16	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1065.9168	159.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Infinity Institute - Interior	000	5-B	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	999.297	149.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Infinity Institute - Interior	000	6-B	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	532.9584	79.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Infinity Institute - Interior	000	7-B	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	10	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	666.198	99.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Infinity Institute - Interior	000	8-B	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	10	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	666.198	99.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Infinity Institute - Interior	000	Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Infinity Institute - Interior	000	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Infinity Institute - Interior	000	Office	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Infinity Institute - Interior	000	Office	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Infinity Institute - Interior	000	Storage	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Infinity Institute - Interior	000	Workout Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Infinity Institute - Interior	001	1	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector (Per Fixture Price)	Bulb (Per Fixture Price)	Labor (Per Fixture Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Subtotal	Materials Subtotal	Labor & Materials Subtotal	Labor Total	Materials Total	Labor & Materials Total
Infinity Institute - Interior	001	2	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Infinity Institute - Interior	001	3	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	10	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	666.198	99.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Infinity Institute - Interior	001	4	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	10	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	666.198	99.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Infinity Institute - Interior	001	5	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Infinity Institute - Interior	001	6	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Infinity Institute - Interior	001	7	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Infinity Institute - Interior	001	Auditorium	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	16	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Infinity Institute - Interior	001	Main	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Infinity Institute - Interior	001	Stage	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Infinity Institute - Interior	002	8	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Infinity Institute - Interior	002	9	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Infinity Institute - Interior	002	10	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Infinity Institute - Interior	002	11	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Infinity Institute - Interior	002	12	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Infinity Institute - Interior	002	13	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Infinity Institute - Interior	002	14	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Infinity Institute - Interior	002	15	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Infinity Institute - Interior	002	Girls Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Infinity Institute - Interior	002	Girls Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Infinity Institute - Interior	002	Office	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Infinity Institute - Interior	003	14	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Infinity Institute - Interior	003	16	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Infinity Institute - Interior	003	17	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Infinity Institute - Interior	003	19	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Infinity Institute - Interior	003	20	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Infinity Institute - Interior	003	21	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Infinity Institute - Interior	003	22	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Infinity Institute - Interior	003	23	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	799.4376	119.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Infinity Institute - Interior	003	24	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	532.9584	79.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
Infinity Institute - Interior	003	Hallway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Infinity Institute - Interior	000	Cafeteria	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	36	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Infinity Institute - Interior	000	Kitchen	1X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	8	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Infinity Institute - Interior	001	Office	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Infinity Institute - Interior	001	Womens	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	1	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Infinity Institute - Interior	001	Auditorium	250W MH Fixture	8	500	Replace 250W Fixture with 150W Induction Light Fixture	None Proposed	0	1.4	700	105.0	$0.0	$390.0	$137.0	$0.0	$0.0	$137.0	$390.0	$527.0	$1,096.0	$3,120.0	$4,216.0

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector (Per Fixture Price)	Bulb (Per Fixture Price)	Labor (Per Fixture Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Subtotal	Materials Subtotal	Labor & Materials Subtotal	Labor Total	Materials Total	Labor & Materials Total
Infinity Institute - Interior	001	Nurse	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Infinity Institute - Interior	001	7 Closet	60W Incandescent Fixture	1	500	Replace 60W Incandescent Fixture with 13W CFL	None Proposed	0	0.047	23.5	3.5	$0.0	$5.0	$20.0	$0.0	$0.0	$20.0	$5.0	$25.0	$20.0	$5.0	$25.0
Infinity Institute - Interior	002	Girls Bathroom	60W Incandescent Fixture	1	500	Replace 60W Incandescent Fixture with 13W CFL	None Proposed	0	0.047	23.5	3.5	$0.0	$5.0	$20.0	$0.0	$0.0	$20.0	$5.0	$25.0	$20.0	$5.0	$25.0
Infinity Institute - Interior	002	Girls Bathroom	60W Incandescent Fixture	1	500	Replace 60W Incandescent Fixture with 13W CFL	None Proposed	0	0.047	23.5	3.5	$0.0	$5.0	$20.0	$0.0	$0.0	$20.0	$5.0	$25.0	$20.0	$5.0	$25.0
Infinity Institute - Interior	002	Office	60W Incandescent Fixture	1	500	Replace 60W Incandescent Fixture with 13W CFL	None Proposed	0	0.047	23.5	3.5	$0.0	$5.0	$20.0	$0.0	$0.0	$20.0	$5.0	$25.0	$20.0	$5.0	$25.0
Infinity Institute - Interior	003	24	60W Incandescent Fixture	1	500	Replace 60W Incandescent Fixture with 13W CFL	None Proposed	0	0.047	23.5	3.5	$0.0	$5.0	$20.0	$0.0	$0.0	$20.0	$5.0	$25.0	$20.0	$5.0	$25.0
Infinity Institute - Interior	003	Bathroom	60W Incandescent Fixture	2	500	Replace 60W Incandescent Fixture with 13W CFL	None Proposed	0	0.094	47	7.1	$0.0	$5.0	$20.0	$0.0	$0.0	$20.0	$5.0	$25.0	$40.0	$10.0	$50.0
Infinity Institute - Interior	003	Office	60W Incandescent Fixture	2	500	Replace 60W Incandescent Fixture with 13W CFL	None Proposed	0	0.094	47	7.1	$0.0	$5.0	$20.0	$0.0	$0.0	$20.0	$5.0	$25.0	$40.0	$10.0	$50.0
JCPS Administrative Building - Exterio	000	Exterior	250W MH Fixture	6	4380	Replace 250W Fixture with 150W Induction Light Fixture	None Proposed	0	1.05	4599	505.9	$0.0	$390.0	$137.0	$0.0	$0.0	$137.0	$390.0	$527.0	$822.0	$2,340.0	$3,162.0
JCPS Administrative Building - Exterio	001	Exterior	Exterior Wall Packs (Assume 70w)	12	4380	Replace 70W Fixture with 45W Induction Light Fixture	None Proposed	0	0.552	2417.76	266.0	$0.0	$380.0	$137.0	$0.0	$0.0	$137.0	$380.0	$517.0	$1,644.0	$4,560.0	$6,204.0
JCPS Administrative Building - Interior	000	Storage	13W CFL Fixture	1	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	001	Cafeteria	13W CFL Fixture	36	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	006	Conference Room	13W CFL Fixture	41	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	002	Eletrical Closet	150W Incandescent Fixture	6	500	Replace 150W Incandescent Fixture with 25W CFL	Ceiling Mounted Occupancy Sensor	2	0.75	397.5	43.7	$0.0	$7.0	$20.0	$206.0	$147.0	$20.0	$7.0	$27.0	$414.0	$454.0	$868.0
JCPS Administrative Building - Interior	002	Hallway	150W Incandescent Fixture	5	8760	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	0.625	5475	602.3	$0.0	$7.0	$20.0	$0.0	$0.0	$20.0	$7.0	$27.0	$100.0	$35.0	$135.0
JCPS Administrative Building - Interior	009	Elevator #3	150W Incandescent Fixture	1	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	0.125	62.5	6.9	$0.0	$7.0	$20.0	$0.0	$0.0	$20.0	$7.0	$27.0	$20.0	$7.0	$27.0
JCPS Administrative Building - Interior	009	Elevator #3	150W Incandescent Fixture	1	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	0.125	62.5	6.9	$0.0	$7.0	$20.0	$0.0	$0.0	$20.0	$7.0	$27.0	$20.0	$7.0	$27.0
JCPS Administrative Building - Interior	009	Elevator #3	150W Incandescent Fixture	1	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	0.125	62.5	6.9	$0.0	$7.0	$20.0	$0.0	$0.0	$20.0	$7.0	$27.0	$20.0	$7.0	$27.0
JCPS Administrative Building - Interior	009	Elevator Freight	150W Incandescent Fixture	3	8760	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	0.375	3285	361.4	$0.0	$7.0	$20.0	$0.0	$0.0	$20.0	$7.0	$27.0	$60.0	$21.0	$81.0
JCPS Administrative Building - Interior	000	Storage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	3	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.111	55.5	6.1	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$195.0	$240.0	$435.0
JCPS Administrative Building - Interior	000	Storage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.148	74	8.1	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$260.0	$320.0	$580.0
JCPS Administrative Building - Interior	000	Storage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.666	333	36.6	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$1,170.0	$1,440.0	$2,610.0
JCPS Administrative Building - Interior	002	Storage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	2	0.444	222	24.4	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$780.0	$960.0	$1,740.0
JCPS Administrative Building - Interior	003	Storage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	13	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.481	240.5	26.5	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$845.0	$1,040.0	$1,885.0
JCPS Administrative Building - Interior	003	Warehouse	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	10	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Ceiling Mounted Occupancy Sensor	2	0.37	2259.204	248.5	$70.0	$10.0	$65.0	$206.0	$147.0	$65.0	$80.0	$145.0	$944.0	$1,212.0	$2,156.0
JCPS Administrative Building - Interior	004	Warehouse	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	39	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Ceiling Mounted Occupancy Sensor	4	1.443	8810.8956	969.2	$70.0	$10.0	$65.0	$412.0	$294.0	$65.0	$80.0	$145.0	$3,711.0	$4,768.0	$8,479.0
JCPS Administrative Building - Interior	005	510	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.074	451.8408	49.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$175.0	$223.5	$398.5
JCPS Administrative Building - Interior	005	1R Large Area	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	22	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.814	407	44.8	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$1,430.0	$1,760.0	$3,190.0
JCPS Administrative Building - Interior	009	Elevator #1	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.037	18.5	2.0	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$65.0	$80.0	$145.0
JCPS Administrative Building - Interior	009	Elevator #2	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.037	18.5	2.0	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$65.0	$80.0	$145.0
JCPS Administrative Building - Interior	000	Walkway	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	001	102	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	002	Storage	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	500	None Proposed	None Proposed	1	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	002	Warehouse	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	22	8760	None Proposed	Ceiling Mounted Occupancy Sensor	2	0	2931.2712	322.4	$0.0	$0.0	$0.0	$206.0	$147.0	$0.0	$0.0	$0.0	$294.0	$412.0	$706.0
JCPS Administrative Building - Interior	003	Electrical	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	003	Warehouse	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	45	4380	None Proposed	Ceiling Mounted Occupancy Sensor	2	0	2997.891	329.8	$0.0	$0.0	$0.0	$206.0	$147.0	$0.0	$0.0	$0.0	$294.0	$412.0	$706.0

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector (Per Fixture Price)	Bulb (Per Fixture Price)	Labor (Per Fixture Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Subtotal	Materials Subtotal	Labor & Materials Subtotal	Labor Total	Materials Total	Labor & Materials Total
JCPS Administrative Building - Interior	004	Warehouse	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	36	4380	None Proposed	Ceiling Mounted Occupancy Sensor	4	0	2398.3128	263.8	$0.0	$0.0	$0.0	$412.0	$294.0	$0.0	$0.0	$0.0	$1,176.0	$1,648.0	$2,824.0
JCPS Administrative Building - Interior	005	1R Large Area	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	10	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	000	Storage	1x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	2	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.1108	55.4	6.1	$85.0	$15.0	$65.0	$0.0	$0.0	$65.0	$100.0	$165.0	$130.0	$200.0	$330.0
JCPS Administrative Building - Interior	003	Warehouse	1x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	1	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Ceiling Mounted Occupancy Sensor	2	0.0554	338.574	37.2	$85.0	$15.0	$65.0	$206.0	$147.0	$65.0	$100.0	$165.0	$359.0	$512.0	$871.0
JCPS Administrative Building - Interior	008	Mech Room	1x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	2	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.1108	55.4	6.1	$85.0	$15.0	$65.0	$0.0	$0.0	$65.0	$100.0	$165.0	$130.0	$200.0	$330.0
JCPS Administrative Building - Interior	000	Generator Room	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	4	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.14784	73.92	8.1	$55.0	$10.0	$65.0	$0.0	$0.0	$65.0	$65.0	$130.0	$260.0	$260.0	$520.0
JCPS Administrative Building - Interior	000	Storage	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	8	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.29568	147.84	16.3	$55.0	$10.0	$65.0	$0.0	$0.0	$65.0	$65.0	$130.0	$520.0	$520.0	$1,040.0
JCPS Administrative Building - Interior	000	Storage	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	19	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.70224	351.12	38.6	$55.0	$10.0	$65.0	$0.0	$0.0	$65.0	$65.0	$130.0	$1,235.0	$1,235.0	$2,470.0
JCPS Administrative Building - Interior	002	Storage	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	6	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	3	0.22176	110.88	12.2	$55.0	$10.0	$65.0	$0.0	$0.0	$65.0	$65.0	$130.0	$390.0	$390.0	$780.0
JCPS Administrative Building - Interior	003	Warehouse	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	6	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Ceiling Mounted Occupancy Sensor	2	0.22176	1354.78656	149.0	$55.0	$10.0	$65.0	$206.0	$147.0	$65.0	$65.0	$130.0	$684.0	$802.0	$1,486.0
JCPS Administrative Building - Interior	005	1R Large Area	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	4	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.14784	73.92	8.1	$55.0	$10.0	$65.0	$0.0	$0.0	$65.0	$65.0	$130.0	$260.0	$260.0	$520.0
JCPS Administrative Building - Interior	007	Mechanical	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	1	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.03696	18.48	2.0	$55.0	$10.0	$65.0	$0.0	$0.0	$65.0	$65.0	$130.0	$65.0	$65.0	$130.0
JCPS Administrative Building - Interior	005	Hallway	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	26	8760	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.9074	7948.824	874.4	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$1,690.0	$2,080.0	$3,770.0
JCPS Administrative Building - Interior	006	Hallway	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	5	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.1745	764.31	84.1	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$325.0	$400.0	$725.0
JCPS Administrative Building - Interior	007	Business	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	9	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.3141	1975.3362	217.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$630.0	$783.5	$1,413.5
JCPS Administrative Building - Interior	007	Maintenance Office	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	9	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.3141	1975.3362	217.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$630.0	$783.5	$1,413.5
JCPS Administrative Building - Interior	007	Mechanical Room	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	3	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.1047	52.35	5.8	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$195.0	$240.0	$435.0
JCPS Administrative Building - Interior	008	812	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	7	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.2443	1536.3726	169.0	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$500.0	$623.5	$1,123.5
JCPS Administrative Building - Interior	008	814	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	3	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.1047	658.4454	72.4	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$240.0	$303.5	$543.5
JCPS Administrative Building - Interior	008	836	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	8	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.2792	1755.8544	193.1	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$565.0	$703.5	$1,268.5
JCPS Administrative Building - Interior	008	844	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.0349	219.4818	24.1	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$110.0	$143.5	$253.5
JCPS Administrative Building - Interior	008	818 Bath	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.0349	17.45	1.9	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$65.0	$80.0	$145.0
JCPS Administrative Building - Interior	008	Hallways	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	8	8760	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.2792	2445.792	269.0	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$520.0	$640.0	$1,160.0
JCPS Administrative Building - Interior	008	Legal	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.0698	438.9636	48.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$175.0	$223.5	$398.5
JCPS Administrative Building - Interior	002	Warehouse	2X2 Fixtures w/ 2-T8 Lamp Fixture w/ Electronic Ballasts	4	8760	Replace T8 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Ceiling Mounted Occupancy Sensor	2	0.00824	583.48608	64.2	$15.0	$10.0	$65.0	$206.0	$147.0	$65.0	$25.0	$90.0	$554.0	$512.0	$1,066.0
JCPS Administrative Building - Interior	007	719A	2X2 Fixtures w/ 2-T8 Lamp Fixture w/ Electronic Ballasts	3	4380	Replace T8 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.00618	218.80728	24.1	$15.0	$10.0	$65.0	$63.5	$45.0	$65.0	$25.0	$90.0	$240.0	$138.5	$378.5
JCPS Administrative Building - Interior	007	Maintance	2X2 Fixtures w/ 2-T8 Lamp Fixture w/ Electronic Ballasts	9	500	Replace T8 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.01854	9.27	1.0	$15.0	$10.0	$65.0	$0.0	$0.0	$65.0	$25.0	$90.0	$585.0	$225.0	$810.0
JCPS Administrative Building - Interior	007	Storage	2X2 Fixtures w/ 2-T8 Lamp Fixture w/ Electronic Ballasts	14	500	Replace T8 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.02884	14.42	1.6	$15.0	$10.0	$65.0	$0.0	$0.0	$65.0	$25.0	$90.0	$910.0	$350.0	$1,260.0
JCPS Administrative Building - Interior	007	West Side Ave Entrance	2X2 Fixtures w/ 2-T8 Lamp Fixture w/ Electronic Ballasts	10	8760	Replace T8 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.0206	180.456	19.9	$15.0	$10.0	$65.0	$0.0	$0.0	$65.0	$25.0	$90.0	$650.0	$250.0	$900.0
JCPS Administrative Building - Interior	008	817	2X2 Fixtures w/ 2-T8 Lamp Fixture w/ Electronic Ballasts	4	4380	Replace T8 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.00824	291.74304	32.1	$15.0	$10.0	$65.0	$63.5	$45.0	$65.0	$25.0	$90.0	$305.0	$163.5	$468.5
JCPS Administrative Building - Interior	008	844	2X2 Fixtures w/ 2-T8 Lamp Fixture w/ Electronic Ballasts	1	4380	Replace T8 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.00206	72.93576	8.0	$15.0	$10.0	$65.0	$63.5	$45.0	$65.0	$25.0	$90.0	$110.0	$88.5	$198.5
JCPS Administrative Building - Interior	008	Early Children	2X2 Fixtures w/ 2-T8 Lamp Fixture w/ Electronic Ballasts	2	4380	Replace T8 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.00412	145.87152	16.0	$15.0	$10.0	$65.0	$63.5	$45.0	$65.0	$25.0	$90.0	$175.0	$113.5	$288.5
JCPS Administrative Building - Interior	008	Hallways	2X2 Fixtures w/ 2-T8 Lamp Fixture w/ Electronic Ballasts	8	8760	Replace T8 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.01648	144.3648	15.9	$15.0	$10.0	$65.0	$0.0	$0.0	$65.0	$25.0	$90.0	$520.0	$200.0	$720.0
JCPS Administrative Building - Interior	008	Super's Office	2X2 Fixtures w/ 2-T8 Lamp Fixture w/ Electronic Ballasts	4	4380	Replace T8 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.00824	291.74304	32.1	$15.0	$10.0	$65.0	$63.5	$45.0	$65.0	$25.0	$90.0	$305.0	$163.5	$468.5
JCPS Administrative Building - Interior	001	100	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	4	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector (Per Fixture Price)	Bulb (Per Fixture Price)	Labor (Per Fixture Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Subtotal	Materials Subtotal	Labor & Materials Subtotal	Labor Total	Materials Total	Labor & Materials Total
JCPS Administrative Building - Interior	001	106	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	4	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	001	108	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	4	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	001	Kitchen	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	5	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	001	Medical	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	15	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	001	Medical Hallway	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	19	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	003	Hallway	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	1	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	005	Hallway	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	22	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	006	Hallway	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	10	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	005	517	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.074	451.8408	49.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$175.0	$223.5	$398.5
JCPS Administrative Building - Interior	005	522	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.074	451.8408	49.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$175.0	$223.5	$398.5
JCPS Administrative Building - Interior	005	523	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.074	451.8408	49.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$175.0	$223.5	$398.5
JCPS Administrative Building - Interior	005	528	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.074	451.8408	49.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$175.0	$223.5	$398.5
JCPS Administrative Building - Interior	005	529	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.037	225.9204	24.9	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$110.0	$143.5	$253.5
JCPS Administrative Building - Interior	005	534	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.074	451.8408	49.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$175.0	$223.5	$398.5
JCPS Administrative Building - Interior	005	536	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	3	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.111	677.7612	74.6	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$240.0	$303.5	$543.5
JCPS Administrative Building - Interior	005	528 A	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.074	451.8408	49.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$175.0	$223.5	$398.5
JCPS Administrative Building - Interior	005	Hallway	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	8760	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.666	5834.16	641.8	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$1,170.0	$1,440.0	$2,610.0
JCPS Administrative Building - Interior	006	607	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.148	903.6816	99.4	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$305.0	$383.5	$688.5
JCPS Administrative Building - Interior	006	608	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.074	451.8408	49.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$175.0	$223.5	$398.5
JCPS Administrative Building - Interior	006	610	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.074	451.8408	49.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$175.0	$223.5	$398.5
JCPS Administrative Building - Interior	006	612	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	3	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.111	677.7612	74.6	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$240.0	$303.5	$543.5
JCPS Administrative Building - Interior	006	613	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.037	225.9204	24.9	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$110.0	$143.5	$253.5
JCPS Administrative Building - Interior	006	636	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	6	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.222	1355.5224	149.1	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$435.0	$543.5	$978.5
JCPS Administrative Building - Interior	006	641	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.037	225.9204	24.9	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$110.0	$143.5	$253.5
JCPS Administrative Building - Interior	006	641	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.037	225.9204	24.9	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$110.0	$143.5	$253.5
JCPS Administrative Building - Interior	006	642	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.074	451.8408	49.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$175.0	$223.5	$398.5
JCPS Administrative Building - Interior	006	643	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.074	451.8408	49.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$175.0	$223.5	$398.5
JCPS Administrative Building - Interior	006	645	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	3	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.111	677.7612	74.6	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$240.0	$303.5	$543.5
JCPS Administrative Building - Interior	006	607A	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.037	225.9204	24.9	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$110.0	$143.5	$253.5
JCPS Administrative Building - Interior	006	638A	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	5	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.185	1129.602	124.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$370.0	$463.5	$833.5
JCPS Administrative Building - Interior	006	Dr. Andrea Blake	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.074	451.8408	49.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$175.0	$223.5	$398.5
JCPS Administrative Building - Interior	008	Custodial	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.037	18.5	2.0	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$65.0	$80.0	$145.0
JCPS Administrative Building - Interior	001	109	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	001	Garage	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	24	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	001	Security	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	14	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector (Per Fixture Price)	Bulb (Per Fixture Price)	Labor (Per Fixture Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Subtotal	Materials Subtotal	Labor & Materials Subtotal	Labor Total	Materials Total	Labor & Materials Total
JCPS Administrative Building - Interior	003	Bathroom	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	003	Womens Bathroom	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	005	508	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	133.2396	14.7	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	005	509	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	133.2396	14.7	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	005	511	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	133.2396	14.7	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	005	518	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	199.8594	22.0	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	005	518	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	133.2396	14.7	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	005	519	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	199.8594	22.0	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	005	520	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	66.6198	7.3	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	005	521	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	133.2396	14.7	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	005	522	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	66.6198	7.3	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	005	523	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	199.8594	22.0	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	005	524	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	133.2396	14.7	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	005	527	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	133.2396	14.7	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	005	529	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	66.6198	7.3	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	005	542	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	133.2396	14.7	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	005	509 B	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	133.2396	14.7	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	005	Hallway	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	005	Lunch Room	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	199.8594	22.0	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	005	Records Room	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	15	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	007	704	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	66.6198	7.3	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	008	Mens Bathroom	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	006	615	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	5	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.277	1692.87	186.2	$85.0	$15.0	$65.0	$63.5	$45.0	$65.0	$100.0	$165.0	$370.0	$563.5	$933.5
JCPS Administrative Building - Interior	006	618	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	2	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.1108	677.148	74.5	$85.0	$15.0	$65.0	$63.5	$45.0	$65.0	$100.0	$165.0	$175.0	$263.5	$438.5
JCPS Administrative Building - Interior	007	Elevator Freight	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	1	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.0554	27.7	3.0	$85.0	$15.0	$65.0	$0.0	$0.0	$65.0	$100.0	$165.0	$65.0	$100.0	$165.0
JCPS Administrative Building - Interior	008	Hallways	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	8	8760	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.4432	3882.432	427.1	$85.0	$15.0	$65.0	$0.0	$0.0	$65.0	$100.0	$165.0	$520.0	$800.0	$1,320.0
JCPS Administrative Building - Interior	009	Elevator Freight	2x4 Fixtures w/ 3-T12 Lamp Fixture w/ Magnetic Ballast	1	8760	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.0554	485.304	53.4	$85.0	$15.0	$65.0	$0.0	$0.0	$65.0	$100.0	$165.0	$65.0	$100.0	$165.0
JCPS Administrative Building - Interior	006	620	2X4 Fixtures w/ 3-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	231.264	25.4	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	005	513	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	2	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.1478	903.0684	99.3	$105.0	$20.0	$65.0	$63.5	$45.0	$65.0	$125.0	$190.0	$175.0	$313.5	$488.5
JCPS Administrative Building - Interior	005	1R Large Area	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	1	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.0739	36.95	4.1	$105.0	$20.0	$65.0	$0.0	$0.0	$65.0	$125.0	$190.0	$65.0	$125.0	$190.0
JCPS Administrative Building - Interior	006	623	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	1	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.0739	451.5342	49.7	$105.0	$20.0	$65.0	$63.5	$45.0	$65.0	$125.0	$190.0	$110.0	$188.5	$298.5
JCPS Administrative Building - Interior	006	624	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	2	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.1478	903.0684	99.3	$105.0	$20.0	$65.0	$63.5	$45.0	$65.0	$125.0	$190.0	$175.0	$313.5	$488.5
JCPS Administrative Building - Interior	006	649	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	3	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.2217	1354.6026	149.0	$105.0	$20.0	$65.0	$63.5	$45.0	$65.0	$125.0	$190.0	$240.0	$438.5	$678.5
JCPS Administrative Building - Interior	006	Hallway	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	16	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	1.1824	5178.912	569.7	$105.0	$20.0	$65.0	$0.0	$0.0	$65.0	$125.0	$190.0	$1,040.0	$2,000.0	$3,040.0
JCPS Administrative Building - Interior	006	Mens Bathroom	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	2	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.1478	73.9	8.1	$105.0	$20.0	$65.0	$0.0	$0.0	$65.0	$125.0	$190.0	$130.0	$250.0	$380.0

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector (Per Fixture Price)	Bulb (Per Fixture Price)	Labor (Per Fixture Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Subtotal	Materials Subtotal	Labor & Materials Subtotal	Labor Total	Materials Total	Labor & Materials Total
JCPS Administrative Building - Interior	007	705	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	3	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	Automatic Wall Switch Occupancy	2	Automatic Wall Switch Occupancy	3	Automatic Wall Switch Occupancy Sensor	4	Automatic Wall Switch Occupancy Sensor	5	Automatic Wall Switch Occupancy Sensor	6	Automatic Wall Switch Occupancy Sensor	7	Automatic Wall Switch Occupancy	8
JCPS Administrative Building - Interior	007	719	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	3	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.2217	1354.6026	149.0	$105.0	$20.0	$65.0	$63.5	$45.0	$65.0	$125.0	$190.0	$240.0	$438.5	$678.5
JCPS Administrative Building - Interior	007	727	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	1	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.0739	451.5342	49.7	$105.0	$20.0	$65.0	$63.5	$45.0	$65.0	$125.0	$190.0	$110.0	$188.5	$298.5
JCPS Administrative Building - Interior	007	728	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	2	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.1478	903.0684	99.3	$105.0	$20.0	$65.0	$63.5	$45.0	$65.0	$125.0	$190.0	$175.0	$313.5	$488.5
JCPS Administrative Building - Interior	007	Admin Services	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	2	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.1478	903.0684	99.3	$105.0	$20.0	$65.0	$63.5	$45.0	$65.0	$125.0	$190.0	$175.0	$313.5	$488.5
JCPS Administrative Building - Interior	007	Budget	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	2	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.1478	903.0684	99.3	$105.0	$20.0	$65.0	$63.5	$45.0	$65.0	$125.0	$190.0	$175.0	$313.5	$488.5
JCPS Administrative Building - Interior	007	Business	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	4	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.2956	1806.1368	198.7	$105.0	$20.0	$65.0	$63.5	$45.0	$65.0	$125.0	$190.0	$305.0	$563.5	$868.5
JCPS Administrative Building - Interior	007	Custodial	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	1	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.0739	36.95	4.1	$105.0	$20.0	$65.0	$0.0	$0.0	$65.0	$125.0	$190.0	$65.0	$125.0	$190.0
JCPS Administrative Building - Interior	007	Food Service	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	3	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.2217	1354.6026	149.0	$105.0	$20.0	$65.0	$63.5	$45.0	$65.0	$125.0	$190.0	$240.0	$438.5	$678.5
JCPS Administrative Building - Interior	007	Hallway	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	6	8760	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.4434	3884.184	427.3	$105.0	$20.0	$65.0	$0.0	$0.0	$65.0	$125.0	$190.0	$390.0	$750.0	$1,140.0
JCPS Administrative Building - Interior	007	Maintenance	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	4	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.2956	147.8	16.3	$105.0	$20.0	$65.0	$0.0	$0.0	$65.0	$125.0	$190.0	$260.0	$500.0	$760.0
JCPS Administrative Building - Interior	007	Mens Bathroom	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	2	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.1478	73.9	8.1	$105.0	$20.0	$65.0	$0.0	$0.0	$65.0	$125.0	$190.0	$130.0	$250.0	$380.0
JCPS Administrative Building - Interior	007	Pay Roll	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	7	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.5173	3160.7394	347.7	$105.0	$20.0	$65.0	$63.5	$45.0	$65.0	$125.0	$190.0	$500.0	$938.5	$1,438.5
JCPS Administrative Building - Interior	008	810	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	3	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.2217	1354.6026	149.0	$105.0	$20.0	$65.0	$63.5	$45.0	$65.0	$125.0	$190.0	$240.0	$438.5	$678.5
JCPS Administrative Building - Interior	008	815	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	6	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.4434	2709.2052	298.0	$105.0	$20.0	$65.0	$63.5	$45.0	$65.0	$125.0	$190.0	$435.0	$813.5	$1,248.5
JCPS Administrative Building - Interior	008	818	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	4	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.2956	1806.1368	198.7	$105.0	$20.0	$65.0	$63.5	$45.0	$65.0	$125.0	$190.0	$305.0	$563.5	$868.5
JCPS Administrative Building - Interior	008	811A	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	1	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.0739	451.5342	49.7	$105.0	$20.0	$65.0	$63.5	$45.0	$65.0	$125.0	$190.0	$110.0	$188.5	$298.5
JCPS Administrative Building - Interior	008	842B	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	2	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.1478	903.0684	99.3	$105.0	$20.0	$65.0	$63.5	$45.0	$65.0	$125.0	$190.0	$175.0	$313.5	$488.5
JCPS Administrative Building - Interior	008	Legal	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	24	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	1.7736	10836.8208	1,192.1	$105.0	$20.0	$65.0	$63.5	$45.0	$65.0	$125.0	$190.0	$1,605.0	$3,063.5	$4,668.5
JCPS Administrative Building - Interior	000	Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	000	Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	000	Walkway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	8	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	001	Mail	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	14	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	001	Medical	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	002	Warehouse	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	8760	None Proposed	Ceiling Mounted Occupancy Sensor	2	0	588.672	64.8	$0.0	$0.0	$0.0	$206.0	$147.0	$0.0	$0.0	$0.0	$294.0	$412.0	$706.0
JCPS Administrative Building - Interior	003	301	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	588.672	64.8	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	003	302	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	588.672	64.8	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	003	303	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	5	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	735.84	80.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	003	304	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	883.008	97.1	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	003	305	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1324.512	145.7	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	003	306	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	441.504	48.6	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	003	309	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	10	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1471.68	161.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	003	310	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	294.336	32.4	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	003	310	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	003	313	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	294.336	32.4	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector (Per Fixture Price)	Bulb (Per Fixture Price)	Labor (Per Fixture Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Subtotal	Materials Subtotal	Labor & Materials Subtotal	Labor Total	Materials Total	Labor & Materials Total
JCPS Administrative Building - Interior	003	314	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	13	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1913.184	210.5	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	003	322	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	194.3	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	003	324	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	003	325	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	294.336	32.4	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	003	327	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	003	Bathroom	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	1	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	003	Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	46	8760	None Proposed	None Proposed	1	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	003	Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	13	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	003	Human Resource Rec	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	194.3	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	003	Mens Bathroom	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	003	Reproduction Room	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	194.3	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	003	Storage	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	1	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	003	Storage	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	13	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	003	Testing Room	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	16	500	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	268.8	29.6	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	005	1R Large Area	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	005	Lunch Room	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	588.672	64.8	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	006	603	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	1	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	147.168	16.2	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	006	604	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	1	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	147.168	16.2	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	006	605	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	294.336	32.4	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	006	607	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	588.672	64.8	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	006	611	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	294.336	32.4	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	006	613	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	1	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	147.168	16.2	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	006	621	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	294.336	32.4	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	006	622	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	294.336	32.4	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	006	623	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	441.504	48.6	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	006	624	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	441.504	48.6	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	006	634	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	8	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1177.344	129.5	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	006	637	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	294.336	32.4	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	006	638	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	294.336	32.4	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	006	639	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	294.336	32.4	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	006	644	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	294.336	32.4	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	006	649	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	10	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1471.68	161.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	006	650	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	441.504	48.6	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	006	Computer Room	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	Automatic Wall Switch Occupancy	2	Automatic Wall Switch Occupancy	3	Automatic Wall Switch Occupancy Sensor	4	Automatic Wall Switch Occupancy Sensor	5	Automatic Wall Switch Occupancy Sensor	6	Automatic Wall Switch Occupancy Sensor	7	Automatic Wall Switch Occupancy	8
JCPS Administrative Building - Interior	006	Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	43	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector (Per Fixture Price)	Bulb (Per Fixture Price)	Labor (Per Fixture Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Subtotal	Materials Subtotal	Labor & Materials Subtotal	Labor Total	Materials Total	Labor & Materials Total
JCPS Administrative Building - Interior	006	Russell Betz	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	441.504	48.6	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	007	704	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	7	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1030.176	113.3	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	007	705	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	1	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	147.168	16.2	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	007	706	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts		4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	0	0.0	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	007	727	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	1	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	147.168	16.2	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	007	729	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	1	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	147.168	16.2	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	007	Admin Services	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	1	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	147.168	16.2	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	007	Budget	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	10	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1471.68	161.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	007	Business	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	294.336	32.4	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	007	Business	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	8	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1177.344	129.5	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	007	Conference Room	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	007	Conference Room	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	1	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	007	Food Service	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2649.024	291.4	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	007	Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	15	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	007	Lunch Room	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	294.336	32.4	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	007	Maintenance	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	13	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	007	Maintenance Office	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	10	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1471.68	161.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	007	Pay Roll	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	9	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1324.512	145.7	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	007	Spec	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	588.672	64.8	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	008	808	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	31	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	4562.208	501.8	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	008	811	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	7	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1030.176	113.3	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	008	815	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	294.336	32.4	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	008	816	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	7	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1030.176	113.3	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	008	816	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	588.672	64.8	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	008	818	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	294.336	32.4	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	008	830	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	5	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	735.84	80.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	008	832	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	441.504	48.6	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	008	842B	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	294.336	32.4	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	008	Early Children	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	20	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2943.36	323.8	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	008	Hallways	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	16	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	008	Kitchen	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	441.504	48.6	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	008	Storage	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	1	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
JCPS Administrative Building - Interior	008	Super's Office	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	1	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	147.168	16.2	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	008	Super's Office	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	441.504	48.6	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
JCPS Administrative Building - Interior	009	Elevator #3	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	1	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector (Per Fixture Price)	Bulb (Per Fixture Price)	Labor (Per Fixture Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Subtotal	Materials Subtotal	Labor & Materials Subtotal	Labor Total	Materials Total	Labor & Materials Total
PS #20 - Exterior	000	Exterior	Exterior Wall Packs (Assume 70w)	8	4380	Replace 70W Wall Pack fixture with LED Area Light	None Proposed	0	0.28	1226.4	184.0	$0.0	$800.0	$186.0	$0.0	$0.0	$186.0	$800.0	$986.0	$1,488.0	$6,400.0	$7,888.0
PS #20 - Exterior	000	Exterior	Flood Lights (Assume 400W MH)	4	4380	Replace 400W MH fixture with LED Area Light	None Proposed	0	0.904	3959.52	593.9	$0.0	$2,000.0	$133.0	$0.0	$0.0	$133.0	$2,000.0	$2,133.0	$532.0	$8,000.0	$8,532.0
PS #20 - Interior	000	Closet	150W Incandescent Fixture	1	500	Replace 150W Incandescent Fixture with 25W CFL	Ceiling Mounted Occupancy Sensor	1	0.125	66.25	9.9	$0.0	$7.0	$20.0	$103.0	$73.5	$20.0	$7.0	$27.0	$93.5	$110.0	$203.5
PS #20 - Interior	000	Closet	150W Incandescent Fixture	1	500	Replace 150W Incandescent Fixture with 25W CFL	Automatic Wall Switch Occupancy Sensor	1	0.125	66.25	9.9	$0.0	$7.0	$20.0	$63.5	$45.0	$20.0	$7.0	$27.0	$65.0	$70.5	$135.5
PS #20 - Interior	000	Storage	150W Incandescent Fixture	7	500	Replace 150W Incandescent Fixture with 25W CFL	Automatic Wall Switch Occupancy Sensor	1	0.875	463.75	69.6	$0.0	$7.0	$20.0	$63.5	$45.0	$20.0	$7.0	$27.0	$185.0	$112.5	$297.5
PS #20 - Interior	000	Storage Room S4	150W Incandescent Fixture	2	500	Replace 150W Incandescent Fixture with 25W CFL	Ceiling Mounted Occupancy Sensor	1	0.25	132.5	19.9	$0.0	$7.0	$20.0	$103.0	$73.5	$20.0	$7.0	$27.0	$113.5	$117.0	$230.5
PS #20 - Interior	000	Storage Room S5	150W Incandescent Fixture	2	500	Replace 150W Incandescent Fixture with 25W CFL	Ceiling Mounted Occupancy Sensor	1	0.25	132.5	19.9	$0.0	$7.0	$20.0	$103.0	$73.5	$20.0	$7.0	$27.0	$113.5	$117.0	$230.5
PS #20 - Interior	001	109B	150W Incandescent Fixture	1	500	Replace 150W Incandescent Fixture with 25W CFL	Automatic Wall Switch Occupancy Sensor	1	0.125	66.25	9.9	$0.0	$7.0	$20.0	$63.5	$45.0	$20.0	$7.0	$27.0	$65.0	$70.5	$135.5
PS #20 - Interior	001	110B	150W Incandescent Fixture	1	500	Replace 150W Incandescent Fixture with 25W CFL	Automatic Wall Switch Occupancy Sensor	1	0.125	66.25	9.9	$0.0	$7.0	$20.0	$63.5	$45.0	$20.0	$7.0	$27.0	$65.0	$70.5	$135.5
PS #20 - Interior	000	Boys Bathroom	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	5	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.185	128.95	19.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$370.0	$463.5	$833.5
PS #20 - Interior	000	Cafeteria	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	24	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.888	3889.44	583.4	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$1,560.0	$1,920.0	$3,480.0
PS #20 - Interior	000	Girls Bathroom	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	6	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.222	154.74	23.2	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$435.0	$543.5	$978.5
PS #20 - Interior	000	Gym Storage S2	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.148	103.16	15.5	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$305.0	$383.5	$688.5
PS #20 - Interior	000	Hallway S3	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	6	8760	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.222	1944.72	291.7	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$390.0	$480.0	$870.0
PS #20 - Interior	000	Industrial Arts	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	21	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.777	4744.3284	711.6	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,410.0	$1,743.5	$3,153.5
PS #20 - Interior	000	Janitor Office	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.074	37	5.6	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$130.0	$160.0	$290.0
PS #20 - Interior	000	Stairwell (All)	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	32	8760	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	1.184	10371.84	1,555.8	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$2,080.0	$2,560.0	$4,640.0
PS #20 - Interior	000	Supply S1	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.074	51.58	7.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$175.0	$223.5	$398.5
PS #20 - Interior	000	Teachers Office	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	6	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.222	1355.5224	203.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$435.0	$543.5	$978.5
PS #20 - Interior	001	102	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Ceiling Mounted Occupancy Sensor	1	0.666	4066.5672	610.0	$70.0	$10.0	$65.0	$103.0	$73.5	$65.0	$80.0	$145.0	$1,243.5	$1,543.0	$2,786.5
PS #20 - Interior	001	103	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Ceiling Mounted Occupancy Sensor	1	0.666	4066.5672	610.0	$70.0	$10.0	$65.0	$103.0	$73.5	$65.0	$80.0	$145.0	$1,243.5	$1,543.0	$2,786.5
PS #20 - Interior	001	104	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Ceiling Mounted Occupancy Sensor	1	0.666	4066.5672	610.0	$70.0	$10.0	$65.0	$103.0	$73.5	$65.0	$80.0	$145.0	$1,243.5	$1,543.0	$2,786.5
PS #20 - Interior	001	105	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Ceiling Mounted Occupancy Sensor	1	0.666	4066.5672	610.0	$70.0	$10.0	$65.0	$103.0	$73.5	$65.0	$80.0	$145.0	$1,243.5	$1,543.0	$2,786.5
PS #20 - Interior	001	106	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Ceiling Mounted Occupancy Sensor	1	0.666	4066.5672	610.0	$70.0	$10.0	$65.0	$103.0	$73.5	$65.0	$80.0	$145.0	$1,243.5	$1,543.0	$2,786.5
PS #20 - Interior	001	107	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Ceiling Mounted Occupancy Sensor	1	0.666	4066.5672	610.0	$70.0	$10.0	$65.0	$103.0	$73.5	$65.0	$80.0	$145.0	$1,243.5	$1,543.0	$2,786.5
PS #20 - Interior	001	108	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Ceiling Mounted Occupancy Sensor	1	0.666	4066.5672	610.0	$70.0	$10.0	$65.0	$103.0	$73.5	$65.0	$80.0	$145.0	$1,243.5	$1,543.0	$2,786.5
PS #20 - Interior	001	109	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Ceiling Mounted Occupancy Sensor	1	0.666	4066.5672	610.0	$70.0	$10.0	$65.0	$103.0	$73.5	$65.0	$80.0	$145.0	$1,243.5	$1,543.0	$2,786.5
PS #20 - Interior	001	110	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Ceiling Mounted Occupancy Sensor	1	0.666	4066.5672	610.0	$70.0	$10.0	$65.0	$103.0	$73.5	$65.0	$80.0	$145.0	$1,243.5	$1,543.0	$2,786.5
PS #20 - Interior	001	110B	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.037	25.79	3.9	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$110.0	$143.5	$253.5
PS #20 - Interior	001	Hallway	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	8760	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.666	5834.16	875.1	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$1,170.0	$1,440.0	$2,610.0
PS #20 - Interior	001	Principal	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.148	648.24	97.2	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$260.0	$320.0	$580.0
PS #20 - Interior	001	Storage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.074	51.58	7.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$175.0	$223.5	$398.5
PS #20 - Interior	001	Storage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.148	103.16	15.5	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$305.0	$383.5	$688.5
PS #20 - Interior	001	Storage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.148	103.16	15.5	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$305.0	$383.5	$688.5
PS #20 - Interior	001	Storage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.148	103.16	15.5	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$305.0	$383.5	$688.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector (Per Fixture Price)	Bulb (Per Fixture Price)	Labor (Per Fixture Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Subtotal	Materials Subtotal	Labor & Materials Subtotal	Labor Total	Materials Total	Labor & Materials Total
PS #20 - Interior	001	Storage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.148	103.16	15.5	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$305.0	$383.5	$688.5
PS #20 - Interior	001	Storage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.148	103.16	15.5	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$305.0	$383.5	$688.5
PS #20 - Interior	002	201	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Ceiling Mounted Occupancy Sensor	1	0.666	4066.5672	610.0	$70.0	$10.0	$65.0	$103.0	$73.5	$65.0	$80.0	$145.0	$1,243.5	$1,543.0	$2,786.5
PS #20 - Interior	002	202	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	8	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Ceiling Mounted Occupancy Sensor	1	0.296	1807.3632	271.1	$70.0	$10.0	$65.0	$103.0	$73.5	$65.0	$80.0	$145.0	$593.5	$743.0	$1,336.5
PS #20 - Interior	002	203	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Ceiling Mounted Occupancy Sensor	1	0.666	4066.5672	610.0	$70.0	$10.0	$65.0	$103.0	$73.5	$65.0	$80.0	$145.0	$1,243.5	$1,543.0	$2,786.5
PS #20 - Interior	002	204	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Ceiling Mounted Occupancy Sensor	1	0.666	4066.5672	610.0	$70.0	$10.0	$65.0	$103.0	$73.5	$65.0	$80.0	$145.0	$1,243.5	$1,543.0	$2,786.5
PS #20 - Interior	002	205	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Ceiling Mounted Occupancy Sensor	1	0.666	4066.5672	610.0	$70.0	$10.0	$65.0	$103.0	$73.5	$65.0	$80.0	$145.0	$1,243.5	$1,543.0	$2,786.5
PS #20 - Interior	002	206	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Ceiling Mounted Occupancy Sensor	1	0.666	4066.5672	610.0	$70.0	$10.0	$65.0	$103.0	$73.5	$65.0	$80.0	$145.0	$1,243.5	$1,543.0	$2,786.5
PS #20 - Interior	002	208	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	14	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Ceiling Mounted Occupancy Sensor	1	0.518	3162.8856	474.4	$70.0	$10.0	$65.0	$103.0	$73.5	$65.0	$80.0	$145.0	$983.5	$1,223.0	$2,206.5
PS #20 - Interior	002	209	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Ceiling Mounted Occupancy Sensor	1	0.666	4066.5672	610.0	$70.0	$10.0	$65.0	$103.0	$73.5	$65.0	$80.0	$145.0	$1,243.5	$1,543.0	$2,786.5
PS #20 - Interior	002	210	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Ceiling Mounted Occupancy Sensor	1	0.666	4066.5672	610.0	$70.0	$10.0	$65.0	$103.0	$73.5	$65.0	$80.0	$145.0	$1,243.5	$1,543.0	$2,786.5
PS #20 - Interior	002	Computer Lab	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	6	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Ceiling Mounted Occupancy Sensor	1	0.222	1355.5224	203.3	$70.0	$10.0	$65.0	$103.0	$73.5	$65.0	$80.0	$145.0	$463.5	$583.0	$1,046.5
PS #20 - Interior	002	Hallway	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	10	8760	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.37	3241.2	486.2	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$650.0	$800.0	$1,450.0
PS #20 - Interior	002	Storage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.148	103.16	15.5	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$305.0	$383.5	$688.5
PS #20 - Interior	002	Storage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.148	103.16	15.5	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$305.0	$383.5	$688.5
PS #20 - Interior	002	Storage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.148	103.16	15.5	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$305.0	$383.5	$688.5
PS #20 - Interior	002	Storage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.148	103.16	15.5	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$305.0	$383.5	$688.5
PS #20 - Interior	002	Storage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.148	103.16	15.5	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$305.0	$383.5	$688.5
PS #20 - Interior	002	Storage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.148	103.16	15.5	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$305.0	$383.5	$688.5
PS #20 - Interior	003	301	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Ceiling Mounted Occupancy Sensor	1	0.666	4066.5672	610.0	$70.0	$10.0	$65.0	$103.0	$73.5	$65.0	$80.0	$145.0	$1,243.5	$1,543.0	$2,786.5
PS #20 - Interior	003	302	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Ceiling Mounted Occupancy Sensor	1	0.666	4066.5672	610.0	$70.0	$10.0	$65.0	$103.0	$73.5	$65.0	$80.0	$145.0	$1,243.5	$1,543.0	$2,786.5
PS #20 - Interior	003	303	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Ceiling Mounted Occupancy Sensor	1	0.666	4066.5672	610.0	$70.0	$10.0	$65.0	$103.0	$73.5	$65.0	$80.0	$145.0	$1,243.5	$1,543.0	$2,786.5
PS #20 - Interior	003	304	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Ceiling Mounted Occupancy Sensor	1	0.666	4066.5672	610.0	$70.0	$10.0	$65.0	$103.0	$73.5	$65.0	$80.0	$145.0	$1,243.5	$1,543.0	$2,786.5
PS #20 - Interior	003	305	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Ceiling Mounted Occupancy Sensor	1	0.666	4066.5672	610.0	$70.0	$10.0	$65.0	$103.0	$73.5	$65.0	$80.0	$145.0	$1,243.5	$1,543.0	$2,786.5
PS #20 - Interior	003	Hallway	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	17	8760	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.629	5510.04	826.5	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$1,105.0	$1,360.0	$2,465.0
PS #20 - Interior	003	Home Economics	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Ceiling Mounted Occupancy Sensor	1	0.666	4066.5672	610.0	$70.0	$10.0	$65.0	$103.0	$73.5	$65.0	$80.0	$145.0	$1,243.5	$1,543.0	$2,786.5
PS #20 - Interior	003	Library	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	6	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Ceiling Mounted Occupancy Sensor	1	0.222	1355.5224	203.3	$70.0	$10.0	$65.0	$103.0	$73.5	$65.0	$80.0	$145.0	$463.5	$583.0	$1,046.5
PS #20 - Interior	003	Stage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.074	37	5.6	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$130.0	$160.0	$290.0
PS #20 - Interior	003	Storage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.148	103.16	15.5	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$305.0	$383.5	$688.5
PS #20 - Interior	003	Storage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.148	103.16	15.5	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$305.0	$383.5	$688.5
PS #20 - Interior	003	Storage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	21	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.777	3403.26	510.5	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$1,365.0	$1,680.0	$3,045.0
PS #20 - Interior	000	Boys Bathroom	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	500	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	45.63	6.8	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #20 - Interior	001	Storage	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	500	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	15.21	2.3	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector (Per Fixture Price)	Bulb (Per Fixture Price)	Labor (Per Fixture Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Subtotal	Materials Subtotal	Labor & Materials Subtotal	Labor Total	Materials Total	Labor & Materials Total
PS #20 - Interior	002	202	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	17	4380	None Proposed	Ceiling Mounted Occupancy Sensor	0	0	1132.5366	169.9	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #20 - Interior	003	Library	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Ceiling Mounted Occupancy Sensor	1	0	799.4376	119.9	$0.0	$0.0	$0.0	$103.0	$73.5	$0.0	$0.0	$0.0	$73.5	$103.0	$176.5
PS #20 - Interior	003	Computer Room	1X4 Suspended Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	24	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #20 - Interior	001	109B	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.0349	25.055	3.8	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$110.0	$143.5	$253.5
PS #20 - Interior	000	Cafeteria	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	7	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #20 - Interior	001	Nurse	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	4380	None Proposed	Ceiling Mounted Occupancy Sensor	1	0	441.504	66.2	$0.0	$0.0	$0.0	$103.0	$73.5	$0.0	$0.0	$0.0	$73.5	$103.0	$176.5
PS #20 - Interior	001	Storage	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	500	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	33.6	5.0	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #20 - Interior	001	Teachers Lounge	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	3	4380	None Proposed	Ceiling Mounted Occupancy Sensor	1	0	441.504	66.2	$0.0	$0.0	$0.0	$103.0	$73.5	$0.0	$0.0	$0.0	$73.5	$103.0	$176.5
PS #20 - Interior	002	207	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	14	4380	None Proposed	Ceiling Mounted Occupancy Sensor	1	0	2060.352	309.1	$0.0	$0.0	$0.0	$103.0	$73.5	$0.0	$0.0	$0.0	$73.5	$103.0	$176.5
PS #20 - Interior	002	Teachers Lounge	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	883.008	132.5	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #20 - Interior	000	Boiler Room	300W Incandescent Fixture	4	500	Replace 300W Incandescent Fixture with 65W CFL	None Proposed	0	0.94	470	70.5	$0.0	$25.0	$20.0	$0.0	$0.0	$20.0	$25.0	$45.0	$80.0	$100.0	$180.0
PS #20 - Interior	000	Electrical Room	300W Incandescent Fixture	2	500	Replace 300W Incandescent Fixture with 65W CFL	Automatic Wall Switch Occupancy Sensor	1	0.47	254.5	38.2	$0.0	$25.0	$20.0	$63.5	$45.0	$20.0	$25.0	$45.0	$85.0	$113.5	$198.5
PS #20 - Interior	003	Auditorium	300W Incandescent Fixture	20	4380	Replace 300W Incandescent Fixture with 65W CFL	None Proposed	0	4.7	20586	3,087.9	$0.0	$25.0	$20.0	$0.0	$0.0	$20.0	$25.0	$45.0	$400.0	$500.0	$900.0
PS #29 (Gladys Nunery School) - Exterior	000	Exterior	Exterior Wall Packs (Assume 70w)	10	4380	Replace 70W Fixture with 45W Induction Light Fixture	None Proposed	0	0.46	2014.8	342.5	$0.0	$380.0	$137.0	$0.0	$0.0	$137.0	$380.0	$517.0	$1,370.0	$3,800.0	$5,170.0
PS #29 (Gladys Nunery School) - Exterior	000	Exterior	Flood Lights (Assume 400W MH)	8	4380	Replace 400W Fixture with Induction Light Fixture	None Proposed	0	1.944	8514.72	1,447.5	$0.0	$485.0	$137.0	$0.0	$0.0	$137.0	$485.0	$622.0	$1,096.0	$3,880.0	$4,976.0
PS #29 (Gladys Nunery School) - Interior	000	Boiler Room	150W Incandescent Fixture	4	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	0.5	250	42.5	$0.0	$7.0	$20.0	$0.0	$0.0	$20.0	$7.0	$27.0	$80.0	$28.0	$108.0
PS #29 (Gladys Nunery School) - Interior	000	Storage	150W Incandescent Fixture	2	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	0.25	125	21.3	$0.0	$7.0	$20.0	$0.0	$0.0	$20.0	$7.0	$27.0	$40.0	$14.0	$54.0
PS #29 (Gladys Nunery School) - Interior	002	Bath	150W Incandescent Fixture	1	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	0.125	62.5	10.6	$0.0	$7.0	$20.0	$0.0	$0.0	$20.0	$7.0	$27.0	$20.0	$7.0	$27.0
PS #29 (Gladys Nunery School) - Interior	002	Principal Bathroom	150W Incandescent Fixture	1	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	0.125	62.5	10.6	$0.0	$7.0	$20.0	$0.0	$0.0	$20.0	$7.0	$27.0	$20.0	$7.0	$27.0
PS #29 (Gladys Nunery School) - Interior	000	Boys Bathroom	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	3	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.111	55.5	9.4	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$195.0	$240.0	$435.0
PS #29 (Gladys Nunery School) - Interior	000	Cafeteria	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	8	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.296	1296.48	220.4	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$520.0	$640.0	$1,160.0
PS #29 (Gladys Nunery School) - Interior	000	Entrences	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	8760	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.444	3889.44	661.2	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$780.0	$960.0	$1,740.0
PS #29 (Gladys Nunery School) - Interior	000	Girls Bathroom	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	3	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.111	55.5	9.4	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$195.0	$240.0	$435.0
PS #29 (Gladys Nunery School) - Interior	000	Gym	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	11	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.407	1782.66	303.1	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$715.0	$880.0	$1,595.0
PS #29 (Gladys Nunery School) - Interior	000	Hallway	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	19	8760	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.703	6158.28	1,046.9	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$1,235.0	$1,520.0	$2,755.0
PS #29 (Gladys Nunery School) - Interior	000	Janitors Office	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.148	74	12.6	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$260.0	$320.0	$580.0
PS #29 (Gladys Nunery School) - Interior	000	Stairwell (All)	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	32	8760	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	1.184	10371.84	1,763.2	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$2,080.0	$2,560.0	$4,640.0
PS #29 (Gladys Nunery School) - Interior	000	Storage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.037	18.5	3.1	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$65.0	$80.0	$145.0
PS #29 (Gladys Nunery School) - Interior	000	Storage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.074	37	6.3	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$130.0	$160.0	$290.0
PS #29 (Gladys Nunery School) - Interior	000	Trailer	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	24	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.888	3889.44	661.2	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$1,560.0	$1,920.0	$3,480.0
PS #29 (Gladys Nunery School) - Interior	001	1	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.666	4066.5672	691.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,215.0	$1,503.5	$2,718.5
PS #29 (Gladys Nunery School) - Interior	001	2	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.666	4066.5672	691.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,215.0	$1,503.5	$2,718.5
PS #29 (Gladys Nunery School) - Interior	001	3	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.666	4066.5672	691.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,215.0	$1,503.5	$2,718.5
PS #29 (Gladys Nunery School) - Interior	001	4	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.666	4066.5672	691.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,215.0	$1,503.5	$2,718.5
PS #29 (Gladys Nunery School) - Interior	001	5	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.666	4066.5672	691.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,215.0	$1,503.5	$2,718.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector (Per Fixture Price)	Bulb (Per Fixture Price)	Labor (Per Fixture Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Subtotal	Materials Subtotal	Labor & Materials Subtotal	Labor Total	Materials Total	Labor & Materials Total
PS #29 (Gladys Nunery School) - Interior	001	6	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.666	4066.5672	691.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,215.0	$1,503.5	$2,718.5
PS #29 (Gladys Nunery School) - Interior	001	7	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.666	4066.5672	691.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,215.0	$1,503.5	$2,718.5
PS #29 (Gladys Nunery School) - Interior	001	8	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.666	4066.5672	691.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,215.0	$1,503.5	$2,718.5
PS #29 (Gladys Nunery School) - Interior	001	Closet	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.037	18.5	3.1	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$65.0	$80.0	$145.0
PS #29 (Gladys Nunery School) - Interior	001	Closet	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.074	37	6.3	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$130.0	$160.0	$290.0
PS #29 (Gladys Nunery School) - Interior	001	Hallway	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	8760	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.148	1296.48	220.4	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$260.0	$320.0	$580.0
PS #29 (Gladys Nunery School) - Interior	001	Storage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.074	37	6.3	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$130.0	$160.0	$290.0
PS #29 (Gladys Nunery School) - Interior	001	Storage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.037	18.5	3.1	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$65.0	$80.0	$145.0
PS #29 (Gladys Nunery School) - Interior	002	9	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.666	4066.5672	691.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,215.0	$1,503.5	$2,718.5
PS #29 (Gladys Nunery School) - Interior	002	10	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.666	4066.5672	691.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,215.0	$1,503.5	$2,718.5
PS #29 (Gladys Nunery School) - Interior	002	11	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.666	4066.5672	691.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,215.0	$1,503.5	$2,718.5
PS #29 (Gladys Nunery School) - Interior	002	14	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.666	4066.5672	691.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,215.0	$1,503.5	$2,718.5
PS #29 (Gladys Nunery School) - Interior	002	15	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.666	4066.5672	691.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,215.0	$1,503.5	$2,718.5
PS #29 (Gladys Nunery School) - Interior	002	16	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.666	4066.5672	691.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,215.0	$1,503.5	$2,718.5
PS #29 (Gladys Nunery School) - Interior	002	Cafeteria	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.148	648.24	110.2	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$260.0	$320.0	$580.0
PS #29 (Gladys Nunery School) - Interior	002	Closet	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.037	18.5	3.1	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$65.0	$80.0	$145.0
PS #29 (Gladys Nunery School) - Interior	002	Guidance	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.074	324.12	55.1	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$130.0	$160.0	$290.0
PS #29 (Gladys Nunery School) - Interior	002	Hallway	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	3	8760	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.111	972.36	165.3	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$195.0	$240.0	$435.0
PS #29 (Gladys Nunery School) - Interior	002	Library	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.666	2917.08	495.9	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$1,170.0	$1,440.0	$2,610.0
PS #29 (Gladys Nunery School) - Interior	002	Library Closet	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.074	37	6.3	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$130.0	$160.0	$290.0
PS #29 (Gladys Nunery School) - Interior	002	Principal	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.666	4066.5672	691.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,215.0	$1,503.5	$2,718.5
PS #29 (Gladys Nunery School) - Interior	002	Secretary	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.148	648.24	110.2	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$260.0	$320.0	$580.0
PS #29 (Gladys Nunery School) - Interior	002	Storage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	3	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.111	55.5	9.4	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$195.0	$240.0	$435.0
PS #29 (Gladys Nunery School) - Interior	003	7	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.666	4066.5672	691.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,215.0	$1,503.5	$2,718.5
PS #29 (Gladys Nunery School) - Interior	003	18	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.666	4066.5672	691.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,215.0	$1,503.5	$2,718.5
PS #29 (Gladys Nunery School) - Interior	003	19	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	15	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.555	3388.806	576.1	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,020.0	$1,263.5	$2,283.5
PS #29 (Gladys Nunery School) - Interior	003	20	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.666	4066.5672	691.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,215.0	$1,503.5	$2,718.5
PS #29 (Gladys Nunery School) - Interior	003	18C	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.074	37	6.3	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$130.0	$160.0	$290.0
PS #29 (Gladys Nunery School) - Interior	003	Art	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.074	37	6.3	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$130.0	$160.0	$290.0
PS #29 (Gladys Nunery School) - Interior	003	Attic	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.148	74	12.6	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$260.0	$320.0	$580.0
PS #29 (Gladys Nunery School) - Interior	003	Auditorium	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	16	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.592	3614.7264	614.5	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,085.0	$1,343.5	$2,428.5
PS #29 (Gladys Nunery School) - Interior	003	Closet	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.074	37	6.3	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$130.0	$160.0	$290.0
PS #29 (Gladys Nunery School) - Interior	003	Music Room	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.148	74	12.6	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$260.0	$320.0	$580.0
PS #29 (Gladys Nunery School) - Interior	003	Nurse	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.148	74	12.6	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$260.0	$320.0	$580.0
PS #29 (Gladys Nunery School) - Interior	003	Small Group	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.074	37	6.3	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$130.0	$160.0	$290.0

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector (Per Fixture Price)	Bulb (Per Fixture Price)	Labor (Per Fixture Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Subtotal	Materials Subtotal	Labor & Materials Subtotal	Labor Total	Materials Total	Labor & Materials Total
PS #29 (Gladys Nunery School) - Interior	000	Boiler Room	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	2	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.07392	36.96	6.3	$55.0	$10.0	$65.0	$0.0	$0.0	$65.0	$65.0	$130.0	$130.0	$130.0	$260.0
PS #29 (Gladys Nunery School) - Interior	001	Hallway	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	3	8760	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.11088	971.3088	165.1	$55.0	$10.0	$65.0	$0.0	$0.0	$65.0	$65.0	$130.0	$195.0	$195.0	$390.0
PS #29 (Gladys Nunery School) - Interior	002	Hallway	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	3	8760	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.11088	971.3088	165.1	$55.0	$10.0	$65.0	$0.0	$0.0	$65.0	$65.0	$130.0	$195.0	$195.0	$390.0
PS #29 (Gladys Nunery School) - Interior	003	Hallway	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	3	8760	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.11088	971.3088	165.1	$55.0	$10.0	$65.0	$0.0	$0.0	$65.0	$65.0	$130.0	$195.0	$195.0	$390.0
PS #29 (Gladys Nunery School) - Interior	001	1 Bath	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.0349	17.45	3.0	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$65.0	$80.0	$145.0
PS #29 (Gladys Nunery School) - Interior	001	2 Bath	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.0349	17.45	3.0	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$65.0	$80.0	$145.0
PS #29 (Gladys Nunery School) - Interior	001	4 Bath	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.0349	17.45	3.0	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$65.0	$80.0	$145.0
PS #29 (Gladys Nunery School) - Interior	001	8 Bath	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	1	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.037	18.5	3.1	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$65.0	$80.0	$145.0
PS #29 (Gladys Nunery School) - Interior	001	Closet	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.074	37	6.3	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$130.0	$160.0	$290.0
PS #29 (Gladys Nunery School) - Interior	003	Conference	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	3	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.111	55.5	9.4	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$195.0	$240.0	$435.0
PS #29 (Gladys Nunery School) - Interior	001	7 Bath	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	1	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.0739	36.95	6.3	$105.0	$20.0	$65.0	$0.0	$0.0	$65.0	$125.0	$190.0	$65.0	$125.0	$190.0
PS #29 (Gladys Nunery School) - Interior	001	Reading	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	2	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.1478	73.9	12.6	$105.0	$20.0	$65.0	$0.0	$0.0	$65.0	$125.0	$190.0	$130.0	$250.0	$380.0
PS #29 (Gladys Nunery School) - Interior	002	11A	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	2	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.1478	73.9	12.6	$105.0	$20.0	$65.0	$0.0	$0.0	$65.0	$125.0	$190.0	$130.0	$250.0	$380.0
PS #29 (Gladys Nunery School) - Interior	003	21	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	10	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.739	4515.342	767.6	$105.0	$20.0	$65.0	$63.5	$45.0	$65.0	$125.0	$190.0	$695.0	$1,313.5	$2,008.5
PS #29 (Gladys Nunery School) - Interior	003	22	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	10	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.739	4515.342	767.6	$105.0	$20.0	$65.0	$63.5	$45.0	$65.0	$125.0	$190.0	$695.0	$1,313.5	$2,008.5
PS #29 (Gladys Nunery School) - Interior	003	Hallway	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	12	8760	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.8868	7768.368	1,320.6	$105.0	$20.0	$65.0	$0.0	$0.0	$65.0	$125.0	$190.0	$780.0	$1,500.0	$2,280.0
PS #29 (Gladys Nunery School) - Interior	000	Trailer	60W Incandescent Fixture	4	4380	Replace 60W Incandescent Fixture with 13W CFL	None Proposed	0	0.188	823.44	140.0	$0.0	$5.0	$20.0	$0.0	$0.0	$20.0	$5.0	$25.0	$80.0	$20.0	$100.0
PS #30 - (Alexander D. Sullivan) - Exterior	001	Exterior	Exterior Wall Packs (Assume 70w)	16	4380	Replace 70W Fixture with 45W Induction Light Fixture	None Proposed	0	0.736	3223.68	548.0	$0.0	$380.0	$137.0	$0.0	$0.0	$137.0	$380.0	$517.0	$2,192.0	$6,080.0	$8,272.0
PS #30 - (Alexander D. Sullivan) - Exterior	000	Exterior	Flood Lights (Assume 400W MH)	6	4380	Replace 400W Fixture with Induction Light Fixture	None Proposed	0	1.458	6386.04	1,085.6	$0.0	$485.0	$137.0	$0.0	$0.0	$137.0	$485.0	$622.0	$822.0	$2,910.0	$3,732.0
PS #30 - (Alexander D. Sullivan) - Interior	000	Industrial Arts	150W Incandescent Fixture	12	4380	Replace 150W Incandescent Fixture with 25W CFL	Automatic Wall Switch Occupancy Sensor	1	1.5	6964.2	1,183.9	$0.0	$7.0	$20.0	$63.5	$45.0	$20.0	$7.0	$27.0	$285.0	$147.5	$432.5
PS #30 - (Alexander D. Sullivan) - Interior	000	Nurse	150W Incandescent Fixture	2	4380	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	0.25	1095	186.2	$0.0	$7.0	$20.0	$0.0	$0.0	$20.0	$7.0	$27.0	$40.0	$14.0	$54.0
PS #30 - (Alexander D. Sullivan) - Interior	000	Timeout	150W Incandescent Fixture	2	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	0.25	125	21.3	$0.0	$7.0	$20.0	$0.0	$0.0	$20.0	$7.0	$27.0	$40.0	$14.0	$54.0
PS #30 - (Alexander D. Sullivan) - Interior	001	102	150W Incandescent Fixture	1	4380	Replace 150W Incandescent Fixture with 25W CFL	Automatic Wall Switch Occupancy Sensor	1	0.125	580.35	98.7	$0.0	$7.0	$20.0	$63.5	$45.0	$20.0	$7.0	$27.0	$65.0	$70.5	$135.5
PS #30 - (Alexander D. Sullivan) - Interior	001	103	150W Incandescent Fixture	1	4380	Replace 150W Incandescent Fixture with 25W CFL	Automatic Wall Switch Occupancy Sensor	1	0.125	580.35	98.7	$0.0	$7.0	$20.0	$63.5	$45.0	$20.0	$7.0	$27.0	$65.0	$70.5	$135.5
PS #30 - (Alexander D. Sullivan) - Interior	001	104	150W Incandescent Fixture	4	4380	Replace 150W Incandescent Fixture with 25W CFL	Automatic Wall Switch Occupancy Sensor	1	0.5	2321.4	394.6	$0.0	$7.0	$20.0	$63.5	$45.0	$20.0	$7.0	$27.0	$125.0	$91.5	$216.5
PS #30 - (Alexander D. Sullivan) - Interior	001	105	150W Incandescent Fixture	4	4380	Replace 150W Incandescent Fixture with 25W CFL	Automatic Wall Switch Occupancy Sensor	1	0.5	2321.4	394.6	$0.0	$7.0	$20.0	$63.5	$45.0	$20.0	$7.0	$27.0	$125.0	$91.5	$216.5
PS #30 - (Alexander D. Sullivan) - Interior	001	106	150W Incandescent Fixture	4	4380	Replace 150W Incandescent Fixture with 25W CFL	Automatic Wall Switch Occupancy Sensor	1	0.5	2321.4	394.6	$0.0	$7.0	$20.0	$63.5	$45.0	$20.0	$7.0	$27.0	$125.0	$91.5	$216.5
PS #30 - (Alexander D. Sullivan) - Interior	001	Storage	150W Incandescent Fixture	2	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	0.25	125	21.3	$0.0	$7.0	$20.0	$0.0	$0.0	$20.0	$7.0	$27.0	$40.0	$14.0	$54.0
PS #30 - (Alexander D. Sullivan) - Interior	002	203	150W Incandescent Fixture	4	4380	Replace 150W Incandescent Fixture with 25W CFL	Automatic Wall Switch Occupancy Sensor	1	0.5	2321.4	394.6	$0.0	$7.0	$20.0	$63.5	$45.0	$20.0	$7.0	$27.0	$125.0	$91.5	$216.5
PS #30 - (Alexander D. Sullivan) - Interior	002	204	150W Incandescent Fixture	4	4380	Replace 150W Incandescent Fixture with 25W CFL	Automatic Wall Switch Occupancy Sensor	1	0.5	2321.4	394.6	$0.0	$7.0	$20.0	$63.5	$45.0	$20.0	$7.0	$27.0	$125.0	$91.5	$216.5
PS #30 - (Alexander D. Sullivan) - Interior	002	205	150W Incandescent Fixture	4	4380	Replace 150W Incandescent Fixture with 25W CFL	Automatic Wall Switch Occupancy Sensor	1	0.5	2321.4	394.6	$0.0	$7.0	$20.0	$63.5	$45.0	$20.0	$7.0	$27.0	$125.0	$91.5	$216.5
PS #30 - (Alexander D. Sullivan) - Interior	002	208	150W Incandescent Fixture	4	4380	Replace 150W Incandescent Fixture with 25W CFL	Automatic Wall Switch Occupancy Sensor	1	0.5	2321.4	394.6	$0.0	$7.0	$20.0	$63.5	$45.0	$20.0	$7.0	$27.0	$125.0	$91.5	$216.5
PS #30 - (Alexander D. Sullivan) - Interior	002	209	150W Incandescent Fixture	4	4380	Replace 150W Incandescent Fixture with 25W CFL	Automatic Wall Switch Occupancy Sensor	1	0.5	2321.4	394.6	$0.0	$7.0	$20.0	$63.5	$45.0	$20.0	$7.0	$27.0	$125.0	$91.5	$216.5
PS #30 - (Alexander D. Sullivan) - Interior	002	210	150W Incandescent Fixture	4	4380	Replace 150W Incandescent Fixture with 25W CFL	Automatic Wall Switch Occupancy Sensor	1	0.5	2321.4	394.6	$0.0	$7.0	$20.0	$63.5	$45.0	$20.0	$7.0	$27.0	$125.0	$91.5	$216.5
PS #30 - (Alexander D. Sullivan) - Interior	002	211	150W Incandescent Fixture	4	4380	Replace 150W Incandescent Fixture with 25W CFL	Automatic Wall Switch Occupancy Sensor	1	0.5	2321.4	394.6	$0.0	$7.0	$20.0	$63.5	$45.0	$20.0	$7.0	$27.0	$125.0	$91.5	$216.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector (Per Fixture Price)	Bulb (Per Fixture Price)	Labor (Per Fixture Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Subtotal	Materials Subtotal	Labor & Materials Subtotal	Labor Total	Materials Total	Labor & Materials Total
PS #30 - (Alexander D. Sullivan) - Interior	002	Principal	150W Incandescent Fixture	4	4380	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	0.5	2190	372.3	$0.0	$7.0	$20.0	$0.0	$0.0	$20.0	$7.0	$27.0	$80.0	$28.0	$108.0
PS #30 - (Alexander D. Sullivan) - Interior	002	Storage	150W Incandescent Fixture	4	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	0.5	250	42.5	$0.0	$7.0	$20.0	$0.0	$0.0	$20.0	$7.0	$27.0	$80.0	$28.0	$108.0
PS #30 - (Alexander D. Sullivan) - Interior	000	Bath	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	10	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.37	185	31.5	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$650.0	$800.0	$1,450.0
PS #30 - (Alexander D. Sullivan) - Interior	000	Cafeteria	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	40	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	1.48	9036.816	1,536.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$2,645.0	$3,263.5	$5,908.5
PS #30 - (Alexander D. Sullivan) - Interior	000	Hallway	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	22	8760	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.814	7130.64	1,212.2	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$1,430.0	$1,760.0	$3,190.0
PS #30 - (Alexander D. Sullivan) - Interior	000	Science	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	10	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.37	2259.204	384.1	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$695.0	$863.5	$1,558.5
PS #30 - (Alexander D. Sullivan) - Interior	001	101	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	10	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.37	2259.204	384.1	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$695.0	$863.5	$1,558.5
PS #30 - (Alexander D. Sullivan) - Interior	001	102	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.666	4066.5672	691.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,215.0	$1,503.5	$2,718.5
PS #30 - (Alexander D. Sullivan) - Interior	001	103	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.666	4066.5672	691.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,215.0	$1,503.5	$2,718.5
PS #30 - (Alexander D. Sullivan) - Interior	001	104	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.666	4066.5672	691.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,215.0	$1,503.5	$2,718.5
PS #30 - (Alexander D. Sullivan) - Interior	001	105	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.666	4066.5672	691.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,215.0	$1,503.5	$2,718.5
PS #30 - (Alexander D. Sullivan) - Interior	001	106	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.666	4066.5672	691.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,215.0	$1,503.5	$2,718.5
PS #30 - (Alexander D. Sullivan) - Interior	001	Hallway	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	22	8760	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.814	7130.64	1,212.2	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$1,430.0	$1,760.0	$3,190.0
PS #30 - (Alexander D. Sullivan) - Interior	001	Offices	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.444	2711.0448	460.9	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$825.0	$1,023.5	$1,848.5
PS #30 - (Alexander D. Sullivan) - Interior	001	Principal	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	6	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.222	1355.5224	230.4	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$435.0	$543.5	$978.5
PS #30 - (Alexander D. Sullivan) - Interior	001	Reading Room	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	6	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.222	1355.5224	230.4	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$435.0	$543.5	$978.5
PS #30 - (Alexander D. Sullivan) - Interior	001	Storage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.074	37	6.3	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$130.0	$160.0	$290.0
PS #30 - (Alexander D. Sullivan) - Interior	001	Storage	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.074	37	6.3	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$130.0	$160.0	$290.0
PS #30 - (Alexander D. Sullivan) - Interior	001	Teachers Lounge	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.148	74	12.6	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$260.0	$320.0	$580.0
PS #30 - (Alexander D. Sullivan) - Interior	002	201	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.666	4066.5672	691.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,215.0	$1,503.5	$2,718.5
PS #30 - (Alexander D. Sullivan) - Interior	002	202	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.666	4066.5672	691.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,215.0	$1,503.5	$2,718.5
PS #30 - (Alexander D. Sullivan) - Interior	002	203	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	6	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.222	1355.5224	230.4	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$435.0	$543.5	$978.5
PS #30 - (Alexander D. Sullivan) - Interior	002	203	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.444	2711.0448	460.9	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$825.0	$1,023.5	$1,848.5
PS #30 - (Alexander D. Sullivan) - Interior	002	204	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	6	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.222	1355.5224	230.4	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$435.0	$543.5	$978.5
PS #30 - (Alexander D. Sullivan) - Interior	002	205	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.148	903.6816	153.6	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$305.0	$383.5	$688.5
PS #30 - (Alexander D. Sullivan) - Interior	002	206	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.666	4066.5672	691.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,215.0	$1,503.5	$2,718.5
PS #30 - (Alexander D. Sullivan) - Interior	002	207	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.666	4066.5672	691.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,215.0	$1,503.5	$2,718.5
PS #30 - (Alexander D. Sullivan) - Interior	002	ITV	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.666	4066.5672	691.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,215.0	$1,503.5	$2,718.5
PS #30 - (Alexander D. Sullivan) - Interior	003	301	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.666	4066.5672	691.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,215.0	$1,503.5	$2,718.5
PS #30 - (Alexander D. Sullivan) - Interior	003	302	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.666	4066.5672	691.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,215.0	$1,503.5	$2,718.5
PS #30 - (Alexander D. Sullivan) - Interior	003	303	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.666	4066.5672	691.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,215.0	$1,503.5	$2,718.5
PS #30 - (Alexander D. Sullivan) - Interior	003	304	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.666	4066.5672	691.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,215.0	$1,503.5	$2,718.5
PS #30 - (Alexander D. Sullivan) - Interior	003	305	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.666	4066.5672	691.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,215.0	$1,503.5	$2,718.5
PS #30 - (Alexander D. Sullivan) - Interior	003	306	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.666	4066.5672	691.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,215.0	$1,503.5	$2,718.5
PS #30 - (Alexander D. Sullivan) - Interior	003	309	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.666	4066.5672	691.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,215.0	$1,503.5	$2,718.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector (Per Fixture Price)	Bulb (Per Fixture Price)	Labor (Per Fixture Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Subtotal	Materials Subtotal	Labor & Materials Subtotal	Labor Total	Materials Total	Labor & Materials Total
PS #30 - (Alexander D. Sullivan) - Interior	003	310	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.444	2711.0448	460.9	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$825.0	$1,023.5	$1,848.5
PS #30 - (Alexander D. Sullivan) - Interior	003	311	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.444	2711.0448	460.9	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$825.0	$1,023.5	$1,848.5
PS #30 - (Alexander D. Sullivan) - Interior	003	Girls	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	3	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.111	55.5	9.4	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$195.0	$240.0	$435.0
PS #30 - (Alexander D. Sullivan) - Interior	003	Library	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	18	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.666	4066.5672	691.3	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$1,215.0	$1,503.5	$2,718.5
PS #30 - (Alexander D. Sullivan) - Interior	003	Small Group	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	4	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.148	903.6816	153.6	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$305.0	$383.5	$688.5
PS #30 - (Alexander D. Sullivan) - Interior	003	Teachers Lounge	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	14	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	0.518	3162.8856	537.7	$70.0	$10.0	$65.0	$63.5	$45.0	$65.0	$80.0	$145.0	$955.0	$1,183.5	$2,138.5
PS #30 - (Alexander D. Sullivan) - Interior	000	Boiler Room	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #30 - (Alexander D. Sullivan) - Interior	000	Girls	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #30 - (Alexander D. Sullivan) - Interior	002	204	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	799.4376	135.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #30 - (Alexander D. Sullivan) - Interior	002	205	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	9	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	599.5782	101.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #30 - (Alexander D. Sullivan) - Interior	002	209	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	15	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2207.52	375.3	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #30 - (Alexander D. Sullivan) - Interior	002	210	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	15	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2207.52	375.3	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #30 - (Alexander D. Sullivan) - Interior	002	211	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	15	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2207.52	375.3	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #30 - (Alexander D. Sullivan) - Interior	002	Hallway	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	35	8760	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	10301.76	1,751.3	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #30 - (Alexander D. Sullivan) - Interior	000	Custodial Office	1x8 Fixture w/ 2-T12 Lamps w/ Magnetic Ballasts	2	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.07392	36.96	6.3	$55.0	$10.0	$65.0	$0.0	$0.0	$65.0	$65.0	$130.0	$130.0	$130.0	$260.0
PS #30 - (Alexander D. Sullivan) - Interior	000	Timeout	1x8 Fixture w/ 2-T8 Lamps w/ Electronic Ballasts	2	500	Replace T8 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.00412	2.06	0.4	$55.0	$10.0	$65.0	$0.0	$0.0	$65.0	$65.0	$130.0	$130.0	$130.0	$260.0
PS #30 - (Alexander D. Sullivan) - Interior	003	Auditorium	250W MH Fixture	20	500	Replace 250W Fixture with 150W Induction Light Fixture	None Proposed	0	3.5	1750	297.5	$0.0	$390.0	$137.0	$0.0	$0.0	$137.0	$390.0	$527.0	$2,740.0	$7,800.0	$10,540.0
PS #30 - (Alexander D. Sullivan) - Interior	000	Nurse	2X2 Fixtures w/ 2-T8 Lamp Fixture w/ Electronic Ballasts	6	4380	Replace T8 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.01236	54.1368	9.2	$15.0	$10.0	$65.0	$0.0	$0.0	$65.0	$25.0	$90.0	$390.0	$150.0	$540.0
PS #30 - (Alexander D. Sullivan) - Interior	000	Storage	2x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.074	37	6.3	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$130.0	$160.0	$290.0
PS #30 - (Alexander D. Sullivan) - Interior	002	208	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	15	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	1.1085	6773.013	1,151.4	$105.0	$20.0	$65.0	$63.5	$45.0	$65.0	$125.0	$190.0	$1,020.0	$1,938.5	$2,958.5
PS #30 - (Alexander D. Sullivan) - Interior	002	Principal	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	3	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.2217	971.046	165.1	$105.0	$20.0	$65.0	$0.0	$0.0	$65.0	$125.0	$190.0	$195.0	$375.0	$570.0
PS #30 - (Alexander D. Sullivan) - Interior	003	308	2x4 Fixtures w/ 4-T12 Lamp Fixture w/ Magnetic Ballast	15	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	1.1085	6773.013	1,151.4	$105.0	$20.0	$65.0	$63.5	$45.0	$65.0	$125.0	$190.0	$1,020.0	$1,938.5	$2,958.5
PS #30 - (Alexander D. Sullivan) - Interior	000	B2	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #30 - (Alexander D. Sullivan) - Interior	000	Nurse	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	6	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #30 - (Alexander D. Sullivan) - Interior	000	Timeout	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #30 - (Alexander D. Sullivan) - Interior	001	107	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	15	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2207.52	375.3	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #30 - (Alexander D. Sullivan) - Interior	001	108	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2649.024	450.3	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #30 - (Alexander D. Sullivan) - Interior	001	109	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	16	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2354.688	400.3	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #30 - (Alexander D. Sullivan) - Interior	001	110	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	16	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2354.688	400.3	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #30 - (Alexander D. Sullivan) - Interior	003	307	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	10	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1471.68	250.2	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #30 - (Alexander D. Sullivan) - Interior	001	Storage	30W Incandescent Fixture	2	500	Replace 30W Incandescent Fixture with 13W CFL	None Proposed	0	0.034	17	2.9	$0.0	$5.0	$20.0	$0.0	$0.0	$20.0	$5.0	$25.0	$40.0	$10.0	$50.0
PS #30 - (Alexander D. Sullivan) - Interior	000	Custodial Closet	30W Incandescent Fixture	2	500	Replace 30W Incandescent Fixture with 13W CFL	None Proposed	0	0.034	17	2.9	$0.0	$5.0	$20.0	$0.0	$0.0	$20.0	$5.0	$25.0	$40.0	$10.0	$50.0
PS #30 - (Alexander D. Sullivan) - Interior	003	Gym	400W MH High Bay Fixture	18	4380	Replace 400W Fixture with 250W Induction Light Fixture	None Proposed	0	4.374	19158.12	3,256.9	$0.0	$485.0	$137.0	$0.0	$0.0	$137.0	$485.0	$622.0	$2,466.0	$8,730.0	$11,196.0
PS #40 (Ezra L. Nolan) - Exterior	000	Exterior	Exterior Wall Packs (Assume 70w)	16	4380	Replace 70W Fixture with 45W Induction Light Fixture	None Proposed	0	0.736	3223.68	483.6	$0.0	$380.0	$137.0	$0.0	$0.0	$137.0	$380.0	$517.0	$2,192.0	$6,080.0	$8,272.0
PS #40 (Ezra L. Nolan) - Exterior	000	Exterior	Flood Lights (Assume 400W MH)	8	4380	Replace 400W Fixture with Induction Light Fixture	None Proposed	0	1.944	8514.72	1,277.2	$0.0	$485.0	$137.0	$0.0	$0.0	$137.0	$485.0	$622.0	$1,096.0	$3,880.0	$4,976.0

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector (Per Fixture Price)	Bulb (Per Fixture Price)	Labor (Per Fixture Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Subtotal	Materials Subtotal	Labor & Materials Subtotal	Labor Total	Materials Total	Labor & Materials Total
PS #40 (Ezra L. Nolan) - Interior	000	Closet	150W Incandescent Fixture	1	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	0.125	62.5	9.4	$0.0	$7.0	$20.0	$0.0	$0.0	$20.0	$7.0	$27.0	$20.0	$7.0	$27.0
PS #40 (Ezra L. Nolan) - Interior	000	Locker Room	150W Incandescent Fixture	6	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	0.75	375	56.3	$0.0	$7.0	$20.0	$0.0	$0.0	$20.0	$7.0	$27.0	$120.0	$42.0	$162.0
PS #40 (Ezra L. Nolan) - Interior	001	Locker 1	150W Incandescent Fixture	14	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	1.75	875	131.3	$0.0	$7.0	$20.0	$0.0	$0.0	$20.0	$7.0	$27.0	$280.0	$98.0	$378.0
PS #40 (Ezra L. Nolan) - Interior	002	217	150W Incandescent Fixture	1	4380	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	0.125	547.5	82.1	$0.0	$7.0	$20.0	$0.0	$0.0	$20.0	$7.0	$27.0	$20.0	$7.0	$27.0
PS #40 (Ezra L. Nolan) - Interior	003	317	150W Incandescent Fixture	1	4380	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	0.125	547.5	82.1	$0.0	$7.0	$20.0	$0.0	$0.0	$20.0	$7.0	$27.0	$20.0	$7.0	$27.0
PS #40 (Ezra L. Nolan) - Interior	000	Bathroom	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	6	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.222	111	16.7	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$390.0	$480.0	$870.0
PS #40 (Ezra L. Nolan) - Interior	000	Closet	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	2	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.074	37	5.6	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$130.0	$160.0	$290.0
PS #40 (Ezra L. Nolan) - Interior	000	Locker Room	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	12	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.444	222	33.3	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$780.0	$960.0	$1,740.0
PS #40 (Ezra L. Nolan) - Interior	000	Locker Room	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	8	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.296	148	22.2	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$520.0	$640.0	$1,160.0
PS #40 (Ezra L. Nolan) - Interior	001	Nurse	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #40 (Ezra L. Nolan) - Interior	001	Pool	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #40 (Ezra L. Nolan) - Interior	002	201	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #40 (Ezra L. Nolan) - Interior	002	202	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #40 (Ezra L. Nolan) - Interior	002	203	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #40 (Ezra L. Nolan) - Interior	002	204	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #40 (Ezra L. Nolan) - Interior	002	205	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #40 (Ezra L. Nolan) - Interior	002	206	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #40 (Ezra L. Nolan) - Interior	002	207	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #40 (Ezra L. Nolan) - Interior	002	208	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #40 (Ezra L. Nolan) - Interior	002	209	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #40 (Ezra L. Nolan) - Interior	002	210	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #40 (Ezra L. Nolan) - Interior	002	211	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #40 (Ezra L. Nolan) - Interior	002	212	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #40 (Ezra L. Nolan) - Interior	002	213	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #40 (Ezra L. Nolan) - Interior	002	214	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #40 (Ezra L. Nolan) - Interior	002	221	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #40 (Ezra L. Nolan) - Interior	003	301	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #40 (Ezra L. Nolan) - Interior	003	302	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #40 (Ezra L. Nolan) - Interior	003	303	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #40 (Ezra L. Nolan) - Interior	003	304	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #40 (Ezra L. Nolan) - Interior	003	305	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #40 (Ezra L. Nolan) - Interior	003	306	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #40 (Ezra L. Nolan) - Interior	003	307	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #40 (Ezra L. Nolan) - Interior	003	308	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #40 (Ezra L. Nolan) - Interior	003	309	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector (Per Fixture Price)	Bulb (Per Fixture Price)	Labor (Per Fixture Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Subtotal	Materials Subtotal	Labor & Materials Subtotal	Labor Total	Materials Total	Labor & Materials Total
PS #40 (Ezra L. Nolan) - Interior	003	310	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #40 (Ezra L. Nolan) - Interior	003	311	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #40 (Ezra L. Nolan) - Interior	003	312	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #40 (Ezra L. Nolan) - Interior	003	313	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #40 (Ezra L. Nolan) - Interior	003	314	1X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1199.1564	179.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #40 (Ezra L. Nolan) - Interior	000	105	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	19	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2796.192	419.4	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #40 (Ezra L. Nolan) - Interior	000	Bathroom	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	2	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #40 (Ezra L. Nolan) - Interior	000	Auditorium	250W MH Fixture	104	3268	Replace 250W Fixture with 150W Induction Light Fixture	None Proposed	0	18.2	59477.6	8,921.6	$0.0	$390.0	$137.0	$0.0	$0.0	$137.0	$390.0	$527.0	$14,248.0	$40,560.0	$54,808.0
PS #40 (Ezra L. Nolan) - Interior	000	Auditorium	250W MH Fixture	6	3269	Replace 250W Fixture with 150W Induction Light Fixture	None Proposed	0	1.05	3432.45	514.9	$0.0	$390.0	$137.0	$0.0	$0.0	$137.0	$390.0	$527.0	$822.0	$2,340.0	$3,162.0
PS #40 (Ezra L. Nolan) - Interior	000	Lobby	2x2 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	14	8760	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	0.4886	4280.136	642.0	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$910.0	$1,120.0	$2,030.0
PS #40 (Ezra L. Nolan) - Interior	001	Cafeteria	2X2 Fixtures w/ 4-17W T8 Lamps w/ Electronic Ballasts	4	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #40 (Ezra L. Nolan) - Interior	000	Hallway	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #40 (Ezra L. Nolan) - Interior	001	25	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	66.6198	10.0	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #40 (Ezra L. Nolan) - Interior	001	28	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	66.6198	10.0	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #40 (Ezra L. Nolan) - Interior	001	Bathroom	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #40 (Ezra L. Nolan) - Interior	001	Custodian Office	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #40 (Ezra L. Nolan) - Interior	001	Filter Room	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	6	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #40 (Ezra L. Nolan) - Interior	001	Filter Room	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #40 (Ezra L. Nolan) - Interior	001	Hallway	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #40 (Ezra L. Nolan) - Interior	001	Hallway	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #40 (Ezra L. Nolan) - Interior	001	Hallway	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #40 (Ezra L. Nolan) - Interior	001	Hallway	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	3	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #40 (Ezra L. Nolan) - Interior	001	Locker 1	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	8	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #40 (Ezra L. Nolan) - Interior	001	Nurse Bathroom	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #40 (Ezra L. Nolan) - Interior	001	Slop Sink	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	1	500	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #40 (Ezra L. Nolan) - Interior	002	215	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #40 (Ezra L. Nolan) - Interior	002	217	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #40 (Ezra L. Nolan) - Interior	002	227	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #40 (Ezra L. Nolan) - Interior	002	Hallway	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #40 (Ezra L. Nolan) - Interior	003	315	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #40 (Ezra L. Nolan) - Interior	003	317	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	2	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #40 (Ezra L. Nolan) - Interior	003	321	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #40 (Ezra L. Nolan) - Interior	003	327	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	4	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #40 (Ezra L. Nolan) - Interior	003	Hallway	2X4 Fixtures w/ 2-T8 Lamps w/ Electronic Ballasts	5	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #40 (Ezra L. Nolan) - Interior	001	Cafeteria	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	4	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector (Per Fixture Price)	Bulb (Per Fixture Price)	Labor (Per Fixture Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Subtotal	Materials Subtotal	Labor & Materials Subtotal	Labor Total	Materials Total	Labor & Materials Total
PS #40 (Ezra L. Nolan) - Interior	001	Kitchen	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	7	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #40 (Ezra L. Nolan) - Interior	002	216	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	264.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #40 (Ezra L. Nolan) - Interior	002	Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	19	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #40 (Ezra L. Nolan) - Interior	003	316	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	264.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #40 (Ezra L. Nolan) - Interior	003	Hallway	2X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	19	8760	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	5592.384	838.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #40 (Ezra L. Nolan) - Interior	001	Men Bathroom	300W Incandescent Fixture	2	4380	Replace 300W Incandescent Fixture with 65W CFL	None Proposed	0	0.47	2058.6	308.8	$0.0	$25.0	$20.0	$0.0	$0.0	$20.0	$25.0	$45.0	$40.0	$50.0	$90.0
PS #40 (Ezra L. Nolan) - Interior	001	Pool	400W MH Fixture	12	4380	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #40 (Ezra L. Nolan) - Interior	000	Gym	400W MH High Bay Fixture	36	4380	Replace 400W Fixture with 250W Induction Light Fixture	None Proposed	0	8.748	38316.24	5,747.4	$0.0	$485.0	$137.0	$0.0	$0.0	$137.0	$485.0	$622.0	$4,932.0	$17,460.0	$22,392.0
PS #41 - (Fred W. Martin) - Exterior	000	Exterior	Exterior Wall Packs (Assume 70w)	16	4380	Replace 70W Fixture with 45W Induction Light Fixture	None Proposed	0	0.736	3223.68	580.3	$0.0	$380.0	$137.0	$0.0	$0.0	$137.0	$380.0	$517.0	$2,192.0	$6,080.0	$8,272.0
PS #41 - (Fred W. Martin) - Exterior	000	Exterior	Flood Lights (Assume 400W MH)	6	4380	Replace 400W Fixture with Induction Light Fixture	None Proposed	0	1.458	6386.04	1,149.5	$0.0	$485.0	$137.0	$0.0	$0.0	$137.0	$485.0	$622.0	$822.0	$2,910.0	$3,732.0
PS #41 - (Fred W. Martin) - Interior	000	Mechanical Rooms	150W Incandescent Fixture	36	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	4.5	2250	405.0	$0.0	$7.0	$20.0	$0.0	$0.0	$20.0	$7.0	$27.0	$720.0	$252.0	$972.0
PS #41 - (Fred W. Martin) - Interior	002	Storage	150W Incandescent Fixture	6	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	0.75	375	67.5	$0.0	$7.0	$20.0	$0.0	$0.0	$20.0	$7.0	$27.0	$120.0	$42.0	$162.0
PS #41 - (Fred W. Martin) - Interior	002	Storage	150W Incandescent Fixture	6	500	Replace 150W Incandescent Fixture with 25W CFL	None Proposed	0	0.75	375	67.5	$0.0	$7.0	$20.0	$0.0	$0.0	$20.0	$7.0	$27.0	$120.0	$42.0	$162.0
PS #41 - (Fred W. Martin) - Interior	002	321	1x4 Fixtures w/ 1-T12 Lamp Fixture w/ Magnetic Ballast	80	4380	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	Automatic Wall Switch Occupancy Sensor	1	1.4784	9031.9104	1,625.7	$35.0	$5.0	$65.0	$63.5	$45.0	$65.0	$40.0	$105.0	$5,245.0	$3,263.5	$8,508.5
PS #41 - (Fred W. Martin) - Interior	000	Storeage (All)	1x4 Fixtures w/ 2-T12 Lamp Fixture w/ Magnetic Ballast	42	500	Replace T12 Bulbs With High Perf. T8 Bulbs, Replace Ballast w/ High Perf., 0.78 Ballast Factor Ballast	None Proposed	0	1.554	777	139.9	$70.0	$10.0	$65.0	$0.0	$0.0	$65.0	$80.0	$145.0	$2,730.0	$3,360.0	$6,090.0
PS #41 - (Fred W. Martin) - Interior	000	K1	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	16	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2354.688	423.8	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #41 - (Fred W. Martin) - Interior	000	K2	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	16	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2354.688	423.8	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #41 - (Fred W. Martin) - Interior	000	K3	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	317.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #41 - (Fred W. Martin) - Interior	000	K4	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	16	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2354.688	423.8	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #41 - (Fred W. Martin) - Interior	000	K5	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	16	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2354.688	423.8	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #41 - (Fred W. Martin) - Interior	000	Industrial Arts	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	22	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	3237.696	582.8	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #41 - (Fred W. Martin) - Interior	000	Stairwell (All)	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	60	8760	None Proposed	None Proposed	0	0	0	0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PS #41 - (Fred W. Martin) - Interior	002	200	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	317.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #41 - (Fred W. Martin) - Interior	002	201	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	317.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #41 - (Fred W. Martin) - Interior	002	202	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	317.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #41 - (Fred W. Martin) - Interior	002	203	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	317.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #41 - (Fred W. Martin) - Interior	002	204	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	317.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #41 - (Fred W. Martin) - Interior	002	205	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	317.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #41 - (Fred W. Martin) - Interior	002	206	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	317.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #41 - (Fred W. Martin) - Interior	002	207	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	317.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #41 - (Fred W. Martin) - Interior	002	208	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	24	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	3532.032	635.8	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #41 - (Fred W. Martin) - Interior	002	209	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	317.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #41 - (Fred W. Martin) - Interior	002	210	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2649.024	476.8	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #41 - (Fred W. Martin) - Interior	002	211	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2649.024	476.8	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #41 - (Fred W. Martin) - Interior	002	212	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	317.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5

Appendix D - Lighting Upgrades

Building	Floor	Location/Room #	Existing Fixture/Lamp & Ballast Description	Qty of Existing Fixtures	Operating Hours	Proposed Replacement Solution	Proposed Occupancy Sensor Type	Occupancy Sensor Quantity	Total kW Saved	Total kWh Saved	Energy Cost Savings	Ballast/Fixture/Reflector (Per Fixture Price)	Bulb (Per Fixture Price)	Labor (Per Fixture Price)	Occupancy Sensor (Per Unit Price)	Occupany Sensor (Per Unit Labor Price)	Labor Subtotal	Materials Subtotal	Labor & Materials Subtotal	Labor Total	Materials Total	Labor & Materials Total
PS #41 - (Fred W. Martin) - Interior	002	213	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	317.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #41 - (Fred W. Martin) - Interior	002	214	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	317.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #41 - (Fred W. Martin) - Interior	002	215	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	317.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #41 - (Fred W. Martin) - Interior	002	216	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2649.024	476.8	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #41 - (Fred W. Martin) - Interior	002	217	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	317.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #41 - (Fred W. Martin) - Interior	002	218	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	18	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	2649.024	476.8	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5
PS #41 - (Fred W. Martin) - Interior	002	219	1X4 Fixtures w/ 4-T8 Lamps w/ Electronic Ballasts	12	4380	None Proposed	Automatic Wall Switch Occupancy Sensor	1	0	1766.016	317.9	$0.0	$0.0	$0.0	$63.5	$45.0	$0.0	$0.0	$0.0	$45.0	$63.5	$108.5

Appendix E

Cunningham Center ECC

Existing Conditons

Current Utility Price ($/kWh)	0.15
Actual SREC Market Values (January 2010-Present)	$110/MWh - $700/MWh

Calculations

Solar Rating - Zip Code: 07305	4.63 kWh/sq-m/day
Solar Capacity Required (kW)	40
Roof Space Needed (sq-ft)	4,000.00
Annual Solar kWh (PV Watts)	49,040
Net System installation Cost ($9/kWh)	$360,000
Electrical Service Modification Cost	$100,000
Total System Installation Cost	**$460,000**
Materials	$322,000
Labor	$138,000
Engineers Opinion of Probable Cost	$575,000

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	2%

Year	Utility Price	Solar kWh	Utility Savings	SRECS	Maintenance Costs	Annual Cash Flow	Cummulative Cash Flow	SREC Factor ($/kWh)*	REC Factor ($/kWh)
Install									
1	0.1500	49,040.0	$7,356.0	$20,744	($981)	$27,119.1	$27,119.1	$0.423	
2	0.1545	48,794.8	$7,538.8	$20,640	($976)	$27,203.1	$54,322.2	$0.423	
3	0.1591	48,550.8	$7,726.1	$20,537	($971)	$27,292.1	$81,614.3	$0.423	
4	0.1639	48,308.1	$7,918.1	$20,434	($966)	$27,386.3	$109,000.6	$0.423	
5	0.1688	48,066.5	$8,114.9	$20,332	($961)	$27,485.7	$136,486.3	$0.423	
6	0.1739	47,826.2	$8,316.6	$20,230	($957)	$27,590.5	$164,076.8	$0.423	
7	0.1791	47,587.1	$8,523.2	$20,129	($952)	$27,700.8	$191,777.6	$0.423	
8	0.1845	47,349.1	$8,735.0	$20,029	($947)	$27,816.7	$219,594.4	$0.423	
9	0.1900	47,112.4	$8,952.1	$19,929	($942)	$27,938.4	$247,532.7	$0.423	
10	0.1957	46,876.8	$9,174.5	$19,829	($938)	$28,065.9	$275,598.6	$0.423	
11	0.2016	46,642.4	$9,402.5	$19,730	($933)	$28,199.4	$303,798.1	$0.423	
12	0.2076	46,409.2	$9,636.2	$19,631	($928)	$28,339.1	$332,137.2	$0.423	
13	0.2139	46,177.2	$9,875.6	$19,533	($924)	$28,485.0	$360,622.2	$0.423	
14	0.2203	45,946.3	$10,121.1	$19,435	($919)	$28,637.4	$389,259.6	$0.423	
15	0.2269	45,716.6	$10,372.6	$19,338	($914)	$28,796.3	$418,056.0	$0.423	
16	0.2337	45,488.0	$10,630.3	$1,137	($910)	$10,857.8	$428,913.7		$0.025
17	0.2407	45,260.5	$10,894.5	$1,132	($905)	$11,120.8	$440,034.5		$0.025
18	0.2479	45,034.2	$11,165.2	$1,126	($901)	$11,390.4	$451,424.9		$0.025
19	0.2554	44,809.1	$11,442.7	$1,120	($896)	$11,666.7	$463,091.6		$0.025
20	0.2630	44,585.0	$11,727.0	$1,115	($892)	$11,949.9	$475,041.6		$0.025
21	0.2709	44,362.1	$12,018.4	$1,109	($887)	$12,240.2	$487,281.8		$0.025
22	0.2790	44,140.3	$12,317.1	$1,104	($883)	$12,537.8	$499,819.6		$0.025
23	0.2874	43,919.6	$12,623.2	$1,098	($878)	$12,842.8	$512,662.4		$0.025
24	0.2960	43,700.0	$12,936.9	$1,092	($874)	$13,155.4	$525,817.7		$0.025
25	0.3049	43,481.5	$13,258.3	$1,087	($870)	$13,475.7	$539,293.5		$0.025

* SREC factor is referenced from the NJBPU Solar Alternative Compliance Payment (SACP) schedule.

Snyder High School

Existing Conditons

Current Utility Price ($/kWh)	0.15
Actual SREC Market Values (January 2010-Present)	$110/MWh - $700/MWh

Calculations

Solar Rating - Zip Code: 07305	4.63 kWh/sq-m/day
Solar Capacity Required (kW)	430
Roof Space Needed (sq-ft)	43,000.00
Annual Solar kWh (PV Watts)	527,180
Net System installation Cost ($9/kWh)	$3,870,000
Electrical Service Modification Cost	$100,000
Total System Installation Cost	**$3,970,000**
Materials	$2,779,000
Labor	$1,191,000
Engineers Opinion of Probable Cost	$4,962,500

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	2%

Year	Utility Price	Solar kWh	Utility Savings	SRECS	Maintenance Costs	Annual Cash Flow	Cummulative Cash Flow	SREC Factor ($/kWh)*	REC Factor ($/kWh)
Install									
1	0.1500	527,180.0	$79,077.0	$222,997	($10,544)	$291,530.5	$291,530.5	$0.423	
2	0.1545	524,544.1	$81,042.1	$221,882	($10,491)	$292,433.3	$583,963.9	$0.423	
3	0.1591	521,921.4	$83,056.0	$220,773	($10,438)	$293,390.3	$877,354.2	$0.423	
4	0.1639	519,311.8	$85,119.9	$219,669	($10,386)	$294,402.5	$1,171,756.7	$0.423	
5	0.1688	516,715.2	$87,235.1	$218,571	($10,334)	$295,471.4	$1,467,228.1	$0.423	
6	0.1739	514,131.6	$89,402.9	$217,478	($10,283)	$296,598.0	$1,763,826.0	$0.423	
7	0.1791	511,561.0	$91,624.6	$216,390	($10,231)	$297,783.7	$2,061,609.7	$0.423	
8	0.1845	509,003.2	$93,901.5	$215,308	($10,180)	$299,029.7	$2,360,639.4	$0.423	
9	0.1900	506,458.2	$96,234.9	$214,232	($10,129)	$300,337.5	$2,660,977.0	$0.423	
10	0.1957	503,925.9	$98,626.3	$213,161	($10,079)	$301,708.5	$2,962,685.4	$0.423	
11	0.2016	501,406.2	$101,077.2	$212,095	($10,028)	$303,143.9	$3,265,829.4	$0.423	
12	0.2076	498,899.2	$103,589.0	$211,034	($9,978)	$304,645.4	$3,570,474.7	$0.423	
13	0.2139	496,404.7	$106,163.2	$209,979	($9,928)	$306,214.3	$3,876,689.0	$0.423	
14	0.2203	493,922.7	$108,801.3	$208,929	($9,878)	$307,852.2	$4,184,541.1	$0.423	
15	0.2269	491,453.1	$111,505.0	$207,885	($9,829)	$309,560.6	$4,494,101.8	$0.423	
16	0.2337	488,995.8	$114,275.9	$12,225	($9,780)	$116,720.9	$4,610,822.7		$0.025
17	0.2407	486,550.8	$117,115.7	$12,164	($9,731)	$119,548.4	$4,730,371.1		$0.025
18	0.2479	484,118.1	$120,026.0	$12,103	($9,682)	$122,446.6	$4,852,817.7		$0.025
19	0.2554	481,697.5	$123,008.7	$12,042	($9,634)	$125,417.1	$4,978,234.9		$0.025
20	0.2630	479,289.0	$126,065.4	$11,982	($9,586)	$128,461.9	$5,106,696.7		$0.025
21	0.2709	476,892.6	$129,198.1	$11,922	($9,538)	$131,582.6	$5,238,279.3		$0.025
22	0.2790	474,508.1	$132,408.7	$11,863	($9,490)	$134,781.3	$5,373,060.6		$0.025
23	0.2874	472,135.5	$135,699.1	$11,803	($9,443)	$138,059.8	$5,511,120.4		$0.025
24	0.2960	469,774.9	$139,071.2	$11,744	($9,395)	$141,420.1	$5,652,540.4		$0.025
25	0.3049	467,426.0	$142,527.1	$11,686	($9,349)	$144,864.3	$5,797,404.7		$0.025

* SREC factor is referenced from the NJBPU Solar Alternative Compliance Payment (SACP) schedule.

MS #40

Existing Conditons

Current Utility Price ($/kWh)	0.15
Actual SREC Market Values (January 2010-Present)	$110/MWh - $700/MWh

Calculations

Solar Rating - Zip Code: 07305	4.63 kWh/sq-m/day
Solar Capacity Required (kW)	330
Roof Space Needed (sq-ft)	33,000.00
Annual Solar kWh (PV Watts)	404,580
Net System installation Cost ($9/kWh)	$2,970,000
Electrical Service Modification Cost	$100,000
Total System Installation Cost	**$3,070,000**
Materials	$2,149,000
Labor	$921,000
Engineers Opinion of Probable Cost	$3,837,500

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	2%

Year	Utility Price	Solar kWh	Utility Savings	SRECS	Maintenance Costs	Annual Cash Flow	Cummulative Cash Flow	SREC Factor ($/kWh)*	REC Factor ($/kWh)
Install									
1	0.1500	404,580.0	$60,687.0	$171,137	($8,092)	$223,732.7	$223,732.7	$0.423	
2	0.1545	402,557.1	$62,195.1	$170,282	($8,051)	$224,425.6	$448,158.3	$0.423	
3	0.1591	400,544.3	$63,740.6	$169,430	($8,011)	$225,160.0	$673,318.3	$0.423	
4	0.1639	398,541.6	$65,324.6	$168,583	($7,971)	$225,936.8	$899,255.1	$0.423	
5	0.1688	396,548.9	$66,947.9	$167,740	($7,931)	$226,757.1	$1,126,012.2	$0.423	
6	0.1739	394,566.1	$68,611.5	$166,901	($7,891)	$227,621.7	$1,353,633.9	$0.423	
7	0.1791	392,593.3	$70,316.5	$166,067	($7,852)	$228,531.6	$1,582,165.6	$0.423	
8	0.1845	390,630.3	$72,063.9	$165,237	($7,813)	$229,487.9	$1,811,653.5	$0.423	
9	0.1900	388,677.2	$73,854.7	$164,410	($7,774)	$230,491.6	$2,042,145.1	$0.423	
10	0.1957	386,733.8	$75,690.0	$163,588	($7,735)	$231,543.7	$2,273,688.8	$0.423	
11	0.2016	384,800.1	$77,570.9	$162,770	($7,696)	$232,645.3	$2,506,334.2	$0.423	
12	0.2076	382,876.1	$79,498.5	$161,957	($7,658)	$233,797.6	$2,740,131.8	$0.423	
13	0.2139	380,961.8	$81,474.1	$161,147	($7,619)	$235,001.6	$2,975,133.4	$0.423	
14	0.2203	379,056.9	$83,498.7	$160,341	($7,581)	$236,258.6	$3,211,392.0	$0.423	
15	0.2269	377,161.7	$85,573.6	$159,539	($7,543)	$237,569.8	$3,448,961.8	$0.423	
16	0.2337	375,275.9	$87,700.1	$9,382	($7,506)	$89,576.5	$3,538,538.3		$0.025
17	0.2407	373,399.5	$89,879.5	$9,335	($7,468)	$91,746.5	$3,630,284.8		$0.025
18	0.2479	371,532.5	$92,113.0	$9,288	($7,431)	$93,970.6	$3,724,255.5		$0.025
19	0.2554	369,674.8	$94,402.0	$9,242	($7,393)	$96,250.4	$3,820,505.8		$0.025
20	0.2630	367,826.4	$96,747.9	$9,196	($7,357)	$98,587.0	$3,919,092.8		$0.025
21	0.2709	365,987.3	$99,152.1	$9,150	($7,320)	$100,982.0	$4,020,074.8		$0.025
22	0.2790	364,157.4	$101,616.0	$9,104	($7,283)	$103,436.8	$4,123,511.6		$0.025
23	0.2874	362,336.6	$104,141.2	$9,058	($7,247)	$105,952.8	$4,229,464.5		$0.025
24	0.2960	360,524.9	$106,729.1	$9,013	($7,210)	$108,531.7	$4,337,996.1		$0.025
25	0.3049	358,722.3	$109,381.3	$8,968	($7,174)	$111,174.9	$4,449,171.0		$0.025

* SREC factor is referenced from the NJBPU Solar Alternative Compliance Payment (SACP) schedule.

MS #41

Existing Conditons

Current Utility Price ($/kWh)	0.18
Actual SREC Market Values (January 2010-Present)	$110/MWh - $700/MWh

Calculations

Solar Rating - Zip Code: 07305	4.63 kWh/sq-m/day
Solar Capacity Required (kW)	360
Roof Space Needed (sq-ft)	36,000.00
Annual Solar kWh (PV Watts)	441,360
Net System installation Cost ($9/kWh)	$3,240,000
Electrical Service Modification Cost	$100,000
Total System Installation Cost	**$3,340,000**
Materials	$2,338,000
Labor	$1,002,000
Engineers Opinion of Probable Cost	$4,175,000

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	2%

Year	Utility Price	Solar kWh	Utility Savings	SRECS	Maintenance Costs	Annual Cash Flow	Cummulative Cash Flow	SREC Factor ($/kWh)*	REC Factor ($/kWh)
Install									
1	0.1800	441,360.0	$79,444.8	$186,695	($8,827)	$257,312.9	$257,312.9	$0.423	
2	0.1854	439,153.2	$81,419.0	$185,762	($8,783)	$258,397.7	$515,710.6	$0.423	
3	0.1910	436,957.4	$83,442.3	$184,833	($8,739)	$259,536.1	$775,246.7	$0.423	
4	0.1967	434,772.6	$85,515.8	$183,909	($8,695)	$260,729.2	$1,035,975.9	$0.423	
5	0.2026	432,598.8	$87,640.9	$182,989	($8,652)	$261,978.2	$1,297,954.1	$0.423	
6	0.2087	430,435.8	$89,818.7	$182,074	($8,609)	$263,284.4	$1,561,238.5	$0.423	
7	0.2149	428,283.6	$92,050.7	$181,164	($8,566)	$264,649.0	$1,825,887.5	$0.423	
8	0.2214	426,142.2	$94,338.2	$180,258	($8,523)	$266,073.5	$2,091,961.0	$0.423	
9	0.2280	424,011.5	$96,682.5	$179,357	($8,480)	$267,559.1	$2,359,520.2	$0.423	
10	0.2349	421,891.4	$99,085.1	$178,460	($8,438)	$269,107.3	$2,628,627.5	$0.423	
11	0.2419	419,782.0	$101,547.3	$177,568	($8,396)	$270,719.5	$2,899,346.9	$0.423	
12	0.2492	417,683.1	$104,070.8	$176,680	($8,354)	$272,397.1	$3,171,744.0	$0.423	
13	0.2566	415,594.6	$106,656.9	$175,797	($8,312)	$274,141.6	$3,445,885.6	$0.423	
14	0.2643	413,516.7	$109,307.4	$174,918	($8,270)	$275,954.6	$3,721,840.2	$0.423	
15	0.2723	411,449.1	$112,023.7	$174,043	($8,229)	$277,837.6	$3,999,677.8	$0.423	
16	0.2804	409,391.8	$114,807.4	$10,235	($8,188)	$116,854.4	$4,116,532.2		$0.025
17	0.2888	407,344.9	$117,660.4	$10,184	($8,147)	$119,697.1	$4,236,229.4		$0.025
18	0.2975	405,308.2	$120,584.3	$10,133	($8,106)	$122,610.8	$4,358,840.2		$0.025
19	0.3064	403,281.6	$123,580.8	$10,082	($8,066)	$125,597.2	$4,484,437.4		$0.025
20	0.3156	401,265.2	$126,651.8	$10,032	($8,025)	$128,658.1	$4,613,095.5		$0.025
21	0.3251	399,258.9	$129,799.1	$9,981	($7,985)	$131,795.4	$4,744,890.8		$0.025
22	0.3349	397,262.6	$133,024.6	$9,932	($7,945)	$135,010.9	$4,879,901.7		$0.025
23	0.3449	395,276.3	$136,330.2	$9,882	($7,906)	$138,306.6	$5,018,208.3		$0.025
24	0.3552	393,299.9	$139,718.0	$9,832	($7,866)	$141,684.5	$5,159,892.9		$0.025
25	0.3659	391,333.4	$143,190.0	$9,783	($7,827)	$145,146.7	$5,305,039.6		$0.025

* SREC factor is referenced from the NJBPU Solar Alternative Compliance Payment (SACP) schedule.

JC Infinity Institute

Existing Conditons

Current Utility Price ($/kWh)	0.11
Actual SREC Market Values (January 2010-Present)	$110/MWh - $700/MWh

Calculations

Solar Rating - Zip Code: 07305	4.63 kWh/sq-m/day
Solar Capacity Required (kW)	130
Roof Space Needed (sq-ft)	13,000.00
Annual Solar kWh (PV Watts)	159,380
Net System installation Cost ($9/kWh)	$1,170,000
Electrical Service Modification Cost	$100,000
Total System Installation Cost	**$1,270,000**
Materials	$889,000
Labor	$381,000
Engineers Opinion of Probable Cost	$1,587,500

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	2%

Year	Utility Price	Solar kWh	Utility Savings	SRECS	Maintenance Costs	Annual Cash Flow	Cummulative Cash Flow	SREC Factor ($/kWh)*	REC Factor ($/kWh)
Install									
1	0.1100	159,380.0	$17,531.8	$67,418	($3,188)	$81,761.9	$81,761.9	$0.423	
2	0.1133	158,583.1	$17,967.5	$67,081	($3,172)	$81,876.5	$163,638.4	$0.423	
3	0.1167	157,790.2	$18,414.0	$66,745	($3,156)	$82,003.4	$245,641.8	$0.423	
4	0.1202	157,001.2	$18,871.5	$66,412	($3,140)	$82,143.0	$327,784.8	$0.423	
5	0.1238	156,216.2	$19,340.5	$66,079	($3,124)	$82,295.6	$410,080.5	$0.423	
6	0.1275	155,435.1	$19,821.1	$65,749	($3,109)	$82,461.5	$492,542.0	$0.423	
7	0.1313	154,658.0	$20,313.7	$65,420	($3,093)	$82,640.8	$575,182.8	$0.423	
8	0.1353	153,884.7	$20,818.5	$65,093	($3,078)	$82,834.0	$658,016.8	$0.423	
9	0.1393	153,115.3	$21,335.8	$64,768	($3,062)	$83,041.2	$741,058.0	$0.423	
10	0.1435	152,349.7	$21,866.0	$64,444	($3,047)	$83,262.9	$824,320.9	$0.423	
11	0.1478	151,587.9	$22,409.4	$64,122	($3,032)	$83,499.3	$907,820.2	$0.423	
12	0.1523	150,830.0	$22,966.2	$63,801	($3,017)	$83,750.7	$991,571.0	$0.423	
13	0.1568	150,075.8	$23,536.9	$63,482	($3,002)	$84,017.5	$1,075,588.5	$0.423	
14	0.1615	149,325.5	$24,121.8	$63,165	($2,987)	$84,300.0	$1,159,888.5	$0.423	
15	0.1664	148,578.8	$24,721.3	$62,849	($2,972)	$84,598.5	$1,244,487.0	$0.423	
16	0.1714	147,835.9	$25,335.6	$3,696	($2,957)	$26,074.8	$1,270,561.8		$0.025
17	0.1765	147,096.8	$25,965.2	$3,677	($2,942)	$26,700.7	$1,297,262.5		$0.025
18	0.1818	146,361.3	$26,610.4	$3,659	($2,927)	$27,342.2	$1,324,604.7		$0.025
19	0.1873	145,629.5	$27,271.7	$3,641	($2,913)	$27,999.8	$1,352,604.5		$0.025
20	0.1929	144,901.3	$27,949.4	$3,623	($2,898)	$28,673.9	$1,381,278.4		$0.025
21	0.1987	144,176.8	$28,643.9	$3,604	($2,884)	$29,364.8	$1,410,643.2		$0.025
22	0.2046	143,455.9	$29,355.7	$3,586	($2,869)	$30,073.0	$1,440,716.2		$0.025
23	0.2108	142,738.7	$30,085.2	$3,568	($2,855)	$30,798.9	$1,471,515.2		$0.025
24	0.2171	142,025.0	$30,832.8	$3,551	($2,840)	$31,543.0	$1,503,058.1		$0.025
25	0.2236	141,314.8	$31,599.0	$3,533	($2,826)	$32,305.6	$1,535,363.7		$0.025

* SREC factor is referenced from the NJBPU Solar Alternative Compliance Payment (SACP) schedule.

PS #15

Existing Conditons

Current Utility Price ($/kWh)	0.12
Actual SREC Market Values (January 2010-Present)	$110/MWh - $700/MWh

Calculations

Solar Rating - Zip Code: 07305	4.63 kWh/sq-m/day
Solar Capacity Required (kW)	610
Roof Space Needed (sq-ft)	61,000.00
Annual Solar kWh (PV Watts)	747,860
Net System installation Cost ($9/kWh)	$5,490,000
Electrical Service Modification Cost	$100,000
Total System Installation Cost	**$5,590,000**
Materials	$3,913,000
Labor	$1,677,000
Engineers Opinion of Probable Cost	$6,987,500

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	2%

Year	Utility Price	Solar kWh	Utility Savings	SRECS	Maintenance Costs	Annual Cash Flow	Cummulative Cash Flow	SREC Factor ($/kWh)*	REC Factor ($/kWh)
Install									
1	0.1200	747,860.0	$89,743.2	$316,345	($14,957)	$391,130.8	$391,130.8	$0.423	
2	0.1236	744,120.7	$91,973.3	$314,763	($14,882)	$391,854.0	$782,984.7	$0.423	
3	0.1273	740,400.1	$94,258.9	$313,189	($14,808)	$392,640.1	$1,175,624.8	$0.423	
4	0.1311	736,698.1	$96,601.2	$311,623	($14,734)	$393,490.5	$1,569,115.4	$0.423	
5	0.1351	733,014.6	$99,001.7	$310,065	($14,660)	$394,406.6	$1,963,522.0	$0.423	
6	0.1391	729,349.5	$101,461.9	$308,515	($14,587)	$395,389.8	$2,358,911.8	$0.423	
7	0.1433	725,702.8	$103,983.2	$306,972	($14,514)	$396,441.5	$2,755,353.2	$0.423	
8	0.1476	722,074.3	$106,567.2	$305,437	($14,441)	$397,563.2	$3,152,916.4	$0.423	
9	0.1520	718,463.9	$109,215.4	$303,910	($14,369)	$398,756.4	$3,551,672.8	$0.423	
10	0.1566	714,871.6	$111,929.4	$302,391	($14,297)	$400,022.7	$3,951,695.4	$0.423	
11	0.1613	711,297.2	$114,710.9	$300,879	($14,226)	$401,363.7	$4,353,059.1	$0.423	
12	0.1661	707,740.7	$117,561.4	$299,374	($14,155)	$402,781.0	$4,755,840.1	$0.423	
13	0.1711	704,202.0	$120,482.8	$297,877	($14,084)	$404,276.3	$5,160,116.3	$0.423	
14	0.1762	700,681.0	$123,476.8	$296,388	($14,014)	$405,851.3	$5,565,967.6	$0.423	
15	0.1815	697,177.6	$126,545.2	$294,906	($13,944)	$407,507.8	$5,973,475.5	$0.423	
16	0.1870	693,691.7	$129,689.9	$17,342	($13,874)	$133,158.4	$6,106,633.8		$0.025
17	0.1926	690,223.3	$132,912.7	$17,256	($13,804)	$136,363.8	$6,242,997.6		$0.025
18	0.1983	686,772.2	$136,215.6	$17,169	($13,735)	$139,649.4	$6,382,647.0		$0.025
19	0.2043	683,338.3	$139,600.5	$17,083	($13,667)	$143,017.2	$6,525,664.2		$0.025
20	0.2104	679,921.6	$143,069.6	$16,998	($13,598)	$146,469.2	$6,672,133.5		$0.025
21	0.2167	676,522.0	$146,624.9	$16,913	($13,530)	$150,007.5	$6,822,140.9		$0.025
22	0.2232	673,139.4	$150,268.5	$16,828	($13,463)	$153,634.2	$6,975,775.1		$0.025
23	0.2299	669,773.7	$154,002.7	$16,744	($13,395)	$157,351.5	$7,133,126.7		$0.025
24	0.2368	666,424.8	$157,829.6	$16,661	($13,328)	$161,161.8	$7,294,288.5		$0.025
25	0.2439	663,092.7	$161,751.7	$16,577	($13,262)	$165,067.2	$7,459,355.6		$0.025

* SREC factor is referenced from the NJBPU Solar Alternative Compliance Payment (SACP) schedule.

PS #15

Existing Conditons

Current Utility Price ($/kWh)	0.12
Actual SREC Market Values (January 2010-Present)	$110/MWh - $700/MWh

Calculations

Solar Rating - Zip Code: 07305	4.63 kWh/sq-m/day
Solar Capacity Required (kW)	280
Roof Space Needed (sq-ft)	28,000.00
Annual Solar kWh (PV Watts)	343,280
Net System installation Cost ($9/kWh)	$2,520,000
Electrical Service Modification Cost	$100,000
Total System Installation Cost	**$2,620,000**
Materials	$1,834,000
Labor	$786,000
Engineers Opinion of Probable Cost	$3,275,000

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	2%

Year	Utility Price	Solar kWh	Utility Savings	SRECS	Maintenance Costs	Annual Cash Flow	Cummulative Cash Flow	SREC Factor ($/kWh)*	REC Factor ($/kWh)
Install									
1	0.1200	343,280.0	$41,193.6	$145,207	($6,866)	$179,535.4	$179,535.4	$0.423	
2	0.1236	341,563.6	$42,217.3	$144,481	($6,831)	$179,867.4	$359,402.8	$0.423	
3	0.1273	339,855.8	$43,266.4	$143,759	($6,797)	$180,228.2	$539,631.1	$0.423	
4	0.1311	338,156.5	$44,341.5	$143,040	($6,763)	$180,618.6	$720,249.7	$0.423	
5	0.1351	336,465.7	$45,443.4	$142,325	($6,729)	$181,039.1	$901,288.8	$0.423	
6	0.1391	334,783.4	$46,572.7	$141,613	($6,696)	$181,490.4	$1,082,779.2	$0.423	
7	0.1433	333,109.5	$47,730.0	$140,905	($6,662)	$181,973.1	$1,264,752.3	$0.423	
8	0.1476	331,443.9	$48,916.1	$140,201	($6,629)	$182,488.0	$1,447,240.3	$0.423	
9	0.1520	329,786.7	$50,131.7	$139,500	($6,596)	$183,035.7	$1,630,276.0	$0.423	
10	0.1566	328,137.8	$51,377.4	$138,802	($6,563)	$183,617.0	$1,813,893.0	$0.423	
11	0.1613	326,497.1	$52,654.2	$138,108	($6,530)	$184,232.5	$1,998,125.5	$0.423	
12	0.1661	324,864.6	$53,962.6	$137,418	($6,497)	$184,883.1	$2,183,008.6	$0.423	
13	0.1711	323,240.3	$55,303.6	$136,731	($6,465)	$185,569.4	$2,368,578.0	$0.423	
14	0.1762	321,624.1	$56,677.9	$136,047	($6,432)	$186,292.4	$2,554,870.4	$0.423	
15	0.1815	320,016.0	$58,086.3	$135,367	($6,400)	$187,052.8	$2,741,923.2	$0.423	
16	0.1870	318,415.9	$59,529.8	$7,960	($6,368)	$61,121.9	$2,803,045.0		$0.025
17	0.1926	316,823.8	$61,009.1	$7,921	($6,336)	$62,593.2	$2,865,638.2		$0.025
18	0.1983	315,239.7	$62,525.2	$7,881	($6,305)	$64,101.4	$2,929,739.6		$0.025
19	0.2043	313,663.5	$64,078.9	$7,842	($6,273)	$65,647.2	$2,995,386.9		$0.025
20	0.2104	312,095.2	$65,671.3	$7,802	($6,242)	$67,231.8	$3,062,618.6		$0.025
21	0.2167	310,534.7	$67,303.2	$7,763	($6,211)	$68,855.9	$3,131,474.5		$0.025
22	0.2232	308,982.0	$68,975.7	$7,725	($6,180)	$70,520.6	$3,201,995.1		$0.025
23	0.2299	307,437.1	$70,689.8	$7,686	($6,149)	$72,226.9	$3,274,222.1		$0.025
24	0.2368	305,899.9	$72,446.4	$7,647	($6,118)	$73,975.9	$3,348,198.0		$0.025
25	0.2439	304,370.4	$74,246.7	$7,609	($6,087)	$75,768.5	$3,423,966.5		$0.025

* SREC factor is referenced from the NJBPU Solar Alternative Compliance Payment (SACP) schedule.

PS #17

Existing Conditons

Current Utility Price ($/kWh)	0.11
Actual SREC Market Values (January 2010-Present)	$110/MWh - $700/MWh

Calculations

Solar Rating - Zip Code: 07305	4.63 kWh/sq-m/day
Solar Capacity Required (kW)	80
Roof Space Needed (sq-ft)	8,000.00
Annual Solar kWh (PV Watts)	98,080
Net System installation Cost ($9/kWh)	$720,000
Electrical Service Modification Cost	$100,000
Total System Installation Cost	**$820,000**
Materials	$574,000
Labor	$246,000
Engineers Opinion of Probable Cost	$1,025,000

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	2%

Year	Utility Price	Solar kWh	Utility Savings	SRECS	Maintenance Costs	Annual Cash Flow	Cummulative Cash Flow	SREC Factor ($/kWh)*	REC Factor ($/kWh)
Install									
1	0.1100	98,080.0	$10,788.8	$41,488	($1,962)	$50,315.0	$50,315.0	$0.423	
2	0.1133	97,589.6	$11,056.9	$41,280	($1,952)	$50,385.5	$100,700.6	$0.423	
3	0.1167	97,101.7	$11,331.7	$41,074	($1,942)	$50,463.6	$151,164.2	$0.423	
4	0.1202	96,616.1	$11,613.3	$40,869	($1,932)	$50,549.6	$201,713.7	$0.423	
5	0.1238	96,133.1	$11,901.8	$40,664	($1,923)	$50,643.5	$252,357.2	$0.423	
6	0.1275	95,652.4	$12,197.6	$40,461	($1,913)	$50,745.5	$303,102.7	$0.423	
7	0.1313	95,174.1	$12,500.7	$40,259	($1,903)	$50,855.9	$353,958.6	$0.423	
8	0.1353	94,698.3	$12,811.4	$40,057	($1,894)	$50,974.8	$404,933.4	$0.423	
9	0.1393	94,224.8	$13,129.7	$39,857	($1,884)	$51,102.3	$456,035.7	$0.423	
10	0.1435	93,753.6	$13,456.0	$39,658	($1,875)	$51,238.7	$507,274.4	$0.423	
11	0.1478	93,284.9	$13,790.4	$39,460	($1,866)	$51,384.2	$558,658.6	$0.423	
12	0.1523	92,818.5	$14,133.1	$39,262	($1,856)	$51,538.9	$610,197.5	$0.423	
13	0.1568	92,354.4	$14,484.3	$39,066	($1,847)	$51,703.1	$661,900.6	$0.423	
14	0.1615	91,892.6	$14,844.2	$38,871	($1,838)	$51,876.9	$713,777.5	$0.423	
15	0.1664	91,433.1	$15,213.1	$38,676	($1,829)	$52,060.6	$765,838.2	$0.423	
16	0.1714	90,976.0	$15,591.1	$2,274	($1,820)	$16,046.0	$781,884.2		$0.025
17	0.1765	90,521.1	$15,978.6	$2,263	($1,810)	$16,431.2	$798,315.4		$0.025
18	0.1818	90,068.5	$16,375.6	$2,252	($1,801)	$16,826.0	$815,141.3		$0.025
19	0.1873	89,618.1	$16,782.6	$2,240	($1,792)	$17,230.7	$832,372.0		$0.025
20	0.1929	89,170.0	$17,199.6	$2,229	($1,783)	$17,645.5	$850,017.5		$0.025
21	0.1987	88,724.2	$17,627.0	$2,218	($1,774)	$18,070.7	$868,088.1		$0.025
22	0.2046	88,280.6	$18,065.1	$2,207	($1,766)	$18,506.5	$886,594.6		$0.025
23	0.2108	87,839.2	$18,514.0	$2,196	($1,757)	$18,953.2	$905,547.8		$0.025
24	0.2171	87,400.0	$18,974.1	$2,185	($1,748)	$19,411.1	$924,958.8		$0.025
25	0.2236	86,963.0	$19,445.6	$2,174	($1,739)	$19,880.4	$944,839.2		$0.025

* SREC factor is referenced from the NJBPU Solar Alternative Compliance Payment (SACP) schedule.

PS #20

Existing Conditons

Current Utility Price ($/kWh)	0.15
Actual SREC Market Values (January 2010-Present)	$110/MWh - $700/MWh

Calculations

Solar Rating - Zip Code: 07305	4.63 kWh/sq-m/day
Solar Capacity Required (kW)	40
Roof Space Needed (sq-ft)	4,000.00
Annual Solar kWh (PV Watts)	49,040
Net System installation Cost ($9/kWh)	$360,000
Electrical Service Modification Cost	$100,000
Total System Installation Cost	**$460,000**
Materials	$322,000
Labor	$138,000
Engineers Opinion of Probable Cost	$575,000

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	2%

Year	Utility Price	Solar kWh	Utility Savings	SRECS	Maintenance Costs	Annual Cash Flow	Cummulative Cash Flow	SREC Factor ($/kWh)*	REC Factor ($/kWh)
Install									
1	0.1500	49,040.0	$7,356.0	$20,744	($981)	$27,119.1	$27,119.1	$0.423	
2	0.1545	48,794.8	$7,538.8	$20,640	($976)	$27,203.1	$54,322.2	$0.423	
3	0.1591	48,550.8	$7,726.1	$20,537	($971)	$27,292.1	$81,614.3	$0.423	
4	0.1639	48,308.1	$7,918.1	$20,434	($966)	$27,386.3	$109,000.6	$0.423	
5	0.1688	48,066.5	$8,114.9	$20,332	($961)	$27,485.7	$136,486.3	$0.423	
6	0.1739	47,826.2	$8,316.6	$20,230	($957)	$27,590.5	$164,076.8	$0.423	
7	0.1791	47,587.1	$8,523.2	$20,129	($952)	$27,700.8	$191,777.6	$0.423	
8	0.1845	47,349.1	$8,735.0	$20,029	($947)	$27,816.7	$219,594.4	$0.423	
9	0.1900	47,112.4	$8,952.1	$19,929	($942)	$27,938.4	$247,532.7	$0.423	
10	0.1957	46,876.8	$9,174.5	$19,829	($938)	$28,065.9	$275,598.6	$0.423	
11	0.2016	46,642.4	$9,402.5	$19,730	($933)	$28,199.4	$303,798.1	$0.423	
12	0.2076	46,409.2	$9,636.2	$19,631	($928)	$28,339.1	$332,137.2	$0.423	
13	0.2139	46,177.2	$9,875.6	$19,533	($924)	$28,485.0	$360,622.2	$0.423	
14	0.2203	45,946.3	$10,121.1	$19,435	($919)	$28,637.4	$389,259.6	$0.423	
15	0.2269	45,716.6	$10,372.6	$19,338	($914)	$28,796.3	$418,056.0	$0.423	
16	0.2337	45,488.0	$10,630.3	$1,137	($910)	$10,857.8	$428,913.7		$0.025
17	0.2407	45,260.5	$10,894.5	$1,132	($905)	$11,120.8	$440,034.5		$0.025
18	0.2479	45,034.2	$11,165.2	$1,126	($901)	$11,390.4	$451,424.9		$0.025
19	0.2554	44,809.1	$11,442.7	$1,120	($896)	$11,666.7	$463,091.6		$0.025
20	0.2630	44,585.0	$11,727.0	$1,115	($892)	$11,949.9	$475,041.6		$0.025
21	0.2709	44,362.1	$12,018.4	$1,109	($887)	$12,240.2	$487,281.8		$0.025
22	0.2790	44,140.3	$12,317.1	$1,104	($883)	$12,537.8	$499,819.6		$0.025
23	0.2874	43,919.6	$12,623.2	$1,098	($878)	$12,842.8	$512,662.4		$0.025
24	0.2960	43,700.0	$12,936.9	$1,092	($874)	$13,155.4	$525,817.7		$0.025
25	0.3049	43,481.5	$13,258.3	$1,087	($870)	$13,475.7	$539,293.5		$0.025

* SREC factor is referenced from the NJBPU Solar Alternative Compliance Payment (SACP) schedule.

PS #29

Existing Conditons

Current Utility Price ($/kWh)	0.13
Actual SREC Market Values (January 2010-Present)	$110/MWh - $700/MWh

Calculations

Solar Rating - Zip Code: 07305	4.63 kWh/sq-m/day
Solar Capacity Required (kW)	120
Roof Space Needed (sq-ft)	12,000.00
Annual Solar kWh (PV Watts)	147,120
Net System installation Cost ($9/kWh)	$1,080,000
Electrical Service Modification Cost	$100,000
Total System Installation Cost	**$1,180,000**
Materials	$826,000
Labor	$354,000
Engineers Opinion of Probable Cost	$1,475,000

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	2%

Year	Utility Price	Solar kWh	Utility Savings	SRECS	Maintenance Costs	Annual Cash Flow	Cummulative Cash Flow	SREC Factor ($/kWh)*	REC Factor ($/kWh)
Install									
1	0.1300	147,120.0	$19,125.6	$62,232	($2,942)	$78,415.0	$78,415.0	$0.423	
2	0.1339	146,384.4	$19,600.9	$61,921	($2,928)	$78,593.8	$157,008.7	$0.423	
3	0.1379	145,652.5	$20,088.0	$61,611	($2,913)	$78,785.9	$235,794.6	$0.423	
4	0.1421	144,924.2	$20,587.1	$61,303	($2,898)	$78,991.6	$314,786.2	$0.423	
5	0.1463	144,199.6	$21,098.7	$60,996	($2,884)	$79,211.2	$393,997.4	$0.423	
6	0.1507	143,478.6	$21,623.0	$60,691	($2,870)	$79,444.9	$473,442.3	$0.423	
7	0.1552	142,761.2	$22,160.4	$60,388	($2,855)	$79,693.1	$553,135.4	$0.423	
8	0.1599	142,047.4	$22,711.0	$60,086	($2,841)	$79,956.2	$633,091.6	$0.423	
9	0.1647	141,337.2	$23,275.4	$59,786	($2,827)	$80,234.3	$713,325.9	$0.423	
10	0.1696	140,630.5	$23,853.8	$59,487	($2,813)	$80,527.9	$793,853.8	$0.423	
11	0.1747	139,927.3	$24,446.6	$59,189	($2,799)	$80,837.3	$874,691.1	$0.423	
12	0.1800	139,227.7	$25,054.1	$58,893	($2,785)	$81,162.8	$955,853.9	$0.423	
13	0.1853	138,531.5	$25,676.7	$58,599	($2,771)	$81,504.9	$1,037,358.8	$0.423	
14	0.1909	137,838.9	$26,314.7	$58,306	($2,757)	$81,863.8	$1,119,222.6	$0.423	
15	0.1966	137,149.7	$26,968.7	$58,014	($2,743)	$82,240.0	$1,201,462.6	$0.423	
16	0.2025	136,463.9	$27,638.8	$3,412	($2,729)	$28,321.1	$1,229,783.7		$0.025
17	0.2086	135,781.6	$28,325.7	$3,395	($2,716)	$29,004.6	$1,258,788.3		$0.025
18	0.2149	135,102.7	$29,029.5	$3,378	($2,702)	$29,705.1	$1,288,493.4		$0.025
19	0.2213	134,427.2	$29,750.9	$3,361	($2,689)	$30,423.1	$1,318,916.4		$0.025
20	0.2280	133,755.1	$30,490.2	$3,344	($2,675)	$31,159.0	$1,350,075.5		$0.025
21	0.2348	133,086.3	$31,247.9	$3,327	($2,662)	$31,913.4	$1,381,988.8		$0.025
22	0.2418	132,420.9	$32,024.4	$3,311	($2,648)	$32,686.5	$1,414,675.3		$0.025
23	0.2491	131,758.8	$32,820.2	$3,294	($2,635)	$33,479.0	$1,448,154.4		$0.025
24	0.2566	131,100.0	$33,635.8	$3,277	($2,622)	$34,291.3	$1,482,445.7		$0.025
25	0.2643	130,444.5	$34,471.7	$3,261	($2,609)	$35,123.9	$1,517,569.6		$0.025

* SREC factor is referenced from the NJBPU Solar Alternative Compliance Payment (SACP) schedule.

PS#39

Existing Conditons

Current Utility Price ($/kWh)	0.16
Actual SREC Market Values (January 2010-Present)	$110/MWh - $700/MWh

Calculations

Solar Rating - Zip Code: 07305	4.63 kWh/sq-m/day
Solar Capacity Required (kW)	42
Roof Space Needed (sq-ft)	4,200.00
Annual Solar kWh (PV Watts)	51,492
Net System installation Cost ($9/kWh)	$378,000
Electrical Service Modification Cost	$100,000
Total System Installation Cost	**$478,000**
Materials	$334,600
Labor	$143,400
Engineers Opinion of Probable Cost	$597,500

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	2%

Year	Utility Price	Solar kWh	Utility Savings	SRECS	Maintenance Costs	Annual Cash Flow	Cummulative Cash Flow	SREC Factor ($/kWh)*	REC Factor ($/kWh)
Install									
1	0.1600	51,492.0	$8,238.7	$21,781	($1,030)	$28,990.0	$28,990.0	$0.423	
2	0.1648	51,234.5	$8,443.5	$21,672	($1,025)	$29,091.0	$58,081.0	$0.423	
3	0.1697	50,978.4	$8,653.3	$21,564	($1,020)	$29,197.6	$87,278.5	$0.423	
4	0.1748	50,723.5	$8,868.3	$21,456	($1,014)	$29,309.9	$116,588.4	$0.423	
5	0.1801	50,469.9	$9,088.7	$21,349	($1,009)	$29,428.0	$146,016.4	$0.423	
6	0.1855	50,217.5	$9,314.5	$21,242	($1,004)	$29,552.2	$175,568.6	$0.423	
7	0.1910	49,966.4	$9,546.0	$21,136	($999)	$29,682.5	$205,251.1	$0.423	
8	0.1968	49,716.6	$9,783.2	$21,030	($994)	$29,819.0	$235,070.1	$0.423	
9	0.2027	49,468.0	$10,026.3	$20,925	($989)	$29,961.9	$265,032.0	$0.423	
10	0.2088	49,220.7	$10,275.5	$20,820	($984)	$30,111.4	$295,143.5	$0.423	
11	0.2150	48,974.6	$10,530.8	$20,716	($979)	$30,267.6	$325,411.0	$0.423	
12	0.2215	48,729.7	$10,792.5	$20,613	($975)	$30,430.6	$355,841.6	$0.423	
13	0.2281	48,486.0	$11,060.7	$20,510	($970)	$30,600.6	$386,442.2	$0.423	
14	0.2350	48,243.6	$11,335.6	$20,407	($965)	$30,777.8	$417,220.0	$0.423	
15	0.2420	48,002.4	$11,617.3	$20,305	($960)	$30,962.2	$448,182.2	$0.423	
16	0.2493	47,762.4	$11,906.0	$1,194	($955)	$12,144.8	$460,327.0		$0.025
17	0.2568	47,523.6	$12,201.8	$1,188	($950)	$12,439.4	$472,766.4		$0.025
18	0.2645	47,286.0	$12,505.0	$1,182	($946)	$12,741.5	$485,507.9		$0.025
19	0.2724	47,049.5	$12,815.8	$1,176	($941)	$13,051.0	$498,558.9		$0.025
20	0.2806	46,814.3	$13,134.3	$1,170	($936)	$13,368.3	$511,927.2		$0.025
21	0.2890	46,580.2	$13,460.6	$1,165	($932)	$13,693.5	$525,620.8		$0.025
22	0.2976	46,347.3	$13,795.1	$1,159	($927)	$14,026.9	$539,647.7		$0.025
23	0.3066	46,115.6	$14,138.0	$1,153	($922)	$14,368.5	$554,016.2		$0.025
24	0.3158	45,885.0	$14,489.3	$1,147	($918)	$14,718.7	$568,734.9		$0.025
25	0.3252	45,655.6	$14,849.3	$1,141	($913)	$15,077.6	$583,812.5		$0.025

* SREC factor is referenced from the NJBPU Solar Alternative Compliance Payment (SACP) schedule.

PS#1

Existing Conditons

Current Utility Price ($/kWh)	0.15
Actual SREC Market Values (January 2010-Present)	$110/MWh - $700/MWh

Calculations

Solar Rating - Zip Code: 07305	4.63 kWh/sq-m/day
Solar Capacity Required (kW)	6.13
Roof Space Needed (sq-ft)	613.00
Annual Solar kWh (PV Watts)	7,515
Net System installation Cost ($9/kWh)	$55,170
Electrical Service Modification Cost	$100,000
Total System Installation Cost	**$155,170**
Materials	$108,619
Labor	$46,551
Engineers Opinion of Probable Cost	$193,963

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	2%

Year	Utility Price	Solar kWh	Utility Savings	SRECS	Maintenance Costs	Annual Cash Flow	Cummulative Cash Flow	SREC Factor ($/kWh)*	REC Factor ($/kWh)
Install									
1	0.1500	7,515.4	$1,127.3	$3,179	($150)	$4,156.0	$4,156.0	$0.423	
2	0.1545	7,477.8	$1,155.3	$3,163	($150)	$4,168.9	$8,324.9	$0.423	
3	0.1591	7,440.4	$1,184.0	$3,147	($149)	$4,182.5	$12,507.4	$0.423	
4	0.1639	7,403.2	$1,213.5	$3,132	($148)	$4,196.9	$16,704.3	$0.423	
5	0.1688	7,366.2	$1,243.6	$3,116	($147)	$4,212.2	$20,916.5	$0.423	
6	0.1739	7,329.4	$1,274.5	$3,100	($147)	$4,228.2	$25,144.8	$0.423	
7	0.1791	7,292.7	$1,306.2	$3,085	($146)	$4,245.1	$29,389.9	$0.423	
8	0.1845	7,256.3	$1,338.6	$3,069	($145)	$4,262.9	$33,652.8	$0.423	
9	0.1900	7,220.0	$1,371.9	$3,054	($144)	$4,281.6	$37,934.4	$0.423	
10	0.1957	7,183.9	$1,406.0	$3,039	($144)	$4,301.1	$42,235.5	$0.423	
11	0.2016	7,148.0	$1,440.9	$3,024	($143)	$4,321.6	$46,557.1	$0.423	
12	0.2076	7,112.2	$1,476.7	$3,008	($142)	$4,343.0	$50,900.0	$0.423	
13	0.2139	7,076.7	$1,513.4	$2,993	($142)	$4,365.3	$55,265.4	$0.423	
14	0.2203	7,041.3	$1,551.1	$2,978	($141)	$4,388.7	$59,654.0	$0.423	
15	0.2269	7,006.1	$1,589.6	$2,964	($140)	$4,413.0	$64,067.1	$0.423	
16	0.2337	6,971.0	$1,629.1	$174	($139)	$1,664.0	$65,731.0		$0.025
17	0.2407	6,936.2	$1,669.6	$173	($139)	$1,704.3	$67,435.3		$0.025
18	0.2479	6,901.5	$1,711.1	$173	($138)	$1,745.6	$69,180.9		$0.025
19	0.2554	6,867.0	$1,753.6	$172	($137)	$1,787.9	$70,968.8		$0.025
20	0.2630	6,832.7	$1,797.2	$171	($137)	$1,831.3	$72,800.1		$0.025
21	0.2709	6,798.5	$1,841.8	$170	($136)	$1,875.8	$74,675.9		$0.025
22	0.2790	6,764.5	$1,887.6	$169	($135)	$1,921.4	$76,597.4		$0.025
23	0.2874	6,730.7	$1,934.5	$168	($135)	$1,968.2	$78,565.5		$0.025
24	0.2960	6,697.0	$1,982.6	$167	($134)	$2,016.1	$80,581.6		$0.025
25	0.3049	6,663.5	$2,031.8	$167	($133)	$2,065.2	$82,646.7		$0.025

* SREC factor is referenced from the NJBPU Solar Alternative Compliance Payment (SACP) schedule.

Dickenson

Existing Conditons

Current Utility Price ($/kWh)	0.15
Actual SREC Market Values (January 2010-Present)	$110/MWh - $700/MWh

Calculations

Solar Rating - Zip Code: 07305	4.63 kWh/sq-m/day
Solar Capacity Required (kW)	355
Roof Space Needed (sq-ft)	35,500.00
Annual Solar kWh (PV Watts)	435,230
Net System installation Cost ($9/kWh)	$3,195,000
Electrical Service Modification Cost	$100,000
Total System Installation Cost	**$3,295,000**
Materials	$2,306,500
Labor	$988,500
Engineers Opinion of Probable Cost	$4,118,750

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	2%

Year	Utility Price	Solar kWh	Utility Savings	SRECS	Maintenance Costs	Annual Cash Flow	Cummulative Cash Flow	SREC Factor ($/kWh)*	REC Factor ($/kWh)
Install									
1	0.1500	435,230.0	$65,284.5	$184,102	($8,705)	$240,682.2	$240,682.2	$0.423	
2	0.1545	433,053.9	$66,906.8	$183,182	($8,661)	$241,427.5	$482,109.7	$0.423	
3	0.1591	430,888.6	$68,569.5	$182,266	($8,618)	$242,217.6	$724,327.3	$0.423	
4	0.1639	428,734.1	$70,273.4	$181,355	($8,575)	$243,053.3	$967,380.5	$0.423	
5	0.1688	426,590.5	$72,019.7	$180,448	($8,532)	$243,935.7	$1,211,316.2	$0.423	
6	0.1739	424,457.5	$73,809.4	$179,546	($8,489)	$244,865.8	$1,456,182.0	$0.423	
7	0.1791	422,335.2	$75,643.6	$178,648	($8,447)	$245,844.6	$1,702,026.6	$0.423	
8	0.1845	420,223.6	$77,523.3	$177,755	($8,404)	$246,873.4	$1,948,900.0	$0.423	
9	0.1900	418,122.4	$79,449.7	$176,866	($8,362)	$247,953.1	$2,196,853.1	$0.423	
10	0.1957	416,031.8	$81,424.1	$175,981	($8,321)	$249,084.9	$2,445,938.0	$0.423	
11	0.2016	413,951.7	$83,447.5	$175,102	($8,279)	$250,270.0	$2,696,208.0	$0.423	
12	0.2076	411,881.9	$85,521.1	$174,226	($8,238)	$251,509.5	$2,947,717.5	$0.423	
13	0.2139	409,822.5	$87,646.3	$173,355	($8,196)	$252,804.8	$3,200,522.3	$0.423	
14	0.2203	407,773.4	$89,824.3	$172,488	($8,155)	$254,157.0	$3,454,679.3	$0.423	
15	0.2269	405,734.5	$92,056.5	$171,626	($8,115)	$255,567.5	$3,710,246.8	$0.423	
16	0.2337	403,705.8	$94,344.1	$10,093	($8,074)	$96,362.6	$3,806,609.4		$0.025
17	0.2407	401,687.3	$96,688.5	$10,042	($8,034)	$98,697.0	$3,905,306.4		$0.025
18	0.2479	399,678.9	$99,091.2	$9,992	($7,994)	$101,089.6	$4,006,396.0		$0.025
19	0.2554	397,680.5	$101,553.7	$9,942	($7,954)	$103,542.1	$4,109,938.1		$0.025
20	0.2630	395,692.1	$104,077.3	$9,892	($7,914)	$106,055.7	$4,215,993.8		$0.025
21	0.2709	393,713.6	$106,663.6	$9,843	($7,874)	$108,632.2	$4,324,626.0		$0.025
22	0.2790	391,745.1	$109,314.2	$9,794	($7,835)	$111,272.9	$4,435,898.9		$0.025
23	0.2874	389,786.3	$112,030.6	$9,745	($7,796)	$113,979.6	$4,549,878.4		$0.025
24	0.2960	387,837.4	$114,814.6	$9,696	($7,757)	$116,753.8	$4,666,632.2		$0.025
25	0.3049	385,898.2	$117,667.7	$9,647	($7,718)	$119,597.2	$4,786,229.5		$0.025

* SREC factor is referenced from the NJBPU Solar Alternative Compliance Payment (SACP) schedule.

Liberty

Existing Conditons

Current Utility Price ($/kWh)	0.15
Actual SREC Market Values (January 2010-Present)	$110/MWh - $700/MWh

Calculations

Solar Rating - Zip Code: 07305	4.63 kWh/sq-m/day
Solar Capacity Required (kW)	49
Roof Space Needed (sq-ft)	4,900.00
Annual Solar kWh (PV Watts)	60,074
Net System installation Cost ($9/kWh)	$441,000
Electrical Service Modification Cost	$100,000
Total System Installation Cost	**$541,000**
Materials	$378,700
Labor	$162,300
Engineers Opinion of Probable Cost	$676,250

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	2%

Year	Utility Price	Solar kWh	Utility Savings	SRECS	Maintenance Costs	Annual Cash Flow	Cummulative Cash Flow	SREC Factor ($/kWh)*	REC Factor ($/kWh)
Install									
1	0.1500	60,074.0	$9,011.1	$25,411	($1,201)	$33,220.9	$33,220.9	$0.423	
2	0.1545	59,773.6	$9,235.0	$25,284	($1,195)	$33,323.8	$66,544.7	$0.423	
3	0.1591	59,474.8	$9,464.5	$25,158	($1,189)	$33,432.8	$99,977.6	$0.423	
4	0.1639	59,177.4	$9,699.7	$25,032	($1,184)	$33,548.2	$133,525.8	$0.423	
5	0.1688	58,881.5	$9,940.7	$24,907	($1,178)	$33,670.0	$167,195.8	$0.423	
6	0.1739	58,587.1	$10,187.8	$24,782	($1,172)	$33,798.4	$200,994.1	$0.423	
7	0.1791	58,294.2	$10,440.9	$24,658	($1,166)	$33,933.5	$234,927.6	$0.423	
8	0.1845	58,002.7	$10,700.4	$24,535	($1,160)	$34,075.5	$269,003.1	$0.423	
9	0.1900	57,712.7	$10,966.3	$24,412	($1,154)	$34,224.5	$303,227.6	$0.423	
10	0.1957	57,424.1	$11,238.8	$24,290	($1,148)	$34,380.7	$337,608.3	$0.423	
11	0.2016	57,137.0	$11,518.1	$24,169	($1,143)	$34,544.3	$372,152.6	$0.423	
12	0.2076	56,851.3	$11,804.3	$24,048	($1,137)	$34,715.4	$406,868.0	$0.423	
13	0.2139	56,567.0	$12,097.7	$23,928	($1,131)	$34,894.2	$441,762.2	$0.423	
14	0.2203	56,284.2	$12,398.3	$23,808	($1,126)	$35,080.8	$476,843.1	$0.423	
15	0.2269	56,002.8	$12,706.4	$23,689	($1,120)	$35,275.5	$512,118.6	$0.423	
16	0.2337	55,722.8	$13,022.1	$1,393	($1,114)	$13,300.8	$525,419.3		$0.025
17	0.2407	55,444.2	$13,345.7	$1,386	($1,109)	$13,623.0	$539,042.3		$0.025
18	0.2479	55,166.9	$13,677.4	$1,379	($1,103)	$13,953.2	$552,995.5		$0.025
19	0.2554	54,891.1	$14,017.3	$1,372	($1,098)	$14,291.7	$567,287.2		$0.025
20	0.2630	54,616.7	$14,365.6	$1,365	($1,092)	$14,638.7	$581,925.9		$0.025
21	0.2709	54,343.6	$14,722.6	$1,359	($1,087)	$14,994.3	$596,920.2		$0.025
22	0.2790	54,071.9	$15,088.4	$1,352	($1,081)	$15,358.8	$612,279.0		$0.025
23	0.2874	53,801.5	$15,463.4	$1,345	($1,076)	$15,732.4	$628,011.4		$0.025
24	0.2960	53,532.5	$15,847.6	$1,338	($1,071)	$16,115.3	$644,126.7		$0.025
25	0.3049	53,264.8	$16,241.5	$1,332	($1,065)	$16,507.8	$660,634.5		$0.025

* SREC factor is referenced from the NJBPU Solar Alternative Compliance Payment (SACP) schedule.

PS #6

Existing Conditons

Current Utility Price ($/kWh)	0.19
Actual SREC Market Values (January 2010-Present)	$110/MWh - $700/MWh

Calculations

Solar Rating - Zip Code: 07305	4.63 kWh/sq-m/day
Solar Capacity Required (kW)	84
Roof Space Needed (sq-ft)	8,400.00
Annual Solar kWh (PV Watts)	102,984
Net System installation Cost ($9/kWh)	$756,000
Electrical Service Modification Cost	$100,000
Total System Installation Cost	**$856,000**
Materials	$599,200
Labor	$256,800
Engineers Opinion of Probable Cost	$1,070,000

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	2%

Year	Utility Price	Solar kWh	Utility Savings	SRECS	Maintenance Costs	Annual Cash Flow	Cummulative Cash Flow	SREC Factor ($/kWh)*	REC Factor ($/kWh)
Install									
1	0.1900	102,984.0	$19,567.0	$43,562	($2,060)	$61,069.5	$61,069.5	$0.423	
2	0.1957	102,469.1	$20,053.2	$43,344	($2,049)	$61,348.2	$122,417.8	$0.423	
3	0.2016	101,956.7	$20,551.5	$43,128	($2,039)	$61,640.1	$184,057.8	$0.423	
4	0.2076	101,447.0	$21,062.2	$42,912	($2,029)	$61,945.3	$246,003.2	$0.423	
5	0.2138	100,939.7	$21,585.6	$42,697	($2,019)	$62,264.3	$308,267.5	$0.423	
6	0.2203	100,435.0	$22,122.0	$42,484	($2,009)	$62,597.3	$370,864.8	$0.423	
7	0.2269	99,932.8	$22,671.8	$42,272	($1,999)	$62,944.7	$433,809.5	$0.423	
8	0.2337	99,433.2	$23,235.2	$42,060	($1,989)	$63,306.7	$497,116.3	$0.423	
9	0.2407	98,936.0	$23,812.5	$41,850	($1,979)	$63,683.8	$560,800.0	$0.423	
10	0.2479	98,441.3	$24,404.3	$41,641	($1,969)	$64,076.1	$624,876.2	$0.423	
11	0.2553	97,949.1	$25,010.7	$41,432	($1,959)	$64,484.2	$689,360.4	$0.423	
12	0.2630	97,459.4	$25,632.2	$41,225	($1,949)	$64,908.4	$754,268.8	$0.423	
13	0.2709	96,972.1	$26,269.2	$41,019	($1,939)	$65,349.0	$819,617.7	$0.423	
14	0.2790	96,487.2	$26,922.0	$40,814	($1,930)	$65,806.4	$885,424.1	$0.423	
15	0.2874	96,004.8	$27,591.0	$40,610	($1,920)	$66,280.9	$951,705.0	$0.423	
16	0.2960	95,524.8	$28,276.6	$2,388	($1,910)	$28,754.3	$980,459.3		$0.025
17	0.3049	95,047.1	$28,979.3	$2,376	($1,901)	$29,454.6	$1,009,913.9		$0.025
18	0.3140	94,571.9	$29,699.5	$2,364	($1,891)	$30,172.3	$1,040,086.2		$0.025
19	0.3235	94,099.0	$30,437.5	$2,352	($1,882)	$30,908.0	$1,070,994.2		$0.025
20	0.3332	93,628.5	$31,193.9	$2,341	($1,873)	$31,662.0	$1,102,656.2		$0.025
21	0.3432	93,160.4	$31,969.0	$2,329	($1,863)	$32,434.8	$1,135,091.0		$0.025
22	0.3535	92,694.6	$32,763.5	$2,317	($1,854)	$33,226.9	$1,168,317.9		$0.025
23	0.3641	92,231.1	$33,577.6	$2,306	($1,845)	$34,038.8	$1,202,356.7		$0.025
24	0.3750	91,770.0	$34,412.0	$2,294	($1,835)	$34,870.9	$1,237,227.6		$0.025
25	0.3862	91,311.1	$35,267.2	$2,283	($1,826)	$35,723.7	$1,272,951.3		$0.025

* SREC factor is referenced from the NJBPU Solar Alternative Compliance Payment (SACP) schedule.

PS #11

Existing Conditons

Current Utility Price ($/kWh)	0.15
Actual SREC Market Values (January 2010-Present)	$110/MWh - $700/MWh

Calculations

Solar Rating - Zip Code: 07305	4.63 kWh/sq-m/day
Solar Capacity Required (kW)	357.36
Roof Space Needed (sq-ft)	35,736.00
Annual Solar kWh (PV Watts)	438,123
Net System installation Cost ($9/kWh)	$3,216,240
Electrical Service Modification Cost	$100,000
Total System Installation Cost	**$3,316,240**
Materials	$2,321,368
Labor	$994,872
Engineers Opinion of Probable Cost	$4,145,300

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	2%

Year	Utility Price	Solar kWh	Utility Savings	SRECS	Maintenance Costs	Annual Cash Flow	Cummulative Cash Flow	SREC Factor ($/kWh)*	REC Factor ($/kWh)
Install									
1	0.1500	438,123.4	$65,718.5	$185,326	($8,762)	$242,282.2	$242,282.2	$0.423	
2	0.1545	435,932.7	$67,351.6	$184,400	($8,719)	$243,032.5	$485,314.7	$0.423	
3	0.1591	433,753.1	$69,025.3	$183,478	($8,675)	$243,827.8	$729,142.5	$0.423	
4	0.1639	431,584.3	$70,740.6	$182,560	($8,632)	$244,669.1	$973,811.6	$0.423	
5	0.1688	429,426.4	$72,498.5	$181,647	($8,589)	$245,557.3	$1,219,368.9	$0.423	
6	0.1739	427,279.3	$74,300.1	$180,739	($8,546)	$246,493.6	$1,465,862.5	$0.423	
7	0.1791	425,142.9	$76,146.4	$179,835	($8,503)	$247,479.0	$1,713,341.5	$0.423	
8	0.1845	423,017.1	$78,038.7	$178,936	($8,460)	$248,514.6	$1,961,856.1	$0.423	
9	0.1900	420,902.1	$79,977.9	$178,042	($8,418)	$249,601.5	$2,211,457.5	$0.423	
10	0.1957	418,797.6	$81,965.4	$177,151	($8,376)	$250,740.8	$2,462,198.3	$0.423	
11	0.2016	416,703.6	$84,002.2	$176,266	($8,334)	$251,933.7	$2,714,132.0	$0.423	
12	0.2076	414,620.0	$86,089.7	$175,384	($8,292)	$253,181.5	$2,967,313.6	$0.423	
13	0.2139	412,546.9	$88,229.0	$174,507	($8,251)	$254,485.4	$3,221,799.0	$0.423	
14	0.2203	410,484.2	$90,421.5	$173,635	($8,210)	$255,846.6	$3,477,645.6	$0.423	
15	0.2269	408,431.8	$92,668.5	$172,767	($8,169)	$257,266.5	$3,734,912.1	$0.423	
16	0.2337	406,389.6	$94,971.3	$10,160	($8,128)	$97,003.2	$3,831,915.3		$0.025
17	0.2407	404,357.7	$97,331.3	$10,109	($8,087)	$99,353.1	$3,931,268.4		$0.025
18	0.2479	402,335.9	$99,750.0	$10,058	($8,047)	$101,761.7	$4,033,030.1		$0.025
19	0.2554	400,324.2	$102,228.8	$10,008	($8,006)	$104,230.4	$4,137,260.5		$0.025
20	0.2630	398,322.6	$104,769.2	$9,958	($7,966)	$106,760.8	$4,244,021.3		$0.025
21	0.2709	396,331.0	$107,372.7	$9,908	($7,927)	$109,354.3	$4,353,375.6		$0.025
22	0.2790	394,349.3	$110,040.9	$9,859	($7,887)	$112,012.6	$4,465,388.2		$0.025
23	0.2874	392,377.6	$112,775.4	$9,809	($7,848)	$114,737.3	$4,580,125.5		$0.025
24	0.2960	390,415.7	$115,577.9	$9,760	($7,808)	$117,530.0	$4,697,655.5		$0.025
25	0.3049	388,463.6	$118,450.0	$9,712	($7,769)	$120,392.3	$4,818,047.8		$0.025

* SREC factor is referenced from the NJBPU Solar Alternative Compliance Payment (SACP) schedule.

PS #23

Existing Conditons

Current Utility Price ($/kWh)	0.15
Actual SREC Market Values (January 2010-Present)	$110/MWh - $700/MWh

Calculations

Solar Rating - Zip Code: 07305	4.63 kWh/sq-m/day
Solar Capacity Required (kW)	204
Roof Space Needed (sq-ft)	20,400.00
Annual Solar kWh (PV Watts)	250,104
Net System installation Cost ($9/kWh)	$1,836,000
Electrical Service Modification Cost	$100,000
Total System Installation Cost	**$1,936,000**
Materials	$1,355,200
Labor	$580,800
Engineers Opinion of Probable Cost	$2,420,000

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	2%

Year	Utility Price	Solar kWh	Utility Savings	SRECS	Maintenance Costs	Annual Cash Flow	Cummulative Cash Flow	SREC Factor ($/kWh)*	REC Factor ($/kWh)
Install									
1	0.1500	250,104.0	$37,515.6	$105,794	($5,002)	$138,307.5	$138,307.5	$0.423	
2	0.1545	248,853.5	$38,447.9	$105,265	($4,977)	$138,735.8	$277,043.3	$0.423	
3	0.1591	247,609.2	$39,403.3	$104,739	($4,952)	$139,189.8	$416,233.1	$0.423	
4	0.1639	246,371.2	$40,382.5	$104,215	($4,927)	$139,670.0	$555,903.2	$0.423	
5	0.1688	245,139.3	$41,386.0	$103,694	($4,903)	$140,177.1	$696,080.3	$0.423	
6	0.1739	243,913.6	$42,414.4	$103,175	($4,878)	$140,711.6	$836,791.9	$0.423	
7	0.1791	242,694.0	$43,468.4	$102,660	($4,854)	$141,274.1	$978,066.0	$0.423	
8	0.1845	241,480.6	$44,548.6	$102,146	($4,830)	$141,865.3	$1,119,931.3	$0.423	
9	0.1900	240,273.2	$45,655.6	$101,636	($4,805)	$142,485.7	$1,262,417.0	$0.423	
10	0.1957	239,071.8	$46,790.2	$101,127	($4,781)	$143,136.1	$1,405,553.1	$0.423	
11	0.2016	237,876.4	$47,952.9	$100,622	($4,758)	$143,817.1	$1,549,370.2	$0.423	
12	0.2076	236,687.1	$49,144.5	$100,119	($4,734)	$144,529.4	$1,693,899.6	$0.423	
13	0.2139	235,503.6	$50,365.8	$99,618	($4,710)	$145,273.7	$1,839,173.4	$0.423	
14	0.2203	234,326.1	$51,617.4	$99,120	($4,687)	$146,050.8	$1,985,224.2	$0.423	
15	0.2269	233,154.5	$52,900.1	$98,624	($4,663)	$146,861.3	$2,132,085.5	$0.423	
16	0.2337	231,988.7	$54,214.6	$5,800	($4,640)	$55,374.6	$2,187,460.1		$0.025
17	0.2407	230,828.8	$55,561.9	$5,771	($4,617)	$56,716.0	$2,244,176.1		$0.025
18	0.2479	229,674.6	$56,942.6	$5,742	($4,593)	$58,090.9	$2,302,267.0		$0.025
19	0.2554	228,526.2	$58,357.6	$5,713	($4,571)	$59,500.2	$2,361,767.2		$0.025
20	0.2630	227,383.6	$59,807.8	$5,685	($4,548)	$60,944.7	$2,422,711.9		$0.025
21	0.2709	226,246.7	$61,294.0	$5,656	($4,525)	$62,425.2	$2,485,137.2		$0.025
22	0.2790	225,115.5	$62,817.2	$5,628	($4,502)	$63,942.7	$2,549,079.9		$0.025
23	0.2874	223,989.9	$64,378.2	$5,600	($4,480)	$65,498.1	$2,614,578.0		$0.025
24	0.2960	222,869.9	$65,978.0	$5,572	($4,457)	$67,092.3	$2,681,670.3		$0.025
25	0.3049	221,755.6	$67,617.5	$5,544	($4,435)	$68,726.3	$2,750,396.6		$0.025

* SREC factor is referenced from the NJBPU Solar Alternative Compliance Payment (SACP) schedule.

PS #24

Existing Conditons

Current Utility Price ($/kWh)	0.14
Actual SREC Market Values (January 2010-Present)	$110/MWh - $700/MWh

Calculations

Solar Rating - Zip Code: 07305	4.63 kWh/sq-m/day
Solar Capacity Required (kW)	186
Roof Space Needed (sq-ft)	18,600.00
Annual Solar kWh (PV Watts)	228,036
Net System installation Cost ($9/kWh)	$1,674,000
Electrical Service Modification Cost	$100,000
Total System Installation Cost	**$1,774,000**
Materials	$1,241,800
Labor	$532,200
Engineers Opinion of Probable Cost	$2,217,500

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	2%

Year	Utility Price	Solar kWh	Utility Savings	SRECS	Maintenance Costs	Annual Cash Flow	Cummulative Cash Flow	SREC Factor ($/kWh)*	REC Factor ($/kWh)
Install									
1	0.1400	228,036.0	$31,925.0	$96,459	($4,561)	$123,823.5	$123,823.5	$0.423	
2	0.1442	226,895.8	$32,718.4	$95,977	($4,538)	$124,157.4	$247,980.9	$0.423	
3	0.1485	225,761.3	$33,531.4	$95,497	($4,515)	$124,513.2	$372,494.2	$0.423	
4	0.1530	224,632.5	$34,364.7	$95,020	($4,493)	$124,891.6	$497,385.8	$0.423	
5	0.1576	223,509.4	$35,218.6	$94,544	($4,470)	$125,292.9	$622,678.7	$0.423	
6	0.1623	222,391.8	$36,093.8	$94,072	($4,448)	$125,717.7	$748,396.4	$0.423	
7	0.1672	221,279.9	$36,990.8	$93,601	($4,426)	$126,166.5	$874,563.0	$0.423	
8	0.1722	220,173.5	$37,910.0	$93,133	($4,403)	$126,639.9	$1,001,202.9	$0.423	
9	0.1773	219,072.6	$38,852.0	$92,668	($4,381)	$127,138.3	$1,128,341.2	$0.423	
10	0.1827	217,977.2	$39,817.5	$92,204	($4,360)	$127,662.3	$1,256,003.5	$0.423	
11	0.1881	216,887.3	$40,807.0	$91,743	($4,338)	$128,212.6	$1,384,216.1	$0.423	
12	0.1938	215,802.9	$41,821.0	$91,285	($4,316)	$128,789.6	$1,513,005.7	$0.423	
13	0.1996	214,723.9	$42,860.3	$90,828	($4,294)	$129,394.0	$1,642,399.8	$0.423	
14	0.2056	213,650.3	$43,925.4	$90,374	($4,273)	$130,026.4	$1,772,426.2	$0.423	
15	0.2118	212,582.0	$45,016.9	$89,922	($4,252)	$130,687.5	$1,903,113.7	$0.423	
16	0.2181	211,519.1	$46,135.6	$5,288	($4,230)	$47,193.2	$1,950,306.8		$0.025
17	0.2247	210,461.5	$47,282.1	$5,262	($4,209)	$48,334.4	$1,998,641.2		$0.025
18	0.2314	209,409.2	$48,457.0	$5,235	($4,188)	$49,504.1	$2,048,145.3		$0.025
19	0.2383	208,362.2	$49,661.2	$5,209	($4,167)	$50,703.0	$2,098,848.2		$0.025
20	0.2455	207,320.4	$50,895.3	$5,183	($4,146)	$51,931.9	$2,150,780.1		$0.025
21	0.2529	206,283.8	$52,160.0	$5,157	($4,126)	$53,191.4	$2,203,971.5		$0.025
22	0.2604	205,252.3	$53,456.2	$5,131	($4,105)	$54,482.4	$2,258,453.9		$0.025
23	0.2683	204,226.1	$54,784.6	$5,106	($4,085)	$55,805.7	$2,314,259.6		$0.025
24	0.2763	203,204.9	$56,146.0	$5,080	($4,064)	$57,162.0	$2,371,421.6		$0.025
25	0.2846	202,188.9	$57,541.2	$5,055	($4,044)	$58,552.1	$2,429,973.7		$0.025

* SREC factor is referenced from the NJBPU Solar Alternative Compliance Payment (SACP) schedule.

PS #25

Existing Conditons

Current Utility Price ($/kWh)	0.15
Actual SREC Market Values (January 2010-Present)	$110/MWh - $700/MWh

Calculations

Solar Rating - Zip Code: 07305	4.63 kWh/sq-m/day
Solar Capacity Required (kW)	273
Roof Space Needed (sq-ft)	27,300.00
Annual Solar kWh (PV Watts)	334,698
Net System installation Cost ($9/kWh)	$2,457,000
Electrical Service Modification Cost	$100,000
Total System Installation Cost	**$2,557,000**
Materials	$1,789,900
Labor	$767,100
Engineers Opinion of Probable Cost	$3,196,250

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	2%

Year	Utility Price	Solar kWh	Utility Savings	SRECS	Maintenance Costs	Annual Cash Flow	Cummulative Cash Flow	SREC Factor ($/kWh)*	REC Factor ($/kWh)
Install									
1	0.1500	334,698.0	$50,204.7	$141,577	($6,694)	$185,088.0	$185,088.0	$0.423	
2	0.1545	333,024.5	$51,452.3	$140,869	($6,660)	$185,661.2	$370,749.2	$0.423	
3	0.1591	331,359.4	$52,730.9	$140,165	($6,627)	$186,268.7	$557,017.9	$0.423	
4	0.1639	329,702.6	$54,041.2	$139,464	($6,594)	$186,911.4	$743,929.2	$0.423	
5	0.1688	328,054.1	$55,384.2	$138,767	($6,561)	$187,590.0	$931,519.2	$0.423	
6	0.1739	326,413.8	$56,760.5	$138,073	($6,528)	$188,305.2	$1,119,824.4	$0.423	
7	0.1791	324,781.7	$58,171.0	$137,383	($6,496)	$189,058.0	$1,308,882.4	$0.423	
8	0.1845	323,157.8	$59,616.5	$136,696	($6,463)	$189,849.1	$1,498,731.5	$0.423	
9	0.1900	321,542.0	$61,098.0	$136,012	($6,431)	$190,679.4	$1,689,411.0	$0.423	
10	0.1957	319,934.3	$62,616.3	$135,332	($6,399)	$191,549.8	$1,880,960.8	$0.423	
11	0.2016	318,334.7	$64,172.3	$134,656	($6,367)	$192,461.1	$2,073,421.9	$0.423	
12	0.2076	316,743.0	$65,767.0	$133,982	($6,335)	$193,414.4	$2,266,836.3	$0.423	
13	0.2139	315,159.3	$67,401.3	$133,312	($6,303)	$194,410.4	$2,461,246.7	$0.423	
14	0.2203	313,583.5	$69,076.2	$132,646	($6,272)	$195,450.3	$2,656,697.0	$0.423	
15	0.2269	312,015.6	$70,792.7	$131,983	($6,240)	$196,535.0	$2,853,232.0	$0.423	
16	0.2337	310,455.5	$72,551.9	$7,761	($6,209)	$74,104.2	$2,927,336.3		$0.025
17	0.2407	308,903.2	$74,354.8	$7,723	($6,178)	$75,899.4	$3,003,235.6		$0.025
18	0.2479	307,358.7	$76,202.6	$7,684	($6,147)	$77,739.4	$3,080,975.0		$0.025
19	0.2554	305,821.9	$78,096.2	$7,646	($6,116)	$79,625.3	$3,160,600.3		$0.025
20	0.2630	304,292.8	$80,036.9	$7,607	($6,086)	$81,558.3	$3,242,158.6		$0.025
21	0.2709	302,771.3	$82,025.8	$7,569	($6,055)	$83,539.7	$3,325,698.3		$0.025
22	0.2790	301,257.5	$84,064.1	$7,531	($6,025)	$85,570.4	$3,411,268.7		$0.025
23	0.2874	299,751.2	$86,153.1	$7,494	($5,995)	$87,651.9	$3,498,920.6		$0.025
24	0.2960	298,252.4	$88,294.0	$7,456	($5,965)	$89,785.3	$3,588,705.9		$0.025
25	0.3049	296,761.2	$90,488.1	$7,419	($5,935)	$91,972.0	$3,680,677.9		$0.025

* SREC factor is referenced from the NJBPU Solar Alternative Compliance Payment (SACP) schedule.

PS #27

Existing Conditons

Current Utility Price ($/kWh)	0.15
Actual SREC Market Values (January 2010-Present)	$110/MWh - $700/MWh

Calculations

Solar Rating - Zip Code: 07305	4.63 kWh/sq-m/day
Solar Capacity Required (kW)	136
Roof Space Needed (sq-ft)	13,600.00
Annual Solar kWh (PV Watts)	166,736
Net System installation Cost ($9/kWh)	$1,224,000
Electrical Service Modification Cost	$100,000
Total System Installation Cost	**$1,324,000**
Materials	$926,800
Labor	$397,200
Engineers Opinion of Probable Cost	$1,655,000

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	2%

Year	Utility Price	Solar kWh	Utility Savings	SRECS	Maintenance Costs	Annual Cash Flow	Cummulative Cash Flow	SREC Factor ($/kWh)*	REC Factor ($/kWh)
Install									
1	0.1500	166,736.0	$25,010.4	$70,529	($3,335)	$92,205.0	$92,205.0	$0.423	
2	0.1545	165,902.3	$25,631.9	$70,177	($3,318)	$92,490.5	$184,695.6	$0.423	
3	0.1591	165,072.8	$26,268.9	$69,826	($3,301)	$92,793.2	$277,488.8	$0.423	
4	0.1639	164,247.4	$26,921.6	$69,477	($3,285)	$93,113.4	$370,602.1	$0.423	
5	0.1688	163,426.2	$27,590.6	$69,129	($3,269)	$93,451.4	$464,053.5	$0.423	
6	0.1739	162,609.1	$28,276.3	$68,784	($3,252)	$93,807.7	$557,861.3	$0.423	
7	0.1791	161,796.0	$28,978.9	$68,440	($3,236)	$94,182.7	$652,044.0	$0.423	
8	0.1845	160,987.1	$29,699.1	$68,098	($3,220)	$94,576.8	$746,620.8	$0.423	
9	0.1900	160,182.1	$30,437.1	$67,757	($3,204)	$94,990.5	$841,611.3	$0.423	
10	0.1957	159,381.2	$31,193.4	$67,418	($3,188)	$95,424.1	$937,035.4	$0.423	
11	0.2016	158,584.3	$31,968.6	$67,081	($3,172)	$95,878.1	$1,032,913.5	$0.423	
12	0.2076	157,791.4	$32,763.0	$66,746	($3,156)	$96,353.0	$1,129,266.4	$0.423	
13	0.2139	157,002.4	$33,577.2	$66,412	($3,140)	$96,849.2	$1,226,115.6	$0.423	
14	0.2203	156,217.4	$34,411.6	$66,080	($3,124)	$97,367.2	$1,323,482.8	$0.423	
15	0.2269	155,436.3	$35,266.7	$65,750	($3,109)	$97,907.5	$1,421,390.3	$0.423	
16	0.2337	154,659.1	$36,143.1	$3,866	($3,093)	$36,916.4	$1,458,306.7		$0.025
17	0.2407	153,885.8	$37,041.2	$3,847	($3,078)	$37,810.7	$1,496,117.4		$0.025
18	0.2479	153,116.4	$37,961.7	$3,828	($3,062)	$38,727.3	$1,534,844.7		$0.025
19	0.2554	152,350.8	$38,905.1	$3,809	($3,047)	$39,666.8	$1,574,511.5		$0.025
20	0.2630	151,589.1	$39,871.9	$3,790	($3,032)	$40,629.8	$1,615,141.3		$0.025
21	0.2709	150,831.1	$40,862.7	$3,771	($3,017)	$41,616.8	$1,656,758.1		$0.025
22	0.2790	150,077.0	$41,878.1	$3,752	($3,002)	$42,628.5	$1,699,386.6		$0.025
23	0.2874	149,326.6	$42,918.8	$3,733	($2,987)	$43,665.4	$1,743,052.0		$0.025
24	0.2960	148,580.0	$43,985.3	$3,714	($2,972)	$44,728.2	$1,787,780.2		$0.025
25	0.3049	147,837.1	$45,078.3	$3,696	($2,957)	$45,817.5	$1,833,597.8		$0.025

* SREC factor is referenced from the NJBPU Solar Alternative Compliance Payment (SACP) schedule.

PS #31

Existing Conditons

Current Utility Price ($/kWh)	0.17
Actual SREC Market Values (January 2010-Present)	$110/MWh - $700/MWh

Calculations

Solar Rating - Zip Code: 07305	4.63 kWh/sq-m/day
Solar Capacity Required (kW)	78
Roof Space Needed (sq-ft)	7,800.00
Annual Solar kWh (PV Watts)	95,628
Net System installation Cost ($9/kWh)	$702,000
Electrical Service Modification Cost	$100,000
Total System Installation Cost	**$802,000**
Materials	$561,400
Labor	$240,600
Engineers Opinion of Probable Cost	$1,002,500

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	2%

Year	Utility Price	Solar kWh	Utility Savings	SRECS	Maintenance Costs	Annual Cash Flow	Cummulative Cash Flow	SREC Factor ($/kWh)*	REC Factor ($/kWh)
Install									
1	0.1700	95,628.0	$16,256.8	$40,451	($1,913)	$54,794.8	$54,794.8	$0.423	
2	0.1751	95,149.9	$16,660.7	$40,248	($1,903)	$55,006.1	$109,801.0	$0.423	
3	0.1804	94,674.1	$17,074.8	$40,047	($1,893)	$55,228.4	$165,029.4	$0.423	
4	0.1858	94,200.7	$17,499.1	$39,847	($1,884)	$55,462.0	$220,491.4	$0.423	
5	0.1913	93,729.7	$17,933.9	$39,648	($1,875)	$55,707.0	$276,198.4	$0.423	
6	0.1971	93,261.1	$18,379.6	$39,449	($1,865)	$55,963.8	$332,162.2	$0.423	
7	0.2030	92,794.8	$18,836.3	$39,252	($1,856)	$56,232.6	$388,394.8	$0.423	
8	0.2091	92,330.8	$19,304.4	$39,056	($1,847)	$56,513.7	$444,908.5	$0.423	
9	0.2154	91,869.2	$19,784.1	$38,861	($1,837)	$56,807.4	$501,715.9	$0.423	
10	0.2218	91,409.8	$20,275.7	$38,666	($1,828)	$57,113.9	$558,829.8	$0.423	
11	0.2285	90,952.8	$20,779.6	$38,473	($1,819)	$57,433.6	$616,263.3	$0.423	
12	0.2353	90,498.0	$21,296.0	$38,281	($1,810)	$57,766.7	$674,030.0	$0.423	
13	0.2424	90,045.5	$21,825.2	$38,089	($1,801)	$58,113.5	$732,143.5	$0.423	
14	0.2497	89,595.3	$22,367.5	$37,899	($1,792)	$58,474.4	$790,617.9	$0.423	
15	0.2571	89,147.3	$22,923.4	$37,709	($1,783)	$58,849.7	$849,467.6	$0.423	
16	0.2649	88,701.6	$23,493.0	$2,218	($1,774)	$23,936.5	$873,404.1		$0.025
17	0.2728	88,258.1	$24,076.8	$2,206	($1,765)	$24,518.1	$897,922.2		$0.025
18	0.2810	87,816.8	$24,675.1	$2,195	($1,756)	$25,114.2	$923,036.4		$0.025
19	0.2894	87,377.7	$25,288.3	$2,184	($1,748)	$25,725.2	$948,761.6		$0.025
20	0.2981	86,940.8	$25,916.7	$2,174	($1,739)	$26,351.4	$975,113.0		$0.025
21	0.3070	86,506.1	$26,560.7	$2,163	($1,730)	$26,993.3	$1,002,106.3		$0.025
22	0.3163	86,073.6	$27,220.8	$2,152	($1,721)	$27,651.1	$1,029,757.4		$0.025
23	0.3257	85,643.2	$27,897.2	$2,141	($1,713)	$28,325.4	$1,058,082.9		$0.025
24	0.3355	85,215.0	$28,590.5	$2,130	($1,704)	$29,016.5	$1,087,099.4		$0.025
25	0.3456	84,788.9	$29,300.9	$2,120	($1,696)	$29,724.9	$1,116,824.2		$0.025

* SREC factor is referenced from the NJBPU Solar Alternative Compliance Payment (SACP) schedule.

PS #33

Existing Conditons

Current Utility Price ($/kWh)	0.11
Actual SREC Market Values (January 2010-Present)	$110/MWh - $700/MWh

Calculations

Solar Rating - Zip Code: 07305	4.63 kWh/sq-m/day
Solar Capacity Required (kW)	48
Roof Space Needed (sq-ft)	4,800.00
Annual Solar kWh (PV Watts)	58,848
Net System installation Cost ($9/kWh)	$432,000
Electrical Service Modification Cost	$100,000
Total System Installation Cost	**$532,000**
Materials	$372,400
Labor	$159,600
Engineers Opinion of Probable Cost	$665,000

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	2%

Year	Utility Price	Solar kWh	Utility Savings	SRECS	Maintenance Costs	Annual Cash Flow	Cummulative Cash Flow	SREC Factor ($/kWh)*	REC Factor ($/kWh)
Install									
1	0.1100	58,848.0	$6,473.3	$24,893	($1,177)	$30,189.0	$30,189.0	$0.423	
2	0.1133	58,553.8	$6,634.1	$24,768	($1,171)	$30,231.3	$60,420.3	$0.423	
3	0.1167	58,261.0	$6,799.0	$24,644	($1,165)	$30,278.2	$90,698.5	$0.423	
4	0.1202	57,969.7	$6,968.0	$24,521	($1,159)	$30,329.7	$121,028.2	$0.423	
5	0.1238	57,679.8	$7,141.1	$24,399	($1,154)	$30,386.1	$151,414.3	$0.423	
6	0.1275	57,391.4	$7,318.6	$24,277	($1,148)	$30,447.3	$181,861.6	$0.423	
7	0.1313	57,104.5	$7,500.4	$24,155	($1,142)	$30,513.5	$212,375.2	$0.423	
8	0.1353	56,819.0	$7,686.8	$24,034	($1,136)	$30,584.9	$242,960.0	$0.423	
9	0.1393	56,534.9	$7,877.8	$23,914	($1,131)	$30,661.4	$273,621.4	$0.423	
10	0.1435	56,252.2	$8,073.6	$23,795	($1,125)	$30,743.2	$304,364.7	$0.423	
11	0.1478	55,970.9	$8,274.2	$23,676	($1,119)	$30,830.5	$335,195.2	$0.423	
12	0.1523	55,691.1	$8,479.8	$23,557	($1,114)	$30,923.3	$366,118.5	$0.423	
13	0.1568	55,412.6	$8,690.6	$23,440	($1,108)	$31,021.9	$397,140.4	$0.423	
14	0.1615	55,135.6	$8,906.5	$23,322	($1,103)	$31,126.2	$428,266.5	$0.423	
15	0.1664	54,859.9	$9,127.9	$23,206	($1,097)	$31,236.4	$459,502.9	$0.423	
16	0.1714	54,585.6	$9,354.7	$1,365	($1,092)	$9,627.6	$469,130.5		$0.025
17	0.1765	54,312.7	$9,587.1	$1,358	($1,086)	$9,858.7	$478,989.2		$0.025
18	0.1818	54,041.1	$9,825.4	$1,351	($1,081)	$10,095.6	$489,084.8		$0.025
19	0.1873	53,770.9	$10,069.5	$1,344	($1,075)	$10,338.4	$499,423.2		$0.025
20	0.1929	53,502.0	$10,319.8	$1,338	($1,070)	$10,587.3	$510,010.5		$0.025
21	0.1987	53,234.5	$10,576.2	$1,331	($1,065)	$10,842.4	$520,852.9		$0.025
22	0.2046	52,968.3	$10,839.0	$1,324	($1,059)	$11,103.9	$531,956.8		$0.025
23	0.2108	52,703.5	$11,108.4	$1,318	($1,054)	$11,371.9	$543,328.7		$0.025
24	0.2171	52,440.0	$11,384.4	$1,311	($1,049)	$11,646.6	$554,975.3		$0.025
25	0.2236	52,177.8	$11,667.3	$1,304	($1,044)	$11,928.2	$566,903.5		$0.025

* SREC factor is referenced from the NJBPU Solar Alternative Compliance Payment (SACP) schedule.

Lincoln High School

Existing Conditons

Current Utility Price ($/kWh)	0.11
Actual SREC Market Values (January 2010-Present)	$110/MWh - $700/MWh

Calculations

Solar Rating - Zip Code: 07305	4.63 kWh/sq-m/day
Solar Capacity Required (kW)	470
Roof Space Needed (sq-ft)	47,000.00
Annual Solar kWh (PV Watts)	576,220
Net System installation Cost ($9/kWh)	$4,230,000
Electrical Service Modification Cost	$100,000
Total System Installation Cost	**$4,330,000**
Materials	$3,031,000
Labor	$1,299,000
Engineers Opinion of Probable Cost	$5,412,500

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	2%

Year	Utility Price	Solar kWh	Utility Savings	SRECS	Maintenance Costs	Annual Cash Flow	Cummulative Cash Flow	SREC Factor ($/kWh)*	REC Factor ($/kWh)
Install									
1	0.1100	576,220.0	$63,384.2	$243,741	($11,524)	$295,600.9	$295,600.9	$0.423	
2	0.1133	573,338.9	$64,959.3	$242,522	($11,467)	$296,014.9	$591,615.7	$0.423	
3	0.1167	570,472.2	$66,573.5	$241,310	($11,409)	$296,473.8	$888,089.6	$0.423	
4	0.1202	567,619.8	$68,227.9	$240,103	($11,352)	$296,978.7	$1,185,068.3	$0.423	
5	0.1238	564,781.7	$69,923.4	$238,903	($11,296)	$297,530.4	$1,482,598.6	$0.423	
6	0.1275	561,957.8	$71,660.9	$237,708	($11,239)	$298,130.0	$1,780,728.6	$0.423	
7	0.1313	559,148.0	$73,441.7	$236,520	($11,183)	$298,778.4	$2,079,507.0	$0.423	
8	0.1353	556,352.3	$75,266.7	$235,337	($11,127)	$299,476.7	$2,378,983.7	$0.423	
9	0.1393	553,570.5	$77,137.1	$234,160	($11,071)	$300,226.1	$2,679,209.8	$0.423	
10	0.1435	550,802.7	$79,054.0	$232,990	($11,016)	$301,027.5	$2,980,237.2	$0.423	
11	0.1478	548,048.7	$81,018.5	$231,825	($10,961)	$301,882.1	$3,282,119.3	$0.423	
12	0.1523	545,308.4	$83,031.8	$230,665	($10,906)	$302,791.1	$3,584,910.4	$0.423	
13	0.1568	542,581.9	$85,095.1	$229,512	($10,852)	$303,755.6	$3,888,666.0	$0.423	
14	0.1615	539,869.0	$87,209.7	$228,365	($10,797)	$304,776.9	$4,193,443.0	$0.423	
15	0.1664	537,169.6	$89,376.9	$227,223	($10,743)	$305,856.3	$4,499,299.3	$0.423	
16	0.1714	534,483.8	$91,597.9	$13,362	($10,690)	$94,270.3	$4,593,569.6		$0.025
17	0.1765	531,811.4	$93,874.1	$13,295	($10,636)	$96,533.2	$4,690,102.8		$0.025
18	0.1818	529,152.3	$96,206.9	$13,229	($10,583)	$98,852.7	$4,788,955.4		$0.025
19	0.1873	526,506.6	$98,597.6	$13,163	($10,530)	$101,230.2	$4,890,185.6		$0.025
20	0.1929	523,874.0	$101,047.8	$13,097	($10,477)	$103,667.2	$4,993,852.8		$0.025
21	0.1987	521,254.7	$103,558.8	$13,031	($10,425)	$106,165.1	$5,100,017.9		$0.025
22	0.2046	518,648.4	$106,132.3	$12,966	($10,373)	$108,725.5	$5,208,743.4		$0.025
23	0.2108	516,055.1	$108,769.7	$12,901	($10,321)	$111,349.9	$5,320,093.3		$0.025
24	0.2171	513,474.9	$111,472.6	$12,837	($10,269)	$114,040.0	$5,434,133.2		$0.025
25	0.2236	510,907.5	$114,242.7	$12,773	($10,218)	$116,797.2	$5,550,930.4		$0.025

* SREC factor is referenced from the NJBPU Solar Alternative Compliance Payment (SACP) schedule.

McNair Academic High School

Existing Conditons

Current Utility Price ($/kWh)	0.15
Actual SREC Market Values (January 2010-Present)	$110/MWh - $700/MWh

Calculations

Solar Rating - Zip Code: 07305	4.63 kWh/sq-m/day
Solar Capacity Required (kW)	180
Roof Space Needed (sq-ft)	18,000.00
Annual Solar kWh (PV Watts)	220,680
Net System installation Cost ($9/kWh)	$1,620,000
Electrical Service Modification Cost	$100,000
Total System Installation Cost	**$1,720,000**
Materials	$1,204,000
Labor	$516,000
Engineers Opinion of Probable Cost	$2,150,000

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	2%

Year	Utility Price	Solar kWh	Utility Savings	SRECS	Maintenance Costs	Annual Cash Flow	Cummulative Cash Flow	SREC Factor ($/kWh)*	REC Factor ($/kWh)
Install									
1	0.1500	220,680.0	$33,102.0	$93,348	($4,414)	$122,036.0	$122,036.0	$0.423	
2	0.1545	219,576.6	$33,924.6	$92,881	($4,392)	$122,414.0	$244,450.0	$0.423	
3	0.1591	218,478.7	$34,767.6	$92,416	($4,370)	$122,814.5	$367,264.5	$0.423	
4	0.1639	217,386.3	$35,631.6	$91,954	($4,348)	$123,238.3	$490,502.8	$0.423	
5	0.1688	216,299.4	$36,517.0	$91,495	($4,326)	$123,685.7	$614,188.5	$0.423	
6	0.1739	215,217.9	$37,424.5	$91,037	($4,304)	$124,157.3	$738,345.8	$0.423	
7	0.1791	214,141.8	$38,354.5	$90,582	($4,283)	$124,653.6	$862,999.4	$0.423	
8	0.1845	213,071.1	$39,307.6	$90,129	($4,261)	$125,175.2	$988,174.6	$0.423	
9	0.1900	212,005.7	$40,284.4	$89,678	($4,240)	$125,722.7	$1,113,897.3	$0.423	
10	0.1957	210,945.7	$41,285.4	$89,230	($4,219)	$126,296.6	$1,240,193.9	$0.423	
11	0.2016	209,891.0	$42,311.4	$88,784	($4,198)	$126,897.5	$1,367,091.4	$0.423	
12	0.2076	208,841.5	$43,362.8	$88,340	($4,177)	$127,526.0	$1,494,617.3	$0.423	
13	0.2139	207,797.3	$44,440.4	$87,898	($4,156)	$128,182.7	$1,622,800.0	$0.423	
14	0.2203	206,758.3	$45,544.7	$87,459	($4,135)	$128,868.3	$1,751,668.4	$0.423	
15	0.2269	205,724.5	$46,676.5	$87,021	($4,114)	$129,583.5	$1,881,251.9	$0.423	
16	0.2337	204,695.9	$47,836.4	$5,117	($4,094)	$48,859.9	$1,930,111.8		$0.025
17	0.2407	203,672.4	$49,025.2	$5,092	($4,073)	$50,043.5	$1,980,155.3		$0.025
18	0.2479	202,654.1	$50,243.4	$5,066	($4,053)	$51,256.7	$2,031,412.1		$0.025
19	0.2554	201,640.8	$51,492.0	$5,041	($4,033)	$52,500.2	$2,083,912.3		$0.025
20	0.2630	200,632.6	$52,771.6	$5,016	($4,013)	$53,774.7	$2,137,687.0		$0.025
21	0.2709	199,629.4	$54,082.9	$4,991	($3,993)	$55,081.1	$2,192,768.1		$0.025
22	0.2790	198,631.3	$55,426.9	$4,966	($3,973)	$56,420.1	$2,249,188.2		$0.025
23	0.2874	197,638.1	$56,804.3	$4,941	($3,953)	$57,792.5	$2,306,980.6		$0.025
24	0.2960	196,649.9	$58,215.9	$4,916	($3,933)	$59,199.1	$2,366,179.7		$0.025
25	0.3049	195,666.7	$59,662.5	$4,892	($3,913)	$60,640.8	$2,426,820.6		$0.025

* SREC factor is referenced from the NJBPU Solar Alternative Compliance Payment (SACP) schedule.

PS #5

Existing Conditons

Current Utility Price ($/kWh)	0.12
Actual SREC Market Values (January 2010-Present)	$110/MWh - $700/MWh

Calculations

Solar Rating - Zip Code: 07305	4.63 kWh/sq-m/day
Solar Capacity Required (kW)	150
Roof Space Needed (sq-ft)	15,000.00
Annual Solar kWh (PV Watts)	183,900
Net System installation Cost ($9/kWh)	$1,350,000
Electrical Service Modification Cost	$100,000
Total System Installation Cost	**$1,450,000**
Materials	$1,015,000
Labor	$435,000
Engineers Opinion of Probable Cost	$1,812,500

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	2%

Year	Utility Price	Solar kWh	Utility Savings	SRECS	Maintenance Costs	Annual Cash Flow	Cummulative Cash Flow	SREC Factor ($/kWh)*	REC Factor ($/kWh)
Install									
1	0.1200	183,900.0	$22,068.0	$77,790	($3,678)	$96,179.7	$96,179.7	$0.423	
2	0.1236	182,980.5	$22,616.4	$77,401	($3,660)	$96,357.5	$192,537.2	$0.423	
3	0.1273	182,065.6	$23,178.4	$77,014	($3,641)	$96,550.8	$289,088.1	$0.423	
4	0.1311	181,155.3	$23,754.4	$76,629	($3,623)	$96,760.0	$385,848.0	$0.423	
5	0.1351	180,249.5	$24,344.7	$76,246	($3,605)	$96,985.2	$482,833.3	$0.423	
6	0.1391	179,348.2	$24,949.7	$75,864	($3,587)	$97,227.0	$580,060.3	$0.423	
7	0.1433	178,451.5	$25,569.7	$75,485	($3,569)	$97,485.6	$677,545.9	$0.423	
8	0.1476	177,559.2	$26,205.1	$75,108	($3,551)	$97,761.4	$775,307.3	$0.423	
9	0.1520	176,671.5	$26,856.3	$74,732	($3,533)	$98,054.8	$873,362.2	$0.423	
10	0.1566	175,788.1	$27,523.6	$74,358	($3,516)	$98,366.2	$971,728.4	$0.423	
11	0.1613	174,909.2	$28,207.6	$73,987	($3,498)	$98,696.0	$1,070,424.4	$0.423	
12	0.1661	174,034.6	$28,908.6	$73,617	($3,481)	$99,044.5	$1,169,468.9	$0.423	
13	0.1711	173,164.4	$29,626.9	$73,249	($3,463)	$99,412.2	$1,268,881.1	$0.423	
14	0.1762	172,298.6	$30,363.2	$72,882	($3,446)	$99,799.5	$1,368,680.6	$0.423	
15	0.1815	171,437.1	$31,117.7	$72,518	($3,429)	$100,206.8	$1,468,887.4	$0.423	
16	0.1870	170,579.9	$31,891.0	$4,264	($3,412)	$32,743.9	$1,501,631.3		$0.025
17	0.1926	169,727.0	$32,683.4	$4,243	($3,395)	$33,532.1	$1,535,163.3		$0.025
18	0.1983	168,878.4	$33,495.6	$4,222	($3,378)	$34,340.0	$1,569,503.4		$0.025
19	0.2043	168,034.0	$34,328.0	$4,201	($3,361)	$35,168.2	$1,604,671.5		$0.025
20	0.2104	167,193.8	$35,181.0	$4,180	($3,344)	$36,017.0	$1,640,688.6		$0.025
21	0.2167	166,357.9	$36,055.3	$4,159	($3,327)	$36,887.1	$1,677,575.6		$0.025
22	0.2232	165,526.1	$36,951.3	$4,138	($3,311)	$37,778.9	$1,715,354.5		$0.025
23	0.2299	164,698.4	$37,869.5	$4,117	($3,294)	$38,693.0	$1,754,047.5		$0.025
24	0.2368	163,875.0	$38,810.6	$4,097	($3,277)	$39,629.9	$1,793,677.5		$0.025
25	0.2439	163,055.6	$39,775.0	$4,076	($3,261)	$40,590.3	$1,834,267.8		$0.025

* SREC factor is referenced from the NJBPU Solar Alternative Compliance Payment (SACP) schedule.

MS #7

Existing Conditons

Current Utility Price ($/kWh)	0.15
Actual SREC Market Values (January 2010-Present)	$110/MWh - $700/MWh

Calculations

Solar Rating - Zip Code: 07305	4.63 kWh/sq-m/day
Solar Capacity Required (kW)	300
Roof Space Needed (sq-ft)	30,000.00
Annual Solar kWh (PV Watts)	367,800
Net System installation Cost ($9/kWh)	$2,700,000
Electrical Service Modification Cost	$100,000
Total System Installation Cost	**$2,800,000**
Materials	$1,960,000
Labor	$840,000
Engineers Opinion of Probable Cost	$3,500,000

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	2%

Year	Utility Price	Solar kWh	Utility Savings	SRECS	Maintenance Costs	Annual Cash Flow	Cummulative Cash Flow	SREC Factor ($/kWh)*	REC Factor ($/kWh)
Install									
1	0.1500	367,800.0	$55,170.0	$155,579	($7,356)	$203,393.4	$203,393.4	$0.423	
2	0.1545	365,961.0	$56,541.0	$154,802	($7,319)	$204,023.3	$407,416.7	$0.423	
3	0.1591	364,131.2	$57,946.0	$154,027	($7,283)	$204,690.9	$612,107.5	$0.423	
4	0.1639	362,310.5	$59,386.0	$153,257	($7,246)	$205,397.1	$817,504.7	$0.423	
5	0.1688	360,499.0	$60,861.7	$152,491	($7,210)	$206,142.8	$1,023,647.5	$0.423	
6	0.1739	358,696.5	$62,374.1	$151,729	($7,174)	$206,928.8	$1,230,576.3	$0.423	
7	0.1791	356,903.0	$63,924.1	$150,970	($7,138)	$207,756.0	$1,438,332.3	$0.423	
8	0.1845	355,118.5	$65,512.6	$150,215	($7,102)	$208,625.4	$1,646,957.7	$0.423	
9	0.1900	353,342.9	$67,140.6	$149,464	($7,067)	$209,537.8	$1,856,495.6	$0.423	
10	0.1957	351,576.2	$68,809.1	$148,717	($7,032)	$210,494.3	$2,066,989.8	$0.423	
11	0.2016	349,818.3	$70,519.0	$147,973	($6,996)	$211,495.8	$2,278,485.6	$0.423	
12	0.2076	348,069.2	$72,271.4	$147,233	($6,961)	$212,543.3	$2,491,028.9	$0.423	
13	0.2139	346,328.9	$74,067.3	$146,497	($6,927)	$213,637.9	$2,704,666.7	$0.423	
14	0.2203	344,597.2	$75,907.9	$145,765	($6,892)	$214,780.6	$2,919,447.3	$0.423	
15	0.2269	342,874.2	$77,794.2	$145,036	($6,857)	$215,972.5	$3,135,419.8	$0.423	
16	0.2337	341,159.9	$79,727.4	$8,529	($6,823)	$81,433.2	$3,216,853.0		$0.025
17	0.2407	339,454.1	$81,708.6	$8,486	($6,789)	$83,405.9	$3,300,258.9		$0.025
18	0.2479	337,756.8	$83,739.1	$8,444	($6,755)	$85,427.9	$3,385,686.8		$0.025
19	0.2554	336,068.0	$85,820.0	$8,402	($6,721)	$87,500.3	$3,473,187.1		$0.025
20	0.2630	334,387.7	$87,952.6	$8,360	($6,688)	$89,624.6	$3,562,811.7		$0.025
21	0.2709	332,715.7	$90,138.2	$8,318	($6,654)	$91,801.8	$3,654,613.5		$0.025
22	0.2790	331,052.2	$92,378.2	$8,276	($6,621)	$94,033.4	$3,748,646.9		$0.025
23	0.2874	329,396.9	$94,673.8	$8,235	($6,588)	$96,320.8	$3,844,967.7		$0.025
24	0.2960	327,749.9	$97,026.4	$8,194	($6,555)	$98,665.2	$3,943,632.9		$0.025
25	0.3049	326,111.2	$99,437.5	$8,153	($6,522)	$101,068.1	$4,044,700.9		$0.025

* SREC factor is referenced from the NJBPU Solar Alternative Compliance Payment (SACP) schedule.

Regional Day

Existing Conditons

Current Utility Price ($/kWh)	0.17
Actual SREC Market Values (January 2010-Present)	$110/MWh - $700/MWh

Calculations

Solar Rating - Zip Code: 07305	4.63 kWh/sq-m/day
Solar Capacity Required (kW)	160
Roof Space Needed (sq-ft)	16,000.00
Annual Solar kWh (PV Watts)	196,160
Net System installation Cost ($9/kWh)	$1,440,000
Electrical Service Modification Cost	$100,000
Total System Installation Cost	**$1,540,000**
Materials	$1,078,000
Labor	$462,000
Engineers Opinion of Probable Cost	$1,925,000

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	2%

Year	Utility Price	Solar kWh	Utility Savings	SRECS	Maintenance Costs	Annual Cash Flow	Cummulative Cash Flow	SREC Factor ($/kWh)*	REC Factor ($/kWh)
Install									
1	0.1700	196,160.0	$33,347.2	$82,976	($3,923)	$112,399.7	$112,399.7	$0.423	
2	0.1751	195,179.2	$34,175.9	$82,561	($3,904)	$112,833.1	$225,232.8	$0.423	
3	0.1804	194,203.3	$35,025.1	$82,148	($3,884)	$113,289.1	$338,521.9	$0.423	
4	0.1858	193,232.3	$35,895.5	$81,737	($3,865)	$113,768.1	$452,290.0	$0.423	
5	0.1913	192,266.1	$36,787.5	$81,329	($3,845)	$114,270.8	$566,560.8	$0.423	
6	0.1971	191,304.8	$37,701.7	$80,922	($3,826)	$114,797.5	$681,358.3	$0.423	
7	0.2030	190,348.3	$38,638.6	$80,517	($3,807)	$115,348.9	$796,707.2	$0.423	
8	0.2091	189,396.5	$39,598.8	$80,115	($3,788)	$115,925.6	$912,632.8	$0.423	
9	0.2154	188,449.5	$40,582.8	$79,714	($3,769)	$116,527.9	$1,029,160.7	$0.423	
10	0.2218	187,507.3	$41,591.3	$79,316	($3,750)	$117,156.7	$1,146,317.4	$0.423	
11	0.2285	186,569.8	$42,624.8	$78,919	($3,731)	$117,812.4	$1,264,129.9	$0.423	
12	0.2353	185,636.9	$43,684.0	$78,524	($3,713)	$118,495.7	$1,382,625.6	$0.423	
13	0.2424	184,708.7	$44,769.6	$78,132	($3,694)	$119,207.2	$1,501,832.8	$0.423	
14	0.2497	183,785.2	$45,882.1	$77,741	($3,676)	$119,947.5	$1,621,780.3	$0.423	
15	0.2571	182,866.3	$47,022.3	$77,352	($3,657)	$120,717.4	$1,742,497.7	$0.423	
16	0.2649	181,951.9	$48,190.8	$4,549	($3,639)	$49,100.5	$1,791,598.2		$0.025
17	0.2728	181,042.2	$49,388.3	$4,526	($3,621)	$50,293.5	$1,841,891.8		$0.025
18	0.2810	180,137.0	$50,615.6	$4,503	($3,603)	$51,516.3	$1,893,408.1		$0.025
19	0.2894	179,236.3	$51,873.4	$4,481	($3,585)	$52,769.6	$1,946,177.7		$0.025
20	0.2981	178,340.1	$53,162.5	$4,459	($3,567)	$54,054.2	$2,000,231.8		$0.025
21	0.3070	177,448.4	$54,483.6	$4,436	($3,549)	$55,370.8	$2,055,602.6		$0.025
22	0.3163	176,561.1	$55,837.5	$4,414	($3,531)	$56,720.3	$2,112,322.9		$0.025
23	0.3257	175,678.3	$57,225.0	$4,392	($3,514)	$58,103.4	$2,170,426.4		$0.025
24	0.3355	174,800.0	$58,647.1	$4,370	($3,496)	$59,521.1	$2,229,947.4		$0.025
25	0.3456	173,926.0	$60,104.5	$4,348	($3,479)	$60,974.1	$2,290,921.5		$0.025

* SREC factor is referenced from the NJBPU Solar Alternative Compliance Payment (SACP) schedule.

PS #22

Existing Conditons

Current Utility Price ($/kWh)	0.16
Actual SREC Market Values (January 2010-Present)	$110/MWh - $700/MWh

Calculations

Solar Rating - Zip Code: 07305	4.63 kWh/sq-m/day
Solar Capacity Required (kW)	300
Roof Space Needed (sq-ft)	30,000.00
Annual Solar kWh (PV Watts)	367,800
Net System installation Cost ($9/kWh)	$2,700,000
Electrical Service Modification Cost	$100,000
Total System Installation Cost	**$2,800,000**
Materials	$1,960,000
Labor	$840,000
Engineers Opinion of Probable Cost	$3,500,000

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	2%

Year	Utility Price	Solar kWh	Utility Savings	SRECS	Maintenance Costs	Annual Cash Flow	Cummulative Cash Flow	SREC Factor ($/kWh)*	REC Factor ($/kWh)
Install									
1	0.1600	367,800.0	$58,848.0	$155,579	($7,356)	$207,071.4	$207,071.4	$0.423	
2	0.1648	365,961.0	$60,310.4	$154,802	($7,319)	$207,792.7	$414,864.1	$0.423	
3	0.1697	364,131.2	$61,809.1	$154,027	($7,283)	$208,554.0	$623,418.0	$0.423	
4	0.1748	362,310.5	$63,345.0	$153,257	($7,246)	$209,356.2	$832,774.2	$0.423	
5	0.1801	360,499.0	$64,919.2	$152,491	($7,210)	$210,200.3	$1,042,974.5	$0.423	
6	0.1855	358,696.5	$66,532.4	$151,729	($7,174)	$211,087.1	$1,254,061.6	$0.423	
7	0.1910	356,903.0	$68,185.7	$150,970	($7,138)	$212,017.6	$1,466,079.2	$0.423	
8	0.1968	355,118.5	$69,880.2	$150,215	($7,102)	$212,992.9	$1,679,072.1	$0.423	
9	0.2027	353,342.9	$71,616.7	$149,464	($7,067)	$214,013.9	$1,893,086.0	$0.423	
10	0.2088	351,576.2	$73,396.3	$148,717	($7,032)	$215,081.6	$2,108,167.5	$0.423	
11	0.2150	349,818.3	$75,220.2	$147,973	($6,996)	$216,197.0	$2,324,364.5	$0.423	
12	0.2215	348,069.2	$77,089.5	$147,233	($6,961)	$217,361.4	$2,541,725.9	$0.423	
13	0.2281	346,328.9	$79,005.1	$146,497	($6,927)	$218,575.7	$2,760,301.6	$0.423	
14	0.2350	344,597.2	$80,968.4	$145,765	($6,892)	$219,841.1	$2,980,142.7	$0.423	
15	0.2420	342,874.2	$82,980.5	$145,036	($6,857)	$221,158.8	$3,201,301.5	$0.423	
16	0.2493	341,159.9	$85,042.6	$8,529	($6,823)	$86,748.4	$3,288,049.9		$0.025
17	0.2568	339,454.1	$87,155.9	$8,486	($6,789)	$88,853.1	$3,376,903.0		$0.025
18	0.2645	337,756.8	$89,321.7	$8,444	($6,755)	$91,010.5	$3,467,913.5		$0.025
19	0.2724	336,068.0	$91,541.3	$8,402	($6,721)	$93,221.7	$3,561,135.1		$0.025
20	0.2806	334,387.7	$93,816.1	$8,360	($6,688)	$95,488.1	$3,656,623.2		$0.025
21	0.2890	332,715.7	$96,147.5	$8,318	($6,654)	$97,811.0	$3,754,434.2		$0.025
22	0.2976	331,052.2	$98,536.7	$8,276	($6,621)	$100,192.0	$3,854,626.2		$0.025
23	0.3066	329,396.9	$100,985.4	$8,235	($6,588)	$102,632.3	$3,957,258.6		$0.025
24	0.3158	327,749.9	$103,494.8	$8,194	($6,555)	$105,133.6	$4,062,392.2		$0.025
25	0.3252	326,111.2	$106,066.7	$8,153	($6,522)	$107,697.3	$4,170,089.4		$0.025

* SREC factor is referenced from the NJBPU Solar Alternative Compliance Payment (SACP) schedule.

PS #37

Existing Conditons

Current Utility Price ($/kWh)	0.13
Actual SREC Market Values (January 2010-Present)	$110/MWh - $700/MWh

Calculations

Solar Rating - Zip Code: 07305	4.63 kWh/sq-m/day
Solar Capacity Required (kW)	200
Roof Space Needed (sq-ft)	20,000.00
Annual Solar kWh (PV Watts)	245,200
Net System installation Cost ($9/kWh)	$1,800,000
Electrical Service Modification Cost	$100,000
Total System Installation Cost	**$1,900,000**
Materials	$1,330,000
Labor	$570,000
Engineers Opinion of Probable Cost	$2,375,000

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	2%

Year	Utility Price	Solar kWh	Utility Savings	SRECS	Maintenance Costs	Annual Cash Flow	Cummulative Cash Flow	SREC Factor ($/kWh)*	REC Factor ($/kWh)
Install									
1	0.1300	245,200.0	$31,876.0	$103,720	($4,904)	$130,691.6	$130,691.6	$0.423	
2	0.1339	243,974.0	$32,668.1	$103,201	($4,879)	$130,989.6	$261,681.2	$0.423	
3	0.1379	242,754.1	$33,479.9	$102,685	($4,855)	$131,309.8	$392,991.1	$0.423	
4	0.1421	241,540.4	$34,311.9	$102,172	($4,831)	$131,652.7	$524,643.7	$0.423	
5	0.1463	240,332.7	$35,164.5	$101,661	($4,807)	$132,018.6	$656,662.3	$0.423	
6	0.1507	239,131.0	$36,038.4	$101,152	($4,783)	$132,408.2	$789,070.5	$0.423	
7	0.1552	237,935.3	$36,933.9	$100,647	($4,759)	$132,821.9	$921,892.4	$0.423	
8	0.1599	236,745.7	$37,851.7	$100,143	($4,735)	$133,260.3	$1,055,152.7	$0.423	
9	0.1647	235,561.9	$38,792.4	$99,643	($4,711)	$133,723.8	$1,188,876.5	$0.423	
10	0.1696	234,384.1	$39,756.4	$99,144	($4,688)	$134,213.2	$1,323,089.6	$0.423	
11	0.1747	233,212.2	$40,744.3	$98,649	($4,664)	$134,728.8	$1,457,818.5	$0.423	
12	0.1800	232,046.1	$41,756.8	$98,156	($4,641)	$135,271.4	$1,593,089.9	$0.423	
13	0.1853	230,885.9	$42,794.5	$97,665	($4,618)	$135,841.5	$1,728,931.3	$0.423	
14	0.1909	229,731.5	$43,857.9	$97,176	($4,595)	$136,439.7	$1,865,371.0	$0.423	
15	0.1966	228,582.8	$44,947.8	$96,691	($4,572)	$137,066.6	$2,002,437.7	$0.423	
16	0.2025	227,439.9	$46,064.7	$5,686	($4,549)	$47,201.9	$2,049,639.6		$0.025
17	0.2086	226,302.7	$47,209.4	$5,658	($4,526)	$48,340.9	$2,097,980.5		$0.025
18	0.2149	225,171.2	$48,382.6	$5,629	($4,503)	$49,508.4	$2,147,488.9		$0.025
19	0.2213	224,045.3	$49,584.9	$5,601	($4,481)	$50,705.1	$2,198,194.1		$0.025
20	0.2280	222,925.1	$50,817.1	$5,573	($4,459)	$51,931.7	$2,250,125.8		$0.025
21	0.2348	221,810.5	$52,079.9	$5,545	($4,436)	$53,188.9	$2,303,314.7		$0.025
22	0.2418	220,701.4	$53,374.1	$5,518	($4,414)	$54,477.6	$2,357,792.2		$0.025
23	0.2491	219,597.9	$54,700.4	$5,490	($4,392)	$55,798.4	$2,413,590.6		$0.025
24	0.2566	218,499.9	$56,059.7	$5,462	($4,370)	$57,152.2	$2,470,742.8		$0.025
25	0.2643	217,407.4	$57,452.8	$5,435	($4,348)	$58,539.8	$2,529,282.7		$0.025

* SREC factor is referenced from the NJBPU Solar Alternative Compliance Payment (SACP) schedule.

Ferris

Existing Conditons

Current Utility Price ($/kWh)	0.14
Actual SREC Market Values (January 2010-Present)	$110/MWh - $700/MWh

Calculations

Solar Rating - Zip Code: 07305	4.63 kWh/sq-m/day
Solar Capacity Required (kW)	120
Roof Space Needed (sq-ft)	12,000.00
Annual Solar kWh (PV Watts)	147,120
Net System installation Cost ($9/kWh)	$1,080,000
Electrical Service Modification Cost	$100,000
Total System Installation Cost	**$1,180,000**
Materials	$826,000
Labor	$354,000
Engineers Opinion of Probable Cost	$1,475,000

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	2%

Year	Utility Price	Solar kWh	Utility Savings	SRECS	Maintenance Costs	Annual Cash Flow	Cummulative Cash Flow	SREC Factor ($/kWh)*	REC Factor ($/kWh)
Install									
1	0.1400	147,120.0	$20,596.8	$62,232	($2,942)	$79,886.2	$79,886.2	$0.423	
2	0.1442	146,384.4	$21,108.6	$61,921	($2,928)	$80,101.5	$159,987.7	$0.423	
3	0.1485	145,652.5	$21,633.2	$61,611	($2,913)	$80,331.1	$240,318.8	$0.423	
4	0.1530	144,924.2	$22,170.8	$61,303	($2,898)	$80,575.2	$320,894.1	$0.423	
5	0.1576	144,199.6	$22,721.7	$60,996	($2,884)	$80,834.1	$401,728.2	$0.423	
6	0.1623	143,478.6	$23,286.3	$60,691	($2,870)	$81,108.2	$482,836.4	$0.423	
7	0.1672	142,761.2	$23,865.0	$60,388	($2,855)	$81,397.8	$564,234.2	$0.423	
8	0.1722	142,047.4	$24,458.1	$60,086	($2,841)	$81,703.2	$645,937.3	$0.423	
9	0.1773	141,337.2	$25,065.8	$59,786	($2,827)	$82,024.7	$727,962.1	$0.423	
10	0.1827	140,630.5	$25,688.7	$59,487	($2,813)	$82,362.8	$810,324.9	$0.423	
11	0.1881	139,927.3	$26,327.1	$59,189	($2,799)	$82,717.8	$893,042.7	$0.423	
12	0.1938	139,227.7	$26,981.3	$58,893	($2,785)	$83,090.1	$976,132.7	$0.423	
13	0.1996	138,531.5	$27,651.8	$58,599	($2,771)	$83,480.0	$1,059,612.7	$0.423	
14	0.2056	137,838.9	$28,338.9	$58,306	($2,757)	$83,888.0	$1,143,500.8	$0.423	
15	0.2118	137,149.7	$29,043.2	$58,014	($2,743)	$84,314.5	$1,227,815.3	$0.423	
16	0.2181	136,463.9	$29,764.9	$3,412	($2,729)	$30,447.2	$1,258,262.5		$0.025
17	0.2247	135,781.6	$30,504.6	$3,395	($2,716)	$31,183.5	$1,289,445.9		$0.025
18	0.2314	135,102.7	$31,262.6	$3,378	($2,702)	$31,938.1	$1,321,384.0		$0.025
19	0.2383	134,427.2	$32,039.5	$3,361	($2,689)	$32,711.6	$1,354,095.6		$0.025
20	0.2455	133,755.1	$32,835.6	$3,344	($2,675)	$33,504.4	$1,387,600.1		$0.025
21	0.2529	133,086.3	$33,651.6	$3,327	($2,662)	$34,317.0	$1,421,917.1		$0.025
22	0.2604	132,420.9	$34,487.9	$3,311	($2,648)	$35,150.0	$1,457,067.1		$0.025
23	0.2683	131,758.8	$35,344.9	$3,294	($2,635)	$36,003.7	$1,493,070.7		$0.025
24	0.2763	131,100.0	$36,223.2	$3,277	($2,622)	$36,878.7	$1,529,949.4		$0.025
25	0.2846	130,444.5	$37,123.3	$3,261	($2,609)	$37,775.6	$1,567,725.0		$0.025

* SREC factor is referenced from the NJBPU Solar Alternative Compliance Payment (SACP) schedule.

PS #16

Existing Conditons

Current Utility Price ($/kWh)	0.15
Actual SREC Market Values (January 2010-Present)	$110/MWh - $700/MWh

Calculations

Solar Rating - Zip Code: 07305	4.63 kWh/sq-m/day
Solar Capacity Required (kW)	100
Roof Space Needed (sq-ft)	10,000.00
Annual Solar kWh (PV Watts)	122,600
Net System installation Cost ($9/kWh)	$900,000
Electrical Service Modification Cost	$100,000
Total System Installation Cost	**$1,000,000**
Materials	$700,000
Labor	$300,000
Engineers Opinion of Probable Cost	$1,250,000

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	2%

Year	Utility Price	Solar kWh	Utility Savings	SRECS	Maintenance Costs	Annual Cash Flow	Cummulative Cash Flow	SREC Factor ($/kWh)*	REC Factor ($/kWh)
Install									
1	0.1500	122,600.0	$18,390.0	$51,860	($2,452)	$67,797.8	$67,797.8	$0.423	
2	0.1545	121,987.0	$18,847.0	$51,601	($2,440)	$68,007.8	$135,805.6	$0.423	
3	0.1591	121,377.1	$19,315.3	$51,342	($2,428)	$68,230.3	$204,035.8	$0.423	
4	0.1639	120,770.2	$19,795.3	$51,086	($2,415)	$68,465.7	$272,501.6	$0.423	
5	0.1688	120,166.3	$20,287.2	$50,830	($2,403)	$68,714.3	$341,215.8	$0.423	
6	0.1739	119,565.5	$20,791.4	$50,576	($2,391)	$68,976.3	$410,192.1	$0.423	
7	0.1791	118,967.7	$21,308.0	$50,323	($2,379)	$69,252.0	$479,444.1	$0.423	
8	0.1845	118,372.8	$21,837.5	$50,072	($2,367)	$69,541.8	$548,985.9	$0.423	
9	0.1900	117,781.0	$22,380.2	$49,821	($2,356)	$69,845.9	$618,831.9	$0.423	
10	0.1957	117,192.1	$22,936.4	$49,572	($2,344)	$70,164.8	$688,996.6	$0.423	
11	0.2016	116,606.1	$23,506.3	$49,324	($2,332)	$70,498.6	$759,495.2	$0.423	
12	0.2076	116,023.1	$24,090.5	$49,078	($2,320)	$70,847.8	$830,343.0	$0.423	
13	0.2139	115,443.0	$24,689.1	$48,832	($2,309)	$71,212.6	$901,555.6	$0.423	
14	0.2203	114,865.7	$25,302.6	$48,588	($2,297)	$71,593.5	$973,149.1	$0.423	
15	0.2269	114,291.4	$25,931.4	$48,345	($2,286)	$71,990.8	$1,045,139.9	$0.423	
16	0.2337	113,720.0	$26,575.8	$2,843	($2,274)	$27,144.4	$1,072,284.3		$0.025
17	0.2407	113,151.4	$27,236.2	$2,829	($2,263)	$27,802.0	$1,100,086.3		$0.025
18	0.2479	112,585.6	$27,913.0	$2,815	($2,252)	$28,476.0	$1,128,562.3		$0.025
19	0.2554	112,022.7	$28,606.7	$2,801	($2,240)	$29,166.8	$1,157,729.0		$0.025
20	0.2630	111,462.6	$29,317.5	$2,787	($2,229)	$29,874.9	$1,187,603.9		$0.025
21	0.2709	110,905.2	$30,046.1	$2,773	($2,218)	$30,600.6	$1,218,204.5		$0.025
22	0.2790	110,350.7	$30,792.7	$2,759	($2,207)	$31,344.5	$1,249,549.0		$0.025
23	0.2874	109,799.0	$31,557.9	$2,745	($2,196)	$32,106.9	$1,281,655.9		$0.025
24	0.2960	109,250.0	$32,342.1	$2,731	($2,185)	$32,888.4	$1,314,544.3		$0.025
25	0.3049	108,703.7	$33,145.8	$2,718	($2,174)	$33,689.4	$1,348,233.6		$0.025

* SREC factor is referenced from the NJBPU Solar Alternative Compliance Payment (SACP) schedule.

PS #12

Existing Conditons

Current Utility Price ($/kWh)	0.11
Actual SREC Market Values (January 2010-Present)	$110/MWh - $700/MWh

Calculations

Solar Rating - Zip Code: 07305	4.63 kWh/sq-m/day
Solar Capacity Required (kW)	200
Roof Space Needed (sq-ft)	20,000.00
Annual Solar kWh (PV Watts)	245,200
Net System installation Cost ($9/kWh)	$1,800,000
Electrical Service Modification Cost	$100,000
Total System Installation Cost	**$1,900,000**
Materials	$1,330,000
Labor	$570,000
Engineers Opinion of Probable Cost	$2,375,000

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	2%

Year	Utility Price	Solar kWh	Utility Savings	SRECS	Maintenance Costs	Annual Cash Flow	Cummulative Cash Flow	SREC Factor ($/kWh)*	REC Factor ($/kWh)
Install									
1	0.1100	245,200.0	$26,972.0	$103,720	($4,904)	$125,787.6	$125,787.6	$0.423	
2	0.1133	243,974.0	$27,642.3	$103,201	($4,879)	$125,963.8	$251,751.4	$0.423	
3	0.1167	242,754.1	$28,329.2	$102,685	($4,855)	$126,159.1	$377,910.5	$0.423	
4	0.1202	241,540.4	$29,033.1	$102,172	($4,831)	$126,373.9	$504,284.4	$0.423	
5	0.1238	240,332.7	$29,754.6	$101,661	($4,807)	$126,608.7	$630,893.0	$0.423	
6	0.1275	239,131.0	$30,494.0	$101,152	($4,783)	$126,863.8	$757,756.9	$0.423	
7	0.1313	237,935.3	$31,251.8	$100,647	($4,759)	$127,139.7	$884,896.6	$0.423	
8	0.1353	236,745.7	$32,028.4	$100,143	($4,735)	$127,436.9	$1,012,333.5	$0.423	
9	0.1393	235,561.9	$32,824.3	$99,643	($4,711)	$127,755.8	$1,140,089.3	$0.423	
10	0.1435	234,384.1	$33,640.0	$99,144	($4,688)	$128,096.8	$1,268,186.1	$0.423	
11	0.1478	233,212.2	$34,475.9	$98,649	($4,664)	$128,460.5	$1,396,646.5	$0.423	
12	0.1523	232,046.1	$35,332.7	$98,156	($4,641)	$128,847.3	$1,525,493.8	$0.423	
13	0.1568	230,885.9	$36,210.7	$97,665	($4,618)	$129,257.7	$1,654,751.5	$0.423	
14	0.1615	229,731.5	$37,110.5	$97,176	($4,595)	$129,692.3	$1,784,443.8	$0.423	
15	0.1664	228,582.8	$38,032.7	$96,691	($4,572)	$130,151.6	$1,914,595.4	$0.423	
16	0.1714	227,439.9	$38,977.8	$5,686	($4,549)	$40,115.0	$1,954,710.5		$0.025
17	0.1765	226,302.7	$39,946.4	$5,658	($4,526)	$41,077.9	$1,995,788.4		$0.025
18	0.1818	225,171.2	$40,939.1	$5,629	($4,503)	$42,065.0	$2,037,853.4		$0.025
19	0.1873	224,045.3	$41,956.4	$5,601	($4,481)	$43,076.7	$2,080,930.0		$0.025
20	0.1929	222,925.1	$42,999.1	$5,573	($4,459)	$44,113.7	$2,125,043.7		$0.025
21	0.1987	221,810.5	$44,067.6	$5,545	($4,436)	$45,176.6	$2,170,220.4		$0.025
22	0.2046	220,701.4	$45,162.7	$5,518	($4,414)	$46,266.2	$2,216,486.5		$0.025
23	0.2108	219,597.9	$46,285.0	$5,490	($4,392)	$47,382.9	$2,263,869.5		$0.025
24	0.2171	218,499.9	$47,435.1	$5,462	($4,370)	$48,527.6	$2,312,397.1		$0.025
25	0.2236	217,407.4	$48,613.9	$5,435	($4,348)	$49,700.9	$2,362,098.1		$0.025

* SREC factor is referenced from the NJBPU Solar Alternative Compliance Payment (SACP) schedule.

PS #14

Existing Conditons

Current Utility Price ($/kWh)	0.11
Actual SREC Market Values (January 2010-Present)	$110/MWh - $700/MWh

Calculations

Solar Rating - Zip Code: 07305	4.63 kWh/sq-m/day
Solar Capacity Required (kW)	200
Roof Space Needed (sq-ft)	20,000.00
Annual Solar kWh (PV Watts)	245,200
Net System installation Cost ($9/kWh)	$1,800,000
Electrical Service Modification Cost	$100,000
Total System Installation Cost	**$1,900,000**
Materials	$1,330,000
Labor	$570,000
Engineers Opinion of Probable Cost	$2,375,000

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	2%

Year	Utility Price	Solar kWh	Utility Savings	SRECS	Maintenance Costs	Annual Cash Flow	Cummulative Cash Flow	SREC Factor ($/kWh)*	REC Factor ($/kWh)
Install									
1	0.1100	245,200.0	$26,972.0	$103,720	($4,904)	$125,787.6	$125,787.6	$0.423	
2	0.1133	243,974.0	$27,642.3	$103,201	($4,879)	$125,963.8	$251,751.4	$0.423	
3	0.1167	242,754.1	$28,329.2	$102,685	($4,855)	$126,159.1	$377,910.5	$0.423	
4	0.1202	241,540.4	$29,033.1	$102,172	($4,831)	$126,373.9	$504,284.4	$0.423	
5	0.1238	240,332.7	$29,754.6	$101,661	($4,807)	$126,608.7	$630,893.0	$0.423	
6	0.1275	239,131.0	$30,494.0	$101,152	($4,783)	$126,863.8	$757,756.9	$0.423	
7	0.1313	237,935.3	$31,251.8	$100,647	($4,759)	$127,139.7	$884,896.6	$0.423	
8	0.1353	236,745.7	$32,028.4	$100,143	($4,735)	$127,436.9	$1,012,333.5	$0.423	
9	0.1393	235,561.9	$32,824.3	$99,643	($4,711)	$127,755.8	$1,140,089.3	$0.423	
10	0.1435	234,384.1	$33,640.0	$99,144	($4,688)	$128,096.8	$1,268,186.1	$0.423	
11	0.1478	233,212.2	$34,475.9	$98,649	($4,664)	$128,460.5	$1,396,646.5	$0.423	
12	0.1523	232,046.1	$35,332.7	$98,156	($4,641)	$128,847.3	$1,525,493.8	$0.423	
13	0.1568	230,885.9	$36,210.7	$97,665	($4,618)	$129,257.7	$1,654,751.5	$0.423	
14	0.1615	229,731.5	$37,110.5	$97,176	($4,595)	$129,692.3	$1,784,443.8	$0.423	
15	0.1664	228,582.8	$38,032.7	$96,691	($4,572)	$130,151.6	$1,914,595.4	$0.423	
16	0.1714	227,439.9	$38,977.8	$5,686	($4,549)	$40,115.0	$1,954,710.5		$0.025
17	0.1765	226,302.7	$39,946.4	$5,658	($4,526)	$41,077.9	$1,995,788.4		$0.025
18	0.1818	225,171.2	$40,939.1	$5,629	($4,503)	$42,065.0	$2,037,853.4		$0.025
19	0.1873	224,045.3	$41,956.4	$5,601	($4,481)	$43,076.7	$2,080,930.0		$0.025
20	0.1929	222,925.1	$42,999.1	$5,573	($4,459)	$44,113.7	$2,125,043.7		$0.025
21	0.1987	221,810.5	$44,067.6	$5,545	($4,436)	$45,176.6	$2,170,220.4		$0.025
22	0.2046	220,701.4	$45,162.7	$5,518	($4,414)	$46,266.2	$2,216,486.5		$0.025
23	0.2108	219,597.9	$46,285.0	$5,490	($4,392)	$47,382.9	$2,263,869.5		$0.025
24	0.2171	218,499.9	$47,435.1	$5,462	($4,370)	$48,527.6	$2,312,397.1		$0.025
25	0.2236	217,407.4	$48,613.9	$5,435	($4,348)	$49,700.9	$2,362,098.1		$0.025

* SREC factor is referenced from the NJBPU Solar Alternative Compliance Payment (SACP) schedule.

PS #30

Existing Conditons

Current Utility Price ($/kWh)	0.17
Actual SREC Market Values (January 2010-Present)	$110/MWh - $700/MWh

Calculations

Solar Rating - Zip Code: 07305	4.63 kWh/sq-m/day
Solar Capacity Required (kW)	120
Roof Space Needed (sq-ft)	12,000.00
Annual Solar kWh (PV Watts)	147,120
Net System installation Cost ($9/kWh)	$1,080,000
Electrical Service Modification Cost	$100,000
Total System Installation Cost	**$1,180,000**
Materials	$826,000
Labor	$354,000
Engineers Opinion of Probable Cost	$1,475,000

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	2%

Year	Utility Price	Solar kWh	Utility Savings	SRECS	Maintenance Costs	Annual Cash Flow	Cummulative Cash Flow	SREC Factor ($/kWh)*	REC Factor ($/kWh)
Install									
1	0.1700	147,120.0	$25,010.4	$62,232	($2,942)	$84,299.8	$84,299.8	$0.423	
2	0.1751	146,384.4	$25,631.9	$61,921	($2,928)	$84,624.8	$168,924.6	$0.423	
3	0.1804	145,652.5	$26,268.9	$61,611	($2,913)	$84,966.8	$253,891.4	$0.423	
4	0.1858	144,924.2	$26,921.6	$61,303	($2,898)	$85,326.1	$339,217.5	$0.423	
5	0.1913	144,199.6	$27,590.6	$60,996	($2,884)	$85,703.1	$424,920.6	$0.423	
6	0.1971	143,478.6	$28,276.3	$60,691	($2,870)	$86,098.1	$511,018.7	$0.423	
7	0.2030	142,761.2	$28,978.9	$60,388	($2,855)	$86,511.7	$597,530.4	$0.423	
8	0.2091	142,047.4	$29,699.1	$60,086	($2,841)	$86,944.2	$684,474.6	$0.423	
9	0.2154	141,337.2	$30,437.1	$59,786	($2,827)	$87,396.0	$771,870.6	$0.423	
10	0.2218	140,630.5	$31,193.4	$59,487	($2,813)	$87,867.5	$859,738.1	$0.423	
11	0.2285	139,927.3	$31,968.6	$59,189	($2,799)	$88,359.3	$948,097.4	$0.423	
12	0.2353	139,227.7	$32,763.0	$58,893	($2,785)	$88,871.8	$1,036,969.2	$0.423	
13	0.2424	138,531.5	$33,577.2	$58,599	($2,771)	$89,405.4	$1,126,374.6	$0.423	
14	0.2497	137,838.9	$34,411.6	$58,306	($2,757)	$89,960.7	$1,216,335.2	$0.423	
15	0.2571	137,149.7	$35,266.7	$58,014	($2,743)	$90,538.0	$1,306,873.3	$0.423	
16	0.2649	136,463.9	$36,143.1	$3,412	($2,729)	$36,825.4	$1,343,698.7		$0.025
17	0.2728	135,781.6	$37,041.2	$3,395	($2,716)	$37,720.1	$1,381,418.8		$0.025
18	0.2810	135,102.7	$37,961.7	$3,378	($2,702)	$38,637.2	$1,420,056.1		$0.025
19	0.2894	134,427.2	$38,905.1	$3,361	($2,689)	$39,577.2	$1,459,633.3		$0.025
20	0.2981	133,755.1	$39,871.9	$3,344	($2,675)	$40,540.6	$1,500,173.9		$0.025
21	0.3070	133,086.3	$40,862.7	$3,327	($2,662)	$41,528.1	$1,541,702.0		$0.025
22	0.3163	132,420.9	$41,878.1	$3,311	($2,648)	$42,540.2	$1,584,242.2		$0.025
23	0.3257	131,758.8	$42,918.8	$3,294	($2,635)	$43,577.6	$1,627,819.8		$0.025
24	0.3355	131,100.0	$43,985.3	$3,277	($2,622)	$44,640.8	$1,672,460.6		$0.025
25	0.3456	130,444.5	$45,078.3	$3,261	($2,609)	$45,730.6	$1,718,191.1		$0.025

* SREC factor is referenced from the NJBPU Solar Alternative Compliance Payment (SACP) schedule.

PS #34

Existing Conditons

Current Utility Price ($/kWh)	0.16
Actual SREC Market Values (January 2010-Present)	$110/MWh - $700/MWh

Calculations

Solar Rating - Zip Code: 07305	4.63 kWh/sq-m/day
Solar Capacity Required (kW)	120
Roof Space Needed (sq-ft)	12,000.00
Annual Solar kWh (PV Watts)	147,120
Net System installation Cost ($9/kWh)	$1,080,000
Electrical Service Modification Cost	$100,000
Total System Installation Cost	**$1,180,000**
Materials	$826,000
Labor	$354,000
Engineers Opinion of Probable Cost	$1,475,000

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	2%

Year	Utility Price	Solar kWh	Utility Savings	SRECS	Maintenance Costs	Annual Cash Flow	Cummulative Cash Flow	SREC Factor ($/kWh)*	REC Factor ($/kWh)
Install									
1	0.1600	147,120.0	$23,539.2	$62,232	($2,942)	$82,828.6	$82,828.6	$0.423	
2	0.1648	146,384.4	$24,124.1	$61,921	($2,928)	$83,117.1	$165,945.6	$0.423	
3	0.1697	145,652.5	$24,723.6	$61,611	($2,913)	$83,421.6	$249,367.2	$0.423	
4	0.1748	144,924.2	$25,338.0	$61,303	($2,898)	$83,742.5	$333,109.7	$0.423	
5	0.1801	144,199.6	$25,967.7	$60,996	($2,884)	$84,080.1	$417,189.8	$0.423	
6	0.1855	143,478.6	$26,613.0	$60,691	($2,870)	$84,434.8	$501,624.6	$0.423	
7	0.1910	142,761.2	$27,274.3	$60,388	($2,855)	$84,807.1	$586,431.7	$0.423	
8	0.1968	142,047.4	$27,952.1	$60,086	($2,841)	$85,197.2	$671,628.8	$0.423	
9	0.2027	141,337.2	$28,646.7	$59,786	($2,827)	$85,605.5	$757,234.4	$0.423	
10	0.2088	140,630.5	$29,358.5	$59,487	($2,813)	$86,032.6	$843,267.0	$0.423	
11	0.2150	139,927.3	$30,088.1	$59,189	($2,799)	$86,478.8	$929,745.8	$0.423	
12	0.2215	139,227.7	$30,835.8	$58,893	($2,785)	$86,944.5	$1,016,690.4	$0.423	
13	0.2281	138,531.5	$31,602.1	$58,599	($2,771)	$87,430.3	$1,104,120.6	$0.423	
14	0.2350	137,838.9	$32,387.4	$58,306	($2,757)	$87,936.4	$1,192,057.1	$0.423	
15	0.2420	137,149.7	$33,192.2	$58,014	($2,743)	$88,463.5	$1,280,520.6	$0.423	
16	0.2493	136,463.9	$34,017.0	$3,412	($2,729)	$34,699.3	$1,315,219.9		$0.025
17	0.2568	135,781.6	$34,862.3	$3,395	($2,716)	$35,541.3	$1,350,761.2		$0.025
18	0.2645	135,102.7	$35,728.7	$3,378	($2,702)	$36,404.2	$1,387,165.4		$0.025
19	0.2724	134,427.2	$36,616.5	$3,361	($2,689)	$37,288.7	$1,424,454.0		$0.025
20	0.2806	133,755.1	$37,526.5	$3,344	($2,675)	$38,195.2	$1,462,649.3		$0.025
21	0.2890	133,086.3	$38,459.0	$3,327	($2,662)	$39,124.4	$1,501,773.7		$0.025
22	0.2976	132,420.9	$39,414.7	$3,311	($2,648)	$40,076.8	$1,541,850.5		$0.025
23	0.3066	131,758.8	$40,394.1	$3,294	($2,635)	$41,052.9	$1,582,903.4		$0.025
24	0.3158	131,100.0	$41,397.9	$3,277	($2,622)	$42,053.4	$1,624,956.9		$0.025
25	0.3252	130,444.5	$42,426.7	$3,261	($2,609)	$43,078.9	$1,668,035.8		$0.025

* SREC factor is referenced from the NJBPU Solar Alternative Compliance Payment (SACP) schedule.

PS #38

Existing Conditons

Current Utility Price ($/kWh)	0.15
Actual SREC Market Values (January 2010-Present)	$110/MWh - $700/MWh

Calculations

Solar Rating - Zip Code: 07305	4.63 kWh/sq-m/day
Solar Capacity Required (kW)	170
Roof Space Needed (sq-ft)	17,000.00
Annual Solar kWh (PV Watts)	208,420
Net System installation Cost ($9/kWh)	$1,530,000
Electrical Service Modification Cost	$100,000
Total System Installation Cost	**$1,630,000**
Materials	$1,141,000
Labor	$489,000
Engineers Opinion of Probable Cost	$2,037,500

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	2%

Year	Utility Price	Solar kWh	Utility Savings	SRECS	Maintenance Costs	Annual Cash Flow	Cummulative Cash Flow	SREC Factor ($/kWh)*	REC Factor ($/kWh)
Install									
1	0.1500	208,420.0	$31,263.0	$88,162	($4,168)	$115,256.3	$115,256.3	$0.423	
2	0.1545	207,377.9	$32,039.9	$87,721	($4,148)	$115,613.2	$230,869.4	$0.423	
3	0.1591	206,341.0	$32,836.1	$87,282	($4,127)	$115,991.5	$346,860.9	$0.423	
4	0.1639	205,309.3	$33,652.1	$86,846	($4,106)	$116,391.7	$463,252.6	$0.423	
5	0.1688	204,282.8	$34,488.3	$86,412	($4,086)	$116,814.3	$580,066.9	$0.423	
6	0.1739	203,261.3	$35,345.3	$85,980	($4,065)	$117,259.7	$697,326.6	$0.423	
7	0.1791	202,245.0	$36,223.7	$85,550	($4,045)	$117,728.4	$815,055.0	$0.423	
8	0.1845	201,233.8	$37,123.8	$85,122	($4,025)	$118,221.1	$933,276.0	$0.423	
9	0.1900	200,227.6	$38,046.4	$84,696	($4,005)	$118,738.1	$1,052,014.1	$0.423	
10	0.1957	199,226.5	$38,991.8	$84,273	($3,985)	$119,280.1	$1,171,294.2	$0.423	
11	0.2016	198,230.4	$39,960.8	$83,851	($3,965)	$119,847.6	$1,291,141.8	$0.423	
12	0.2076	197,239.2	$40,953.8	$83,432	($3,945)	$120,441.2	$1,411,583.0	$0.423	
13	0.2139	196,253.0	$41,971.5	$83,015	($3,925)	$121,061.5	$1,532,644.5	$0.423	
14	0.2203	195,271.8	$43,014.5	$82,600	($3,905)	$121,709.0	$1,654,353.5	$0.423	
15	0.2269	194,295.4	$44,083.4	$82,187	($3,886)	$122,384.4	$1,776,737.9	$0.423	
16	0.2337	193,323.9	$45,178.9	$4,833	($3,866)	$46,145.5	$1,822,883.4		$0.025
17	0.2407	192,357.3	$46,301.6	$4,809	($3,847)	$47,263.3	$1,870,146.7		$0.025
18	0.2479	191,395.5	$47,452.1	$4,785	($3,828)	$48,409.1	$1,918,555.8		$0.025
19	0.2554	190,438.5	$48,631.3	$4,761	($3,809)	$49,583.5	$1,968,139.4		$0.025
20	0.2630	189,486.3	$49,839.8	$4,737	($3,790)	$50,787.3	$2,018,926.6		$0.025
21	0.2709	188,538.9	$51,078.3	$4,713	($3,771)	$52,021.0	$2,070,947.6		$0.025
22	0.2790	187,596.2	$52,347.6	$4,690	($3,752)	$53,285.6	$2,124,233.3		$0.025
23	0.2874	186,658.2	$53,648.5	$4,666	($3,733)	$54,581.8	$2,178,815.0		$0.025
24	0.2960	185,724.9	$54,981.6	$4,643	($3,714)	$55,910.3	$2,234,725.3		$0.025
25	0.3049	184,796.3	$56,347.9	$4,620	($3,696)	$57,271.9	$2,291,997.2		$0.025

* SREC factor is referenced from the NJBPU Solar Alternative Compliance Payment (SACP) schedule.

JCPS Administrative Building

Existing Conditons

Current Utility Price ($/kWh)	0.11
Actual SREC Market Values (January 2010-Present)	$110/MWh - $700/MWh

Calculations

Solar Rating - Zip Code: 07305	4.63 kWh/sq-m/day
Solar Capacity Required (kW)	40
Roof Space Needed (sq-ft)	4,000.00
Annual Solar kWh (PV Watts)	49,040
Net System installation Cost ($9/kWh)	$360,000
Electrical Service Modification Cost	$100,000
Total System Installation Cost	**$460,000**
Materials	$322,000
Labor	$138,000
Engineers Opinion of Probable Cost	$575,000

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	2%

Year	Utility Price	Solar kWh	Utility Savings	SRECS	Maintenance Costs	Annual Cash Flow	Cummulative Cash Flow	SREC Factor ($/kWh)*	REC Factor ($/kWh)
Install									
1	0.1100	49,040.0	$5,394.4	$20,744	($981)	$25,157.5	$25,157.5	$0.423	
2	0.1133	48,794.8	$5,528.5	$20,640	($976)	$25,192.8	$50,350.3	$0.423	
3	0.1167	48,550.8	$5,665.8	$20,537	($971)	$25,231.8	$75,582.1	$0.423	
4	0.1202	48,308.1	$5,806.6	$20,434	($966)	$25,274.8	$100,856.9	$0.423	
5	0.1238	48,066.5	$5,950.9	$20,332	($961)	$25,321.7	$126,178.6	$0.423	
6	0.1275	47,826.2	$6,098.8	$20,230	($957)	$25,372.8	$151,551.4	$0.423	
7	0.1313	47,587.1	$6,250.4	$20,129	($952)	$25,427.9	$176,979.3	$0.423	
8	0.1353	47,349.1	$6,405.7	$20,029	($947)	$25,487.4	$202,466.7	$0.423	
9	0.1393	47,112.4	$6,564.9	$19,929	($942)	$25,551.2	$228,017.9	$0.423	
10	0.1435	46,876.8	$6,728.0	$19,829	($938)	$25,619.4	$253,637.2	$0.423	
11	0.1478	46,642.4	$6,895.2	$19,730	($933)	$25,692.1	$279,329.3	$0.423	
12	0.1523	46,409.2	$7,066.5	$19,631	($928)	$25,769.5	$305,098.8	$0.423	
13	0.1568	46,177.2	$7,242.1	$19,533	($924)	$25,851.5	$330,950.3	$0.423	
14	0.1615	45,946.3	$7,422.1	$19,435	($919)	$25,938.5	$356,888.8	$0.423	
15	0.1664	45,716.6	$7,606.5	$19,338	($914)	$26,030.3	$382,919.1	$0.423	
16	0.1714	45,488.0	$7,795.6	$1,137	($910)	$8,023.0	$390,942.1		$0.025
17	0.1765	45,260.5	$7,989.3	$1,132	($905)	$8,215.6	$399,157.7		$0.025
18	0.1818	45,034.2	$8,187.8	$1,126	($901)	$8,413.0	$407,570.7		$0.025
19	0.1873	44,809.1	$8,391.3	$1,120	($896)	$8,615.3	$416,186.0		$0.025
20	0.1929	44,585.0	$8,599.8	$1,115	($892)	$8,822.7	$425,008.7		$0.025
21	0.1987	44,362.1	$8,813.5	$1,109	($887)	$9,035.3	$434,044.1		$0.025
22	0.2046	44,140.3	$9,032.5	$1,104	($883)	$9,253.2	$443,297.3		$0.025
23	0.2108	43,919.6	$9,257.0	$1,098	($878)	$9,476.6	$452,773.9		$0.025
24	0.2171	43,700.0	$9,487.0	$1,092	($874)	$9,705.5	$462,479.4		$0.025
25	0.2236	43,481.5	$9,722.8	$1,087	($870)	$9,940.2	$472,419.6		$0.025

* SREC factor is referenced from the NJBPU Solar Alternative Compliance Payment (SACP) schedule.

Appendix F

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2011 Prescriptive Lighting Application

Customer Information

Company	Electric Utility Serving Applicant choose one	Electric Account No.	Anticipated Installation Date
Facility Address	City	State	Zip
Type of Project ❑ New Construction ❑ Renovation ❑ Equipment Replacement		Size of Building	
Company Mailing Address	City	State	Zip
Contact Person (Name/Title)	Telephone No. ( )	Fax No. ( )	
Incorporated? ❑ Yes ❑ No ❑ Exempt	Federal Tax ID# or SSN	E-mail Address	
Incentive Payment to ❑ Customer ❑ Contractor ❑ Other	Please assign payment to contractor/vendor/other indicated below Customer Signature		

Payee Information (must submit W-9 form with application)

Company	Contact Name	Incorporated? ❑ Yes ❑ No	Federal Tax ID#	E-mail Address
Street Address	City	State / Zip	Telephone No. ( )	Fax No. ( )

Contractor/Vendor Information (if different from Payee)

Company	Contact Name	Incorporated? ❑ Yes ❑ No	Federal Tax ID#	E-mail Address
Street Address	City	State / Zip	Telephone No. ( )	Fax No. ( )

Building Type (circle one)

Education-Primary School; Education-Community College; Education-University; Grocery; Medical-Hospital; Medical-Clinic; Lodging Hotel(Guest Rooms); Lodging Motel; Manufacturing-Light Industrial; Office-Large; Office-Small; Restaurant-Sit Down; Restaurant-Fast Food; Retail-3 Story Large; Retail- Single Story Large; Retail-Small; Storage Conditioned; Storage Unconditioned; Warehouse; Other

Prescriptive Lighting Incentive

$_____ Total Incentive (per attached worksheet calculations)

Note: Prescriptive Lighting Worksheet must accompany this application.

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2011 Prescriptive Lighting Incentive Worksheet

Customer Information

Company	Facility Address
☐ Check here if multiple worksheets are being submitted for one project/building.	Date Submitted

Prescriptive Lighting Information

For additional fixtures, attach additional sheets and check here ☐

Reason N–New R–Replaced	Fixture Type Installed	Fixture Type Removed	Permanent Delamp w/ New Reflector (Y/N)	Location (Bldg/Rm)	Size of Replaced Lamps in Watts	A Incentive Per Fixture (Table)	B # of Units	Total Incentives (AxB)
(Examples) R	2x4 3L T-5	2x4 3L T-12	N	Office	40	$10	8	$10 x 8 = $80
R	2x2 2L T-8	2x2 2L T-12	N	Office	34	$10	10	$10 x 10 = $100
R	28w CFL	100w Incan	N	Supply Room	100	$25	3	$25 x 3 = $75
R	250w Pulse Start Metal Halide	400w Mercury Vapor	N	Warehouse	450	$25	3	$25 x 3 = $75
N	New Doors 5' LED-Center	1L T-8 5'	N	Dairy Case #5	38	$42	25	$42 x 25=$1,050
N	New Doors 5' LED-End	1L T-8 5'	N	Dairy Case #5	38	$42	25	$42 x 25=$1,050
N	New 127w LED High Bay	400w Metal Halide	N	Warehouse	450	$150	10	$150 x 10=$1,500
								$0
								$0
								$0

Specific Program Requirements* (these requirements are in addition to the Program Terms and Conditions.)

1. Please refer to the program guide for additional applicable technical requirements.
2. Include the manufacturer's specification sheet with the application package and mail or fax directly to the Commercial/Industrial Program Manager.
3. Incentives for T-5 and T-8 lamps with electronic ballasts are available only for fixtures with a Total Harmonic Distortion of ≤20%.
4. Incentives for retrofits/replacement of existing fixtures ≤250W to T-8 lighting requires high performance or reduced wattage lamps (4' only) and ballasts qualified by CEE.
   - Incentives for delamped T-8 lamps with new reflectors are available only for fixtures with a total Harmonic Distortion of <20%. Electronic ballast replacement required for all eligible de-lamped fixtures. Eligible de-lamping can include reduction in linear lamp feet from existing conditions. For example, 1-8' linear fluorescent lamp can be considered as 2-4' linear lamps. U-bend lamps 4' in total length can be considered as 2-F17/T8 lamps.
   - Electronic ballast replacement is necessary for all eligible de-lamped fixtures.
   - Reduced wattage T8 (28W/25W 4') (1-4 lamps) retrofit requires lamp and ballast replacement.
5. For all eligible lighting devices, fixture or lamp must be listed by UL or other OSHA approved Nationally Recognized Testing Laboratory (NRTL) in accordance with applicable US standards.
6. Requirements for CFL fixtures (must meet all requirements):
   - Fixtures must be new and ENERGY STAR® qualified
   - Fixtures must have replaceable electronic ballasts
   - Total Harmonic Distortion (THD) must not exceed 33%
   - Power factor of the ballast must be no less than 90%
   - The manufacturer must warrant all fixtures for a minimum of 3 years. Warranty does not pertain to lamps or photocells not physically part of the fixture.
   - The installer must warrant installation of fixtures for a minimum of 1 year.
7. Screw-in PAR 38 or 30 Compact Fluorescent Lamps (CFL) with Aluminum Reflectors replacing existing incandescent fixtures.
   - Lamp must be ENERGY STAR® qualified where applicable. For ENERGY STAR® qualified and non-qualified product, ALL the following requirements must be met:
     - The lamp must be new and warranted by the manufacturer for 12 months, or one year
     - Average rated lamp life must be ≥ 8,000 hours
     - Power factor of the ballast must be > 50%
8. Pulse Start Metal Halide (including pole-mounted parking lot lighting) must have a 12% minimum wattage reduction.
9. T-5 or T-8 Fixtures replacing incandescent or T-12 fluorescent fixtures greater than 250 watt or High Intensity Discharge shall comply as follows:
   - T-5 fixtures replacing T-12 fluorescent or incandescent fixtures 250 watts or greater, or HID fixtures shall have a ballast factor greater than or equal to 1.0; have reflectivity greater than or equal to 91%; have a minimum 2 lamps; and be designated as F54T5 HO.
   - T-8 fixtures replacing T-12 fluorescent or incandescent fixtures 250 watts or greater, or HID fixtures shall have a ballast factor greater than or equal to 1.14; have reflectivity greater than or equal to 91%; have a minimum of 4 lamps; and be designated as F32T8, minimum 32 watts.
10. Incentive requirements for LED fixtures and lamps (excluding LED Exit Signs)
    - LED fixture or lamp must be listed on ENERGY STAR® or Design Lights Consortium Qualified (DLC) Product Lists.
    - For replacement of incandescent, fluorescent and HID only
    - LEDs categories not listed by ENERGY STAR®(1) or DLC(2) qualified products will not be evaluated through Custom for incentive eligibility.

    (1) http://www.energystar.gov/index.cfm?c=ssl.pr_commercial

    (2) http://www.designlights.org/solidstate.about.QualifiedProductsList_Publicv2.php

ACKNOWLEDGEMENT

_____

CUSTOMER'S SIGNATURE

By signing, I certify that I have read, understand and agree to the Specific Program Requirements/Terms and Conditions listed on this application form, I will also submit for approval a properly completed application package, which includes this signed application, worksheet (if applicable), manufacturer's specification sheets and complete utility bill (name and address on utility bill must match name and address on application).

Mail or fax your application package DIRECTLY to the Commercial/Industrial Program Manager.

New Jersey's Clean Energy Program
c/o TRC Energy Services
900 Route 9 North, Suite 404 • Woodbridge, NJ 07095
Phone: 866-657-6278 • Fax: 732-855-0422

Visit our website: NJCleanEnergy.com/ssb

New Jersey SmartStart Buildings® is a registered trademark. Use of the mark without the permission of the New Jersey Board of Public Utilities, Office of Clean Energy is prohibited.
*Incentives/Requirements subject to change.

Prescriptive Lighting Measures and Incentives

NEW FIXTURE INCENTIVES

Type of Fixture	Incentive
Compact Fluorescent	
Recessed and Surface-Mounted Compact Fluorescents (New Fixtures Replacing Incandescent Fixtures Only): Only available for hard-wired, electronically ballasted new fixtures with rare earth phosphor lamps and 4-pin based tubes (including: twin tube, quad tube, triple tube, 2D or circuline lamps), THD<33% and BF>0.9	$25 per 1-lamp fixture $30 per 2-lamp or more fixture

Linear Fluorescent

Type of Old Fixture	Wattage of Old Fixture	Type of New Fixture	Incentive Per Fixture Replaced
HID, T-12, Incandescent	≥ 1000 Watts	T-5, T-8	$200
HID, T-12, Incandescent	400-999 Watt	T-5, T-8	$100
HID, T-12, Incandescent	250-399 Watt	T-5, T-8	$50
HID only	175-249 Watt	T-5, T-8	$43
HID only	100-174 Watt	T-5, T-8	$30
HID only	75-99 Watt	T-5, T-8	$16
T-12 only	<250 Watt	T-5, T-8 (1-4 lamps)	$25

Induction Lighting	
Replacement of HID	**$70 per HID (≥100w) fixture replaced with a new induction fixture. Replacement unit must use 30% less wattage per fixture than existing HID system.**
LED Lighting	
LED Exit Signs (new fixtures only):	
For existing facilities with connected load <75 kW	**$20 per fixture**
For existing facilities with connected load ≥ 75 kW	**$10 per fixture**
LED Display Case Lighting	**$30 per display case**
LED Shelf-Mounted Display and Task Lights	**$15 per linear foot**
LED Portable Desk Lamps	**$20 per fixture**
LED Wall-Wash Lights	**$30 per fixture**
LED Recessed Down Lights	**$35 per fixture**
LED Outdoor Pole/Arm-Mounted Area and Roadway Luminaires	**$175 per fixture**
LED Outdoor Pole/Arm-Mounted Decorative Luminaires	**$175 per fixture**
LED Outdoor Wall-Mounted Area Luminaires	**$100 per fixture**
LED Parking Garage Luminaires	**$100 per fixture**
LED Track or Mono-Point Directional Lighting Fixtures	**$50 per fixture**
LED High-Bay and Low-Bay Fixtures for Commercial & Industrial Buildings	**$150 per fixture**
LED High-Bay-Aisle Lighting	**$150 per fixture**
LED Bollard Fixtures	**$50 per fixture**
LED Linear Panels (2x2 Troffers Only)	**$50 per fixture**
LED Fuel Pump Canopy	**$100 per fixture**
LED Screw-based & Pin-based (PAR, MR, BR, R) Standards (A-Style) and Decorative (globe, candelabra, etc.) Lamps	**$20 per lamp**
LED Refrigerated/Freezer Case Lighting: Incentive for replacement of fluorescent lighting systems in medium or low temperature display cases	**$42 per 5' fixture** **$65 per 6' fixture**
Pulse-Start Metal Halide	
Pulse Start metal Halide (for fixtures ≥ 150 watts)	**$25 per fixture (includes parking lot lighting)**

RETROFIT INCENTIVES

Compact Fluorescent	
Screw-in PAR 38 or PAR 30 (CFL) as per requirement 7.	**$7 per lamp replaced**
Linear Fluorescent Lighting	
High-Efficiency Fluorescent Fixtures: For retrofit of T-12 fixtures to T-5 or T-8 with electric ballasts	**$10 per fixture (1-4 lamps retrofits)**
For retrofit of T-8 fixtures by permanent delamping & new reflectors. Electronic ballast replacement required for all eligible delamped fixtures.	**$15 per fixture**
T-12 to T-8 fixtures by permanent delamping & new reflectors. Electronic ballast replacement required for all eligible delamped fixtures.	**$20 per fixture**
Retrofit of existing 32 watt T-8 system to reduced wattage (28w/25w 4')	**$10 per fixture (1-4 lamps)**
Induction Lighting	
$50 per HID (≥100w) fixture retrofitted with induction lamp	**$50 per HID (≥100w) fixture retrofitted with induction lamp, power coupler and generator. Replacement unit must use 30% less wattage per fixture than existing HID system.**

New Construction & Complete Renovation - Performance based only

NJ SmartStart Buildings®

Program Terms and Conditions

Definitions:

Design Incentives – Incentives that may be offered to design professionals by the Program.

Design Services – Services that may be offered to design professionals under the Program.

Energy-Efficient Measures – Any device eligible to receive a Program Incentive payment through the NJ Clean Energy Commercial and Industrial Program (New Jersey SmartStart Buildings).

New Jersey Utilities – The regulated electric and/or gas utilities in the State of New Jersey. They are: Atlantic City Electric, Jersey Central Power & Light, Rockland Electric Company, New Jersey Natural Gas, Elizabethtown Gas, PSE&G, and South Jersey Gas.

Administrator – New Jersey Board of Public Utilities, Office of Clean Energy

Participating Customers – Those non-residential electric and/or gas service customers of the New Jersey Utilities who participate in this Program.

Product Installation or Equipment Installation – Installation of the Energy-Efficient Measures.

Program – The Commercial and Industrial Energy-Efficient Construction Program (New Jersey SmartStart Buildings) offered herein by the New Jersey Board of Public Utilities, Office of Clean Energy pursuant to state regulatory approval under the New Jersey Electric Discount and Energy Competition Act, NJSA 48:3-49, et seq.

Program Incentives – Refers to the amount or level of incentive that the Program provides to Participating Customers pursuant to the Program offered herein (see description under "Incentive Amount" heading).

Program Offer – Program Incentives are available to non-residential retail electric and/or gas service customers of the New Jersey Utilities identified above. Program Incentives for new construction are available only for projects in areas designated for growth in the State Plan. Public school (K-12) new construction projects are exempted from this restriction and are eligible for new Program incentives throughout the State. Customers, or their trade allies, can determine if a location is in a designated growth area by referring to the Smart Growth Locator available from the HMFA website or contact the Program Manager if you are uncertain about project eligibility.

Program Manager – TRC Energy Services.

Application and Eligibility Process – The Program pays incentives after the installation of qualified energy-efficient measures that were pre-approved (for exceptions to this condition, please refer to "Exceptions for Approval".) In order to be eligible for Program Incentives, a Customer, or an agent (contractor/vendor) authorized by a Customer, must submit a properly completed application package. The package must include an application signed by the customer; a complete (current) utility bill; and technology worksheet and manufacturer's cut sheets (where appropriate). This information must be submitted to the Program Manager before equipment is installed. Applications for measures that are self installed by customers must be submitted by the customer and not the sales vendor of the measure, however, the customer may elect to assign payment of the incentive to the sales vendor. This application package must be received by the Program Manager on or before December 31, 2011 in order to be eligible for 2011 incentives. The Program Manager will review the application package to determine if the project is eligible for a Program Incentive. If eligible, the Customer will receive an approval letter with the estimated authorized incentive amount and the date by which the equipment must be installed in order for the approval to remain in effect. Upon receipt of an approval letter, the Customer may then proceed to install the equipment listed on the approved application. Equipment installed prior to the date of the Program Manager's approval letter is not eligible for an incentive. The Program Manager reserves the right to conduct a pre-inspection of the facility prior to the installation of equipment. This will be done prior to the issuance of the approval letter. All equipment must be purchased within 12 months of date of application. **Any Customer and/or agent who purchases equipment prior to the receipt of an incentive approval letter does so at his/her own risk.**

Exceptions for Approval – The Application and Eligibility Process pertains to all projects except for those involving either Unitary HVAC or Motors having an incentive amount less than $5,000. These measures, at this incentive level, may be installed without prior approval. In addition, but at the sole discretion of the Program Manager, emergency replacement of equipment may not require a prior approval determination and letter. **In such cases, please notify the Program Manager of such emergencies as early as possible, that an application will soon be sent in that was not pre-approved.**

Post-Installation Approval – After installation is completed, the Customer, or an agent authorized by the Customer, must finalize and submit an invoice for the purchase of the equipment (material cost must be broken out from labor costs), and any other required documentation as specified on the equipment application or in the Program Manager's initial approval letter.

Please refer to the program guide on the NJCleanEnergy.com/ssb website for the complete Application and Eligibility Process.

The Program Manager reserves the right to verify sales transactions and to have reasonable access to Participating Customer's facility to inspect both pre-existing product or equipment (if applicable) and the Energy-Efficient Measures installed under this Program, either prior to issuing incentives or at a later time.

Energy-Efficient Measures must be installed in buildings located within a New Jersey Utilities' service territory and designated on the Participating Customer's incentive application. Program Incentives are available for qualified Energy-Efficient Measures as listed and described in the Program materials and incentive applications. The Participating Customer must ultimately own the equipment, either through an up-front purchase or at the end of a short-term lease. Design Incentives are available to design professionals as described in the Program materials and applications. A different and separate agreement must be executed by participating design professionals to be eligible for this type of incentive. The design professional does not need to be based in New Jersey.

Equipment procured by Participating Customers through another program offered by New Jersey's Clean Energy Program or the New Jersey Utilities, as applicable, is not eligible for incentives through this program. Customers who have not contributed to the Societal Benefits Charge of the applicable New Jersey Utility are not be eligible for incentives offered through this program.

Incentive Amount – Program Incentives will equal either: a) the approved Program Incentive amount, or b) the actual equipment cost of the Energy-Efficient Measure, whichever is less, as determined by the Program Manager. Products offered at no direct cost to the customer are ineligible. Incomplete application submissions, applications requiring inspections and unanticipated high volume of activities may cause processing delays. Program Incentives are limited to $500,000 per utility account in a calendar year. Contact the Program Manager regarding any questions.

Tax Liability – The Program Manager will not be responsible for any tax liability that may be imposed on any Participating Customer as a result of the payment of Program Incentives. All Participating Customers must supply their federal tax identification number or social security number to the Program Manager on the application form in order to receive a Program Incentive. In addition, Participating Customers must also provide a Tax Clearance Form (entitled "Business Assistance or Incentive Clearance Certificate") that is dated within 90 days of equipment installation.

Endorsement – The Program Manager and Administrator do not endorse, support or recommend any particular manufacturer, product or system design in promoting this Program.

Warranties – THE PROGRAM MANAGER AND ADMINISTRATOR DO NOT WARRANT THE PERFORMANCE OF INSTALLED EQUIPMENT, AND/OR SERVICES RENDERED AS PART OF THIS PROGRAM, EITHER EXPRESSLY OR IMPLICITLY. NO WARRANTIES OR REPRESENTATIONS OF ANY KIND, WHETHER STATUTORY, EXPRESSED, OR IMPLIED, INCLUDING, WITHOUT LIMITATIONS, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE REGARDING EQUIPMENT OR SERVICES PROVIDED BY A MANUFACTURER OR VENDOR. CONTACT YOUR VENDOR/SERVICES PROVIDER FOR DETAILS REGARDING PERFORMANCE AND WARRANTIES.

Limitation of Liability – By virtue of participating in this Program, Participating Customers agree to waive any and all claims or damages against the Program Manager or the Administrator, except the receipt of the Program Incentive. Participating Customers agree that the Program Manager's and Administrator's liability, in connection with this Program, is limited to paying the Program Incentive specified. Under no circumstances shall the Program Manager, its representatives, or subcontractors, or the Administrator, be liable for any lost profits, special, punitive, consequential or incidental damages or for any other damages or claims connected with or resulting from participation in this Program. Further, any liability attributed to the Program Manager under this Program shall be individual, and not joint and/or several.

Assignment – The Participating Customer may assign Program Incentive payments to a specified vendor.

Participating Customer's Certification – Participating Customer certifies that he/she purchased and installed the equipment listed in their application at their defined New Jersey location. Participating Customer agrees that all information is true and that he/she has conformed to all of the Program and equipment requirements listed in the application.

Termination – The New Jersey Board of Public Utilities reserves the right to extend, modify (this includes modification of Program Incentive levels) or terminate this Program without prior or further notice.

Acknowledgement – I have read, understood and am in compliance with all rules and regulations concerning this incentive program. I certify that all information provided is correct to the best of my knowledge, and I give the Program Manager permission to share my records with the New Jersey Board of Public Utilities, and contractors it selects to manage, coordinate or evaluate the NJ SmartStart Buildings Program. Additionally, I allow reasonable access to my property to inspect the installation and performance of the technologies and installations that are eligible for incentives under the guidelines of New Jersey's Clean Energy Program.

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2011 Lighting Controls Application

Customer Information

Company	Electric Utility Serving Applicant	Electric Account No.	Anticipated Installation Date
	choose one		

Facility Address	City	State	Zip

Type of Project	Size of Building
❑ New Construction ❑ Renovation ❑ Equipment Replacement	

Company Mailing Address	City	State	Zip

Contact Person (Name/Title)	Telephone No.	Fax No.
	( )	( )

Incorporated?	Federal Tax ID# or SSN	E-mail Address
❑ Yes ❑ No ❑ Exempt		

Incentive Payment to	Please assign payment to contractor/vendor/other indicated below
❑ Customer ❑ Contractor ❑ Other	Customer Signature

Payee Information (must submit W-9 form with application)

Company	Contact Name	Incorporated?	Federal Tax ID#	E-mail Address
		❑ Yes ❑ No		

Street Address	City	State	Zip	Telephone No.	Fax No.
				( )	( )

Contractor/Vendor Information (if different from Payee)

Company	Contact Name	Incorporated?	Federal Tax ID#	E-mail Address
		❑ Yes ❑ No		

Street Address	City	State	Zip	Telephone No.	Fax No.
				( )	( )

Building Type (circle one)

Education-Primary School; Education-Community College; Education-University; Grocery; Medical-Hospital; Medical-Clinic; Lodging Hotel(Guest Rooms); Lodging Motel; Manufacturing-Light Industrial; Office-Large; Office-Small; Restaurant-Sit Down; Restaurant-Fast Food; Retail-3 Story Large; Retail- Single Story Large; Retail-Small; Storage Conditioned; Storage Unconditioned; Warehouse; Other

Lighting Control Incentive

$_____ Total Incentive (per attached worksheet calculations)

Note: Lighting Controls Incentive Worksheet must accompany this application.

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2011 Lighting Controls Incentive Worksheet

Customer Information

Company	Facility Address
☐ Check here if multiple worksheets are being submitted for one project/building.	Date Submitted

Lighting Controls Information

For additional fixtures, attach additional sheets and check here ☐

Location	Reason N–New R–Replaced	Control Device Type	Fixture Type Controlled	Watts Controlled per Device	A # of Fixtures Controlled per Device	B # of Units*	C Incentive per Unit	Total Incentive (B x C)
Office 101	(Examples) N	OSW	4-lamp, T8	220	2	4	$20	4 x $20 = $80
Conference Room A	N	OSR	2-lamp, T8	330	6	2	$35	2 x $35 = $70
Large Office 400	N	DLD	2-lamp, T8	275	N/A	6	$50	6 x $50 = $300
Warehouse A	N	OHLF	4-lamp, T8	140	N/A	12	$25	12 x $25 = $300
Warehouse B	N	OSRH	4-lamp, T5	234	1	5	$35	5 x $35 = $175
								$0
								$0
								$0

Specific Program Requirements* (these requirements are in addition to the Program Terms and Conditions.)

1. Please refer to the program guide for additional applicable technical requirements, including special requirements for lighting controls.
2. Include the manufacturer's specification sheet with the application package and mail or fax directly to the Commercial/Industrial Program Manager.
3. All lighting controls must be listed by UL or other OSHA approved Nationally Recognized Testing Laboratory (NRTL) in accordance with applicable US standards.
4. If more than one eligible lighting control device is associated with the same eligible fixture, the incentive paid will be for the lighting control device that yields the largest incentive only.
5. Occupancy Sensor Controls (existing facilities only):
   - There is no incentive available for occupancy sensors installed in a space where they are prohibited by state or local building or safety code. Additionally, no incentive is eligible for occupancy sensors in the following specific spaces in all cases: stairways, restrooms (remote mounted only allowed), elevators, corridors/hallways, lobbies, and closets/storage areas.
   - Incentives will only be paid for eligible occupancy sensors (OSW & OSR) controlling at least 2 eligible lighting fixtures and, for OSR installations, a minimum total connected load of 180 watts.
   - Incentives will only be paid for eligible OSRH occupancy sensors controlling eligible fixtures when the controlled wattage is greater than 180 watts.
   - Occupancy sensors with manual override to the "ON" position are ineligible for incentive.
6. High-Low Controls (OHLF and OHLH):
   - Incentives will not be paid for high-low controls on eligible fluorescent fixtures where daylight dimming controls can be effectively employed.
   - Incentives will not be paid for spaces where the bottom of the fixture does not comply with the appropriate Prescriptive Lighting 2008 incentives, nor in spaces smaller than 250 square feet.
   - Incentives available only when "low level" is no more than 60% of "high level."
   - Incentives are not available for the following spaces: stairways, elevators, corridors/hallways, or lobbies.
   - OHLF will control fixtures that have a ballast factor less than 1.0 for T-5s, induction lighting and 1.14 for T-8s.
   - OHLH will control fixtures that have a ballast factor greater than or equal to 1.0 for T-5s, induction lighting and 1.14 for T-8s.
7. Daylight Dimming Controls for eligible fixtures:
   - Incentives will only be paid for eligible daylight dimming controls operating at least 4 eligible ballasts with a minimum total connected load of 240 watts.
   - Dimming shall be continuous or stepped at 4 or more levels.
   - Incentives will be paid only for eligible daylight dimming control systems designed in accordance with IESNA practice as delineated in "RP-5-99, IESNA Recommended Practice of Daylighting."
   - DLD will control fixtures that have a ballast factor less than 1.0 for T-5s and 1.14 for T-8s.
   - DDH will control fixtures that have a ballast factor greater than or equal to 1.0 for T-5s and 1.14 for T-8s.

Application Checklist (before submitting your application, please make sure you have signed in the space below and completed the following items.)

- ❑ Payee Information is filled out and a W-9 form of the payee is included
- ❑ Manufacturer's specification sheets for proposed technology are included
- ❑ A copy (all pages) of a recent month's utility bill is included
- ❑ Check this box if you are applying for an ARRA Block Grant.

ACKNOWLEDGEMENT

_____

CUSTOMER'S SIGNATURE

By signing, I certify that I have read, understand and agree to the Specific Program Requirements/Terms and Conditions listed on this application form, I will also submit for approval a properly completed application package, which includes this signed application, worksheet (if applicable), manufacturer's specification sheets and complete utility bill (name and address on utility bill must match name and address on application).

Lighting Control Prescriptive Incentives*

Control Device Type	Incentive per Unit
OSW – Occupancy Sensor Wall Mounted (Existing facilities only)	$20 per control
OSR – Occupancy Sensor Remote Mounted (Existing facilities only)	$35 per control
DLD – Fluorescent Daylight Dimming	$25 per fixture controlled
DLD – Fluorescent Daylight Dimming (Office Applications)	$50 per fixture controlled
OHLF – Occupancy Controlled High-Low with Step Ballast	$25 per fixture controlled
OSRH – Occupancy Sensor Remote Mounted	$35 per control
OHLH – Occupancy Controlled High-Low with Step Ballast	$75 per fixture controlled
DDH – Daylight Dimming	$75 per fixture controlled

Mail or fax your application package DIRECTLY to the Commercial/Industrial Program Manager.

New Jersey's Clean Energy Program
c/o TRC Energy Services
900 Route 9 North, Suite 404 • Woodbridge, NJ 07095
Phone: 866-657-6278 • Fax: 732-855-0422

Visit our website: NJCleanEnergy.com

New Jersey SmartStart Buildings® is a registered trademark. Use of the mark without the permission of the New Jersey Board of Public Utilities, Office of Clean Energy is prohibited.
*Incentives/Requirements subject to change.

NJ SmartStart Buildings®

Program Terms and Conditions

Definitions:

Design Incentives – Incentives that may be offered to design professionals by the Program.

Design Services – Services that may be offered to design professionals under the Program.

Energy-Efficient Measures – Any device eligible to receive a Program Incentive payment through the NJ Clean Energy Commercial and Industrial Program (New Jersey SmartStart Buildings).

New Jersey Utilities – The regulated electric and/or gas utilities in the State of New Jersey. They are: Atlantic City Electric, Jersey Central Power & Light, Rockland Electric Company, New Jersey Natural Gas, Elizabethtown Gas, PSE&G, and South Jersey Gas.

Administrator – New Jersey Board of Public Utilities, Office of Clean Energy

Participating Customers – Those non-residential electric and/or gas service customers of the New Jersey Utilities who participate in this Program.

Product Installation or Equipment Installation – Installation of the Energy-Efficient Measures.

Program – The Commercial and Industrial Energy-Efficient Construction Program (New Jersey SmartStart Buildings) offered herein by the New Jersey Board of Public Utilities, Office of Clean Energy pursuant to state regulatory approval under the New Jersey Electric Discount and Energy Competition Act, NJSA 48:3-49, et seq.

Program Incentives – Refers to the amount or level of incentive that the Program provides to Participating Customers pursuant to the Program offered herein (see description under "Incentive Amount" heading).

Program Offer – Program Incentives are available to non-residential retail electric and/or gas service customers of the New Jersey Utilities identified above. Program Incentives for new construction are available only for projects in areas designated for growth in the State Plan. Public school (K-12) new construction projects are exempted from this restriction and are eligible for new Program incentives throughout the State. Customers, or their trade allies, can determine if a location is in a designated growth area by referring to the Smart Growth Locator available from the HMFA website or contact the Program Manager if you are uncertain about project eligibility.

Program Manager – TRC Energy Services.

Application and Eligibility Process – The Program pays incentives after the installation of qualified energy-efficient measures that were pre-approved (for exceptions to this condition, please refer to "Exceptions for Approval".) In order to be eligible for Program Incentives, a Customer, or an agent (contractor/vendor) authorized by a Customer, must submit a properly completed application package. The package must include an application signed by the customer; a complete (current) utility bill; and technology worksheet and manufacturer's cut sheets (where appropriate). This information must be submitted to the Program Manager before equipment is installed. Applications for measures that are self installed by customers must be submitted by the customer and not the sales vendor of the measure, however, the customer may elect to assign payment of the incentive to the sales vendor. This application package must be received by the Program Manager on or before December 31, 2011 in order to be eligible for 2011 incentives. The Program Manager will review the application package to determine if the project is eligible for a Program Incentive. If eligible, the Customer will receive an approval letter with the estimated authorized incentive amount and the date by which the equipment must be installed in order for the approval to remain in effect. Upon receipt of an approval letter, the Customer may then proceed to install the equipment listed on the approved application. Equipment installed prior to the date of the Program Manager's approval letter is not eligible for an incentive. The Program Manager reserves the right to conduct a pre-inspection of the facility prior to the installation of equipment. This will be done prior to the issuance of the approval letter. All equipment must be purchased within 12 months of date of application. **Any Customer and/or agent who purchases equipment prior to the receipt of an incentive approval letter does so at his/her own risk.**

Exceptions for Approval – The Application and Eligibility Process pertains to all projects except for those involving either Unitary HVAC or Motors having an incentive amount less than $5,000. These measures, at this incentive level, may be installed without prior approval. In addition, but at the sole discretion of the Program Manager, emergency replacement of equipment may not require a prior approval determination and letter. **In such cases, please notify the Program Manager of such emergencies as early as possible, that an application will soon be sent in that was not pre-approved.**

Post-Installation Approval – After installation is completed, the Customer, or an agent authorized by the Customer, must finalize and submit an invoice for the purchase of the equipment (material cost must be broken out from labor costs), and any other required documentation as specified on the equipment application or in the Program Manager's initial approval letter.

Please refer to the program guide on the NJCleanEnergy.com/ssb website for the complete Application and Eligibility Process.

The Program Manager reserves the right to verify sales transactions and to have reasonable access to Participating Customer's facility to inspect both pre-existing product or equipment (if applicable) and the Energy-Efficient Measures installed under this Program, either prior to issuing incentives or at a later time.

Energy-Efficient Measures must be installed in buildings located within a New Jersey Utilities' service territory and designated on the Participating Customer's incentive application. Program Incentives are available for qualified Energy-Efficient Measures as listed and described in the Program materials and incentive applications. The Participating Customer must ultimately own the equipment, either through an up-front purchase or at the end of a short-term lease. Design Incentives are available to design professionals as described in the Program materials and applications. A different and separate agreement must be executed by participating design professionals to be eligible for this type of incentive. The design professional does not need to be based in New Jersey.

Equipment procured by Participating Customers through another program offered by New Jersey's Clean Energy Program or the New Jersey Utilities, as applicable, is not eligible for incentives through this program. Customers who have not contributed to the Societal Benefits Charge of the applicable New Jersey Utility are not be eligible for incentives offered through this program.

Incentive Amount – Program Incentives will equal either: a) the approved Program Incentive amount, or b) the actual equipment cost of the Energy-Efficient Measure, whichever is less, as determined by the Program Manager. Products offered at no direct cost to the customer are ineligible. Incomplete application submissions, applications requiring inspections and unanticipated high volume of activities may cause processing delays. Program Incentives are limited to $500,000 per utility account in a calendar year. Contact the Program Manager regarding any questions.

Tax Liability – The Program Manager will not be responsible for any tax liability that may be imposed on any Participating Customer as a result of the payment of Program Incentives. All Participating Customers must supply their federal tax identification number or social security number to the Program Manager on the application form in order to receive a Program Incentive. In addition, Participating Customers must also provide a Tax Clearance Form (entitled "Business Assistance or Incentive Clearance Certificate") that is dated within 90 days of equipment installation.

Endorsement – The Program Manager and Administrator do not endorse, support or recommend any particular manufacturer, product or system design in promoting this Program.

Warranties – THE PROGRAM MANAGER AND ADMINISTRATOR DO NOT WARRANT THE PERFORMANCE OF INSTALLED EQUIPMENT, AND/OR SERVICES RENDERED AS PART OF THIS PROGRAM, EITHER EXPRESSLY OR IMPLICITLY. NO WARRANTIES OR REPRESENTATIONS OF ANY KIND, WHETHER STATUTORY, EXPRESSED, OR IMPLIED, INCLUDING, WITHOUT LIMITATIONS, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE REGARDING EQUIPMENT OR SERVICES PROVIDED BY A MANUFACTURER OR VENDOR. CONTACT YOUR VENDOR/SERVICES PROVIDER FOR DETAILS REGARDING PERFORMANCE AND WARRANTIES.

Limitation of Liability – By virtue of participating in this Program, Participating Customers agree to waive any and all claims or damages against the Program Manager or the Administrator, except the receipt of the Program Incentive. Participating Customers agree that the Program Manager's and Administrator's liability, in connection with this Program, is limited to paying the Program Incentive specified. Under no circumstances shall the Program Manager, its representatives, or subcontractors, or the Administrator, be liable for any lost profits, special, punitive, consequential or incidental damages or for any other damages or claims connected with or resulting from participation in this Program. Further, any liability attributed to the Program Manager under this Program shall be individual, and not joint and/or several.

Assignment – The Participating Customer may assign Program Incentive payments to a specified vendor.

Participating Customer's Certification – Participating Customer certifies that he/she purchased and installed the equipment listed in their application at their defined New Jersey location. Participating Customer agrees that all information is true and that he/she has conformed to all of the Program and equipment requirements listed in the application.

Termination – The New Jersey Board of Public Utilities reserves the right to extend, modify (this includes modification of Program Incentive levels) or terminate this Program without prior or further notice.

Acknowledgement – I have read, understood and am in compliance with all rules and regulations concerning this incentive program. I certify that all information provided is correct to the best of my knowledge, and I give the Program Manager permission to share my records with the New Jersey Board of Public Utilities, and contractors it selects to manage, coordinate or evaluate the NJ SmartStart Buildings Program. Additionally, I allow reasonable access to my property to inspect the installation and performance of the technologies and installations that are eligible for incentives under the guidelines of New Jersey's Clean Energy Program.

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Your Power to Save
njcleanenergy.com

New Jersey SmartStart BUILDINGS®

BPU

2011 Performance Lighting Application

Customer Information

Company	Electric Utility Serving Applicant	Electric Account No.	Anticipated Installation Date
	choose one		

Facility Address	City	State	Zip

Type of Project	Size of Building
❑ New Construction (Renovation and Equipment Replacement are no longer eligible for Performance Lighting Incentives)	

Company Mailing Address	City	State	Zip

Contact Person (Name/Title)	Telephone No.	Fax No.
	( )	( )

Incorporated?	Federal Tax ID# or SSN	E-mail Address
❑ Yes ❑ No ❑ Exempt		

Incentive Payment to	Please assign payment to contractor/vendor/other indicated below
❑ Customer ❑ Contractor ❑ Other	Customer Signature

Payee Information (must submit W-9 form with application)

Company	Contact Name	Incorporated?	Federal Tax ID#	E-mail Address
		❑ Yes ❑ No		

Street Address	City	State	Zip	Telephone No.	Fax No.
				( )	( )

Contractor/Vendor Information (if different from Payee)

Company	Contact Name	Incorporated?	Federal Tax ID#	E-mail Address
		❑ Yes ❑ No		

Street Address	City	State	Zip	Telephone No.	Fax No.
				( )	( )

Building Type (circle one)

Education-Primary School; Education-Community College; Education-University; Grocery; Medical-Hospital; Medical-Clinic; Lodging Hotel(Guest Rooms); Lodging Motel; Manufacturing-Light Industrial; Office-Large; Office-Small; Restaurant-Sit Down; Restaurant-Fast Food; Retail-3 Story Large; Retail- Single Story Large; Retail-Small; Storage Conditioned; Storage Unconditioned; Warehouse; Other

Performance Lighting Incentive

$_____ Total Incentive (per attached worksheet calculations)

1. **Attach Performance Lighting Incentive Worksheet.**
2. **Data must be provided to indicate that installed lighting exceeds ASHRAE performance standard by the program incentive threshold (refer to table on next page).**

Specific Program Requirements* (these requirements are in addition to the Program Terms and Conditions.)

1. Please refer to the program guide for additional applicable technical requirements, including special requirements for compact fluorescent fixtures.
2. Include the manufacturer's specification sheet with the application package and mail or fax directly to the Commercial/Industrial Program Manager.
3. Incentives for T-5 and T-8 fluorescent lighting fixtures with electronic ballasts are available only for fixtures with a Total Harmonic Distortion of ≤ 20%.
4. All eligible lighting devices must be UL or other OSHA approved Nationally Recognized Testing Laboratory (NRTL) in accordance with applicable US standards.
5. Incentives are available for new construction only.

Application Checklist (before submitting your application, please make sure you have signed in the space below and completed the following items.)

- ❑ Payee Information is filled out and a W-9 form of the payee is included
- ❑ Manufacturer's specification sheets for proposed technology are included
- ❑ A copy (all pages) of a recent month's utility bill is included
- ❑ Check this box if you are applying for an ARRA Block Grant.

ACKNOWLEDGEMENT

_____

CUSTOMER'S SIGNATURE

By signing, I certify that I have read, understand and agree to the Specific Program Requirements/Terms and Conditions listed on this application form, I will also submit for approval a properly completed application package, which includes this signed application, worksheet (if applicable), manufacturer's specification sheets and complete utility bill (name and address on utility bill must match name and address on application).

Performance Lighting Incentives*

Indoor Lighting Outdoor Lighting (attached to building only)	$1.00 per watt per square foot below program incentive threshold
Maximum Incentive	$30 per qualified fixture
Baseline	New Jersey Code (ASHRAE 90.1-2007)
Incentive Threshold New Construction	5% more energy-efficient than ASHRAE 90.1-2007
Minimum Lighting Levels- Applicant shall be responsible for confirming light levels	Lighting installed under the performance incentive path should comply with the following minimum lighting levels: ■ Lighting level requirements as specified by New Jersey's non-residential construction code, or ■ For publicly supported schools, minimum lighting levels as specified in the New Jersey Administrative Code Title 6-NJAC 6:22-5.4, g1-h1.

Mail or fax your application package DIRECTLY to the Commercial/Industrial Program Manager.

New Jersey's Clean Energy Program
c/o TRC Energy Services
900 Route 9 North, Suite 404 • Woodbridge, NJ 07095
Phone: 866-657-6278 • Fax: 732-855-0422

Visit our website: NJCleanEnergy.com

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*Incentives/Requirements subject to change.

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Program Terms and Conditions

Definitions:

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Administrator – New Jersey Board of Public Utilities, Office of Clean Energy

Participating Customers – Those non-residential electric and/or gas service customers of the New Jersey Utilities who participate in this Program.

Product Installation or Equipment Installation – Installation of the Energy-Efficient Measures.

Program – The Commercial and Industrial Energy-Efficient Construction Program (New Jersey SmartStart Buildings) offered herein by the New Jersey Board of Public Utilities, Office of Clean Energy pursuant to state regulatory approval under the New Jersey Electric Discount and Energy Competition Act, NJSA 48:3-49, et seq.

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Application and Eligibility Process – The Program pays incentives after the installation of qualified energy-efficient measures that were pre-approved (for exceptions to this condition, please refer to "Exceptions for Approval".) In order to be eligible for Program Incentives, a Customer, or an agent (contractor/vendor) authorized by a Customer, must submit a properly completed application package. The package must include an application signed by the customer; a complete (current) utility bill; and technology worksheet and manufacturer's cut sheets (where appropriate). This information must be submitted to the Program Manager before equipment is installed. Applications for measures that are self installed by customers must be submitted by the customer and not the sales vendor of the measure, however, the customer may elect to assign payment of the incentive to the sales vendor. This application package must be received by the Program Manager on or before December 31, 2011 in order to be eligible for 2011 incentives. The Program Manager will review the application package to determine if the project is eligible for a Program Incentive. If eligible, the Customer will receive an approval letter with the estimated authorized incentive amount and the date by which the equipment must be installed in order for the approval to remain in effect. Upon receipt of an approval letter, the Customer may then proceed to install the equipment listed on the approved application. Equipment installed prior to the date of the Program Manager's approval letter is not eligible for an incentive. The Program Manager reserves the right to conduct a pre-inspection of the facility prior to the installation of equipment. This will be done prior to the issuance of the approval letter. All equipment must be purchased within 12 months of date of application. **Any Customer and/or agent who purchases equipment prior to the receipt of an incentive approval letter does so at his/her own risk.**

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Post-Installation Approval – After installation is completed, the Customer, or an agent authorized by the Customer, must finalize and submit an invoice for the purchase of the equipment (material cost must be broken out from labor costs), and any other required documentation as specified on the equipment application or in the Program Manager's initial approval letter.

Please refer to the program guide on the NJCleanEnergy.com/ssb website for the complete Application and Eligibility Process.

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Tax Liability – The Program Manager will not be responsible for any tax liability that may be imposed on any Participating Customer as a result of the payment of Program Incentives. All Participating Customers must supply their federal tax identification number or social security number to the Program Manager on the application form in order to receive a Program Incentive. In addition, Participating Customers must also provide a Tax Clearance Form (entitled "Business Assistance or Incentive Clearance Certificate") that is dated within 90 days of equipment installation.

Endorsement – The Program Manager and Administrator do not endorse, support or recommend any particular manufacturer, product or system design in promoting this Program.

Warranties – THE PROGRAM MANAGER AND ADMINISTRATOR DO NOT WARRANT THE PERFORMANCE OF INSTALLED EQUIPMENT, AND/OR SERVICES RENDERED AS PART OF THIS PROGRAM, EITHER EXPRESSLY OR IMPLICITLY. NO WARRANTIES OR REPRESENTATIONS OF ANY KIND, WHETHER STATUTORY, EXPRESSED, OR IMPLIED, INCLUDING, WITHOUT LIMITATIONS, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE REGARDING EQUIPMENT OR SERVICES PROVIDED BY A MANUFACTURER OR VENDOR. CONTACT YOUR VENDOR/SERVICES PROVIDER FOR DETAILS REGARDING PERFORMANCE AND WARRANTIES.

Limitation of Liability – By virtue of participating in this Program, Participating Customers agree to waive any and all claims or damages against the Program Manager or the Administrator, except the receipt of the Program Incentive. Participating Customers agree that the Program Manager's and Administrator's liability, in connection with this Program, is limited to paying the Program Incentive specified. Under no circumstances shall the Program Manager, its representatives, or subcontractors, or the Administrator, be liable for any lost profits, special, punitive, consequential or incidental damages or for any other damages or claims connected with or resulting from participation in this Program. Further, any liability attributed to the Program Manager under this Program shall be individual, and not joint and/or several.

Assignment – The Participating Customer may assign Program Incentive payments to a specified vendor.

Participating Customer's Certification – Participating Customer certifies that he/she purchased and installed the equipment listed in their application at their defined New Jersey location. Participating Customer agrees that all information is true and that he/she has conformed to all of the Program and equipment requirements listed in the application.

Termination – The New Jersey Board of Public Utilities reserves the right to extend, modify (this includes modification of Program Incentive levels) or terminate this Program without prior or further notice.

Acknowledgement – I have read, understood and am in compliance with all rules and regulations concerning this incentive program. I certify that all information provided is correct to the best of my knowledge, and I give the Program Manager permission to share my records with the New Jersey Board of Public Utilities, and contractors it selects to manage, coordinate or evaluate the NJ SmartStart Buildings Program. Additionally, I allow reasonable access to my property to inspect the installation and performance of the technologies and installations that are eligible for incentives under the guidelines of New Jersey's Clean Energy Program.

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BPU

2011 Premium Motors Application

Customer Information

Company	Electric Utility Serving Applicant	Electric Account No.	Anticipated Installation Date
	choose one		

Facility Address	City	State	Zip

Type of Project	Size of Building
❑ New Construction ❑ Renovation ❑ Equipment Replacement	

Company Mailing Address	City	State	Zip

Contact Person (Name/Title)	Telephone No.	Fax No.
	( )	( )

Incorporated?	Federal Tax ID# or SSN	E-mail Address
❑ Yes ❑ No ❑ Exempt		

Incentive Payment to	Please assign payment to contractor/vendor/other indicated below
❑ Customer ❑ Contractor ❑ Other	Customer Signature

Payee Information (must submit W-9 form with application)

Company	Contact Name	Incorporated?	Federal Tax ID#	E-mail Address
		❑ Yes ❑ No		

Street Address	City	State	Zip	Telephone No.	Fax No.
				( )	( )

Contractor/Vendor Information (if different from Payee)

Company	Contact Name	Incorporated?	Federal Tax ID#	E-mail Address
		❑ Yes ❑ No		

Street Address	City	State	Zip	Telephone No.	Fax No.
				( )	( )

Building Type (circle one)

Commercial-Retail; Commercial-Other than Retail; Office; School-Public K-12; School-University-Public; School-University-Private; School-Other; Hospital; Government-Municipality; Government-Other than Municipality; Farm; Non-Profit; Other

Premium Motor Information

Reason* N–New R–Replaced S–Stocked	**Type* ODP, TEFC or ECM**	**Manuf.***	**Model***	**Function*** Fan, Pump, Process, Ref / Freezer	**Location** Bldg/Rm	**Size* (HP)**	**Speed (RPM)**	**NEMA** Nominal Efficiency (%)	**Has VFD**	**Annual Run Hours** Y/N (2,000 min.)	**Incentive Per Motor - Hours**	**Quantity** (Table)	**Total Incentives**
(Example) N	TEFC	ACME	RR/C1957	HVAC Pump	Mech. Rm. #4	30	1800	93.6	N	4400	$150	1	$150
R	ECM	GE	26-ECM-6	Ref/Freezer	Freezer Case #2	1/15				6000	$40	3	$120
								0.0%					$0
								0.0%					$0
								0.0%					$0
								0.0%					$0
*Required fields for ECM											**Total**		$0

Specific Program Requirements* (these requirements are in addition to the Program Terms and Conditions.)

1. Please refer to the program guide for additional applicable technical requirements.
2. Include the manufacturer's specification sheet with the application package and mail or fax directly to the Commercial/Industrial Program Manager.
3. Incentives are only available for qualifying Premium Motors that operate at least 2000 run hours annually.

Application Checklist (before submitting your application, please make sure you have signed in the space below and completed the following items.)

- ❑ Payee Information is filled out and a W-9 form of the payee is included
- ❑ Manufacturer's specification sheets for proposed technology are included
- ❑ A copy (all pages) of a recent month's utility bill is included
- ❑ Check this box if you are applying for an ARRA Block Grant.

ACKNOWLEDGEMENT

_____

CUSTOMER'S SIGNATURE

By signing, I certify that I have read, understand and agree to the Specific Program Requirements/Terms and Conditions listed on this application form, I will also submit for approval a properly completed application package, which includes this signed application, worksheet (if applicable), manufacturer's specification sheets and complete utility bill (name and address on utility bill must match name and address on application).

Qualifying Premium Motor Efficiencies and Incentives*

Premium Motor Incentives Open Drip-Proof (ODP)					Premium Motor Incentives Totally Enclosed Fan-Cooled (TEFC)				
Size HP	Speed (RPM)			Customer Incentive ($/Motor)	Size HP	Speed (RPM)			Customer Incentive ($/Motor)
	1200	1800	3600			1200	1800	3600	
	NEMA Nominal Efficiency					NEMA Nominal Efficiency			
1	82.5%	85.5%	77.0%	$45	1	82.5%	85.5%	77.0%	$50
1.5	86.5%	86.5%	84.0%	$45	1.5	87.5%	86.5%	84.0%	$50
2	87.5%	86.5%	85.5%	$54	2	88.5%	86.5%	85.5%	$60
3	88.5%	89.5%	85.5%	$54	3	89.5%	89.5%	86.5%	$60
5	89.5%	89.5%	86.5%	$54	5	89.5%	89.5%	88.5%	$60
7.5	90.2%	91.0%	88.5%	$81	7.5	91.0%	91.7%	89.5%	$90
10	91.7%	91.7%	89.5%	$90	10	91.0%	91.7%	90.2%	$100
15	91.7%	93.0%	90.2%	$104	15	91.7%	92.4%	91.0%	$115
20	92.4%	93.0%	91.0%	$113	20	91.7%	93.0%	91.0%	$125
25	93.0%	93.6%	91.7%	$117	25	93.0%	93.6%	91.7%	$130
30	93.6%	94.1%	91.7%	$135	30	93.0%	93.6%	91.7%	$150
40	94.1%	94.1%	92.4%	$162	40	94.1%	94.1%	92.4%	$180
50	94.1%	94.5%	93.0%	$198	50	94.1%	94.5%	93.0%	$220
60	94.5%	95.0%	93.6%	$234	60	94.5%	95.0%	93.6%	$260
75	94.5%	95.0%	93.6%	$270	75	94.5%	95.4%	93.6%	$300
100	95.0%	95.4%	93.6%	$360	100	95.0%	95.4%	94.1%	$400
125	95.0%	95.4%	94.1%	$540	125	95.0%	95.4%	95.0%	$600
150	95.4%	95.8%	94.1%	$630	150	95.8%	95.8%	95.0%	$700
200	95.4%	95.8%	95.0%	$630	200	95.8%	96.2%	95.4%	$700

Fractional Motor Incentives Electronic Commutated Motors (ECM)	
Size HP	**Customer Incentive ($/Motor)**
<1 HP	$40 per ECM for replacement of existing shaded-pole motor in refrigerated/freezer cases

Motors > 200 HP must follow the Custom Electric Equipment Path
Mail or fax your application package DIRECTLY to the Commercial/Industrial Program Manager.

New Jersey's Clean Energy Program
c/o TRC Energy Services
900 Route 9 North, Suite 404 • Woodbridge, NJ 07095
Phone: 866-657-6278 • Fax: 732-855-0422

Visit our website: NJCleanEnergy.com/ssb

New Jersey SmartStart Buildings® is a registered trademark. Use of the mark without the permission of the New Jersey Board of Public Utilities, Office of Clean Energy is prohibited.
*Incentives/Requirements subject to change.

NJ SmartStart Buildings®

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Administrator – New Jersey Board of Public Utilities, Office of Clean Energy

Participating Customers – Those non-residential electric and/or gas service customers of the New Jersey Utilities who participate in this Program.

Product Installation or Equipment Installation – Installation of the Energy-Efficient Measures.

Program – The Commercial and Industrial Energy-Efficient Construction Program (New Jersey SmartStart Buildings) offered herein by the New Jersey Board of Public Utilities, Office of Clean Energy pursuant to state regulatory approval under the New Jersey Electric Discount and Energy Competition Act, NJSA 48:3-49, et seq.

Program Incentives – Refers to the amount or level of incentive that the Program provides to Participating Customers pursuant to the Program offered herein (see description under "Incentive Amount" heading).

Program Offer – Program Incentives are available to non-residential retail electric and/or gas service customers of the New Jersey Utilities identified above. Program Incentives for new construction are available only for projects in areas designated for growth in the State Plan. Public school (K-12) new construction projects are exempted from this restriction and are eligible for new Program incentives throughout the State. Customers, or their trade allies, can determine if a location is in a designated growth area by referring to the Smart Growth Locator available from the HMFA website or contact the Program Manager if you are uncertain about project eligibility.

Program Manager – TRC Energy Services.

Application and Eligibility Process – The Program pays incentives after the installation of qualified energy-efficient measures that were pre-approved (for exceptions to this condition, please refer to "Exceptions for Approval".) In order to be eligible for Program Incentives, a Customer, or an agent (contractor/vendor) authorized by a Customer, must submit a properly completed application package. The package must include an application signed by the customer; a complete (current) utility bill; and technology worksheet and manufacturer's cut sheets (where appropriate). This information must be submitted to the Program Manager before equipment is installed. Applications for measures that are self installed by customers must be submitted by the customer and not the sales vendor of the measure, however, the customer may elect to assign payment of the incentive to the sales vendor. This application package must be received by the Program Manager on or before December 31, 2011 in order to be eligible for 2011 incentives. The Program Manager will review the application package to determine if the project is eligible for a Program Incentive. If eligible, the Customer will receive an approval letter with the estimated authorized incentive amount and the date by which the equipment must be installed in order for the approval to remain in effect. Upon receipt of an approval letter, the Customer may then proceed to install the equipment listed on the approved application. Equipment installed prior to the date of the Program Manager's approval letter is not eligible for an incentive. The Program Manager reserves the right to conduct a pre-inspection of the facility prior to the installation of equipment. This will be done prior to the issuance of the approval letter. All equipment must be purchased within 12 months of date of application. **Any Customer and/or agent who purchases equipment prior to the receipt of an incentive approval letter does so at his/her own risk.**

Exceptions for Approval – The Application and Eligibility Process pertains to all projects except for those involving either Unitary HVAC or Motors having an incentive amount less than $5,000. These measures, at this incentive level, may be installed without prior approval. In addition, but at the sole discretion of the Program Manager, emergency replacement of equipment may not require a prior approval determination and letter. **In such cases, please notify the Program Manager of such emergencies as early as possible, that an application will soon be sent in that was not pre-approved.**

Post-Installation Approval – After installation is completed, the Customer, or an agent authorized by the Customer, must finalize and submit an invoice for the purchase of the equipment (material cost must be broken out from labor costs), and any other required documentation as specified on the equipment application or in the Program Manager's initial approval letter.

Please refer to the program guide on the NJCleanEnergy.com/ssb website for the complete Application and Eligibility Process.

The Program Manager reserves the right to verify sales transactions and to have reasonable access to Participating Customer's facility to inspect both pre-existing product or equipment (if applicable) and the Energy-Efficient Measures installed under this Program, either prior to issuing incentives or at a later time.

Energy-Efficient Measures must be installed in buildings located within a New Jersey Utilities' service territory and designated on the Participating Customer's incentive application. Program Incentives are available for qualified Energy-Efficient Measures as listed and described in the Program materials and incentive applications. The Participating Customer must ultimately own the equipment, either through an up-front purchase or at the end of a short-term lease. Design Incentives are available to design professionals as described in the Program materials and applications. A different and separate agreement must be executed by participating design professionals to be eligible for this type of incentive. The design professional does not need to be based in New Jersey.

Equipment procured by Participating Customers through another program offered by New Jersey's Clean Energy Program or the New Jersey Utilities, as applicable, is not eligible for incentives through this program. Customers who have not contributed to the Societal Benefits Charge of the applicable New Jersey Utility are not be eligible for incentives offered through this program.

Incentive Amount – Program Incentives will equal either: a) the approved Program Incentive amount, or b) the actual equipment cost of the Energy-Efficient Measure, whichever is less, as determined by the Program Manager. Products offered at no direct cost to the customer are ineligible. Incomplete application submissions, applications requiring inspections and unanticipated high volume of activities may cause processing delays. Program Incentives are limited to $500,000 per utility account in a calendar year. Contact the Program Manager regarding any questions.

Tax Liability – The Program Manager will not be responsible for any tax liability that may be imposed on any Participating Customer as a result of the payment of Program Incentives. All Participating Customers must supply their federal tax identification number or social security number to the Program Manager on the application form in order to receive a Program Incentive. In addition, Participating Customers must also provide a Tax Clearance Form (entitled "Business Assistance or Incentive Clearance Certificate") that is dated within 90 days of equipment installation.

Endorsement – The Program Manager and Administrator do not endorse, support or recommend any particular manufacturer, product or system design in promoting this Program.

Warranties – THE PROGRAM MANAGER AND ADMINISTRATOR DO NOT WARRANT THE PERFORMANCE OF INSTALLED EQUIPMENT, AND/OR SERVICES RENDERED AS PART OF THIS PROGRAM, EITHER EXPRESSLY OR IMPLICITLY. NO WARRANTIES OR REPRESENTATIONS OF ANY KIND, WHETHER STATUTORY, EXPRESSED, OR IMPLIED, INCLUDING, WITHOUT LIMITATIONS, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE REGARDING EQUIPMENT OR SERVICES PROVIDED BY A MANUFACTURER OR VENDOR. CONTACT YOUR VENDOR/SERVICES PROVIDER FOR DETAILS REGARDING PERFORMANCE AND WARRANTIES.

Limitation of Liability – By virtue of participating in this Program, Participating Customers agree to waive any and all claims or damages against the Program Manager or the Administrator, except the receipt of the Program Incentive. Participating Customers agree that the Program Manager's and Administrator's liability, in connection with this Program, is limited to paying the Program Incentive specified. Under no circumstances shall the Program Manager, its representatives, or subcontractors, or the Administrator, be liable for any lost profits, special, punitive, consequential or incidental damages or for any other damages or claims connected with or resulting from participation in this Program. Further, any liability attributed to the Program Manager under this Program shall be individual, and not joint and/or several.

Assignment – The Participating Customer may assign Program Incentive payments to a specified vendor.

Participating Customer's Certification – Participating Customer certifies that he/she purchased and installed the equipment listed in their application at their defined New Jersey location. Participating Customer agrees that all information is true and that he/she has conformed to all of the Program and equipment requirements listed in the application.

Termination – The New Jersey Board of Public Utilities reserves the right to extend, modify (this includes modification of Program Incentive levels) or terminate this Program without prior or further notice.

Acknowledgement – I have read, understood and am in compliance with all rules and regulations concerning this incentive program. I certify that all information provided is correct to the best of my knowledge, and I give the Program Manager permission to share my records with the New Jersey Board of Public Utilities, and contractors it selects to manage, coordinate or evaluate the NJ SmartStart Buildings Program. Additionally, I allow reasonable access to my property to inspect the installation and performance of the technologies and installations that are eligible for incentives under the guidelines of New Jersey's Clean Energy Program.

New Jersey's Clean Energy PROGRAM™
Your Power to Save
njcleanenergy.com

New Jersey SmartStart BUILDINGS®

BPU

2011 Variable Frequency Drives Application

Customer Information

Company	Electric Utility Serving Applicant choose one	Electric Account No.	Anticipated Installation Date
Facility Address	City	State	Zip
Type of Project ❑ New Construction ❑ Renovation ❑ Equipment Replacement		Size of Building	
Company Mailing Address	City	State	Zip
Contact Person (Name/Title)	Telephone No. ( )	Fax No. ( )	
Incorporated? ❑ Yes ❑ No ❑ Exempt	Federal Tax ID# or SSN	E-mail Address	
Incentive Payment to ❑ Customer ❑ Contractor ❑ Other	Please assign payment to contractor/vendor/other indicated below Customer Signature		

Payee Information (must submit W-9 form with application)

Company	Contact Name	Incorporated? ❑ Yes ❑ No	Federal Tax ID#	E-mail Address
Street Address	City	State / Zip	Telephone No. ( )	Fax No. ( )

Contractor/Vendor Information (if different from Payee)

Company	Contact Name	Incorporated? ❑ Yes ❑ No	Federal Tax ID#	E-mail Address
Street Address	City	State / Zip	Telephone No. ( )	Fax No. ( )

Building Type (circle one)

Commercial-Retail; Commercial-Other than Retail; Office; School-Public K-12; School-University-Public; School-University-Private; School-Other; Hospital; Government-Municipality; Government-Other than Municipality; Farm; Non-Profit; Other

Variable Frequency Drive Information

Reason N-New R-Retrofit	**Type of Usage** F – Airfoil/Backward Inclined fan C – Forward Curved Fan P – Chilled Water Pump A – Air Compressor T – Cooling Tower	**Manufacturer**	**Model**	**Annual Operating Hours**	**Drive Efficiency %**	**Motor Efficiency %**	**Location** (Bldg/Rm)	**A HP of Controlled Motors**	**B Incentive per HP (Table)**	**C # of Units**	**Total Incentives (AxBxC)**
(Example) N	F	ACME	RR/C1957	4,000	97	94.1	Mech. Rm. #4	30	$65	2	30 x $65 x 2 = $3,900
					0.0%	0.0%					$0
					0.0%	0.0%					$0
					0.0%	0.0%					$0
					0.0%	0.0%					$0
										Total	$0

Specific Program Requirements* (these requirements are in addition to the Program Terms and Conditions.)

1. Please refer to the program guide for additional applicable technical requirements.
2. Include the manufacturer's specification sheet with the application package and mail or fax directly to the Commercial/Industrial Program Manager.
3. Incentives for VFDs in HVAC VAV systems, are available only for installing a VFD on existing VAV systems as an add-on measure. Replacement of an existing VFD on VAV systems and installations on VAV systems in new construction are not eligible for incentives.
4. The Variable Frequency Drive (VFD) incentive for cooling towers is available for existing single speed motors only. Replacement of two speed motor with single speed/VFD motor, replacement of existing VFD and new construction do not qualify.
5. The Variable Frequency Drive (VFD) incentive for pumps is available only for VFDs installed on centrifugal chilled water pump motors for HVAC systems.
6. The VFDs must be installed in a system (VAV air supply or chilled water pumping systems) that incorporates pressure sensors (or other applicable sensor devices) in the flow stream.

For Compressed Air Systems:

7. Incentives are available for new air or water cooled, single or double stage, oil lubricated or oil free twin rotor screw air compressors outfitted with VFDs (providing compressed air for typical plant air use).
8. Replacement of VFD on an existing air compressor that had VFD control is not eligible for incentives.
9. Incentives for retrofitting an existing qualified air compressor with VFD control may be available through the custom electric equipment program.
10. VFD controlled compressors with premium efficiency motors may be eligible for a premium motor incentive in addition to this prescriptive VFD incentive.
11. Only one VFD controlled air compressor will be eligible for an incentive for each compressed air system.
12. The applicant shall provide sufficient documentation to demonstrate that a VFD controlled air compressor operates, at a minimum, for 2000 hours annually. Documentation may include P&IDs, Control Logic Diagrams, and Plant Operating Schedules.

For All VFDs:

13. The VFD must have either an input line reactor or isolation transformer.

Application Checklist (before submitting your application, please make sure you have signed in the space below and completed the following items.)

- ❑ Payee Information is filled out and a W-9 form of the payee is included
- ❑ Manufacturer's specification sheets for proposed technology are included
- ❑ A copy (all pages) of a recent month's utility bill is included
- ❑ Check this box if you are applying for an ARRA Block Grant.

ACKNOWLEDGEMENT

_____

CUSTOMER'S SIGNATURE

By signing, I certify that I have read, understand and agree to the Specific Program Requirements/Terms and Conditions listed on this application form, I will also submit for approval a properly completed application package, which includes this signed application, worksheet (if applicable), manufacturer's specification sheets and complete utility bill (name and address on utility bill must match name and address on application).

Variable Frequency Drive Incentives*

Centrifugal Fan Applications on Variable Air Volume HVAC Systems	
Cumulative Motor HP Controlled by Each VFD	Incentive $/Cumulative HP Controlled
5 to <10 hp 10 to <20 hp 20+ hp	$155 per hp $120 per hp $65 per hp
Cooling Tower Fan Systems	
≥ 10 hp	$60 per VFD rated hp
Chilled Water Pump Motors for HVAC Systems	
20+ hp	$60 per VFD rated hp
Rotary Screw Air Compressors	
25 to 29 hp	Up to $5,250
30 to 39 hp	Up to $6,000
40 to 49 hp	Up to $7,200
50 to 59 hp	Up to $8,000
60 to 199 hp	Up to $9,000
200 to 249 hp	Up to $10,000
≥ 250 hp	Up to $12,500

Mail or fax your application package DIRECTLY to the Commercial/Industrial Program Manager.

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Endorsement – The Program Manager and Administrator do not endorse, support or recommend any particular manufacturer, product or system design in promoting this Program.

Warranties – THE PROGRAM MANAGER AND ADMINISTRATOR DO NOT WARRANT THE PERFORMANCE OF INSTALLED EQUIPMENT, AND/OR SERVICES RENDERED AS PART OF THIS PROGRAM, EITHER EXPRESSLY OR IMPLICITLY. NO WARRANTIES OR REPRESENTATIONS OF ANY KIND, WHETHER STATUTORY, EXPRESSED, OR IMPLIED, INCLUDING, WITHOUT LIMITATIONS, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE REGARDING EQUIPMENT OR SERVICES PROVIDED BY A MANUFACTURER OR VENDOR. CONTACT YOUR VENDOR/SERVICES PROVIDER FOR DETAILS REGARDING PERFORMANCE AND WARRANTIES.

Limitation of Liability – By virtue of participating in this Program, Participating Customers agree to waive any and all claims or damages against the Program Manager or the Administrator, except the receipt of the Program Incentive. Participating Customers agree that the Program Manager's and Administrator's liability, in connection with this Program, is limited to paying the Program Incentive specified. Under no circumstances shall the Program Manager, its representatives, or subcontractors, or the Administrator, be liable for any lost profits, special, punitive, consequential or incidental damages or for any other damages or claims connected with or resulting from participation in this Program. Further, any liability attributed to the Program Manager under this Program shall be individual, and not joint and/or several.

Assignment – The Participating Customer may assign Program Incentive payments to a specified vendor.

Participating Customer's Certification – Participating Customer certifies that he/she purchased and installed the equipment listed in their application at their defined New Jersey location. Participating Customer agrees that all information is true and that he/she has conformed to all of the Program and equipment requirements listed in the application.

Termination – The New Jersey Board of Public Utilities reserves the right to extend, modify (this includes modification of Program Incentive levels) or terminate this Program without prior or further notice.

Acknowledgement – I have read, understood and am in compliance with all rules and regulations concerning this incentive program. I certify that all information provided is correct to the best of my knowledge, and I give the Program Manager permission to share my records with the New Jersey Board of Public Utilities, and contractors it selects to manage, coordinate or evaluate the NJ SmartStart Buildings Program. Additionally, I allow reasonable access to my property to inspect the installation and performance of the technologies and installations that are eligible for incentives under the guidelines of New Jersey's Clean Energy Program.

New Jersey Clean Energy Program

Technical Worksheet – Biomass Equipment

Please read carefully all of the following information. With the help of your installation contractor, fully complete sections A through E of this technical worksheet for biomass equipment.

GENERAL TERMS AND CONDITIONS

Rebates will be processed based on the date *New Jersey's* ***Clean Energy*** *Program*™ (NJCEP) approves the final paperwork packet, not on the purchase date of the equipment. Program procedures and rebates are subject to change or cancellation without notice. To qualify for a rebate, the applicant must comply with all *Renewable Energy Incentive Program* (REIP) eligibility requirements, terms and conditions, installation requirements and submit all completed forms. For more information about NJCEP or for assistance in completing applications or forms, please see NJCleanEnergy.com or call **866-NJSMART**.

INSTALLATION REQUIREMENTS

Equipment installation must meet the following minimum requirements in order to qualify for payment under the provisions set by NJCEP. Proposed changes to the requirements will be considered, but they must be documented by the applicant or installation contractor and approved by NJCEP. These requirements are not all-encompassing and are intended only to address certain minimum safety and efficiency standards.

A: CODE REQUIREMENTS

1. The installation must comply with the provisions of the National Electrical Code and all other applicable local, state, and federal codes and permit requirements or practices.
2. All required permits must be properly obtained and posted.
3. NJCEP inspection must be performed before the local building code enforcement office. If not, this may delay the processing of the rebate.
4. All required inspections must be performed (Electrical/NEC, local building codes enforcement office, etc.). Note in order to ensure compliance with provisions of the NEC, an inspection by a state-licensed electrical inspector is mandatory.

B: BIOMASS INSTALLATION REQUIREMENTS

1. A biomass sustainability determination from the New Jersey Department of Environmental Protection (NJDEP) must accompany this document.
2. The installation must comply with manufacturer's instructions.
3. The installation must comply with the interconnection and protection requirements of the local electric distribution company.
4. The installation must comply with provisions of IEEE 519 - Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems, as appropriate. Input and output protection functions should be in compliance with ANSI C37.2 device function number specifications.
5. The system should be equipped with the following capabilities, indicators and/or controls:
   - On/off control on site
   - Operating mode setting indication - parallel vs. stand-alone
   - AC and DC overcurrent protection or equivalent
   - Operating status indicator
   - Remote control and data acquisition capability
   - Electric load-following capability
6. Warning labels must be posted on the control panels and junction boxes indicating that the circuits are energized by an alternate power source independent of utility-provided power.
7. All interconnecting wires must be copper. (Some provisions may be made for aluminum wiring; approval must be received from utility engineering departments prior to acceptance.)
8. All wiring splices must be contained in UL-approved workboxes.
9. Operating instructions must be posted on or near the system, or on file with facilities operation and maintenance documents.

C: BIOMASS SYSTEM EVALUATION CRITERIA

Biomass projects will also be evaluated based on the following three criteria:

1. **Fuel Sustainability**

Each project must document the sustainability of the fuel source. This information includes the percentage of fuel input that is derived from a certified, sustainable source. Landfill gas facilities should document that the methane fuel has a minimum availability of 5 years.

2. **Close Loop Operational Process**

Documentation must include a description of the operational process and the associated equipment. A functional use for any refuse by-products must be documented. Landfill gas facilities must describe current process/use of flare gas and document incremental benefits related to the proposed application.

3. **Proper Emissions Levels**

The project must meet the emission standards specified in the New Jersey State of the Art Manual (SOTA). *New Jersey's Clean Energy Program* application will not be approved until permit approval documentation has been provided.

New Jersey Clean Energy Program

Technical Worksheet – Biomass Equipment

A: APPLICANT INFORMATION

Applicant Name: _____ Application Number: _____
(Assigned by the NJCEP MM/ NJBPU)

B: EQUIPMENT INFORMATION

1. Electrical Generator Manufacturer: _____
2. Electric Generator Model: _____
3. Capacity Rating of each Electric Generator: _____ AC Watts
4. Number of Electric Generators: _____
5. Total System Rated Net Continuous Output: _____ AC Watts (No. of Electric Generators x Capacity Rating)

C: PROPOSED INSTALLATION/INTERCONNECTION INFORMATION

1. Generator Location: _____
2. Utility-Accessible AC Disconnect Switch Location: _____
3. System Type and Mode of Operation:
   - Grid-connected operating mode (parallel/capable of synchronizing with the electric grid; capable of automatically reducing load to prevent back feeding the meter)
   - Grid-connected/grid-independent operating mode (parallel/capable of synchronizing with the electric grid and capable of switching automatically to independent, load-follow operation when the grid is unavailable; automatic operation and synchronization of multiple power plants connected in parallel)
   - Stand-alone load-following operation (system confined to an independent circuit, no utility backup)
   - Battery interactive capabilities, if applicable
4. A one-page site map must accompany this application. This document must indicate the location of the generator(s), batteries (if any), lockable disconnect switch (unless otherwise approved by the electric utility, the disconnect switch shall be installed at the electric utility meter location), and point of connection with the utility system. The installation address, current account number at that address (gas and electric), and the installer's name and telephone number must also be included on the site map.

D: INCENTIVE REQUEST CALCULATION

1. Total system rated net continuous output (Section B, line 5 *above):* _____ AC Watts
2. Incentive Calculation (Calculate appropriate incentive based on system rated output: **Complete either power only or heat and power and complete only one tier in that category**):

A. Power Only:

a. Tier I (0 to 10,000 Watts System Rated Output): _____ (Watts) x $4.00/Watt = $_____
b. Tier II (10,001 to 99,999 Watts System Rated Output): (_____ -10,000 Watts) x $3.00/Watt + $40,000 = $_____
c. Tier III (100,000 to 499,999 Watts System Rated Output): (_____ - 99,999Watts) x $1.50/Watt + $309,997 = $_____
d. Tier IV (500,000 to 1,000,000 Watts System Rated Output): (_____ - 499,999 Watts) x $0.15/Watt + $909,997 = $_____

B. Heat and Power:

a. Tier I (0 to 10,000 Watts System Rated Output): _____ (Watts) x $5.00/Watt = $_____
b. Tier II (10,001 to 99,999 Watts System Rated Output): (90,000 -10,000 Watts) x $3.75/Watt + $50,000 = $350,000
c. Tier III (100,000 to 499,999 Watts System Rated Output): (_____ - 99,999 Watts) x $2.00/Watt + $387,496 = $_____
d. Tier IV (500,000 to 1,000,000 Watts System Rated Output): (_____ - 499,999 Watts) x $0.65/Watt + $1,187,496 = _____

3. Requested Incentive (Enter the value from either 2A or 2B): $_____ (Maximum incentive for power only is $984,997 and for heat and power is $1,512,496)

4. Total Installed System Cost:: $_____
(Eligible installed system cost includes all equipment, installation, and applicable interconnection costs before *New Jersey's Clean Energy Program* incentive, less any other direct incentives. These costs must be documented by invoices from the vendor, as well as proof of customer purchase (copy of customer's check, credit card receipt or lease contract and documentation) submitted with the final paperwork packet.)
5. Maximum allowable incentive (Multiply line D4 by 30% for Power Only or 40% for Heat and Power): $_____
6. Final incentive amount (Input the lesser of line D3 or D5): $_____

E: WARRANTY INFORMATION

1. Biomass Technology: _____ Years 2. Installation: _____ Years 3. Parts and Labor: _____ Years

An all Inclusive 5 year warranty is required for all systems Installed through *New Jersey's Clean Energy Program.*

Revised June 2010

New Jersey Clean Energy Program

Technical Worksheet – Biomass Equipment

Please read carefully all of the following information. With the help of your installation contractor, fully complete sections A through E of this technical worksheet for biomass equipment.

GENERAL TERMS AND CONDITIONS

Rebates will be processed based on the date *New Jersey's* ***Clean Energy*** *Program*™ (NJCEP) approves the final paperwork packet, not on the purchase date of the equipment. Program procedures and rebates are subject to change or cancellation without notice. To qualify for a rebate, the applicant must comply with all *Renewable Energy Incentive Program* (REIP) eligibility requirements, terms and conditions, installation requirements and submit all completed forms. For more information about NJCEP or for assistance in completing applications or forms, please see NJCleanEnergy.com or call 866-NJSMART.

INSTALLATION REQUIREMENTS

Equipment installation must meet the following minimum requirements in order to qualify for payment under the provisions set by NJCEP. Proposed changes to the requirements will be considered, but they must be documented by the applicant or installation contractor and approved by NJCEP. These requirements are not all-encompassing and are intended only to address certain minimum safety and efficiency standards.

A: CODE REQUIREMENTS

1. The installation must comply with the provisions of the National Electrical Code and all other applicable local, state, and federal codes and permit requirements or practices.
2. All required permits must be properly obtained and posted.
3. NJCEP inspection must be performed before the local building code enforcement office. If not, this may delay the processing of the rebate.
4. All required inspections must be performed (Electrical/NEC, local building codes enforcement office, etc.). Note in order to ensure compliance with provisions of the NEC, an inspection by a state-licensed electrical inspector is mandatory.

B: BIOMASS INSTALLATION REQUIREMENTS

1. A biomass sustainability determination from the New Jersey Department of Environmental Protection (NJDEP) must accompany this document.
2. The installation must comply with manufacturer's instructions.
3. The installation must comply with the interconnection and protection requirements of the local electric distribution company.
4. The installation must comply with provisions of IEEE 519 - Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems, as appropriate. Input and output protection functions should be in compliance with ANSI C37.2 device function number specifications.
5. The system should be equipped with the following capabilities, indicators and/or controls:
   - On/off control on site
   - Operating mode setting indication - parallel vs. stand-alone
   - AC and DC overcurrent protection or equivalent
   - Operating status indicator
   - Remote control and data acquisition capability
   - Electric load-following capability
6. Warning labels must be posted on the control panels and junction boxes indicating that the circuits are energized by an alternate power source independent of utility-provided power.
7. All interconnecting wires must be copper. (Some provisions may be made for aluminum wiring; approval must be received from utility engineering departments prior to acceptance.)
8. All wiring splices must be contained in UL-approved workboxes.
9. Operating instructions must be posted on or near the system, or on file with facilities operation and maintenance documents.

C: BIOMASS SYSTEM EVALUATION CRITERIA

Biomass projects will also be evaluated based on the following three criteria:

1. **Fuel Sustainability**

Each project must document the sustainability of the fuel source. This information includes the percentage of fuel input that is derived from a certified, sustainable source. Landfill gas facilities should document that the methane fuel has a minimum availability of 5 years.

2. **Close Loop Operational Process**

Documentation must include a description of the operational process and the associated equipment. A functional use for any refuse by-products must be documented. Landfill gas facilities must describe current process/use of flare gas and document incremental benefits related to the proposed application.

3. **Proper Emissions Levels**

The project must meet the emission standards specified in the New Jersey State of the Art Manual (SOTA). *New Jersey's Clean Energy Program* application will not be approved until permit approval documentation has been provided.

New Jersey Clean Energy Program

Technical Worksheet – Biomass Equipment

A: APPLICANT INFORMATION

Applicant Name: _____ Application Number: _____
(Assigned by the NJCEP MM/ NJBPU)

B: EQUIPMENT INFORMATION

1. Electrical Generator Manufacturer: _____
2. Electric Generator Model: _____
3. Capacity Rating of each Electric Generator: _____ AC Watts
4. Number of Electric Generators: _____
5. Total System Rated Net Continuous Output: _____ AC Watts (No. of Electric Generators x Capacity Rating)

C: PROPOSED INSTALLATION/INTERCONNECTION INFORMATION

1. Generator Location: _____
2. Utility-Accessible AC Disconnect Switch Location: _____
3. System Type and Mode of Operation:
   - Grid-connected operating mode (parallel/capable of synchronizing with the electric grid; capable of automatically reducing load to prevent back feeding the meter)
   - Grid-connected/grid-independent operating mode (parallel/capable of synchronizing with the electric grid and capable of switching automatically to independent, load-follow operation when the grid is unavailable; automatic operation and synchronization of multiple power plants connected in parallel)
   - Stand-alone load-following operation (system confined to an independent circuit, no utility backup)
   - Battery interactive capabilities, if applicable
4. A one-page site map must accompany this application. This document must indicate the location of the generator(s), batteries (if any), lockable disconnect switch (unless otherwise approved by the electric utility, the disconnect switch shall be installed at the electric utility meter location), and point of connection with the utility system. The installation address, current account number at that address (gas and electric), and the installer's name and telephone number must also be included on the site map.

D: INCENTIVE REQUEST CALCULATION

1. Total system rated net continuous output (Section B, line 5 *above):* _____ AC Watts
2. Incentive Calculation (Calculate appropriate incentive based on system rated output: **Complete either power only or heat and power and complete only one tier in that category**):

A. Power Only:

a. Tier I (0 to 10,000 Watts System Rated Output): _____ (Watts) x $4.00/Watt = $_____
b. Tier II (10,001 to 99,999 Watts System Rated Output): (_____ -10,000 Watts) x $3.00/Watt + $40,000 = $_____
c. Tier III (100,000 to 499,999 Watts System Rated Output): (_____ - 99,999Watts) x $1.50/Watt + $309,997 = $_____
d. Tier IV (500,000 to 1,000,000 Watts System Rated Output): (_____ - 499,999 Watts) x $0.15/Watt + $909,997 = $_____

B. Heat and Power:

a. Tier I (0 to 10,000 Watts System Rated Output): _____ (Watts) x $5.00/Watt = $_____
b. Tier II (10,001 to 99,999 Watts System Rated Output): (_____ -10,000 Watts) x $3.75/Watt + $50,000 = $_____
c. Tier III (100,000 to 499,999 Watts System Rated Output): (130,000 - 99,999 Watts) x $2.00/Watt + $387,496 = $ 547,498
d. Tier IV (500,000 to 1,000,000 Watts System Rated Output): (_____ - 499,999 Watts) x $0.65/Watt + $1,187,496 = _____

3. Requested Incentive (Enter the value from either 2A or 2B): $_____ (Maximum incentive for power only is $984,997 and for heat and power is $1,512,496)

4. Total Installed System Cost:: $_____
(Eligible installed system cost includes all equipment, installation, and applicable interconnection costs before *New Jersey's Clean Energy Program* incentive, less any other direct incentives. These costs must be documented by invoices from the vendor, as well as proof of customer purchase (copy of customer's check, credit card receipt or lease contract and documentation) submitted with the final paperwork packet.)
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Revised June 2010

New Jersey Clean Energy Program

Technical Worksheet – Biomass Equipment

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2. **Close Loop Operational Process**

Documentation must include a description of the operational process and the associated equipment. A functional use for any refuse by-products must be documented. Landfill gas facilities must describe current process/use of flare gas and document incremental benefits related to the proposed application.

3. **Proper Emissions Levels**

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New Jersey Clean Energy Program

Technical Worksheet – Biomass Equipment

A: APPLICANT INFORMATION

Applicant Name: _____ Application Number: _____
(Assigned by the NJCEP MM/ NJBPU)

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4. Number of Electric Generators: _____
5. Total System Rated Net Continuous Output: _____ AC Watts (No. of Electric Generators x Capacity Rating)

C: PROPOSED INSTALLATION/INTERCONNECTION INFORMATION

1. Generator Location: _____
2. Utility-Accessible AC Disconnect Switch Location: _____
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   - Grid-connected/grid-independent operating mode (parallel/capable of synchronizing with the electric grid and capable of switching automatically to independent, load-follow operation when the grid is unavailable; automatic operation and synchronization of multiple power plants connected in parallel)
   - Stand-alone load-following operation (system confined to an independent circuit, no utility backup)
   - Battery interactive capabilities, if applicable
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D: INCENTIVE REQUEST CALCULATION

1. Total system rated net continuous output (Section B, line 5 *above):* _____ AC Watts
2. Incentive Calculation (Calculate appropriate incentive based on system rated output: **Complete either power only or heat and power and complete only one tier in that category**):

A. Power Only:

a. Tier I (0 to 10,000 Watts System Rated Output): _____ (Watts) x $4.00/Watt = $_____
b. Tier II (10,001 to 99,999 Watts System Rated Output): (_____ -10,000 Watts) x $3.00/Watt + $40,000 = $_____
c. Tier III (100,000 to 499,999 Watts System Rated Output): (_____ - 99,999Watts) x $1.50/Watt + $309,997 = $_____
d. Tier IV (500,000 to 1,000,000 Watts System Rated Output): (_____ - 499,999 Watts) x $0.15/Watt + $909,997 = $_____

B. Heat and Power:

a. Tier I (0 to 10,000 Watts System Rated Output): _____ (Watts) x $5.00/Watt = $_____
b. Tier II (10,001 to 99,999 Watts System Rated Output): (_____ -10,000 Watts) x $3.75/Watt + $50,000 = $_____
c. Tier III (100,000 to 499,999 Watts System Rated Output): (250,000 - 99,999 Watts) x $2.00/Watt + $387,496 = $ 687,498
d. Tier IV (500,000 to 1,000,000 Watts System Rated Output): (_____ - 499,999 Watts) x $0.65/Watt + $1,187,496 = _____

3. Requested Incentive (Enter the value from either 2A or 2B): $_____ (Maximum incentive for power only is $984,997 and for heat and power is $1,512,496)

4. Total Installed System Cost:: $_____
(Eligible installed system cost includes all equipment, installation, and applicable interconnection costs before *New Jersey's Clean Energy Program* incentive, less any other direct incentives. These costs must be documented by invoices from the vendor, as well as proof of customer purchase (copy of customer's check, credit card receipt or lease contract and documentation) submitted with the final paperwork packet.)
5. Maximum allowable incentive (Multiply line D4 by 30% for Power Only or 40% for Heat and Power): $_____
6. Final incentive amount (Input the lesser of line D3 or D5): $_____

E: WARRANTY INFORMATION

1. Biomass Technology: _____ Years 2. Installation: _____ Years 3. Parts and Labor: _____ Years

An all Inclusive 5 year warranty is required for all systems Installed through *New Jersey's Clean Energy Program.*

Revised June 2010

Appendix G

FACILITY DATA FORM

*Complete one Facility Data Form for **each building** that you would like to have audited.*

APPLYING AGENCY: The Jersey City Public Schools

☒ This Entity owns the facility described below or has provided documentation to show that the applicant pays the utility bills and has permission from building owner to perform audit and install energy efficient equipment.

This building is served by (check all that apply):

☐	Atlantic City Electric
☐	Jersey Central Power & Light
☐	New Jersey Natural Gas
☐	Elizabethtown Gas
☒	Public Service Electric and Gas
☐	Rockland Electric Company
☒	South Jersey Gas
☐	A non-regulated energy company (oil, propane, municipal, cooperative, etc.*): _____

**Note: buildings that are NOT served by at least one regulated utility will be eligible to receive incentives on a limited basis, depending on Energy Efficiency and Conservation Block Grant funding availability. Applicant must check off the appropriate box above for buildings in this situation.*

FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name Cunningham Center ECC			
Street Address 218 Ocean Avenue		**County** Hudson	
City Jersey City		**State** NJ	**Zip** 07305
Facility's Description One Story Masonry Non-Combustible			
Total Sq Ft 12100	**Year Built** 2005	**Hours/Week Occupied** 60-75	**Number of Employees** 14

Building Type (Check only one of the following):

☐	Emergency Services	☐	Garage
☐	Center/Meeting Hall/Library	☐	Offices
☐	Recreation/Entertainment/Parks	☐	Religious
☒	School	☐	School: College or University
☐	Water Treatment/Pumping	☐	Other: _____

ENERGY DATA

Please complete the energy information below for the most recent 12 month period available. In order to gain a complete picture of the facility's energy use, be sure to include all types of energy used by the facility. Do not include vehicle fuel.

The Data Below is for the 12 Month Period: ___/___/_____ to ___/___/_____

ELECTRICITY

Electric Utility Name & Account Number(s) PSE&G 6727276900	
Annual kWh Use 176600	Annual Electricity Cost $8264.62
Max Summer kW 17920	Max Winter kW 14680

NATURAL GAS

Natural Gas Utility Name & Account Number(s) N/A	
Annual Use in Therms	Annual Natural Gas Cost

FUEL OIL

Fuel Oil Utility Name & Account Number(s) N/A	
Annual Use in Gallons	Annual Fuel Oil Cost

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Propane Cost**

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

Other Fuel Type:	
Annual Energy Use (indicate units)	**Annual Energy Cost**

Please mail, fax, or email your completed application to:

New Jersey's Clean Energy Program
c/o TRC Energy Services
900 Route 9 North, Suite 404
Woodbridge, NJ 07095
Fax: 732-855-0422
Email: LGEA@trcsolutions.com

For further questions, please call 866-657-6278 x4 or visit our website at www.NJCleanEnergy.com/LGEA

STAFF USE ONLY

Date Received: _____ Project No.: _____

FACILITY DATA FORM

*Complete one Facility Data Form for **each building** that you would like to have audited.*

APPLYING AGENCY: The Jersey City Public Schools

☒ This Entity owns the facility described below or has provided documentation to show that the applicant pays the utility bills and has permission from building owner to perform audit and install energy efficient equipment.

This building is served by (check all that apply):

☐	Atlantic City Electric
☐	Jersey Central Power & Light
☐	New Jersey Natural Gas
☐	Elizabethtown Gas
☒	Public Service Electric and Gas
☐	Rockland Electric Company
☒	South Jersey Gas
☒	A non-regulated energy company (oil, propane, municipal, cooperative, etc.*): Hess Electric

**Note: buildings that are NOT served by at least one regulated utility will be eligible to receive incentives on a limited basis, depending on Energy Efficiency and Conservation Block Grant funding availability. Applicant must check off the appropriate box above for buildings in this situation.*

FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name Dickinson High School			
Street Address 2 Palisades Avenue		**County** Hudson	
City Jersey City		**State** NJ	**Zip** 07305
Facility's Description Six Story Masonry Non-Combustible			
Total Sq Ft 356000	**Year Built** 1904	**Hours/Week Occupied** 100-110	**Number of Employees** 2763

Building Type (Check only one of the following):

☐	Emergency Services	☐	Garage
☐	Center/Meeting Hall/Library	☐	Offices
☐	Recreation/Entertainment/Parks	☐	Religious
☒	School	☐	School: College or University
☐	Water Treatment/Pumping	☐	Other: _____

ENERGY DATA

Please complete the energy information below for the most recent 12 month period available. In order to gain a complete picture of the facility's energy use, be sure to include all types of energy used by the facility. Do not include vehicle fuel.

The Data Below is for the 12 Month Period: ___/___/_____ to ___/___/_____

ELECTRICITY

Electric Utility Name & Account Number(s)	
PSE&G 4201024709 6610113106** Hess Electric 519264 South Jersey 6610113106 **	
Annual kWh Use 2213087 2967 1344643	**Annual Electricity Cost** $69293.12 $249.06 $127779.63 $57143.94
Max Summer kW 193617 49 186324	**Max Winter kW** 169923 719 169923

NATURAL GAS

Natural Gas Utility Name & Account Number(s)	
PSE&G 6608480407 Hess 447201	
Annual Use in Therms 2204.209 217.87	**Annual Natural Gas Cost** $821.27 $1953.14

FUEL OIL

Fuel Oil Utility Name & Account Number(s) [redacted] FINCH FUEL 68400-7	
Annual Use in Gallons 13446	**Annual Fuel Oil Cost** $29,176.52

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Propane Cost**

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

Other Fuel Type:	
Annual Energy Use (indicate units)	**Annual Energy Cost**

Please mail, fax, or email your completed application to:

New Jersey's Clean Energy Program
c/o TRC Energy Services
900 Route 9 North, Suite 404
Woodbridge, NJ 07095
Fax: 732-855-0422
Email: LGEA@trcsolutions.com

For further questions, please call 866-657-6278 x4 or visit our website at www.NJCleanEnergy.com/LGEA

STAFF USE ONLY

Date Received: _____ Project No.: _____

FACILITY DATA FORM

Complete one Facility Data Form for each building that you would like to have audited.

APPLYING AGENCY: The Jersey City Public Schools

☒ This Entity owns the facility described below or has provided documentation to show that the applicant pays the utility bills and has permission from building owner to perform audit and install energy efficient equipment.

This building is served by (check all that apply):

☐	Atlantic City Electric
☐	Jersey Central Power & Light
☐	New Jersey Natural Gas
☐	Elizabethtown Gas
☒	Public Service Electric and Gas
☐	Rockland Electric Company
☒	South Jersey Gas
☐	A non-regulated energy company (oil, propane, municipal, cooperative, etc.*): Hess Electric

**Note: buildings that are NOT served by at least one regulated utility will be eligible to receive incentives on a limited basis, depending on Energy Efficiency and Conservation Block Grant funding availability. Applicant must check off the appropriate box above for buildings in this situation.*

FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name Ferris High School			
Street Address 35 Colgate Street		**County** Hudson	
City Jersey City		**State** NJ	**Zip** 07305
Facility's Description Four Story Masonry Non-Combustible			
Total Sq Ft 282115	**Year Built** 1969	**Hours/Week Occupied** 100-110	**Number of Employees** 1893

Building Type (Check only one of the following):

☐	Emergency Services	☐	Garage
☐	Center/Meeting Hall/Library	☐	Offices
☐	Recreation/Entertainment/Parks	☐	Religious
☒	School	☐	School: College or University
☐	Water Treatment/Pumping	☐	Other: _____

ENERGY DATA

Please complete the energy information below for the most recent 12 month period available. In order to gain a complete picture of the facility's energy use, be sure to include all types of energy used by the facility. Do not include vehicle fuel.

The Data Below is for the 12 Month Period: ___/___/_____ to ___/___/_____

ELECTRICITY

Electric Utility Name & Account Number(s)	
PSE&G 6661869518** 4200554704 South Jersey 6661869518 **	
Annual kWh Use 423300 – 2922740	**Annual Electricity Cost** $16295.52 $45547.08 ** $424692.54
Max Summer kW 11700 – 256801	**Max Winter kW** 56400 – 244502

NATURAL GAS

Natural Gas Utility Name & Account Number(s)	
PSE&G 4200554704 4200188902 Hess 491645	
Annual Use in Therms 6208.146 177094.557 580.51	**Annual Natural Gas Cost** $2137.93 $191434.06 $5103.19

FUEL OIL

Fuel Oil Utility Name & Account Number(s) N/A	
Annual Use in Gallons	**Annual Fuel Oil Cost**

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Propane Cost**

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

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Annual Energy Use (indicate units)	**Annual Energy Cost**

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☒	South Jersey Gas
☒	A non-regulated energy company (oil, propane, municipal, cooperative, etc.*): Hess Gas Finch Fuel Oil

**Note: buildings that are NOT served by at least one regulated utility will be eligible to receive incentives on a limited basis, depending on Energy Efficiency and Conservation Block Grant funding availability. Applicant must check off the appropriate box above for buildings in this situation.*

FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name Liberty High School			
Street Address 299 Sip Avenue		**County** Hudson	
City Jersey City		**State** NJ	**Zip** 07305
Facility's Description Four Story Masonry Non-Combustible			
Total Sq Ft 33316	**Year Built** 1911	**Hours/Week Occupied** 100-110	**Number of Employees** 231

Building Type (Check only one of the following):

☐	Emergency Services	☐	Garage
☐	Center/Meeting Hall/Library	☐	Offices
☐	Recreation/Entertainment/Parks	☐	Religious
☒	School	☐	School: College or University
☐	Water Treatment/Pumping	☐	Other: _____

ENERGY DATA

Please complete the energy information below for the most recent 12 month period available. In order to gain a complete picture of the facility's energy use, be sure to include all types of energy used by the facility. Do not include vehicle fuel.

The Data Below is for the 12 Month Period: ___/___/_____ to ___/___/_____

ELECTRICITY

Electric Utility Name & Account Number(s)	
PSE&G 6622519803 6613278718** 6754702303 South Jersey 6613278718 ** 7943304104897	
Annual kWh Use 106720 13554 157760 00** 124000	**Annual Electricity Cost** $5555.70 $1919.22 $27002.58 $1050.71** $1043.
Max Summer kW 19040 00 16400 00 19040	**Max Winter kW** 13040 00 13360 00 13040

NATURAL GAS

Natural Gas Utility Name & Account Number(s)	
PSE&G 6754702303 Hess 447207	
Annual Use in Therms 296.802 4510.19	**Annual Natural Gas Cost** $231.03 $239.51

FUEL OIL

Fuel Oil Utility Name & Account Number(s)	
Finch Fuel 68400-16	
Annual Use in Gallons 10006	**Annual Fuel Oil Cost** $20710.21

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Propane Cost**

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

Other Fuel Type:	
Annual Energy Use (indicate units)	**Annual Energy Cost**

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For further questions, please call 866-657-6278 x4 or visit our website at www.NJCleanEnergy.com/LGEA

STAFF USE ONLY

Date Received: _____ Project No.: _____

FACILITY DATA FORM

Complete one Facility Data Form for each building that you would like to have audited.

APPLYING AGENCY: The Jersey City Public Schools

☒ This Entity owns the facility described below or has provided documentation to show that the applicant pays the utility bills and has permission from building owner to perform audit and install energy efficient equipment.

This building is served by (check all that apply):

☐	Atlantic City Electric
☐	Jersey Central Power & Light
☐	New Jersey Natural Gas
☐	Elizabethtown Gas
☒	Public Service Electric and Gas
☐	Rockland Electric Company
☒	South Jersey Gas
☒	A non-regulated energy company (oil, propane, municipal, cooperative, etc.*): Hess Gas

**Note: buildings that are NOT served by at least one regulated utility will be eligible to receive incentives on a limited basis, depending on Energy Efficiency and Conservation Block Grant funding availability. Applicant must check off the appropriate box above for buildings in this situation.*

FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name Lincoln High School			
Street Address 60 crescent Avenue		**County** Hudson	
City Jersey City		**State** NJ	**Zip** 07305
Facility's Description Four Story Masonry Non-Combustible			
Total Sq Ft 272931	**Year Built** 1919	***Hours/Week Occupied*** 100-110	**Number of Employees** 1207

Building Type (Check only one of the following):

☐	Emergency Services	☐	Garage
☐	Center/Meeting Hall/Library	☐	Offices
☐	Recreation/Entertainment/Parks	☐	Religious
☒	School	☐	School: College or University
☐	Water Treatment/Pumping	☐	Other: _____

ENERGY DATA

Please complete the energy information below for the most recent 12 month period available. In order to gain a complete picture of the facility's energy use, be sure to include all types of energy used by the facility. Do not include vehicle fuel.

The Data Below is for the 12 Month Period: ___/___/_____ to ___/___/_____

ELECTRICITY

Electric Utility Name & Account Number(s)	
PSE&G 4200649209** 4200014904 6593730408***South Jersey 4200649209 ** 8208212423247	
Annual kWh Use 753720 00** 1264400 2427 00*** 1188800	**Annual Electricity Cost** $50172. $81104.**$48871. $169.76 $261.***$59170
Max Summer kW 73920 00** 108400 238 00*** 108400	**Max Winter kW** 85920 00** 117600 244 00 *** 117600

NATURAL GAS

Natural Gas Utility Name & Account Number(s)	
Hess 447203 447169 492246	
Annual Use in Therms 16796.93 87.66 162.61	**Annual Natural Gas Cost** $153904.32 $877.49 $1527.52

FUEL OIL

Fuel Oil Utility Name & Account Number(s) N/A	
Annual Use in Gallons	**Annual Fuel Oil Cost**

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Propane Cost**

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

Other Fuel Type:	
Annual Energy Use (indicate units)	**Annual Energy Cost**

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For further questions, please call 866-657-6278 x4 or visit our website at www.NJCleanEnergy.com/LGEA

STAFF USE ONLY

Date Received: _____ Project No.: _____

FACILITY DATA FORM

*Complete one Facility Data Form for **each building** that you would like to have audited.*

APPLYING AGENCY: The Jersey City Public Schools

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This building is served by (check all that apply):

☐	Atlantic City Electric
☐	Jersey Central Power & Light
☐	New Jersey Natural Gas
☐	Elizabethtown Gas
☒	Public Service Electric and Gas
☐	Rockland Electric Company
☒	South Jersey Gas
☒	A non-regulated energy company (oil, propane, municipal, cooperative, etc.*): Hess Gas Finch Fuel Oil

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FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name McNair Academic High School			
Street Address 123 Coles Street		**County** Hudson	
City Jersey City		**State** NJ	**Zip** 07305
Facility's Description Five Story Masonry Non-Combustible			
Total Sq Ft 132311	**Year Built** 1910	**Hours/Week Occupied** 100-110	**Number of Employees** 808

Building Type (Check only one of the following):

☐	Emergency Services	☐	Garage
☐	Center/Meeting Hall/Library	☐	Offices
☐	Recreation/Entertainment/Parks	☐	Religious
☒	School	☐	School: College or University
☐	Water Treatment/Pumping	☐	Other: _____

ENERGY DATA

Please complete the energy information below for the most recent 12 month period available. In order to gain a complete picture of the facility's energy use, be sure to include all types of energy used by the facility. Do not include vehicle fuel.

The Data Below is for the 12 Month Period: ___/___/_____ to ___/___/_____

ELECTRICITY

Electric Utility Name & Account Number(s)	
PSE&G 4200478501** South Jersey 4200478501**	
Annual kWh Use 1798328 00 **	**Annual Electricity Cost** $69575.09 *190406.96**
Max Summer kW 174616 00**	**Max Winter kW** 132910 00**

NATURAL GAS

Natural Gas Utility Name & Account Number(s)	
Hess 447195	
Annual Use in Therms 4510.19	**Annual Natural Gas Cost** $40935.40

FUEL OIL

Fuel Oil Utility Name & Account Number(s)	
Finch Fuel Oil 68400-25	
Annual Use in Gallons 147	**Annual Fuel Oil Cost** $310.04

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Propane Cost**

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

Other Fuel Type:	
Annual Energy Use (indicate units)	**Annual Energy Cost**

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STAFF USE ONLY

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FACILITY DATA FORM

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APPLYING AGENCY: The Jersey City Public Schools

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This building is served by (check all that apply):

☐	Atlantic City Electric
☐	Jersey Central Power & Light
☐	New Jersey Natural Gas
☐	Elizabethtown Gas
☒	Public Service Electric and Gas
☐	Rockland Electric Company
☒	South Jersey Gas
☒	A non-regulated energy company (oil, propane, municipal, cooperative, etc.*): Finch Fuel Oil

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FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name Snyder High School			
Street Address 239 Bergen Avenue		**County** Hudson	
City Jersey City		**State** NJ	**Zip** 07305
Facility's Description Five Story Masonry Non-Combustible			
Total Sq Ft 209500	**Year Built** 1923	**Hours/Week Occupied** 100-110	**Number of Employees** 1306

Building Type (Check only one of the following):

☐	Emergency Services	☐	Garage
☐	Center/Meeting Hall/Library	☐	Offices
☐	Recreation/Entertainment/Parks	☐	Religious
☒	School	☐	School: College or University
☐	Water Treatment/Pumping	☐	Other: _____

ENERGY DATA

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The Data Below is for the 12 Month Period: ___/___/_____ to ___/___/_____

ELECTRICITY

Electric Utility Name & Account Number(s)	
PSE&G 6541540608 ** 4200089718 South Jersey 6541540608 **	
Annual kWh Use 10236 00 ** 2212594	**Annual Electricity Cost** $1268.70 $1101.39** $327132.93
Max Summer kW 1590 00** 2147914	**Max Winter kW** 564 00** 168926

NATURAL GAS

Natural Gas Utility Name & Account Number(s)	
N/A	
Annual Use in Therms	**Annual Natural Gas Cost**

FUEL OIL

Fuel Oil Utility Name & Account Number(s)	
Finch Fuel Oil 68400-25	
Annual Use in Gallons 40860	**Annual Fuel Oil Cost** $88115.03

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Propane Cost**

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

Other Fuel Type:	
Annual Energy Use (indicate units)	**Annual Energy Cost**

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STAFF USE ONLY

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FACILITY DATA FORM

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APPLYING AGENCY: The Jersey City Public Schools

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This building is served by (check all that apply):

☐	Atlantic City Electric
☐	Jersey Central Power & Light
☐	New Jersey Natural Gas
☐	Elizabethtown Gas
☒	Public Service Electric and Gas
☐	Rockland Electric Company
☒	South Jersey Gas
☒	A non-regulated energy company (oil, propane, municipal, cooperative, etc.*): Hess Electric

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FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name Middle School #4			
Street Address 107 Bright Street		**County** Hudson	
City Jersey City		**State** NJ	**Zip** 070305
Facility's Description Three Story Masonry Non-Combustible			
Total Sq Ft 169678	**Year Built** 2006	**Hours/Week Occupied** 90-100	**Number of Employees** 991

Building Type (Check only one of the following):

☐	Emergency Services	☐	Garage
☐	Center/Meeting Hall/Library	☐	Offices
☐	Recreation/Entertainment/Parks	☐	Religious
☒	School	☐	School: College or University
☐	Water Treatment/Pumping	☐	Other: _____

ENERGY DATA

Please complete the energy information below for the most recent 12 month period available. In order to gain a complete picture of the facility's energy use, be sure to include all types of energy used by the facility. Do not include vehicle fuel.

The Data Below is for the 12 Month Period: ___/___/_____ to ___/___/_____

ELECTRICITY

Electric Utility Name & Account Number(s)	
PSE&G 4200421100** South Jersey 4200421100 ** Hess Electric 519266	
Annual kWh Use 00 1736690** 983771	**Annual Electricity Cost** $68796.16 $52557.38** $95146.09
Max Summer kW 00 181555 129502	**Max Winter kW** 00 123569 123569

NATURAL GAS

Natural Gas Utility Name & Account Number(s)	
PSE&G 4200421100**	
Annual Use in Therms 37804.423	**Annual Natural Gas Cost** $42072.89

FUEL OIL

Fuel Oil Utility Name & Account Number(s)	
N/A	
Annual Use in Gallons	**Annual Fuel Oil Cost**

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Propane Cost**

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

Other Fuel Type:	
Annual Energy Use (indicate units)	**Annual Energy Cost**

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STAFF USE ONLY

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FACILITY DATA FORM

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APPLYING AGENCY: The Jersey City Public Schools

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This building is served by (check all that apply):

☐	Atlantic City Electric
☐	Jersey Central Power & Light
☐	New Jersey Natural Gas
☐	Elizabethtown Gas
☒	Public Service Electric and Gas
☐	Rockland Electric Company
☐	South Jersey Gas
☒	A non-regulated energy company (oil, propane, municipal, cooperative, etc.*): Finch Fuel Oil

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FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name: Middle School #7			
Street Address: 222 Laidlaw Avenue		County: Hudson	
City: Jersey City		State: NJ	Zip: 07305
Facility's Description: Four Story Masonry Non-Combustible			
Total Sq Ft: 163855	Year Built: 2007	Hours/Week Occupied: 90-100	Number of Employees: 891

Building Type (Check only one of the following):

☐	Emergency Services	☐	Garage
☐	Center/Meeting Hall/Library	☐	Offices
☐	Recreation/Entertainment/Parks	☐	Religious
☒	School	☐	School: College or University
☐	Water Treatment/Pumping	☐	Other: _____

ENERGY DATA

Please complete the energy information below for the most recent 12 month period available. In order to gain a complete picture of the facility's energy use, be sure to include all types of energy used by the facility. Do not include vehicle fuel.

The Data Below is for the 12 Month Period: ___/___/_____ to ___/___/_____

ELECTRICITY

Electric Utility Name & Account Number(s)	
PSE&G 4200639009	
Annual kWh Use 3082200	**Annual Electricity Cost** $451157.86
Max Summer kW 258600	**Max Winter kW** 242700

NATURAL GAS

Natural Gas Utility Name & Account Number(s)	
PSE&G 4200639009	
Annual Use in Therms 92419.603	**Annual Natural Gas Cost** $ 100229.35

FUEL OIL

Fuel Oil Utility Name & Account Number(s)	
Finch Fuel Oil 68400-32	
Annual Use in Gallons 575	**Annual Fuel Oil Cost** $ 1158.63

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Propane Cost**

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

Other Fuel Type:	
Annual Energy Use (indicate units)	**Annual Energy Cost**

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STAFF USE ONLY

Date Received: _____ Project No.: _____

FACILITY DATA FORM

Complete one Facility Data Form for each building that you would like to have audited.

APPLYING AGENCY: The Jersey City Public Schools

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This building is served by (check all that apply):

☐	Atlantic City Electric
☐	Jersey Central Power & Light
☐	New Jersey Natural Gas
☐	Elizabethtown Gas
☒	Public Service Electric and Gas
☐	Rockland Electric Company
☐	South Jersey Gas
☒	A non-regulated energy company (oil, propane, municipal, cooperative, etc.*): Hess Gas Finch Fuel Oil

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FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name Middle School #40			
Street Address 88 Gates Avenue		**County** Hudson	
City Jersey City		**State** NJ	**Zip** 07305
Facility's Description Four Story Masonry Non-Combustible			
Total Sq Ft 132483	**Year Built** 1963	**Hours/Week Occupied** 90-100	**Number of Employees** 511

Building Type (Check only one of the following):

☐	Emergency Services	☐	Garage
☐	Center/Meeting Hall/Library	☐	Offices
☐	Recreation/Entertainment/Parks	☐	Religious
☒	School	☐	School: College or University
☐	Water Treatment/Pumping	☐	Other: _____

ENERGY DATA

Please complete the energy information below for the most recent 12 month period available. In order to gain a complete picture of the facility's energy use, be sure to include all types of energy used by the facility. Do not include vehicle fuel.

The Data Below is for the 12 Month Period: ___/___/_____ to ___/___/_____

ELECTRICITY

Electric Utility Name & Account Number(s)	
PSE&G 4200472201	
Annual kWh Use 694080	**Annual Electricity Cost** $32063.15
Max Summer kW 53760	**Max Winter kW** 56800

NATURAL GAS

Natural Gas Utility Name & Account Number(s)	
PSE&G 4200472201 Hess 447185	
Annual Use in Therms 72663.565 7306.59	**Annual Natural Gas Cost** $21699.48 $64577.48

FUEL OIL

Fuel Oil Utility Name & Account Number(s)	
Finch Fuel Oil 68400-20	
Annual Use in Gallons 4000	**Annual Fuel Oil Cost** $9326.40

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Propane Cost**

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

Other Fuel Type:	
Annual Energy Use (indicate units)	**Annual Energy Cost**

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STAFF USE ONLY

Date Received: _____ Project No.: _____

FACILITY DATA FORM

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APPLYING AGENCY: The Jersey City Public Schools

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This building is served by (check all that apply):

☐	Atlantic City Electric
☐	Jersey Central Power & Light
☐	New Jersey Natural Gas
☐	Elizabethtown Gas
☒	Public Service Electric and Gas
☐	Rockland Electric Company
☒	South Jersey Gas
☒	A non-regulated energy company (oil, propane, municipal, cooperative, etc.*): Hess Gas Finch Fuel Oil

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FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name Middle School #41			
Street Address 59 Wilkinson Avenue		**County** Hudson	
City Jersey City		**State** NJ	**Zip** 07305
Facility's Description Four Story Masonry Non-Combustible			
Total Sq Ft 140467	**Year Built** 1977	**Hours/Week Occupied** 90-100	**Number of Employees** 574

Building Type (Check only one of the following):

☐	Emergency Services	☐	Garage
☐	Center/Meeting Hall/Library	☐	Offices
☐	Recreation/Entertainment/Parks	☐	Religious
☒	School	☐	School: College or University
☐	Water Treatment/Pumping	☐	Other: _____

ENERGY DATA

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The Data Below is for the 12 Month Period: ___/___/_____ to ___/___/_____

ELECTRICITY

Electric Utility Name & Account Number(s)	
PSE&G 4200684306** South Jersey 4200684306** 6759920007	
Annual kWh Use 1564668 00** 71000	**Annual Electricity Cost** $57861.57 $179420.87** $10733.48
Max Summer kW 106656 00** 3320	**Max Winter kW** 145200 00** 9360

NATURAL GAS

Natural Gas Utility Name & Account Number(s)	
PSE&G 4200684306 Hess 447193	
Annual Use in Therms 23282.267 1771.85	**Annual Natural Gas Cost** $6841.64 $13073.35

FUEL OIL

Fuel Oil Utility Name & Account Number(s)	
Finch Fuel Oil 68400-21	
Annual Use in Gallons 57004	**Annual Fuel Oil Cost** $123437.11

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Propane Cost**

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

Other Fuel Type:	
Annual Energy Use (indicate units)	**Annual Energy Cost**

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STAFF USE ONLY

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FACILITY DATA FORM

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APPLYING AGENCY: The Jersey City Public Schools

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This building is served by (check all that apply):

☐	Atlantic City Electric
☐	Jersey Central Power & Light
☐	New Jersey Natural Gas
☐	Elizabethtown Gas
☒	Public Service Electric and Gas
☐	Rockland Electric Company
☐	South Jersey Gas
☒	A non-regulated energy company (oil, propane, municipal, cooperative, etc.*): Hess Electric

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FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name Jersey City Infinity Institute			
Street Address 193 Old Bergen Road		**County** Hudson	
City Jersey City		**State** NJ	**Zip** 070305
Facility's Description Four Story Masonry Non-Combustible			
Total Sq Ft 60000	**Year Built** 1926	**Hours/Week Occupied** 45-60	**Number of Employees** 61

Building Type (Check only one of the following):

☐	Emergency Services	☐	Garage
☐	Center/Meeting Hall/Library	☐	Offices
☐	Recreation/Entertainment/Parks	☐	Religious
☒	School	☐	School: College or University
☐	Water Treatment/Pumping	☐	Other: _____

ENERGY DATA

Please complete the energy information below for the most recent 12 month period available. In order to gain a complete picture of the facility's energy use, be sure to include all types of energy used by the facility. Do not include vehicle fuel.

The Data Below is for the 12 Month Period: ___/___/_____ to ___/___/_____

ELECTRICITY

Electric Utility Name & Account Number(s) PSE&G 4200738309 Hess 519270	
Annual kWh Use 1041159 1050788	Annual Electricity Cost $50405.27 $84323.61
Max Summer kW 47950 0	Max Winter kW 179735 179735

NATURAL GAS

Natural Gas Utility Name & Account Number(s) N/A	
Annual Use in Therms	Annual Natural Gas Cost

FUEL OIL

Fuel Oil Utility Name & Account Number(s) N/A	
Annual Use in Gallons	Annual Fuel Oil Cost

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Propane Cost**

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

Other Fuel Type:	
Annual Energy Use (indicate units)	**Annual Energy Cost**

Please mail, fax, or email your completed application to:

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Woodbridge, NJ 07095
Fax: 732-855-0422
Email: LGEA@trcsolutions.com

For further questions, please call 866-657-6278 x4 or visit our website at www.NJCleanEnergy.com/LGEA

STAFF USE ONLY

Date Received: _____ Project No.: _____

FACILITY DATA FORM

Complete one Facility Data Form for each building that you would like to have audited.

APPLYING AGENCY: The Jersey City Public Schools

☒ This Entity owns the facility described below or has provided documentation to show that the applicant pays the utility bills and has permission from building owner to perform audit and install energy efficient equipment.

This building is served by (check all that apply):

☐	Atlantic City Electric
☐	Jersey Central Power & Light
☐	New Jersey Natural Gas
☐	Elizabethtown Gas
☒	Public Service Electric and Gas
☐	Rockland Electric Company
☒	South Jersey Gas
☒	A non-regulated energy company (oil, propane, municipal, cooperative, etc.*): Hess Electric

**Note: buildings that are NOT served by at least one regulated utility will be eligible to receive incentives on a limited basis, depending on Energy Efficiency and Conservation Block Grant funding availability. Applicant must check off the appropriate box above for buildings in this situation.*

FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name Academy I			
Street Address 209 Bergen Avenue		County Hudson	
City Jersey City		**State** NJ	**Zip** 07305
Facility's Description Four Story Masonry Non-Combustible			
Total Sq Ft 64884	**Year Built** 1966	**Hours/Week Occupied** 6:00am - 9:40pm	**Number of Employees** 469

Building Type (Check only one of the following):

☐	Emergency Services	☐	Garage
☐	Center/Meeting Hall/Library	☐	Offices
☐	Recreation/Entertainment/Parks	☐	Religious
☒	School	☐	School: College or University
☐	Water Treatment/Pumping	☐	Other: _____

ENERGY DATA

Please complete the energy information below for the most recent 12 month period available. In order to gain a complete picture of the facility's energy use, be sure to include all types of energy used by the facility. Do not include vehicle fuel.

The Data Below is for the 12 Month Period: ___/___/_____ to ___/___/_____

ELECTRICITY

Electric Utility Name & Account Number(s)	
PSEG 4200738309 Hess 519270	
Annual kWh Use 1041159 1050788	**Annual Electricity Cost** $50405.27 $84323.61
Max Summer kW 47950	**Max Winter kW** 179735

NATURAL GAS

Natural Gas Utility Name & Account Number(s)	
PSEG 4200738309	
Annual Use in Therms	Annual Natural Gas Cost $132.92

FUEL OIL

Fuel Oil Utility Name & Account Number(s)	
N/A	
Annual Use in Gallons	Annual Fuel Oil Cost

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	Annual Propane Cost

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

Other Fuel Type:	
Annual Energy Use (indicate units)	Annual Energy Cost

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STAFF USE ONLY

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FACILITY DATA FORM

*Complete one Facility Data Form for **each building** that you would like to have audited.*

APPLYING AGENCY: The Jersey City Public Schools

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This building is served by (check all that apply):

☐	Atlantic City Electric
☐	Jersey Central Power & Light
☐	New Jersey Natural Gas
☐	Elizabethtown Gas
☒	Public Service Electric and Gas
☐	Rockland Electric Company
☒	South Jersey Gas
☒	A non-regulated energy company (oil, propane, municipal, cooperative, etc.*): Hess Gas

**Note: buildings that are NOT served by at least one regulated utility will be eligible to receive incentives on a limited basis, depending on Energy Efficiency and Conservation Block Grant funding availability. Applicant must check off the appropriate box above for buildings in this situation.*

FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name P.S. #1			
Street Address 128 Duncan Avenue		**County** Hudson	
City Jersey City		**State** NJ	**Zip** 07305
Facility's Description Five Story Non-Combustible Masonry Construction			
Total Sq Ft ~~50230~~ 56230	**Year Built** 1898	**Hours/Week Occupied** 60-75	**Number of Employees** 1744

Building Type (Check only one of the following):

☐	Emergency Services	☐	Garage
☐	Center/Meeting Hall/Library	☐	Offices
☐	Recreation/Entertainment/Parks	☐	Religious
☒	School	☐	School: College or University
☐	Water Treatment/Pumping	☐	Other: _____

ENERGY DATA

Please complete the energy information below for the most recent 12 month period available. In order to gain a complete picture of the facility's energy use, be sure to include all types of energy used by the facility. Do not include vehicle fuel.

The Data Below is for the 12 Month Period: ___/___/_____ to ___/___/_____

ELECTRICITY

Electric Utility Name & Account Number(s)	
PSE&G 6754702818** South Jersey 6754702818**	
Annual kWh Use 253965	**Annual Electricity Cost** $12949.33 $27326.63**
Max Summer kW 21720 00**	**Max Winter kW** 27180 00**

NATURAL GAS

Natural Gas Utility Name & Account Number(s)	
PSE&G 6754702818 Hess 447205	
Annual Use in Therms 983.934 98.00	**Annual Natural Gas Cost** $458.74 $835.37

FUEL OIL

Fuel Oil Utility Name & Account Number(s) N/A	
Annual Use in Gallons	**Annual Fuel Oil Cost**

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Propane Cost**

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

Other Fuel Type:	
Annual Energy Use (indicate units)	**Annual Energy Cost**

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STAFF USE ONLY

Date Received: _____ Project No.: _____

FACILITY DATA FORM

*Complete one Facility Data Form for **each building** that you would like to have audited.*

APPLYING AGENCY: The Jersey City Public Schools

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This building is served by (check all that apply):

☐	Atlantic City Electric
☐	Jersey Central Power & Light
☐	New Jersey Natural Gas
☐	Elizabethtown Gas
☒	Public Service Electric and Gas
☐	Rockland Electric Company
☒	South Jersey Gas
☒	A non-regulated energy company (oil, propane, municipal, cooperative, etc.*): Hess Electric/Gas Finch Fuel Oil

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FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name P.S. #3			
Street Address 111 Bright Street		**County** Hudson	
City Jersey City		**State** NJ	**Zip** 07305
Facility's Description Three Story Non-Combustible Masonry Construction			
Total Sq Ft 117939	**Year Built** 1909	**Hours/Week Occupied** 70-85	**Number of Employees** 731

Building Type (Check only one of the following):

☐	Emergency Services	☐	Garage
☐	Center/Meeting Hall/Library	☐	Offices
☐	Recreation/Entertainment/Parks	☐	Religious
☒	School	☐	School: College or University
☐	Water Treatment/Pumping	☐	Other: _____

ENERGY DATA

Please complete the energy information below for the most recent 12 month period available. In order to gain a complete picture of the facility's energy use, be sure to include all types of energy used by the facility. Do not include vehicle fuel.

The Data Below is for the 12 Month Period: ___/___/_____ to ___/___/_____

ELECTRICITY

Electric Utility Name & Account Number(s)	
PSE&G/South Jersey 4200421208/6541046905/6541763305/6506320001/6560044904 Hess 519268	
Annual kWh Use 2565744 216630 40500 128320 40960 1537097	**Annual Electricity Cost** $88446./$11470./$2477./$5733./$2611./$95146.
Max Summer kW 238897 19440 3020 8400 3120 219935	**Max Winter kW** 207747 2140 5760 14240 5760 207747

NATURAL GAS

Natural Gas Utility Name & Account Number(s)	
PSE&G 6754702818 Hess 447205	
Annual Use in Therms 42762.376 98.0	**Annual Natural Gas Cost** $46169.45 $835.37

FUEL OIL

Fuel Oil Utility Name & Account Number(s)	
Finch Fuel Oil 68460-01	
Annual Use in Gallons 11977	**Annual Fuel Oil Cost** $25770.22

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Propane Cost**

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

Other Fuel Type:	
Annual Energy Use (indicate units)	**Annual Energy Cost**

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STAFF USE ONLY

Date Received: _____ Project No.: _____

FACILITY DATA FORM

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APPLYING AGENCY: The Jersey City Public Schools

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This building is served by (check all that apply):

☐	Atlantic City Electric
☐	Jersey Central Power & Light
☐	New Jersey Natural Gas
☐	Elizabethtown Gas
☒	Public Service Electric and Gas
☐	Rockland Electric Company
☒	South Jersey Gas
☒	A non-regulated energy company (oil, propane, municipal), cooperative, etc.*): Hess Electric/Gas

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FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name P.S. #5			
Street Address 182 Mersaeles Street		**County** Hudson	
City Jersey City		**State** NJ	**Zip** 070305
Facility's Description Four Story Non-Combustible Masonry Construction			
Total Sq Ft 148409	**Year Built** 1914	**Hours/Week Occupied** 70-85	**Number of Employees** 762

Building Type (Check only one of the following):

☐	Emergency Services	☐	Garage
☐	Center/Meeting Hall/Library	☐	Offices
☐	Recreation/Entertainment/Parks	☐	Religious
☒	School	☐	School: College or University
☐	Water Treatment/Pumping	☐	Other: _____

ENERGY DATA

Please complete the energy information below for the most recent 12 month period available. In order to gain a complete picture of the facility's energy use, be sure to include all types of energy used by the facility. Do not include vehicle fuel.

The Data Below is for the 12 Month Period: ___/___/_____ to ___/___/_____

ELECTRICITY

Electric Utility Name & Account Number(s)	
PSE&G/South Jersey 4200098806 Hess 519265	
Annual kWh Use 508964 00 437526	**Annual Electricity Cost** $25175.50 $14747.05 $44693..58
Max Summer kW 34506 00 57109	**Max Winter kW** 61387 00 61387

NATURAL GAS

Natural Gas Utility Name & Account Number(s)	
Hess 447199	
Annual Use in Therms 5321.02	**Annual Natural Gas Cost** $60971.64

FUEL OIL

Fuel Oil Utility Name & Account Number(s)	
N/A	
Annual Use in Gallons	**Annual Fuel Oil Cost**

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Propane Cost**

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

Other Fuel Type:	
Annual Energy Use (indicate units)	**Annual Energy Cost**

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STAFF USE ONLY

Date Received: _____ Project No.: _____

FACILITY DATA FORM

*Complete one Facility Data Form for **each building** that you would like to have audited.*

APPLYING AGENCY: The Jersey City Public Schools

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This building is served by (check all that apply):

☐	Atlantic City Electric
☐	Jersey Central Power & Light
☐	New Jersey Natural Gas
☐	Elizabethtown Gas
☒	Public Service Electric and Gas
☐	Rockland Electric Company
☒	South Jersey Gas
☒	A non-regulated energy company (oil, propane, municipal, cooperative, etc.*): Hess Gas Finch Fuel Oil

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FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name P.S. #6			
Street Address 100 St Paul's Avenue		**County** Hudson	
City Jersey City		**State** NJ	**Zip** 070305
Facility's Description Five Story Non-Combustible Masonry Construction			
Total Sq Ft 148882	**Year Built** 1919	**Hours/Week Occupied** 70-85	**Number of Employees** 998

Building Type (Check only one of the following):

☐	Emergency Services	☐	Garage
☐	Center/Meeting Hall/Library	☐	Offices
☐	Recreation/Entertainment/Parks	☐	Religious
☒	School	☐	School: College or University
☐	Water Treatment/Pumping	☐	Other: _____

ENERGY DATA

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The Data Below is for the 12 Month Period: ___/___/_____ to ___/___/_____

ELECTRICITY

Electric Utility Name & Account Number(s)	
PSE&G/South Jersey 6567339705** 6729154705** 6729153008** 4200895501 S.J.9643248923247	
Annual kWh Use 107600** 17850** 11934** 783200** 783200	**Annual Electricity Cost** $5428. 1305.1024. 31765. 42668.11578.1921.1284.
Max Summer kW 7120 1032 540 16600 61600	**Max Winter kW** 18000 3438 2748 81600 81600

NATURAL GAS

Natural Gas Utility Name & Account Number(s)	
Hess 447177	
Annual Use in Therms 3553.31	**Annual Natural Gas Cost** $33123.90

FUEL OIL

Fuel Oil Utility Name & Account Number(s)	
Finch Fuel Oil 68400-03	
Annual Use in Gallons 12087	**Annual Fuel Oil Cost** $25298.31

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Propane Cost**

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

Other Fuel Type:	
Annual Energy Use (indicate units)	**Annual Energy Cost**

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STAFF USE ONLY

Date Received: _____ Project No.: _____

FACILITY DATA FORM

Complete one Facility Data Form for each building that you would like to have audited.

APPLYING AGENCY: The Jersey City Public Schools

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This building is served by (check all that apply):

☐	Atlantic City Electric
☐	Jersey Central Power & Light
☐	New Jersey Natural Gas
☐	Elizabethtown Gas
☒	Public Service Electric and Gas
☐	Rockland Electric Company
☒	South Jersey Gas
☒	A non-regulated energy company (oil, propane, municipal, cooperative, etc.*): Hess Gas Finch Fuel Oil

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FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name P.S. #8			
Street Address 96 Franklin Street		**County** Hudson	
City Jersey City		**State** NJ	**Zip** 070305
Facility's Description Four Story Non-Combustible Masonry Construction			
Total Sq Ft 169196	**Year Built** 1951	**Hours/Week Occupied** 70-85	**Number of Employees** 900

Building Type (Check only one of the following):

☐	Emergency Services	☐	Garage
☐	Center/Meeting Hall/Library	☐	Offices
☐	Recreation/Entertainment/Parks	☐	Religious
☒	School	☐	School: College or University
☐	Water Treatment/Pumping	☐	Other: _____

ENERGY DATA

Please complete the energy information below for the most recent 12 month period available. In order to gain a complete picture of the facility's energy use, be sure to include all types of energy used by the facility. Do not include vehicle fuel.

The Data Below is for the 12 Month Period: ___/___/_____ to ___/___/_____

ELECTRICITY

Electric Utility Name & Account Number(s)	
PSE&G/South Jersey 4200507501 6724523508	
Annual kWh Use 334000 71940.00	**Annual Electricity Cost** $16159.18 $35406.27 $7740.75 $4160.64
Max Summer kW 00 3470	**Max Winter kW** 54800 12960

NATURAL GAS

Natural Gas Utility Name & Account Number(s)	
PSE&G 6724523508 Hess 447179	
Annual Use in Therms 3008.519 366.766	**Annual Natural Gas Cost** $1090.03 $3275.14

FUEL OIL

Fuel Oil Utility Name & Account Number(s)	
Finch Fuel Oil 68400-04	
Annual Use in Gallons 39105	**Annual Fuel Oil Cost** $83351.11

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Propane Cost**

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

Other Fuel Type:	
Annual Energy Use (indicate units)	**Annual Energy Cost**

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STAFF USE ONLY

Date Received: _____ Project No.: _____

FACILITY DATA FORM

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APPLYING AGENCY: The Jersey City Public Schools

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This building is served by (check all that apply):

☐	Atlantic City Electric
☐	Jersey Central Power & Light
☐	New Jersey Natural Gas
☐	Elizabethtown Gas
☒	Public Service Electric and Gas
☐	Rockland Electric Company
☒	South Jersey Gas
☒	A non-regulated energy company (oil, propane, municipal, cooperative, etc.*): Hess Gas

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FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name P.S. #11			
Street Address 886 Bergen Avenue		**County** Hudson	
City Jersey City		**State** NJ	**Zip** 07305
Facility's Description Three Story Non-Combustible Masonry Construction			
Total Sq Ft 104509	**Year Built** 1968	**Hours/Week Occupied** 70-85	**Number of Employees** 888

Building Type (Check only one of the following):

☐	Emergency Services	☐	Garage
☐	Center/Meeting Hall/Library	☐	Offices
☐	Recreation/Entertainment/Parks	☐	Religious
☒	School	☐	School: College or University
☐	Water Treatment/Pumping	☐	Other: _____

ENERGY DATA

Please complete the energy information below for the most recent 12 month period available. In order to gain a complete picture of the facility's energy use, be sure to include all types of energy used by the facility. Do not include vehicle fuel.

The Data Below is for the 12 Month Period: ___/___/_____ to ___/___/_____

ELECTRICITY

Electric Utility Name & Account Number(s)	
PSE&G/South Jersey 6535485307	
Annual kWh Use 340275	**Annual Electricity Cost** $16948.27 $36613.59
Max Summer kW 29400	**Max Winter kW** 32625

NATURAL GAS

Natural Gas Utility Name & Account Number(s)	
PSE&G 6535485307 Hess 447206	
Annual Use in Therms 882.07 88.62	**Annual Natural Gas Cost** $412.95 $875.77

FUEL OIL

Fuel Oil Utility Name & Account Number(s)	
Finch Fuel Oil 68400-05	
Annual Use in Gallons 22827	**Annual Fuel Oil Cost** $49375.50

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Propane Cost**

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

Other Fuel Type:	
Annual Energy Use (indicate units)	**Annual Energy Cost**

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FACILITY DATA FORM

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APPLYING AGENCY: The Jersey City Public Schools

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This building is served by (check all that apply):

☐	Atlantic City Electric
☐	Jersey Central Power & Light
☐	New Jersey Natural Gas
☐	Elizabethtown Gas
☒	Public Service Electric and Gas
☐	Rockland Electric Company
☒	South Jersey Gas
☒	A non-regulated energy company (oil, propane, municipal, cooperative, etc.*): Hess Gas Finch Fuel Oil

**Note: buildings that are NOT served by at least one regulated utility will be eligible to receive incentives on a limited basis, depending on Energy Efficiency and Conservation Block Grant funding availability. Applicant must check off the appropriate box above for buildings in this situation.*

FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name P.S. #14			
Street Address 153 Union Street		**County** Hudson	
City Jersey City		**State** NJ	**Zip** 070305
Facility's Description Four Story Non-Combustible Masonry Construction			
Total Sq Ft 118873	**Year Built** 1954	**Hours/Week Occupied** 70-85	**Number of Employees** 496

Building Type (Check only one of the following):

☐	Emergency Services	☐	Garage
☐	Center/Meeting Hall/Library	☐	Offices
☐	Recreation/Entertainment/Parks	☐	Religious
☒	School	☐	School: College or University
☐	Water Treatment/Pumping	☐	Other: _____

ENERGY DATA

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The Data Below is for the 12 Month Period: ___/___/_____ to ___/___/_____

ELECTRICITY

Electric Utility Name & Account Number(s)	
PSE&G/South Jersey 4201152308	
Annual kWh Use 333955	Annual Electricity Cost $21471.63 $35401.51
Max Summer kW 38772	Max Winter kW 0

NATURAL GAS

Natural Gas Utility Name & Account Number(s)	
PSE&G 4201152308 Hess 447188	
Annual Use in Therms 31.192 9.360	Annual Natural Gas Cost $122.77 $10.13

FUEL OIL

Fuel Oil Utility Name & Account Number(s)	
Finch Fuel Oil 68400-06	
Annual Use in Gallons 31969	Annual Fuel Oil Cost $68221.84

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Propane Cost**

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

Other Fuel Type:	
Annual Energy Use (indicate units)	**Annual Energy Cost**

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Fax: 732-855-0422
Email: LGEA@trcsolutions.com

For further questions, please call 866-657-6278 x4 or visit our website at www.NJCleanEnergy.com/LGEA

STAFF USE ONLY

Date Received: _____ Project No.: _____

FACILITY DATA FORM

*Complete one Facility Data Form for **each building** that you would like to have audited.*

APPLYING AGENCY: The Jersey City Public Schools

☒ This Entity owns the facility described below or has provided documentation to show that the applicant pays the utility bills and has permission from building owner to perform audit and install energy efficient equipment.

This building is served by (check all that apply):

☐	Atlantic City Electric
☐	Jersey Central Power & Light
☐	New Jersey Natural Gas
☐	Elizabethtown Gas
☒	Public Service Electric and Gas
☐	Rockland Electric Company
☒	South Jersey Gas
☒	A non-regulated energy company (oil, propane, municipal, cooperative, etc.*): Hess Gas

**Note: buildings that are NOT served by at least one regulated utility will be eligible to receive incentives on a limited basis, depending on Energy Efficiency and Conservation Block Grant funding availability. Applicant must check off the appropriate box above for buildings in this situation.*

FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name P.S. #15			
Street Address 135 Stegman Street		**County** Hudson	
City Jersey City		**State** NJ	**Zip** 07305
Facility's Description Three Story Masonry Non-Combustible			
Total Sq Ft 179590	**Year Built** 1971	**Hours/Week Occupied** 6:30am - 10:00pm	**Number of Employees** 752

Building Type (Check only one of the following):

☐	Emergency Services	☐	Garage
☐	Center/Meeting Hall/Library	☐	Offices
☐	Recreation/Entertainment/Parks	☐	Religious
☒	School	☐	School: College or University
☐	Water Treatment/Pumping	☐	Other: _____

ENERGY DATA

Please complete the energy information below for the most recent 12 month period available. In order to gain a complete picture of the facility's energy use, be sure to include all types of energy used by the facility. Do not include vehicle fuel.

The Data Below is for the 12 Month Period: ___/___/_____ to ___/___/_____

ELECTRICITY

Electric Utility Name & Account Number(s)	
PSE&G/South Jersey 4200539306 4200539306 8038995023247	
Annual kWh Use 975863 583424 1381024	**Annual Electricity Cost** $28824.81 $27386.28 $146222.82
Max Summer kW 121944	**Max Winter kW** 142000

NATURAL GAS

Natural Gas Utility Name & Account Number(s)	
PSE&G 4200539306 4200539306 Hess 447191	
Annual Use in Therms 83033.612 51463.598 6114.0	**Annual Natural Gas Cost** $23998.81 $12238.69 $121834.08

FUEL OIL

Fuel Oil Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Fuel Oil Cost**

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Propane Cost**

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

Other Fuel Type:	
Annual Energy Use (indicate units)	**Annual Energy Cost**

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STAFF USE ONLY

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FACILITY DATA FORM

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APPLYING AGENCY: The Jersey City Public Schools

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This building is served by (check all that apply):

☐	Atlantic City Electric
☐	Jersey Central Power & Light
☐	New Jersey Natural Gas
☐	Elizabethtown Gas
☒	Public Service Electric and Gas
☐	Rockland Electric Company
☒	South Jersey Gas
☒	A non-regulated energy company (oil, propane, municipal, cooperative, etc.*): Hess Gas

**Note: buildings that are NOT served by at least one regulated utility will be eligible to receive incentives on a limited basis, depending on Energy Efficiency and Conservation Block Grant funding availability. Applicant must check off the appropriate box above for buildings in this situation.*

FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name P.S. #16			
Street Address 96 Sussex Street		**County** Hudson	
City Jersey City		**State** NJ	**Zip** 07305
Facility's Description Four Story Masonry Non-Combustible			
Total Sq Ft 61684	**Year Built** 1918	**Hours/Week Occupied** 6:30am - 10:00pm	**Number of Employees** 335

Building Type (Check only one of the following):

☐	Emergency Services	☐	Garage
☐	Center/Meeting Hall/Library	☐	Offices
☐	Recreation/Entertainment/Parks	☐	Religious
☒	School	☐	School: College or University
☐	Water Treatment/Pumping	☐	Other: _____

ENERGY DATA

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The Data Below is for the 12 Month Period: ___/___/_____ to ___/___/_____

ELECTRICITY

Electric Utility Name & Account Number(s)	
PSE&G/South Jersey 6535490300* 6687341707* 6645402201 11789639406724	
Annual kWh Use 258150. 32880.00 38251.00 4114.00	**Annual Electricity Cost** $12902. *$27777. $1920. *$3538. $2761. $1329.
Max Summer kW 23490 6160 3120 254	**Max Winter kW** 22680 2240 7760 435

NATURAL GAS

Natural Gas Utility Name & Account Number(s)	
PSE&G 6687341707 Hess 491647	
Annual Use in Therms 21640.015 2174.88	**Annual Natural Gas Cost** $7553.00 $19961.26

FUEL OIL

Fuel Oil Utility Name & Account Number(s)	
N/A	
Annual Use in Gallons	**Annual Fuel Oil Cost**

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Propane Cost**

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

Other Fuel Type:	
Annual Energy Use (indicate units)	**Annual Energy Cost**

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STAFF USE ONLY

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FACILITY DATA FORM

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APPLYING AGENCY: The Jersey City Public Schools

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This building is served by (check all that apply):

☐	Atlantic City Electric
☐	Jersey Central Power & Light
☐	New Jersey Natural Gas
☐	Elizabethtown Gas
☒	Public Service Electric and Gas
☐	Rockland Electric Company
☒	South Jersey Gas
☒	A non-regulated energy company (oil, propane, municipal, cooperative, etc.*): Hess Gas

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FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name P. S. #17			
Street Address 600 Bergen Avenue		**County** Hudson	
City Jersey City		**State** NJ	**Zip** 07305
Facility's Description Four Story Masonry Non-Combustible			
Total Sq Ft 153864	**Year Built** 1996	**Hours/Week Occupied** 6:30am -10:00pm	**Number of Employees** 1301

Building Type (Check only one of the following):

☐	Emergency Services	☐	Garage
☐	Center/Meeting Hall/Library	☐	Offices
☐	Recreation/Entertainment/Parks	☐	Religious
☒	School	☐	School: College or University
☐	Water Treatment/Pumping	☐	Other: _____

ENERGY DATA

Please complete the energy information below for the most recent 12 month period available. In order to gain a complete picture of the facility's energy use, be sure to include all types of energy used by the facility. Do not include vehicle fuel.

The Data Below is for the 12 Month Period: ___/___/_____ to ___/___/_____

ELECTRICITY

Electric Utility Name & Account Number(s)	
PSE&G/S.J.4200451409 6550205905* 6606690706* 6645197403* 6501276004* 8392851523247	
Annual kWh Use 2205200. 20382. 21840. 48400. 37360. 2057600	**Annual Electricity Cost** 83179. 1343. 1558. 2487. 2290.59564. 2193. 2194
Max Summer kW 362800 1356 3200 2880 362800	**Max Winter kW** 145200 4074 7760 5280 145200

NATURAL GAS

Natural Gas Utility Name & Account Number(s)	
PSE&G 6606690706 Hess Gas 447202 491641	
Annual Use in Therms 46693.51 3963.15 709.78	**Annual Natural Gas Cost** $18134.70 $37282.52 $6100.44

FUEL OIL

Fuel Oil Utility Name & Account Number(s) N/A	
Annual Use in Gallons	**Annual Fuel Oil Cost**

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Propane Cost**

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

Other Fuel Type:	
Annual Energy Use (indicate units)	**Annual Energy Cost**

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FACILITY DATA FORM

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APPLYING AGENCY: The Jersey City Public Schools

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This building is served by (check all that apply):

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☐	Jersey Central Power & Light
☐	New Jersey Natural Gas
☐	Elizabethtown Gas
☒	Public Service Electric and Gas
☐	Rockland Electric Company
☒	South Jersey Gas
☒	A non-regulated energy company (oil, propane, municipal, cooperative, etc.*): Hess Gas Finch Fuel Oil

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FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name P. S. #20			
Street Address 160 Danforth Avenue		**County** Hudson	
City Jersey City		**State** NJ	**Zip** 07305
Facility's Description Four Story Masonry Non-Combustible			
Total Sq Ft 78996	**Year Built** 1900	**Hours/Week Occupied** 6:30am -10:00pm	**Number of Employees** 674

Building Type (Check only one of the following):

☐	Emergency Services	☐	Garage
☐	Center/Meeting Hall/Library	☐	Offices
☐	Recreation/Entertainment/Parks	☐	Religious
☒	School	☐	School: College or University
☐	Water Treatment/Pumping	☐	Other: _____

ENERGY DATA

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The Data Below is for the 12 Month Period: ___/___/_____ to ___/___/_____

ELECTRICITY

Electric Utility Name & Account Number(s)	
PSE&G/S.J. 6724466709* 6614935518* 9785746023247	
Annual kWh Use 354800 91840 283400	**Annual Electricity Cost** $30493.84 $24051.50 $4041.43 $9881.97
Max Summer kW 29800 8320 31800	**Max Winter kW** 54800 18320 54800

NATURAL GAS

Natural Gas Utility Name & Account Number(s)	
PSE&G 6724466709 Hess Gas 447183	
Annual Use in Therms 1203.89 113.44	**Annual Natural Gas Cost** $547.34 $1161.60

FUEL OIL

Fuel Oil Utility Name & Account Number(s)	
Finch Fuel Oil 68400-08	
Annual Use in Gallons 16641	**Annual Fuel Oil Cost** $35722.22

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Propane Cost**

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

Other Fuel Type:	
Annual Energy Use (indicate units)	**Annual Energy Cost**

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APPLYING AGENCY: The Jersey City Public Schools

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This building is served by (check all that apply):

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☐	New Jersey Natural Gas
☐	Elizabethtown Gas
☒	Public Service Electric and Gas
☐	Rockland Electric Company
☒	South Jersey Gas
☒	A non-regulated energy company (oil, propane, municipal, cooperative, etc.*): Hess Gas

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FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name P. S. #22			
Street Address 264 Van Horn Street		**County** Hudson	
City Jersey City		**State** NJ	**Zip** 07305
Facility's Description Four Story Masonry Non-Combustible			
Total Sq Ft 157134	**Year Built** 1931	**Hours/Week Occupied** 6:30am -10:00pm	**Number of Employees** 740

Building Type (Check only one of the following):

☐	Emergency Services	☐	Garage
☐	Center/Meeting Hall/Library	☐	Offices
☐	Recreation/Entertainment/Parks	☐	Religious
☒	School	☐	School: College or University
☐	Water Treatment/Pumping	☐	Other: _____

ENERGY DATA

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The Data Below is for the 12 Month Period: ___/___/_____ to ___/___/_____

ELECTRICITY

Electric Utility Name & Account Number(s)	
PSE&G/S.J. 6582060104 4201006905 *	
Annual kWh Use 62000	**Annual Electricity Cost** $42607.55 $82332.30
Max Summer kW 268033 81200*	**Max Winter kW** 12555.911 72400*

NATURAL GAS

Natural Gas Utility Name & Account Number(s)	
PSE&G 6582060104 4201006905 Hess Gas 447186	
Annual Use in Therms 68532.67 8175.135 817.5	**Annual Natural Gas Cost** $77489.38 $3049.08 $7080.89

FUEL OIL

Fuel Oil Utility Name & Account Number(s) N/A	
Annual Use in Gallons	**Annual Fuel Oil Cost**

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Propane Cost**

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

Other Fuel Type:	
Annual Energy Use (indicate units)	**Annual Energy Cost**

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FACILITY DATA FORM

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APPLYING AGENCY: The Jersey City Public Schools

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☐	New Jersey Natural Gas
☐	Elizabethtown Gas
☒	Public Service Electric and Gas
☐	Rockland Electric Company
☒	South Jersey Gas
☒	A non-regulated energy company (oil, propane, municipal, cooperative, etc.*): Hess Gas Finch Fuel Oil

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FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name P. S. #23			
Street Address 143 Romaine Avenue		**County** Hudson	
City Jersey City		**State** NJ	**Zip** 07305
Facility's Description Five Story Masonry Non-Combustible			
Total Sq Ft 177028	**Year Built** 1922	**Hours/Week Occupied** 6:30am -11:00pm	**Number of Employees** 1744

Building Type (Check only one of the following):

☐	**Emergency Services**	☐	**Garage**
☐	**Center/Meeting Hall/Library**	☐	**Offices**
☐	**Recreation/Entertainment/Parks**	☐	**Religious**
☒	**School**	☐	**School: College or University**
☐	**Water Treatment/Pumping**	☐	**Other:** _____

ENERGY DATA

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The Data Below is for the 12 Month Period: ___/___/_____ to ___/___/_____

ELECTRICITY

Electric Utility Name & Account Number(s)	
PSE&G/S.J. 6517075003 4200812606* 9168170023247	
Annual kWh Use 162000.00 983200.00* 904200	**Annual Electricity Cost** $7353.36 $43997.35 $17431.20* $38303.59
Max Summer kW 12960 80800 00* 100400	**Max Winter kW** 25440 83400 0.00* 86800

NATURAL GAS

Natural Gas Utility Name & Account Number(s)	
PSE&G 4200812606 Hess Gas 447168	
Annual Use in Therms 190907.71 370.74	**Annual Natural Gas Cost** $1133.04 $3141.89

FUEL OIL

Fuel Oil Utility Name & Account Number(s)	
Finch Fuel Oil 68400 - 10	
Annual Use in Gallons 31711	**Annual Fuel Oil Cost** $67961.84

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Propane Cost**

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

Other Fuel Type:	
Annual Energy Use (indicate units)	**Annual Energy Cost**

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APPLYING AGENCY: The Jersey City Public Schools

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This building is served by (check all that apply):

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☐	New Jersey Natural Gas
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☐	Rockland Electric Company
☒	South Jersey Gas
☒	A non-regulated energy company (oil, propane, municipal, cooperative, etc.*): Hess Gas Finch Fuel Oil

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FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name P. S. #24			
Street Address 220 Virginia Avenue		**County** Hudson	
City Jersey City		**State** NJ	**Zip** 07305
Facility's Description Four Story Masonry Non-Combustible			
Total Sq Ft 118240	**Year Built** 1920	**Hours/Week Occupied** 6:30am -10:00pm	**Number of Employees** 1039

Building Type (Check only one of the following):

☐	Emergency Services	☐	Garage
☐	Center/Meeting Hall/Library	☐	Offices
☐	Recreation/Entertainment/Parks	☐	Religious
☒	School	☐	School: College or University
☐	Water Treatment/Pumping	☐	Other: _____

ENERGY DATA

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The Data Below is for the 12 Month Period: ___/___/_____ to ___/___/_____

ELECTRICITY

Electric Utility Name & Account Number(s)	
PSE&G/S.J. 4200237008 *	
Annual kWh Use 654023	**Annual Electricity Cost** $33010.38 $69247.96*
Max Summer kW 63455	**Max Winter kW** 65760

NATURAL GAS

Natural Gas Utility Name & Account Number(s)	
PSE&G 4200237008 Hess Gas 447189	
Annual Use in Therms 1361.104 119.40	**Annual Natural Gas Cost** $608.76 $1012.11

FUEL OIL

Fuel Oil Utility Name & Account Number(s)	
Finch Fuel Oil 68400 - 11	
Annual Use in Gallons 29112	**Annual Fuel Oil Cost** $62790.82

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Propane Cost**

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

Other Fuel Type:	
Annual Energy Use (indicate units)	**Annual Energy Cost**

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START

Date Received: _____ Project No.: _____

FACILITY DATA FORM

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APPLYING AGENCY: The Jersey City Public Schools

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This building is served by (check all that apply):

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☐	Jersey Central Power & Light
☐	New Jersey Natural Gas
☐	Elizabethtown Gas
☒	Public Service Electric and Gas
☐	Rockland Electric Company
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☒	A non-regulated energy company (oil, propane, municipal, cooperative, etc.*): Hess Gas Finch Fuel Oil

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FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name P. S. #25			
Street Address 3386 Kennedy Blvd		**County** Hudson	
City Jersey City		**State** NJ	**Zip** 07305
Facility's Description Four Story Masonry Non-Combustible			
Total Sq Ft 132860	**Year Built** 1896	**Hours/Week Occupied** 5:30am - 9:30pm	**Number of Employees** 912

Building Type (Check only one of the following):

☐	Emergency Services	☐	Garage
☐	Center/Meeting Hall/Library	☐	Offices
☐	Recreation/Entertainment/Parks	☐	Religious
☒	School	☐	School: College or University
☐	Water Treatment/Pumping	☐	Other: _____

ENERGY DATA

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The Data Below is for the 12 Month Period: ___/___/_____ to ___/___/_____

ELECTRICITY

Electric Utility Name & Account Number(s)	
PSE&G/S.J. 6643392004 4200846500	
Annual kWh Use 1320800	**Annual Electricity Cost** $54933.91 $139846.30
Max Summer kW 62400	**Max Winter kW** 210000

NATURAL GAS

Natural Gas Utility Name & Account Number(s)	
PSE&G 4200846500 Hess Gas 447200	
Annual Use in Therms 55.965 55.07	**Annual Natural Gas Cost** $318.05 $502.37

FUEL OIL

Fuel Oil Utility Name & Account Number(s)	
Finch Fuel Oil 68400 - 12	
Annual Use in Gallons 13531	**Annual Fuel Oil Cost** $28517.78

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Propane Cost**

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

Other Fuel Type:	
Annual Energy Use (indicate units)	**Annual Energy Cost**

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STAFF USE ONLY

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FACILITY DATA FORM

*Complete one Facility Data Form for **each building** that you would like to have audited.*

APPLYING AGENCY: The Jersey City Public Schools

☒ This Entity owns the facility described below or has provided documentation to show that the applicant pays the utility bills and has permission from building owner to perform audit and install energy efficient equipment.

This building is served by (check all that apply):

☐	Atlantic City Electric
☐	Jersey Central Power & Light
☐	New Jersey Natural Gas
☐	Elizabethtown Gas
☒	Public Service Electric and Gas
☐	Rockland Electric Company
☒	South Jersey Gas
☐	A non-regulated energy company (oil, propane, municipal, cooperative, etc.*): Hess Gas Finch Fuel Oil

**Note: buildings that are NOT served by at least one regulated utility will be eligible to receive incentives on a limited basis, depending on Energy Efficiency and Conservation Block Grant funding availability. Applicant must check off the appropriate box above for buildings in this situation.*

FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name P. S. #27			
Street Address 201 North Street		**County** Hudson	
City Jersey City		**State** NJ	**Zip** 07305
Facility's Description Four Story Masonry Non-Combustible			
Total Sq Ft 94611	**Year Built** 1966	**Hours/Week Occupied** 6:00am - 10:00pm	**Number of Employees** 1175

Building Type (Check only one of the following):

☐	**Emergency Services**	☐	**Garage**
☐	**Center/Meeting Hall/Library**	☐	**Offices**
☐	**Recreation/Entertainment/Parks**	☐	**Religious**
☒	**School**	☐	**School: College or University**
☐	**Water Treatment/Pumping**	☐	**Other:** _____

ENERGY DATA

Please complete the energy information below for the most recent 12 month period available. In order to gain a complete picture of the facility's energy use, be sure to include all types of energy used by the facility. Do not include vehicle fuel.

The Data Below is for the 12 Month Period: ___/___/_____ to ___/___/_____

ELECTRICITY

Electric Utility Name & Account Number(s)	
PSEG/SJ 6696413103 4200127806 6696428801*6591721002*6720656805*6696756604*108602285489	
Annual kWh Use 61047 1684500 37360 40640 4480 82880 61047	**Annual Electricity Cost** 3210.229680.2464.4020.2078.4373.350.482.4024.8
Max Summer kW 3753 67800 2960 2720 2240 6240 3753	**Max Winter kW** 13068 316200 5680 6480 12160 13068

NATURAL GAS

Natural Gas Utility Name & Account Number(s)	
N/A	
Annual Use in Therms	Annual Natural Gas Cost

FUEL OIL

Fuel Oil Utility Name & Account Number(s)	
N/A	
Annual Use in Gallons	Annual Fuel Oil Cost

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Propane Cost**

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

Other Fuel Type:	
Annual Energy Use (indicate units)	**Annual Energy Cost**

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For further questions, please call 866-657-6278 x4 or visit our website at www.NJCleanEnergy.com/LGEA

STAFF USE ONLY

Date Received: _____ Project No.: _____

FACILITY DATA FORM

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APPLYING AGENCY: The Jersey City Public Schools

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This building is served by (check all that apply):

☐	Atlantic City Electric
☐	Jersey Central Power & Light
☐	New Jersey Natural Gas
☐	Elizabethtown Gas
☒	Public Service Electric and Gas
☐	Rockland Electric Company
☒	South Jersey Gas
☒	A non-regulated energy company (oil, propane, municipal, cooperative, etc.*): Hess Electric

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FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name P. S. #28			
Street Address 167 Hancock Avenue		**County** Hudson	
City Jersey City		**State** NJ	**Zip** 07305
Facility's Description Three Story Masonry Non-Combustible			
Total Sq Ft 126761	**Year Built** 1990	**Hours/Week Occupied** 6:00am - 9:40pm	**Number of Employees** 1091

Building Type (Check only one of the following):

☐	Emergency Services	☐	Garage
☐	Center/Meeting Hall/Library	☐	Offices
☐	Recreation/Entertainment/Parks	☐	Religious
☒	School	☐	School: College or University
☐	Water Treatment/Pumping	☐	Other: _____

ENERGY DATA

Please complete the energy information below for the most recent 12 month period available. In order to gain a complete picture of the facility's energy use, be sure to include all types of energy used by the facility. Do not include vehicle fuel.

The Data Below is for the 12 Month Period: ___/___/_____ to ___/___/_____

ELECTRICITY

Electric Utility Name & Account Number(s)	
PSEG/SJ 4200655306 6609303002 * Hess Electric 519267	
Annual kWh Use 1826703 68220 1232252	**Annual Electricity Cost** $75768.15 $3969.65 $7340.46* $140654.15
Max Summer kW 122741 3420 226011	**Max Winter kW** 282713 23490 282173

NATURAL GAS

Natural Gas Utility Name & Account Number(s)	
N/A	
Annual Use in Therms	**Annual Natural Gas Cost**

FUEL OIL

Fuel Oil Utility Name & Account Number(s)	
N/A	
Annual Use in Gallons	Annual Fuel Oil Cost

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Propane Cost**

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

Other Fuel Type:	
Annual Energy Use (indicate units)	**Annual Energy Cost**

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APPLYING AGENCY: The Jersey City Public Schools

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This building is served by (check all that apply):

☐	Atlantic City Electric
☐	Jersey Central Power & Light
☐	New Jersey Natural Gas
☐	Elizabethtown Gas
☒	Public Service Electric and Gas
☐	Rockland Electric Company
☒	South Jersey Gas
☒	A non-regulated energy company (oil, propane, municipal, cooperative, etc.*): Hess Gas Finch Fuel Oil

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FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name P. S. #29			
Street Address 123 Claremont Avenue		**County** Hudson	
City Jersey City		**State** NJ	**Zip** 07305
Facility's Description Four Story Masonry Non-Combustible			
Total Sq Ft 66180	**Year Built** 1901	**Hours/Week Occupied** 6:00am - 10:00pm	**Number of Employees** 557

Building Type (Check only one of the following):

☐	Emergency Services	☐	Garage
☐	Center/Meeting Hall/Library	☐	Offices
☐	Recreation/Entertainment/Parks	☐	Religious
☒	School	☐	School: College or University
☐	Water Treatment/Pumping	☐	Other: _____

ENERGY DATA

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The Data Below is for the 12 Month Period: ___/___/_____ to ___/___/_____

ELECTRICITY

Electric Utility Name & Account Number(s)	
PSEG/SJ 6684698605 6691631501 *	
Annual kWh Use 7102 325440.00	**Annual Electricity Cost** $1409.84 $16791.71 $35017.35*
Max Summer kW 733 25760 0.00	**Max Winter kW** 0.00 35040 0.00

NATURAL GAS

Natural Gas Utility Name & Account Number(s)	
PSE&G 6691631501 Hess 447184	
Annual Use in Therms 425.465 44.74	**Annual Natural Gas Cost** $267.45 $369.25

FUEL OIL

Fuel Oil Utility Name & Account Number(s)	
Finch Fuel Oil 68400-13	
Annual Use in Gallons 14850	Annual Fuel Oil Cost $32364.47

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Propane Cost**

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

Other Fuel Type:	
Annual Energy Use (indicate units)	**Annual Energy Cost**

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STAFF USE ONLY

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APPLYING AGENCY: The Jersey City Public Schools

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This building is served by (check all that apply):

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☐	Jersey Central Power & Light
☐	New Jersey Natural Gas
☐	Elizabethtown Gas
☒	Public Service Electric and Gas
☐	Rockland Electric Company
☒	South Jersey Gas
☒	A non-regulated energy company (oil, propane, municipal, cooperative, etc.*): Hess Gas Finch Fuel Oil

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FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name P. S. #30			
Street Address 171 Seaview Avenue		County Hudson	
City Jersey City		**State** NJ	**Zip** 07305
Facility's Description Four Story Masonry Non-Combustible			
Total Sq Ft 93129	**Year Built** 1906	**Hours/Week Occupied** 6:00am - 9:30pm	**Number of Employees** 918

Building Type (Check only one of the following):

☐	Emergency Services	☐	Garage
☐	**Center/Meeting Hall/Library**	☐	**Offices**
☐	**Recreation/Entertainment/Parks**	☐	**Religious**
☒	**School**	☐	**School: College or University**
☐	Water Treatment/Pumping	☐	Other: _____

ENERGY DATA

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The Data Below is for the 12 Month Period: ___/___/_____ to ___/___/_____

ELECTRICITY

Electric Utility Name & Account Number(s)	
PSEG/SJ 6649699209* 6683454108* 4200865203 10515527923247*	
Annual kWh Use 52120 72730.00 688200 661920	**Annual Electricity Cost** $2511. $5608.* $3456. $7826.* $32675. $58399.*
Max Summer kW 4830 10900 108800 22240	**Max Winter kW** 9130 11480 65800 56800

NATURAL GAS

Natural Gas Utility Name & Account Number(s)	
PSE&G 6683454108 Hess 447198	
Annual Use in Therms 3557.542 255.17	**Annual Natural Gas Cost** $682.97 $1540.59

FUEL OIL

Fuel Oil Utility Name & Account Number(s)	
Finch Fuel Oil 68400-14	
Annual Use in Gallons 17719	Annual Fuel Oil Cost $38404.86

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Propane Cost**

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

Other Fuel Type:	
Annual Energy Use (indicate units)	**Annual Energy Cost**

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STAFF USE ONLY

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FACILITY DATA FORM

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APPLYING AGENCY: The Jersey City Public Schools

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This building is served by (check all that apply):

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☐	Jersey Central Power & Light
☐	New Jersey Natural Gas
☐	Elizabethtown Gas
☒	Public Service Electric and Gas
☐	Rockland Electric Company
☒	South Jersey Gas
☒	A non-regulated energy company (oil, propane, municipal, cooperative, etc.*): Hess Gas

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FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name P. S. #31			
Street Address 3055 Kennedy Blvd		County Hudson	
City Jersey City		**State** NJ	**Zip** 07305
Facility's Description Five Story Masonry Non-Combustible			
Total Sq Ft 36973	**Year Built** 1906	**Hours/Week Occupied** 6:00am - 6:00pm	**Number of Employees** 318

Building Type (Check only one of the following):

☐	Emergency Services	☐	Garage
☐	Center/Meeting Hall/Library	☐	Offices
☐	Recreation/Entertainment/Parks	☐	Religious
☒	School	☐	School: College or University
☐	Water Treatment/Pumping	☐	Other: _____

ENERGY DATA

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The Data Below is for the 12 Month Period: ___/___/_____ to ___/___/_____

ELECTRICITY

Electric Utility Name & Account Number(s) PSEG/SJ 6649804509	
Annual kWh Use 222060	**Annual Electricity Cost** $12066.56 $23893.66*
Max Summer kW 18000	**Max Winter kW** 23760

NATURAL GAS

Natural Gas Utility Name & Account Number(s) PSE&G 6649804509 Hess 4471181	
Annual Use in Therms 17906.463 1800.8	**Annual Natural Gas Cost** $7446.59 $16180.36

FUEL OIL

Fuel Oil Utility Name & Account Number(s) N/A	
Annual Use in Gallons	**Annual Fuel Oil Cost**

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Propane Cost**

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

Other Fuel Type:	
Annual Energy Use (indicate units)	**Annual Energy Cost**

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STAFF USE ONLY

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FACILITY DATA FORM

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APPLYING AGENCY: The Jersey City Public Schools

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This building is served by (check all that apply):

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☐	Jersey Central Power & Light
☐	New Jersey Natural Gas
☐	Elizabethtown Gas
☒	Public Service Electric and Gas
☐	Rockland Electric Company
☒	South Jersey Gas
☒	A non-regulated energy company (oil, propane, municipal, cooperative, etc.*): Hess Gas

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FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name P. S. #33			
Street Address 362 Union Street		County Hudson	
City Jersey City		**State** NJ	**Zip** 07305
Facility's Description Four Story Masonry Non-Combustible			
Total Sq Ft 30607	**Year Built** 1906	**Hours/Week Occupied** 6:00am - 8:00pm	**Number of Employees** 472

Building Type (Check only one of the following):

☐	Emergency Services	☐	Garage
☐	Center/Meeting Hall/Library	☐	Offices
☐	Recreation/Entertainment/Parks	☐	Religious
☒	School	☐	School: College or University
☐	Water Treatment/Pumping	☐	Other: _____

ENERGY DATA

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The Data Below is for the 12 Month Period: ___/___/_____ to ___/___/_____

ELECTRICITY

Electric Utility Name & Account Number(s)	
PSEG/SJ 6645129505* 6752701903* 6515131100* 6652401606*	
Annual kWh Use 26920 51520 49824 181280	**Annual Electricity Cost** $1803. 2897. 2377. 5544. 3002. 5361. 10591.19506
Max Summer kW 1400 3130 4620 13440	**Max Winter kW** 5380 9740 11700 18080

NATURAL GAS

Natural Gas Utility Name & Account Number(s)	
PSE&G 6652401606 Hess 491646 447187	
Annual Use in Therms 14060.648 700.14 705.49	**Annual Natural Gas Cost** $5941.37 $6925.32 $6510.27

FUEL OIL

Fuel Oil Utility Name & Account Number(s)	
N/A	
Annual Use in Gallons	Annual Fuel Oil Cost

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Propane Cost**

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

Other Fuel Type:	
Annual Energy Use (indicate units)	**Annual Energy Cost**

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STAFF USE ONLY

Date Received: _____ Project No.: _____

FACILITY DATA FORM

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APPLYING AGENCY: The Jersey City Public Schools

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This building is served by (check all that apply):

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☐	Jersey Central Power & Light
☐	New Jersey Natural Gas
☐	Elizabethtown Gas
☒	Public Service Electric and Gas
☐	Rockland Electric Company
☒	South Jersey Gas
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FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name P. S. #34			
Street Address 1830 Kennedy Blvd		County Hudson	
City Jersey City		State NJ	Zip 07305
Facility's Description Four Story Masonry Non-Combustible			
Total Sq Ft 141086	Year Built 1911	Hours/Week Occupied 6:00am - 10:00pm	Number of Employees 685

Building Type (Check only one of the following):

☐	Emergency Services	☐	Garage
☐	Center/Meeting Hall/Library	☐	Offices
☐	Recreation/Entertainment/Parks	☐	Religious
☒	School	☐	School: College or University
☐	Water Treatment/Pumping	☐	Other: _____

ENERGY DATA

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The Data Below is for the 12 Month Period: ___/___/_____ to ___/___/_____

ELECTRICITY

Electric Utility Name & Account Number(s)	
PSEG/SJ 4200772108 11003348723247	
Annual kWh Use 840400 732400	**Annual Electricity Cost** $42329.53 $72361.82
Max Summer kW 69400 115800	**Max Winter kW** 60600 60600

NATURAL GAS

Natural Gas Utility Name & Account Number(s)	
PSE&G 6609080208 Hess 4447197	
Annual Use in Therms 35660.904 24.12	**Annual Natural Gas Cost** $539983.24 $614.95

FUEL OIL

Fuel Oil Utility Name & Account Number(s)	
N/A	
Annual Use in Gallons	Annual Fuel Oil Cost

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Propane Cost**

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

Other Fuel Type:	
Annual Energy Use (indicate units)	**Annual Energy Cost**

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FACILITY DATA FORM

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APPLYING AGENCY: The Jersey City Public Schools

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☐	New Jersey Natural Gas
☐	Elizabethtown Gas
☒	Public Service Electric and Gas
☐	Rockland Electric Company
☒	South Jersey Gas
☒	A non-regulated energy company (oil, propane, municipal, cooperative, etc.*): Hess Gas & Electric Finch Fuel Oil

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FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name P. S. #37			
Street Address 158 Erie Street		County Hudson	
City Jersey City		State NJ	Zip 07305
Facility's Description Five Story Masonry Non-Combustible			
Total Sq Ft 135534	**Year Built** 1925	**Hours/Week Occupied** 6:00am - 10:00pm	**Number of Employees** 869

Building Type (Check only one of the following):

☐	Emergency Services	☐	Garage
☐	Center/Meeting Hall/Library	☐	Offices
☐	Recreation/Entertainment/Parks	☐	Religious
☒	School	☐	School: College or University
☐	Water Treatment/Pumping	☐	Other: _____

ENERGY DATA

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The Data Below is for the 12 Month Period: ___/___/_____ to ___/___/_____

ELECTRICITY

Electric Utility Name & Account Number(s)	
PSEG/SJ 4200182106* 6685975903 Hess Electric	
Annual kWh Use 648727* 00 467447	**Annual Electricity Cost** $25786.20 $12777.83* $47618.55
Max Summer kW 45315 00 66501	**Max Winter kW** 53973

NATURAL GAS

Natural Gas Utility Name & Account Number(s)	
PSE&G 6685975903 Hess 447194	
Annual Use in Therms 381.986 38.2	**Annual Natural Gas Cost** $289.14 $369.03

FUEL OIL

Fuel Oil Utility Name & Account Number(s)	
Finch Fuel Oil 68400-17	
Annual Use in Gallons 35024	**Annual Fuel Oil Cost** $73366.24

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Propane Cost**

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

Other Fuel Type:	
Annual Energy Use (indicate units)	**Annual Energy Cost**

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FACILITY DATA FORM

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APPLYING AGENCY: The Jersey City Public Schools

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☐	New Jersey Natural Gas
☐	Elizabethtown Gas
☒	Public Service Electric and Gas
☐	Rockland Electric Company
☒	South Jersey Gas
☒	A non-regulated energy company (oil, propane, municipal, cooperative, etc.*): Hess Gas Finch Fuel Oil

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FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name P. S..#38			
Street Address 339 Stegman Street		**County** Hudson	
City Jersey City		**State** NJ	**Zip** 07305
Facility's Description Five Story Masonry Non-Combustible			
Total Sq Ft 120940	**Year Built** 1953	**Hours/Week Occupied** 6:00am - 10:00pm	**Number of Employees** 1043

Building Type (Check only one of the following):

☐	Emergency Services	☐	Garage
☐	Center/Meeting Hall/Library	☐	Offices
☐	Recreation/Entertainment/Parks	☐	Religious
☒	School	☐	School: College or University
☐	Water Treatment/Pumping	☐	Other: _____

ENERGY DATA

Please complete the energy information below for the most recent 12 month period available. In order to gain a complete picture of the facility's energy use, be sure to include all types of energy used by the facility. Do not include vehicle fuel.

The Data Below is for the 12 Month Period: ___/___/___ to ___/___/___

ELECTRICITY

Electric Utility Name & Account Number(s)	
PSEG/SJ 6683458308* 6645148003* 6619012205 *	
Annual kWh Use 86800 15845 449.631	**Annual Electricity Cost** $4349. $9348. $992. $1704. $28000. $48546.
Max Summer kW 5360 6035 31323	**Max Winter kW** 10400 425 43295

NATURAL GAS

Natural Gas Utility Name & Account Number(s)	
PSE&G 6619012205 Hess 491648	
Annual Use in Therms 873.29 38.2	**Annual Natural Gas Cost** $450.73 $369.03

FUEL OIL

Fuel Oil Utility Name & Account Number(s)	
Finch Fuel Oil 68400-118	
Annual Use in Gallons 26447	**Annual Fuel Oil Cost** $57316.15

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Propane Cost**

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

Other Fuel Type:	
Annual Energy Use (indicate units)	**Annual Energy Cost**

Please mail, fax, or email your completed application to:

New Jersey's Clean Energy Program
c/o TRC Energy Services
900 Route 9 North, Suite 404
Woodbridge, NJ 07095
Fax: 732-855-0422
Email: LGEA@trcsolutions.com

For further questions, please call **866-657-6278 x4** or visit our website at www.NJCleanEnergy.com/LGEA

STAFF USE ONLY

Date Received: _____ Project No.: _____

FACILITY DATA FORM

*Complete one Facility Data Form for **each building** that you would like to have audited.*

APPLYING AGENCY: The Jersey City Public Schools

☒ This Entity owns the facility described below or has provided documentation to show that the applicant pays the utility bills and has permission from building owner to perform audit and install energy efficient equipment.

This building is served by (check all that apply):

☐	Atlantic City Electric
☐	Jersey Central Power & Light
☐	New Jersey Natural Gas
☐	Elizabethtown Gas
☒	Public Service Electric and Gas
☐	Rockland Electric Company
☒	South Jersey Gas
☒	A non-regulated energy company (oil, propane, municipal, cooperative, etc.*): Hess Gas Finch Fuel Oil

**Note: buildings that are NOT served by at least one regulated utility will be eligible to receive incentives on a limited basis, depending on Energy Efficiency and Conservation Block Grant funding availability. Applicant must check off the appropriate box above for buildings in this situation.*

FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name P. S. #39			
Street Address 214 Plainfield Avenue		**County** Hudson	
City Jersey City		**State** NJ	**Zip** 07305
Facility's Description Four Story Masonry Non-Combustible			
Total Sq Ft 126429	**Year Built** 1963	**Hours/Week Occupied** 6:00am - 10:00pm	**Number of Employees** 372

Building Type (Check only one of the following):

☐	Emergency Services	☐	Garage
☐	Center/Meeting Hall/Library	☐	Offices
☐	Recreation/Entertainment/Parks	☐	Religious
☒	School	☐	School: College or University
☐	Water Treatment/Pumping	☐	Other: _____

ENERGY DATA

Please complete the energy information below for the most recent 12 month period available. In order to gain a complete picture of the facility's energy use, be sure to include all types of energy used by the facility. Do not include vehicle fuel.

The Data Below is for the 12 Month Period: ___/___/_____ to ___/___/_____

ELECTRICITY

Electric Utility Name & Account Number(s)	
PSEG/SJ 4200446901 *	
Annual kWh Use 433200	**Annual Electricity Cost** $18203.28 $49933.01*
Max Summer kW 26400	**Max Winter kW** 41400

NATURAL GAS

Natural Gas Utility Name & Account Number(s)	
PSE&G 4200446901 Hess 491644	
Annual Use in Therms 6929.995 780.42	**Annual Natural Gas Cost** $2591.30 $6555.48

FUEL OIL

Fuel Oil Utility Name & Account Number(s)	
Finch Fuel Oil 68400-19	
Annual Use in Gallons 26802	**Annual Fuel Oil Cost** $58217.02

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Propane Cost**

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

Other Fuel Type:	
Annual Energy Use (indicate units)	**Annual Energy Cost**

Please mail, fax, or email your completed application to:

New Jersey's Clean Energy Program
c/o TRC Energy Services
900 Route 9 North, Suite 404
Woodbridge, NJ 07095
Fax: 732-855-0422
Email: LGEA@trcsolutions.com

For further questions, please call **866-657-6278 x4** or visit our website at www.NJCleanEnergy.com/LGEA

STAFF USE ONLY

Date Received: _____ Project No.: _____

FACILITY DATA FORM

*Complete one Facility Data Form for **each building** that you would like to have audited.*

APPLYING AGENCY: The Jersey City Public Schools

☒ This Entity owns the facility described below or has provided documentation to show that the applicant pays the utility bills and has permission from building owner to perform audit and install energy efficient equipment.

This building is served by (check all that apply):

☐	Atlantic City Electric
☐	Jersey Central Power & Light
☐	New Jersey Natural Gas
☐	Elizabethtown Gas
☒	Public Service Electric and Gas
☐	Rockland Electric Company
☒	South Jersey Gas
☐	A non-regulated energy company (oil, propane, municipal, cooperative, etc.*): _____

**Note: buildings that are NOT served by at least one regulated utility will be eligible to receive incentives on a limited basis, depending on Energy Efficiency and Conservation Block Grant funding availability. Applicant must check off the appropriate box above for buildings in this situation.*

FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name Regional Day School			
Street Address 425 Johnson Avenue		**County** Hudson	
City Jersey City		**State** NJ	**Zip** 07305
Facility's Description One Story Masonry Non-Combustible			
Total Sq Ft 30587	**Year Built** 1981	**Hours/Week Occupied** 6:00am - 9:00pm	**Number of Employees** 199

Building Type (Check only one of the following):

☐	Emergency Services	☐	Garage
☐	Center/Meeting Hall/Library	☐	Offices
☐	Recreation/Entertainment/Parks	☐	Religious
☒	School	☐	School: College or University
☐	Water Treatment/Pumping	☐	Other: _____

ENERGY DATA

Please complete the energy information below for the most recent 12 month period available. In order to gain a complete picture of the facility's energy use, be sure to include all types of energy used by the facility. Do not include vehicle fuel.

The Data Below is for the 12 Month Period: ___/___/___ to ___/___/___

ELECTRICITY

Electric Utility Name & Account Number(s)	
PSEG/SJ 4200590506 *	
Annual kWh Use 659840	**Annual Electricity Cost** $18203.28 $49933.04
Max Summer kW 12000	**Max Winter kW** 74800

NATURAL GAS

Natural Gas Utility Name & Account Number(s)	
N/A	
Annual Use in Therms	**Annual Natural Gas Cost**

FUEL OIL

Fuel Oil Utility Name & Account Number(s)	
N/A	
Annual Use in Gallons	**Annual Fuel Oil Cost**

PROPANE

Propane Utility Name & Account Number(s)	
Annual Use in Gallons	**Annual Propane Cost**

OTHER

In this section please indicate any other fuel type that the facility uses, such as: solar energy, wind energy, bio-fuel, cogeneration, fuel cells.

Other Fuel Type:	
Annual Energy Use (indicate units)	**Annual Energy Cost**

Please mail, fax, or email your completed application to:

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c/o TRC Energy Services
900 Route 9 North, Suite 404
Woodbridge, NJ 07095
Fax: 732-855-0422
Email: LGEA@trcsolutions.com

For further questions, please call 866-657-6278 x4 or visit our website at www.NJCleanEnergy.com/LGEA

STAFF USE ONLY

Date Received: _____ Project No.: _____

FACILITY DATA FORM

*Complete one Facility Data Form for **each building** that you would like to have audited.*

APPLYING AGENCY: The Jersey City Public Schools

☒ This Entity owns the facility described below or has provided documentation to show that the applicant pays the utility bills and has permission from building owner to perform audit and install energy efficient equipment.

This building is served by (check all that apply):

☐	Atlantic City Electric
☐	Jersey Central Power & Light
☐	New Jersey Natural Gas
☐	Elizabethtown Gas
☒	Public Service Electric and Gas
☐	Rockland Electric Company
☒	South Jersey Gas
☒	A non-regulated energy company (oil, propane, municipal, cooperative, etc.*): Hess Electric

**Note: buildings that are NOT served by at least one regulated utility will be eligible to receive incentives on a limited basis, depending on Energy Efficiency and Conservation Block Grant funding availability. Applicant must check off the appropriate box above for buildings in this situation.*

FACILITY INFORMATION

Please complete the information below for this specific facility that is seeking enrollment in the Program.

Facility Name JCPS Administrative Building			
Street Address 346 Claremont Avenue		**County** Hudson	
City Jersey City		**State** NJ	**Zip** 07305
Facility's Description Nine Story Masonry Non-Combustible			
Total Sq Ft 166500	**Year Built** 1919	**Hours/Week Occupied** 7:00am - 10:00pm	**Number of Employees** 803

Building Type (Check only one of the following):

☐	Emergency Services	☐	Garage
☐	Center/Meeting Hall/Library	☐	Offices
☐	Recreation/Entertainment/Parks	☐	Religious
☒	School	☐	School: College or University
☐	Water Treatment/Pumping	☐	Other: _____

ENERGY DATA

Please complete the energy information below for the most recent 12 month period available. In order to gain a complete picture of the facility's energy use, be sure to include all types of energy used by the facility. Do not include vehicle fuel.

The Data Below is for the 12 Month Period: ___/___/_____ to ___/___/_____

ELECTRICITY

Electric Utility Name & Account Number(s) PSEG/SJ 4200719908* 6650570818* Hess 519269	
Annual kWh Use 5189088 90856 2603772	**Annual Electricity Cost** $17015569. $124168* $14681. $7043* $354238
Max Summer kW 395080 6183 451404	**Max Winter kW** 485725 9715 482725

NATURAL GAS

Natural Gas Utility Name & Account Number(s) N/A	
Annual Use in Therms	**Annual Natural Gas Cost**

FUEL OIL

Fuel Oil Utility Name & Account Number(s) N/A	
Annual Use in Gallons	**Annual Fuel Oil Cost**

Attachment B:

This section contains selected Utility Provider Invoice reference material for all schools in this RFQ.

The chart below summarizes the metered account that presently exists at each facility. All facilities are supplied with Natural Gas service for their heating equipment. There are fuel oil consuming devices at several facilities. The Facilities Manager's Office is located in the JCPS Administrative Office maintains all the records for the equipment.

Facility Designation	School	# Electric Meters	# Gas Meters
JC#1	Cuuningham ECC	1	0
JC#6	Dickinson HS	3	2
JC#7	Ferris HS	2	3
JC#9	Liberty HS	4	2
JC#10	Lincoln HS	4	3
JC#11	McNair/Academic HS	1	1
JC#12	Snyder HS	2	0
JC#15	MS #4	2	1
JC#16	MS #7	1	1
JC#17	MS #40	1	2
JC#18	MS #41	2	2
JC#19	JC Infinity Institute	1	1
JC#20	Academy 1	2	1
JC#21	PS #1	2	2
JC#22	PS #3	5	2
JC#23	PS #5	3	2
JC#24	PS #6	4	2
JC#25	PS #8	2	2
JC#26	PS #11	2	2
JC#27	PS #12	2	2
JC#28	PS #14	2	2
JC#29	PS #15	2	3
JC#30	PS #16	3	2
JC#31	PS #17	5	3

Facility Designation	School	# Electric Meters	# Gas Meters
JC#32	PS #20	**3**	**2**
JC#33	PS #22	**3**	**3**
JC#34	PS #23	**3**	**2**
JC#35	PS #24	**1**	**2**
JC#36	PS #25	**2**	**2**
JC#37	PS #27	**7**	**0**
JC#38	PS #28	**4**	**0**
JC#39	PS #29	**4**	**2**
JC#40	PS #30	**3**	**2**
JC#41	PS #31	**1**	**2**
JC#42	PS #33	**4**	**3**
JC#43	PS #34	**2**	**3**
JC#44	PS #37	**2**	**2**
JC#45	PS #38	**3**	**2**
JC#46	PS #39	**1**	**2**
JC#47	Reg'l Day Sch	**1**	**1**
JC#51	JCPS Admin	**2**	**0**

Appendix H

CDM

11 British American Blvd
Latham, NY 12110
Phone (518) 782-4500
Fax (518) 786-3810

ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

Location: Jersey City
Estimate by: RG
Checked by: JM

ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
1	**PS #20 - Total Lighting Upgrades**	1	ea.	$ 74,569.50	$ 74,569.50	1	ea.	$ 50,560.50	$ 50,560.50	$ 125,130.00
	Subtotal				$ 74,569.50				$ 50,560.50	

SUBTOTAL =	$	125,130.00
MARKUP % =	$	0.15
MARKUP =	$	18,769.50
SUB-TOTAL w/ OH & P =	$	143,899.50
CONTINGENCY % =		0.25
CONTINGENCY =	$	35,974.88
BUDGET COST ESTIMATE =	$	179,874.38

Notes:
1. CDM has no control over the cost of labor, materials, equipment, services furnished or market conditions.
2. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids.
3. Bonds not included in estimate.
4. Escalation not included in estimate.

o "This is an Opinion of Probable Construction Cost only. CDM has no control over the cost of labor, materials, equipment, or services furnished, over schedules, over contractor's methods of determining prices, competitive bidding, market conditions or negotiating terms. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids. There are not any costs provided for: Change Orders, Design Engineering, Construction Oversight, Client Costs, Finance or Funding Costs, Legal Fees, Land Acquisition or temporary/permanent Easements, Operations, or any other costs associated with this project that are not specifically part of the bidding contractor's proposed scope.

ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
1	**Cunningham ECC - Total Lighting Upgrades**	1	ea.	$ 6,477.50	$ 6,477.50	1	ea.	$ 2,143.00	$ 2,143.00	$ 8,620.50
	Subtotal				$ 6,477.50				$ 2,143.00	

SUBTOTAL =	$	8,620.50
MARKUP % =	$	0.15
MARKUP =	$	1,293.08
SUB-TOTAL w/ OH & P =	$	9,913.58
CONTINGENCY % =		0.25
CONTINGENCY =	$	2,478.39
BUDGET COST ESTIMATE =	$	12,391.97

Notes:
1. CDM has no control over the cost of labor, materials, equipment, services furnished or market conditions.
2. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids.
3. Bonds not included in estimate.
4. Escalation not included in estimate.

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CDM

11 British American Blvd
Latham, NY 12110
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Fax (518) 786-3810

ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

Location: Jersey City
Estimate by: RG
Checked by: JM

ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
1	**Infinity Institute - Total Lighting Upgrades**	1	ea.	$ 12,116.50	$ 12,116.50	1	ea.	$ 5,647.00	$ 5,647.00	$ 17,763.50
	Subtotal				$ 12,116.50				$ 5,647.00	

SUBTOTAL =	$ 17,763.50
MARKUP % =	$ 0.15
MARKUP =	$ 2,664.53
SUB-TOTAL w/ OH & P =	$ 20,428.03
CONTINGENCY % =	0.25
CONTINGENCY =	$ 5,107.01
BUDGET COST ESTIMATE =	$ 25,535.03

Notes:
1. CDM has no control over the cost of labor, materials, equipment, services furnished or market conditions.
2. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids.
3. Bonds not included in estimate.
4. Escalation not included in estimate.

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ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
1	**PS #40 (Ezra L. Nolan) - Total** Lighting Upgrades	1	ea.	$ 76,050.00	$ 76,050.00	1	ea.	$ 28,050.00	$ 28,050.00	$ 104,100.00
	Subtotal				$ 76,050.00				$ 28,050.00	

SUBTOTAL =	$ 104,100.00
MARKUP % =	$ 0.15
MARKUP =	$ 15,615.00
SUB-TOTAL w/ OH & P =	$ 119,715.00
CONTINGENCY % =	0.25
CONTINGENCY =	$ 29,928.75
BUDGET COST ESTIMATE =	$ 149,643.75

Notes:
1. CDM has no control over the cost of labor, materials, equipment, services furnished or market conditions.
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3. Bonds not included in estimate.
4. Escalation not included in estimate.

o "This is an Opinion of Probable Construction Cost only. CDM has no control over the cost of labor, materials, equipment, or services furnished, over schedules, over contractor's methods of determining prices, competitive bidding, market conditions or negotiating terms. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids. There are not any costs provided for: Change Orders, Design Engineering, Construction Oversight, Client Costs, Finance or Funding Costs, Legal Fees, Land Acquisition or temporary/permanent Easements, Operations, or any other costs associated with this project that are not specifically part of the bidding contractor's proposed scope.

CDM

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Fax (518) 786-3810

ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

Location: Jersey City
Estimate by: RG
Checked by: JM

ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	Academy I Middle School - Total									
1	Lighting Upgrades	1	ea.	$ 71,147.00	$ 71,147.00	1	ea.	$ 50,813.00	$ 50,813.00	$ 121,960.00
	Subtotal				$ 71,147.00				$ 50,813.00	

SUBTOTAL =	$ 121,960.00
MARKUP % =	$ 0.15
MARKUP =	$ 18,294.00
SUB-TOTAL w/ OH & P =	$ 140,254.00
CONTINGENCY % =	0.25
CONTINGENCY =	$ 35,063.50
BUDGET COST ESTIMATE =	$ 175,317.50

Notes:
1. CDM has no control over the cost of labor, materials, equipment, services furnished or market conditions.
2. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids.
3. Bonds not included in estimate.
4. Escalation not included in estimate.

o "This is an Opinion of Probable Construction Cost only. CDM has no control over the cost of labor, materials, equipment, or services furnished, over schedules, over contractor's methods of determining prices, competitive bidding, market conditions or negotiating terms. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids. There are not any costs provided for: Change Orders, Design Engineering, Construction Oversight, Client Costs, Finance or Funding Costs, Legal Fees, Land Acquisition or temporary/permanent Easements, Operations, or any other costs associated with this project that are not specifically part of the bidding contractor's proposed scope.

ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	PS #29 (Gladys Nunery School) - Total									
1	Lighting Upgrades	1	ea.	$ 58,493.00	$ 58,493.00	1	ea.	$ 42,566.00	$ 42,566.00	$ 101,059.00
	Subtotal				$ 58,493.00				$ 42,566.00	

SUBTOTAL =	$ 101,059.00
MARKUP % =	$ 0.15
MARKUP =	$ 15,158.85
SUB-TOTAL w/ OH & P =	$ 116,217.85
CONTINGENCY % =	0.25
CONTINGENCY =	$ 29,054.46
BUDGET COST ESTIMATE =	$ 145,272.31

Notes:
1. CDM has no control over the cost of labor, materials, equipment, services furnished or market conditions.
2. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids.
3. Bonds not included in estimate.
4. Escalation not included in estimate.

o "This is an Opinion of Probable Construction Cost only. CDM has no control over the cost of labor, materials, equipment, or services furnished, over schedules, over contractor's methods of determining prices, competitive bidding, market conditions or negotiating terms. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids. There are not any costs provided for: Change Orders, Design Engineering, Construction Oversight, Client Costs, Finance or Funding Costs, Legal Fees, Land Acquisition or temporary/permanent Easements, Operations, or any other costs associated with this project that are not specifically part of the bidding contractor's proposed scope.

CDM

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Latham, NY 12110
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ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

Location: Jersey City
Estimate by: RG
Checked by: JM

ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	Henry Snyder High School - Total									
1	Lighting Upgrades	1	ea.	$ 52,011.20	$ 52,011.20	1	ea.	$ 27,592.00	$ 27,592.00	$ 79,603.20
	Subtotal				$ 52,011.20				$ 27,592.00	

SUBTOTAL =	$ 79,603.20
MARKUP % =	$ 0.15
MARKUP =	$ 11,940.48
SUB-TOTAL w/ OH & P =	$ 91,543.68
CONTINGENCY % =	0.25
CONTINGENCY =	$ 22,885.92
BUDGET COST ESTIMATE =	$ 114,429.60

Notes:
1. CDM has no control over the cost of labor, materials, equipment, services furnished or market conditions.
2. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids.
3. Bonds not included in estimate.
4. Escalation not included in estimate.

o "This is an Opinion of Probable Construction Cost only. CDM has no control over the cost of labor, materials, equipment, or services furnished, over schedules, over contractor's methods of determining prices, competitive bidding, market conditions or negotiating terms. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids. There are not any costs provided for: Change Orders, Design Engineering, Construction Oversight, Client Costs, Finance or Funding Costs, Legal Fees, Land Acquisition or temporary/permanent Easements, Operations, or any other costs associated with this project that are not specifically part of the bidding contractor's proposed scope.

ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	JCPS Administrative Building - Total									
1	Lighting Upgrades	1	ea.	$ 64,068.00	$ 64,068.00	1	ea.	$ 46,684.00	$ 46,684.00	$ 110,752.00
	Subtotal				$ 64,068.00				$ 46,684.00	

SUBTOTAL =	$ 110,752.00
MARKUP % =	$ 0.15
MARKUP =	$ 16,612.80
SUB-TOTAL w/ OH & P =	$ 127,364.80
CONTINGENCY % =	0.25
CONTINGENCY =	$ 31,841.20
BUDGET COST ESTIMATE =	$ 159,206.00

Notes:
1. CDM has no control over the cost of labor, materials, equipment, services furnished or market conditions.
2. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids.
3. Bonds not included in estimate.
4. Escalation not included in estimate.

o "This is an Opinion of Probable Construction Cost only. CDM has no control over the cost of labor, materials, equipment, or services furnished, over schedules, over contractor's methods of determining prices, competitive bidding, market conditions or negotiating terms. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids. There are not any costs provided for: Change Orders, Design Engineering, Construction Oversight, Client Costs, Finance or Funding Costs, Legal Fees, Land Acquisition or temporary/permanent Easements, Operations, or any other costs associated with this project that are not specifically part of the bidding contractor's proposed scope.

CDM

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Latham, NY 12110
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Fax (518) 786-3810

ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

Location: Jersey City
Estimate by: RG
Checked by: JM

ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	PS #30 - (Alexander D. Sullivan) - Total									
1	Lighting Upgrades	1	ea.	$ 77,834.00	$ 77,834.00	1	ea.	$ 50,490.00	$ 50,490.00	$ 128,324.00
	Subtotal				$ 77,834.00				$ 50,490.00	

SUBTOTAL =	$ 128,324.00
MARKUP % =	$ 0.15
MARKUP =	$ 19,248.60
SUB-TOTAL w/ OH & P =	$ 147,572.60
CONTINGENCY % =	0.25
CONTINGENCY =	$ 36,893.15
BUDGET COST ESTIMATE =	$ 184,465.75

Notes:
1. CDM has no control over the cost of labor, materials, equipment, services furnished or market conditions.
2. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids.
3. Bonds not included in estimate.
4. Escalation not included in estimate.

o "This is an Opinion of Probable Construction Cost only. CDM has no control over the cost of labor, materials, equipment, or services furnished, over schedules, over contractor's methods of determining prices, competitive bidding, market conditions or negotiating terms. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids. There are not any costs provided for: Change Orders, Design Engineering, Construction Oversight, Client Costs, Finance or Funding Costs, Legal Fees, Land Acquisition or temporary/permanent Easements, Operations, or any other costs associated with this project that are not specifically part of the bidding contractor's proposed scope.

ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	PS #41 - (Fred W. Martin) - Total									
1	Lighting Upgrades	1	ea.	$ 17,600.50	$ 17,600.50	1	ea.	$ 13,119.00	$ 13,119.00	$ 30,719.50
	Subtotal				$ 17,600.50				$ 13,119.00	

SUBTOTAL =	$ 30,719.50
MARKUP % =	$ 0.15
MARKUP =	$ 4,607.93
SUB-TOTAL w/ OH & P =	$ 35,327.43
CONTINGENCY % =	0.25
CONTINGENCY =	$ 8,831.86
BUDGET COST ESTIMATE =	$ 44,159.28

Notes:
1. CDM has no control over the cost of labor, materials, equipment, services furnished or market conditions.
2. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids.
3. Bonds not included in estimate.
4. Escalation not included in estimate.

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ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

Location: Jersey City
Estimate by: RG
Checked by: JM

ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	PS #27 - Total									
1	Lighting Upgrades	1	ea.	$ 8,285.50	$ 8,285.50	1	ea.	$ 5,072.00	$ 5,072.00	$ 13,357.50
	Subtotal				$ 8,285.50				$ 5,072.00	

SUBTOTAL =	$ 13,357.50
MARKUP % =	$ 0.15
MARKUP =	$ 2,003.63
SUB-TOTAL w/ OH & P =	$ 15,361.13
CONTINGENCY % =	0.25
CONTINGENCY =	$ 3,840.28
BUDGET COST ESTIMATE =	$ 19,201.41

Notes:
1. CDM has no control over the cost of labor, materials, equipment, services furnished or market conditions.
2. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids.
3. Bonds not included in estimate
4. Escalation not included in estimate.

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ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	PS #28 - Total									
1	Lighting Upgrades	1	ea.	$ 14,867.00	$ 14,867.00	1	ea.	$ 7,600.00	$ 7,600.00	$ 22,467.00
	Subtotal				$ 14,867.00				$ 7,600.00	

SUBTOTAL =	$ 22,467.00
MARKUP % =	$ 0.15
MARKUP =	$ 3,370.05
SUB-TOTAL w/ OH & P =	$ 25,837.05
CONTINGENCY % =	0.25
CONTINGENCY =	$ 6,459.26
BUDGET COST ESTIMATE =	$ 32,296.31

Notes:
1. CDM has no control over the cost of labor, materials, equipment, services furnished or market conditions.
2. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids.
3. Bonds not included in estimate
4. Escalation not included in estimate.

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ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

Location: Jersey City
Estimate by: RG
Checked by: JM

ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	PS #31 - Total									
1	Lighting Upgrades	1	ea.	$ 3,719.00	$ 3,719.00	1	ea.	$ 2,078.00	$ 2,078.00	$ 5,797.00
	Subtotal				$ 3,719.00				$ 2,078.00	

SUBTOTAL =	$	5,797.00
MARKUP % =	$	0.15
MARKUP =	$	869.55
SUB-TOTAL w/ OH & P =	$	6,666.55
CONTINGENCY % =		0.25
CONTINGENCY =	$	1,666.64
BUDGET COST ESTIMATE =	$	8,333.19

Notes:
1. CDM has no control over the cost of labor, materials, equipment, services furnished or market conditions.
2. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids.
3. Bonds not included in estimate
4. Escalation not included in estimate.

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ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	PS #33 - Total									
1	Lighting Upgrades	1	ea.	$ 3,363.00	$ 3,363.00	1	ea.	$ 1,908.00	$ 1,908.00	$ 5,271.00
	Subtotal				$ 3,363.00				$ 1,908.00	

SUBTOTAL =	$	5,271.00
MARKUP % =	$	0.15
MARKUP =	$	790.65
SUB-TOTAL w/ OH & P =	$	6,061.65
CONTINGENCY % =		0.25
CONTINGENCY =	$	1,515.41
BUDGET COST ESTIMATE =	$	7,577.06

Notes:
1. CDM has no control over the cost of labor, materials, equipment, services furnished or market conditions.
2. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids.
3. Bonds not included in estimate
4. Escalation not included in estimate.

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ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

Location: Jersey City
Estimate by: RG
Checked by: JM

ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
1	**PS #39 - Total** Lighting Upgrades	1	ea.	$ 18,723.00	$ 18,723.00	1	ea.	$ 7,940.00	$ 7,940.00	$ 26,663.00
	Subtotal				$ 18,723.00				$ 7,940.00	

SUBTOTAL =	$	26,663.00
MARKUP % =	$	0.15
MARKUP =	$	3,999.45
SUB-TOTAL w/ OH & P =	$	30,662.45
CONTINGENCY % =		0.25
CONTINGENCY =	$	7,665.61
BUDGET COST ESTIMATE =	$	38,328.06

Notes:
1. CDM has no control over the cost of labor, materials, equipment, services furnished or market conditions.
2. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids.
3. Bonds not included in estimate
4. Escalation not included in estimate.

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ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

Location: Jersey City
Estimate by: RG
Checked by: JM

ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	Dickinson High School - Total									
1	Lighting Upgrades	1	ea.	$ 31,044.00	$ 31,044.00	1	ea.	$ 28,301.00	$ 28,301.00	$ 59,345.00
	Subtotal				$ 31,044.00				$ 28,301.00	

SUBTOTAL =	$ 59,345.00
MARKUP % =	$ 0.15
MARKUP =	$ 8,901.75
SUB-TOTAL w/ OH & P =	$ 68,246.75
CONTINGENCY % =	0.25
CONTINGENCY =	$ 17,061.69
BUDGET COST ESTIMATE =	$ 85,308.44

Notes:
1. CDM has no control over the cost of labor, materials, equipment, services furnished or market conditions.
2. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids.
3. Bonds not included in estimate.
4. Escalation not included in estimate.

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ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	Liberty High School - Total									
1	Lighting Upgrades	1	ea.	$ 4,598.00	$ 4,598.00	1	ea.	$ 2,472.00	$ 2,472.00	$ 7,070.00
	Subtotal				$ 4,598.00				$ 2,472.00	

SUBTOTAL =	$ 7,070.00
MARKUP % =	$ 0.15
MARKUP =	$ 1,060.50
SUB-TOTAL w/ OH & P =	$ 8,130.50
CONTINGENCY % =	0.25
CONTINGENCY =	$ 2,032.63
BUDGET COST ESTIMATE =	$ 10,163.13

Notes:
1. CDM has no control over the cost of labor, materials, equipment, services furnished or market conditions.
2. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids.
3. Bonds not included in estimate.
4. Escalation not included in estimate.

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ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

Location: Jersey City
Estimate by: RG
Checked by: JM

ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	PS #1 - Total									
1	Lighting Upgrades	1	ea.	$ 8,526.50	$ 8,526.50	1	ea.	$ 3,753.00	$ 3,753.00	$ 12,279.50
	Subtotal				$ 8,526.50				$ 3,753.00	

SUBTOTAL =	$	12,279.50
MARKUP % =	$	0.15
MARKUP =	$	1,841.93
SUB-TOTAL w/ OH & P =	$	14,121.43
CONTINGENCY % =		0.25
CONTINGENCY =	$	3,530.36
BUDGET COST ESTIMATE =	$	17,651.78

Notes:
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2. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids.
3. Bonds not included in estimate.
4. Escalation not included in estimate.

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ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	PS #6 - Total									
1	Lighting Upgrades	1	ea.	$ 30,473.00	$ 30,473.00	1	ea.	$ 11,271.50	$ 11,271.50	$ 41,744.50
	Subtotal				$ 30,473.00				$ 11,271.50	

SUBTOTAL =	$	41,744.50
MARKUP % =	$	0.15
MARKUP =	$	6,261.68
SUB-TOTAL w/ OH & P =	$	48,006.18
CONTINGENCY % =		0.25
CONTINGENCY =	$	12,001.54
BUDGET COST ESTIMATE =	$	60,007.72

Notes:
1. CDM has no control over the cost of labor, materials, equipment, services furnished or market conditions.
2. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids.
3. Bonds not included in estimate.
4. Escalation not included in estimate.

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ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

Location: Jersey City
Estimate by: RG
Checked by: JM

ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	PS #8 - Total									
1	Lighting Upgrades	1	ea.	$ 10,712.50	$ 10,712.50	1	ea.	$ 5,919.00	$ 5,919.00	$ 16,631.50
	Subtotal				$ 10,712.50				$ 5,919.00	

SUBTOTAL =	$	16,631.50
MARKUP % =	$	0.15
MARKUP =	$	2,494.73
SUB-TOTAL w/ OH & P =	$	19,126.23
CONTINGENCY % =		0.25
CONTINGENCY =	$	4,781.56
BUDGET COST ESTIMATE =	$	23,907.78

Notes:
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2. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids.
3. Bonds not included in estimate.
4. Escalation not included in estimate.

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ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	PS #11 - Total									
1	Lighting Upgrades	1	ea.	$ 12,314.50	$ 12,314.50	1	ea.	$ 7,781.00	$ 7,781.00	$ 20,095.50
	Subtotal				$ 12,314.50				$ 7,781.00	

SUBTOTAL =	$	20,095.50
MARKUP % =	$	0.15
MARKUP =	$	3,014.33
SUB-TOTAL w/ OH & P =	$	23,109.83
CONTINGENCY % =		0.25
CONTINGENCY =	$	5,777.46
BUDGET COST ESTIMATE =	$	28,887.28

Notes:
1. CDM has no control over the cost of labor, materials, equipment, services furnished or market conditions.
2. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids.
3. Bonds not included in estimate.
4. Escalation not included in estimate.

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ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

Location: Jersey City
Estimate by: RG
Checked by: JM

ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	PS #23 - Total									
1	Lighting Upgrades	1	ea.	$ 11,574.00	$ 11,574.00	1	ea.	$ 7,959.00	$ 7,959.00	$ 19,533.00
	Subtotal				$ 11,574.00				$ 7,959.00	

SUBTOTAL =	$	19,533.00
MARKUP % =	$	0.15
MARKUP =	$	2,929.95
SUB-TOTAL w/ OH & P =	$	22,462.95
CONTINGENCY % =		0.25
CONTINGENCY =	$	5,615.74
BUDGET COST ESTIMATE =	$	28,078.69

Notes:
1. CDM has no control over the cost of labor, materials, equipment, services furnished or market conditions.
2. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids.
3. Bonds not included in estimate.
4. Escalation not included in estimate.

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ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	PS #23 Annex (Duncan) - Total									
1	Lighting Upgrades	1	ea.	$ 2,648.50	$ 2,648.50	1	ea.	$ 1,180.00	$ 1,180.00	$ 3,828.50
	Subtotal				$ 2,648.50				$ 1,180.00	

SUBTOTAL =	$	3,828.50
MARKUP % =	$	0.15
MARKUP =	$	574.28
SUB-TOTAL w/ OH & P =	$	4,402.78
CONTINGENCY % =		0.25
CONTINGENCY =	$	1,100.69
BUDGET COST ESTIMATE =	$	5,503.47

Notes:
1. CDM has no control over the cost of labor, materials, equipment, services furnished or market conditions.
2. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids.
3. Bonds not included in estimate.
4. Escalation not included in estimate.

o "This is an Opinion of Probable Construction Cost only. CDM has no control over the cost of labor, materials, equipment, or services furnished, over schedules, over contractor's methods of determining prices, competitive bidding, market conditions or negotiating terms. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids. There are not any costs provided for: Change Orders, Design Engineering, Construction Oversight, Client Costs, Finance or Funding Costs, Legal Fees, Land Acquisition or temporary/permanent Easements, Operations, or any other costs associated with this project that are not specifically part of the bidding contractor's proposed scope.

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ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

Location: Jersey City
Estimate by: RG
Checked by: JM

ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	PS #24 - Total									
1	Lighting Upgrades	1	ea.	$ 29,089.50	$ 29,089.50	1	ea.	$ 11,728.00	$ 11,728.00	$ 40,817.50
	Subtotal				$ 29,089.50				$ 11,728.00	

SUBTOTAL =	$	40,817.50
MARKUP % =	$	0.15
MARKUP =	$	6,122.63
SUB-TOTAL w/ OH & P =	$	46,940.13
CONTINGENCY % =		0.25
CONTINGENCY =	$	11,735.03
BUDGET COST ESTIMATE =	$	58,675.16

Notes:
1. CDM has no control over the cost of labor, materials, equipment, services furnished or market conditions.
2. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids.
3. Bonds not included in estimate.
4. Escalation not included in estimate.

o "This is an Opinion of Probable Construction Cost only. CDM has no control over the cost of labor, materials, equipment, or services furnished, over schedules, over contractor's methods of determining prices, competitive bidding, market conditions or negotiating terms. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids. There are not any costs provided for: Change Orders, Design Engineering, Construction Oversight, Client Costs, Finance or Funding Costs, Legal Fees, Land Acquisition or temporary/permanent Easements, Operations, or any other costs associated with this project that are not specifically part of the bidding contractor's proposed scope.

ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	PS #25 - Total									
1	Lighting Upgrades	1	ea.	$ 11,346.50	$ 11,346.50	1	ea.	$ 6,515.00	$ 6,515.00	$ 17,861.50
	Subtotal				$ 11,346.50				$ 6,515.00	

SUBTOTAL =	$	17,861.50
MARKUP % =	$	0.15
MARKUP =	$	2,679.23
SUB-TOTAL w/ OH & P =	$	20,540.73
CONTINGENCY % =		0.25
CONTINGENCY =	$	5,135.18
BUDGET COST ESTIMATE =	$	25,675.91

Notes:
1. CDM has no control over the cost of labor, materials, equipment, services furnished or market conditions.
2. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids.
3. Bonds not included in estimate.
4. Escalation not included in estimate.

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CDM

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ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

Location: Jersey City
Estimate by: RG
Checked by: JM

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ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

Location: Jersey City
Estimate by: RG
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ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	Lincoln - Total									
1	Lighting Upgrades	1	ea.	$ 42,435.00	$ 42,435.00	1	ea.	$ 18,734.00	$ 18,734.00	$ 61,169.00
	Subtotal				$ 42,435.00				$ 18,734.00	

SUBTOTAL =	$	61,169.00
MARKUP % =	$	0.15
MARKUP =	$	9,175.35
SUB-TOTAL w/ OH & P =	$	70,344.35
CONTINGENCY % =		0.25
CONTINGENCY =	$	17,586.09
BUDGET COST ESTIMATE =	$	87,930.44

Notes:
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4. Escalation not included in estimate.

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ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	McNair - Total									
1	Lighting Upgrades	1	ea.	$ 26,743.00	$ 26,743.00	1	ea.	$ 12,262.00	$ 12,262.00	$ 39,005.00
	Subtotal				$ 26,743.00				$ 12,262.00	

SUBTOTAL =	$	39,005.00
MARKUP % =	$	0.15
MARKUP =	$	5,850.75
SUB-TOTAL w/ OH & P =	$	44,855.75
CONTINGENCY % =		0.25
CONTINGENCY =	$	11,213.94
BUDGET COST ESTIMATE =	$	56,069.69

Notes:
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3. Bonds not included in estimate
4. Escalation not included in estimate.

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ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

Location: Jersey City
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ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
1	**PS #5 - Total** Lighting Upgrades	1	ea.	$ 85,762.00	$ 85,762.00	1	ea.	$ 35,646.00	$ 35,646.00	$ 121,408.00
	Subtotal				$ 85,762.00				$ 35,646.00	

SUBTOTAL =	$	121,408.00
MARKUP % =	$	0.15
MARKUP =	$	18,211.20
SUB-TOTAL w/ OH & P =	$	139,619.20
CONTINGENCY % =		0.25
CONTINGENCY =	$	34,904.80
BUDGET COST ESTIMATE =	$	174,524.00

Notes:
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4. Escalation not included in estimate.

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ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

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ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	PS #7 - Total									
1	Lighting Upgrades	1	ea.	$ 58,680.00	$ 58,680.00	1	ea.	$ 21,461.00	$ 21,461.00	$ 80,141.00
	Subtotal				$ 58,680.00				$ 21,461.00	

SUBTOTAL =	$	80,141.00
MARKUP % =	$	0.15
MARKUP =	$	12,021.15
SUB-TOTAL w/ OH & P =	$	92,162.15
CONTINGENCY % =		0.25
CONTINGENCY =	$	23,040.54
BUDGET COST ESTIMATE =	$	115,202.69

Notes:
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3. Bonds not included in estimate.
4. Escalation not included in estimate.

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ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	Regional Day - Total									
1	Lighting Upgrades	1	ea.	$ 39,677.10	$ 39,677.10	1	ea.	$ 30,948.00	$ 30,948.00	$ 70,625.10
	Subtotal				$ 39,677.10				$ 30,948.00	

SUBTOTAL =	$	70,625.10
MARKUP % =	$	0.15
MARKUP =	$	10,593.77
SUB-TOTAL w/ OH & P =	$	81,218.87
CONTINGENCY % =		0.25
CONTINGENCY =	$	20,304.72
BUDGET COST ESTIMATE =	$	101,523.58

Notes:
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4. Escalation not included in estimate.

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ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

Location: Jersey City
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ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	PS #22 - Total									
1	Lighting Upgrades	1	ea.	$ 174,430.10	$ 174,430.10	1	ea.	$ 103,865.50	$ 103,865.50	$ 278,295.60
	Subtotal				$ 174,430.10				$ 103,865.50	

SUBTOTAL =	$	278,295.60
MARKUP % =	$	0.15
MARKUP =	$	41,744.34
SUB-TOTAL w/ OH & P =	$	320,039.94
CONTINGENCY % =		0.25
CONTINGENCY =	$	80,009.99
BUDGET COST ESTIMATE =	$	400,049.93

Notes:
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3. Bonds not included in estimate.
4. Escalation not included in estimate.

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ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	PS #37 - Total									
1	Lighting Upgrades	1	ea.	$ 16,485.00	$ 16,485.00	1	ea.	$ 6,025.00	$ 6,025.00	$ 22,510.00
	Subtotal				$ 16,485.00				$ 6,025.00	

SUBTOTAL =	$	22,510.00
MARKUP % =	$	0.15
MARKUP =	$	3,376.50
SUB-TOTAL w/ OH & P =	$	25,886.50
CONTINGENCY % =		0.25
CONTINGENCY =	$	6,471.63
BUDGET COST ESTIMATE =	$	32,358.13

Notes:
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3. Bonds not included in estimate.
4. Escalation not included in estimate.

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ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

Location: Jersey City
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ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	Ferris - Total									
1	Lighting Upgrades	1	ea.	$ 43,773.80	$ 43,773.80	1	ea.	$ 23,784.50	$ 23,784.50	$ 67,558.30
	Subtotal				$ 43,773.80				$ 23,784.50	

SUBTOTAL =	$	67,558.30
MARKUP % =	$	0.15
MARKUP =	$	10,133.75
SUB-TOTAL w/ OH & P =	$	77,692.05
CONTINGENCY % =		0.25
CONTINGENCY =	$	19,423.01
BUDGET COST ESTIMATE =	$	97,115.06

Notes:
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4. Escalation not included in estimate.

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ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	PS #16 - Total									
1	Lighting Upgrades	1	ea.	$ 10,961.00	$ 10,961.00	1	ea.	$ 6,327.00	$ 6,327.00	$ 17,288.00
	Subtotal				$ 10,961.00				$ 6,327.00	

SUBTOTAL =	$	17,288.00
MARKUP % =	$	0.15
MARKUP =	$	2,593.20
SUB-TOTAL w/ OH & P =	$	19,881.20
CONTINGENCY % =		0.25
CONTINGENCY =	$	4,970.30
BUDGET COST ESTIMATE =	$	24,851.50

Notes:
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4. Escalation not included in estimate.

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ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	PS #12 - Total									
1	Lighting Upgrades	1	ea.	$ 28,905.00	$ 28,905.00	1	ea.	$ 11,733.50	$ 11,733.50	$ 40,638.50
	Subtotal				$ 28,905.00				$ 11,733.50	

SUBTOTAL =	$ 40,638.50
MARKUP % =	$ 0.15
MARKUP =	$ 6,095.78
SUB-TOTAL w/ OH & P =	$ 46,734.28
CONTINGENCY % =	0.25
CONTINGENCY =	$ 11,683.57
BUDGET COST ESTIMATE =	$ 58,417.84

Notes:
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4. Escalation not included in estimate.

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ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	PS #14 - Total									
1	Lighting Upgrades	1	ea.	$ 15,432.00	$ 15,432.00	1	ea.	$ 10,346.50	$ 10,346.50	$ 25,778.50
	Subtotal				$ 15,432.00				$ 10,346.50	

SUBTOTAL =	$ 25,778.50
MARKUP % =	$ 0.15
MARKUP =	$ 3,866.78
SUB-TOTAL w/ OH & P =	$ 29,645.28
CONTINGENCY % =	0.25
CONTINGENCY =	$ 7,411.32
BUDGET COST ESTIMATE =	$ 37,056.59

Notes:
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4. Escalation not included in estimate.

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ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	MS #4 - Total									
1	Lighting Upgrades	1	ea.	$ 11,812.00	$ 11,812.00	1	ea.	$ 4,404.00	$ 4,404.00	$ 16,216.00
	Subtotal				$ 11,812.00				$ 4,404.00	

SUBTOTAL =	$	16,216.00
MARKUP % =	$	0.15
MARKUP =	$	2,432.40
SUB-TOTAL w/ OH & P =	$	18,648.40
CONTINGENCY % =		0.25
CONTINGENCY =	$	4,662.10
BUDGET COST ESTIMATE =	$	23,310.50

Notes:
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3. Bonds not included in estimate.
4. Escalation not included in estimate.

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ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	PS #3 - Total									
1	Lighting Upgrades	1	ea.	$ 7,703.00	$ 7,703.00	1	ea.	$ 2,813.50	$ 2,813.50	$ 10,516.50
	Subtotal				$ 7,703.00				$ 2,813.50	

SUBTOTAL =	$	10,516.50
MARKUP % =	$	0.15
MARKUP =	$	1,577.48
SUB-TOTAL w/ OH & P =	$	12,093.98
CONTINGENCY % =		0.25
CONTINGENCY =	$	3,023.49
BUDGET COST ESTIMATE =	$	15,117.47

Notes:
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ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	PS 15 (Whitney M. Young Jr.) - Total									
1	Lighting Upgrades	1	ea.	$ 36,172.70	$ 36,172.70	1	ea.	$ 15,507.00	$ 15,507.00	$ 51,679.70
	Subtotal				$ 36,172.70				$ 15,507.00	

SUBTOTAL =	$	51,679.70
MARKUP % =	$	0.15
MARKUP =	$	7,751.96
SUB-TOTAL w/ OH & P =	$	59,431.66
CONTINGENCY % =		0.25
CONTINGENCY =	$	14,857.91
BUDGET COST ESTIMATE =	$	74,289.57

Notes:
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3. Bonds not included in estimate
4. Escalation not included in estimate.

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ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	PS 38 (James F. Murry) - Total									
1	Lighting Upgrades	1	ea.	$ 32,090.50	$ 32,090.50	1	ea.	$ 11,639.00	$ 11,639.00	$ 43,729.50
	Subtotal				$ 32,090.50				$ 11,639.00	

SUBTOTAL =	$	43,729.50
MARKUP % =	$	0.15
MARKUP =	$	6,559.43
SUB-TOTAL w/ OH & P =	$	50,288.93
CONTINGENCY % =		0.25
CONTINGENCY =	$	12,572.23
BUDGET COST ESTIMATE =	$	62,861.16

Notes:
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3. Bonds not included in estimate
4. Escalation not included in estimate.

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ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

Location: Jersey City
Estimate by: RG
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ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
1	**PS 34 - Total**									
	Lighting Upgrades	1	ea.	$ 16,882.50	$ 16,882.50	1	ea.	$ 6,546.00	$ 6,546.00	$ 23,428.50
	Subtotal				$ 16,882.50				$ 6,546.00	

SUBTOTAL =	$	23,428.50
MARKUP % =	$	0.15
MARKUP =	$	3,514.28
SUB-TOTAL w/ OH & P =	$	26,942.78
CONTINGENCY % =		0.25
CONTINGENCY =	$	6,735.69
BUDGET COST ESTIMATE =	$	33,678.47

Notes:
1. CDM has no control over the cost of labor, materials, equipment, services furnished or market conditions.
2. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids.
3. Bonds not included in estimate
4. Escalation not included in estimate.

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ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
1	**PS 17 (Joseph H. Brensinger) - Total**									
	Lighting Upgrades	1	ea.	$ 183,027.50	$ 183,027.50	1	ea.	$ 64,273.00	$ 64,273.00	$ 247,300.50
	Subtotal				$ 183,027.50				$ 64,273.00	

SUBTOTAL =	$	247,300.50
MARKUP % =	$	0.15
MARKUP =	$	37,095.08
SUB-TOTAL w/ OH & P =	$	284,395.58
CONTINGENCY % =		0.25
CONTINGENCY =	$	71,098.89
BUDGET COST ESTIMATE =	$	355,494.47

Notes:
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3. Bonds not included in estimate
4. Escalation not included in estimate.

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CDM

ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

11 British American Blvd
Latham, NY 12110
Phone (518) 782-4500
Fax (518) 786-3810

ITEM	DESCRIPTION	QTY	UNIT	MATERIAL & LABOR COST	TOTAL
1	**PS #30** Building Management System.	93,129	SF	$ 67,500.00	67,500.00
	Subtotal				

Pricing per RS Means Costworks 2011

One control or sensor point is estimated at $300, thus this system would provide for approximately 225 points

SUBTOTAL =	$	67,500.00
MARKUP % =	$	0.15
MARKUP =	$	10,125.00
SUB-TOTAL w/ OH & P =	$	77,625.00
CONTINGENCY % =		0.25
CONTINGENCY =	$	19,406.25
BUDGET COST ESTIMATE =	$	97,031.25

Notes:

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2. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids.
3. Bonds not included in estimate.
4. Escalation not included in estimate.

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ITEM	DESCRIPTION	QTY	UNIT	MATERIAL & LABOR COST	TOTAL
1	**PS #29** Building Management System.	66,180	SF	$ 42,000.00	42,000.00
	Subtotal				

Pricing per RS Means Costworks 2011

One control or sensor point is estimated at $300, thus this system would provide for approximately 140 points

SUBTOTAL =	$	42,000.00
MARKUP % =	$	0.15
MARKUP =	$	6,300.00
SUB-TOTAL w/ OH & P =	$	48,300.00
CONTINGENCY % =		0.25
CONTINGENCY =	$	12,075.00
BUDGET COST ESTIMATE =	$	60,375.00

Notes:

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3. Bonds not included in estimate.
4. Escalation not included in estimate.

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ITEM	DESCRIPTION	QTY	UNIT	MATERIAL & LABOR COST	TOTAL
1	**PS #20** Building Management System.	78,996	SF	$ 67,500.00	67,500.00
	Subtotal				

Pricing per RS Means Costworks 2011

One control or sensor point is estimated at $300, thus this system would provide for approximately 225 points

SUBTOTAL =	$	67,500.00
MARKUP % =	$	0.15
MARKUP =	$	10,125.00
SUB-TOTAL w/ OH & P =	$	77,625.00
CONTINGENCY % =		0.25
CONTINGENCY =	$	19,406.25
BUDGET COST ESTIMATE =	$	97,031.25

Notes:

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2. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids.
3. Bonds not included in estimate.
4. Escalation not included in estimate.

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ITEM	DESCRIPTION	QTY	UNIT	MATERIAL & LABOR COST	TOTAL
1	**Snyder High School** Building Management System.	209,500	SF	$ 172,500.00	172,500.00
	Subtotal				

Pricing per RS Means Costworks 2011

One control or sensor point is estimated at $300, thus this system would provide for approximately 575 points

SUBTOTAL =	$	172,500.00
MARKUP % =	$	0.15
MARKUP =	$	25,875.00
SUB-TOTAL w/ OH & P =	$	198,375.00
CONTINGENCY % =		0.25
CONTINGENCY =	$	49,593.75
BUDGET COST ESTIMATE =	$	247,968.75

Notes:

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3. Bonds not included in estimate.
4. Escalation not included in estimate.

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ITEM	DESCRIPTION	QTY	UNIT	MATERIAL & LABOR COST	TOTAL
1	**PS #15** Building Management System.	179,590	SF	$ 168,000.00	168,000.00
	Subtotal				

Pricing per RS Means Costworks 2011

One control or sensor point is estimated at $300, thus this system would provide for approximately 560 points

SUBTOTAL =	$	168,000.00
MARKUP % =	$	0.15
MARKUP =	$	25,200.00
SUB-TOTAL w/ OH & P =	$	193,200.00
CONTINGENCY % =		0.25
CONTINGENCY =	$	48,300.00
BUDGET COST ESTIMATE =	$	241,500.00

Notes:

1. CDM has no control over the cost of labor, materials, equipment, services furnished or market conditions.
2. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids.
3. Bonds not included in estimate.
4. Escalation not included in estimate.

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ITEM	DESCRIPTION	QTY	UNIT	MATERIAL & LABOR COST	TOTAL
1	**Middle School #40** Building Management System.	132,483	SF	$ 168,000.00	168,000.00
	Subtotal				

Pricing per RS Means Costworks 2011

One control or sensor point is estimated at $300, thus this system would provide for approximately 560 points

SUBTOTAL =	$	168,000.00
MARKUP % =	$	0.15
MARKUP =	$	25,200.00
SUB-TOTAL w/ OH & P =	$	193,200.00
CONTINGENCY % =		0.25
CONTINGENCY =	$	48,300.00
BUDGET COST ESTIMATE =	$	241,500.00

Notes:

1. CDM has no control over the cost of labor, materials, equipment, services furnished or market conditions.
2. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids.
3. Bonds not included in estimate.
4. Escalation not included in estimate.

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ITEM	DESCRIPTION	QTY	UNIT	MATERIAL & LABOR COST	TOTAL
1	**Academy #1** Building Management System.	64,884	SF	$ 94,500.00	94,500.00
	Subtotal				

Pricing per RS Means Costworks 2011

One control or sensor point is estimated at $300, thus this system would provide for approximately 315 points

SUBTOTAL =	$	94,500.00
MARKUP % =	$	0.15
MARKUP =	$	14,175.00
SUB-TOTAL w/ OH & P =	$	108,675.00
CONTINGENCY % =		0.25
CONTINGENCY =	$	27,168.75
BUDGET COST ESTIMATE =	$	135,843.75

Notes:

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3. Bonds not included in estimate.
4. Escalation not included in estimate.

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ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	Snyder High School									
1	Remove existing boiler	2	Ea	0.00	$ -	2	Ea	$ 10,300.00	$ 20,600.00	20,600.00
2	Steam Boiler, Dual Fuel, Incremental Cost*	1	Ea	$ 19,600.00	$ 19,600.00	1	Ea	$ 15,825.00	$ 15,825.00	35,425.00
	Subtotal				19,600.00				36,425.00	

All cost data obtained from RS Means Costworks 2011

*Incremental cost is difference between 83% firetube boiler and a 80% efficient cast-iron boiler. Includes O2 trim

SUBTOTAL =	$	56,025.00
MARKUP % =	$	0.15
MARKUP =	$	8,403.75
SUB-TOTAL w/ OH & P =	$	64,428.75
CONTINGENCY % =		0.25
CONTINGENCY =	$	16,107.19
BUDGET COST ESTIMATE =	$	80,535.94

Notes:

1. Bonds not included in estimate.
2. Escalation not included in estimate.
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ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

Location: Jersey City Board of Education
Estimate by: ANT
Checked by: CDW

ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	Regional Day School									0.00
1	Control Components/DDC Systems, subcontractor's quote	4.000	Ea	2,150.00	$ 8,600.00				$ -	8,600.00
2	Control Components/DDC Systems, front end costs, engineering labor, excl. drafting		Hr		$ -	20	Hr	80.00	$ 1,600.00	1,600.00
3	Control Components/DDC Systems, applications software, optimum start/stop	4.000	Ea	40.00	$ 160.00				$ -	160.00
4	Control Components/DDC Systems, applications software, time program	4.000	Ea	6.65	$ 26.60					26.60
					$ -					0.00
										0.00
	Subtotal				0.00				0.00	

All cost data obtained from RS Means Costworks 2011
*incl. material & labor, D.D.C controller (avg. 50' run in conduit), mechanical room, 16 point controller, incl. 120V/1 phase power supply

SUBTOTAL =	$	10,386.60
MARKUP % =	$	0.15
MARKUP =	$	1,557.99
SUB-TOTAL w/ OH & P =	$	11,944.59
CONTINGENCY % =		0.25
CONTINGENCY =	$	2,986.15
BUDGET COST ESTIMATE =	$	14,930.74

Notes:
1. Bonds not included in estimate.
2. Escalation not included in estimate.
3. CDM has no control over the cost of labor, materials, equipment, services furnished or market conditions.
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ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	PS # 29									
1	Remove existing boiler	2	Ea	0.00	$ -	2	Ea	$ 5,500.00	$ 11,000.00	11,000.00
2	Steam Boiler, Dual Fuel, Incremental Cost*	2	Ea	$ 18,600.00	$ 37,200.00	2	Ea	$ 13,850.00	$ 27,700.00	64,900.00
	Subtotal				37,200.00				38,700.00	

All cost data obtained from RS Means Costworks 2011

*Incremental cost is difference between 83% firetube boiler and a 80% efficient cast-iron boiler. Includes O2 trim

SUBTOTAL =	$	75,900.00
MARKUP % =	$	0.15
MARKUP =	$	11,385.00
SUB-TOTAL w/ OH & P =	$	87,285.00
CONTINGENCY % =		0.25
CONTINGENCY =	$	21,821.25
BUDGET COST ESTIMATE =	$	109,106.25

Notes:

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2. Escalation not included in estimate.
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ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

Location: Jersey City Board of Education
Estimate by: MJR
Checked by: CDW

ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	PS #22									0.00
1	Control Components, thermostats, automatic, clock, 24 hour	2.000	Ea	137.00	$ 274.00	2		65.50	$ 131.00	405.00
2	Control Components, thermostats, heating/cooling, low voltage, with clock	2.000	Ea	231.00	$ 462.00	2	Hr	64.00	$ 128.00	590.00
			Ea		$ -				$ -	0.00
					$ -					0.00
										0.00
	Subtotal				0.00				0.00	

All cost data obtained from RS Means Costworks 2011

SUBTOTAL =	$	995.00
MARKUP % =	$	0.15
MARKUP =	$	149.25
SUB-TOTAL w/ OH & P =	$	1,144.25
CONTINGENCY % =		0.25
CONTINGENCY =	$	286.06
BUDGET COST ESTIMATE =	$	1,430.31

Notes:
1. Bonds not included in estimate.
2. Escalation not included in estimate.
3. CDM has no control over the cost of labor, materials, equipment, services furnished or market conditions.
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ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

Location: Jersey City Board of Education
Estimate by: ANT
Checked by: CDW

ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	PS #22									0.00
1	Control Components/DDC Systems, subcontractor's quote	1.000	Ea.	$ 2,150.00	$ 2,150.00				$ -	2,150.00
2	Control Components/DDC Systems, subcontractor's quote incl. material & la	1.000		$ -	$ -				$ -	0.00
3	Control Components/DDC Systems, subcontractor's quote	1.000	Ea.	$ 9,475.00	$ 9,475.00					9,475.00
4	Control Components/DDC Systems, applications software, time program	1.000	Point	$ 6.65	$ 6.65					6.65
5	Control Components/DDC Systems, applications software, demand limiting	1.000	Point	$ 19.85	$ 19.85					19.85
2	Control Components/DDC Systems, subcontractor's quote incl. material & la	1.000	Ea.	$ 400.00	$ 400.00				$ -	400.00
3	Control Components/DDC Systems, analog inputs, sensors (avg. 50' run in	1.000	Ea.	$ 640.00	$ 640.00					640.00
6	Control Components/DDC Systems, subcontractor's quote incl. material & la	1.000	Ea.	$ 545.00	$ 545.00					545.00
7	Control Components/DDC Systems, status (alarms), digital output (avg. 50'	1.000	Ea.	$ 330.00	$ 330.00					330.00
	Subtotal				13,566.50				0.00	

All cost data obtained from RS Means Costworks 2011

incl. material & labor, D.D.C controller (avg. 50' run in conduit), mechanical room, 16 point controller, incl. 120V/1 phase power supply

incl. material & labor, host computer (avg. 50' run in conduit), package complete with PC, keyboard, printer, color CRT, modem & basic software

ckage complete with PC, keyboard, printer, color CRT, modem & basic software

SUBTOTAL =	$	13,566.50
MARKUP % =	$	0.15
MARKUP =	$	2,034.98
SUB-TOTAL w/ OH & P =	$	15,601.48
CONTINGENCY % =		0.25
CONTINGENCY =	$	3,900.37
BUDGET COST ESTIMATE =	$	19,501.84

Notes:
1. Bonds not included in estimate.
2. Escalation not included in estimate.
3. CDM has no control over the cost of labor, materials, equipment, services furnished or market conditions.
4. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids.

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ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	Public School #20									
1	Remove existing boiler	2	Ea	0.00	$ -	2	Ea	$ 3,300.00	$ 6,600.00	6,600.00
2	Steam Boiler, Dual Fuel, Incremental Cost*	2	Ea	$ 47,900.00	$ 95,800.00	2	Ea	$ 11,775.00	$ 23,550.00	119,350.00
	Subtotal				95,800.00				30,150.00	

All cost data obtained from RS Means Costworks 2011

*Incremental cost is difference between 83% firetube boiler and a 80% efficient cast-iron boiler. Includes O2 trim

SUBTOTAL =	$	125,950.00
MARKUP % =	$	0.15
MARKUP =	$	18,892.50
SUB-TOTAL w/ OH & P =	$	144,842.50
CONTINGENCY % =		0.25
CONTINGENCY =	$	36,210.63
BUDGET COST ESTIMATE =	$	181,053.13

Notes:

1. Bonds not included in estimate.
2. Escalation not included in estimate.
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CDM

ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

11 British American Blvd
Latham, NY 12110
Phone (518) 782-4500
Fax (518) 786-3810

ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	PS #17									
1	Remove existing boiler	2	Ea	0.00	$ -	2	Ea	$ 10,300.00	$ 20,600.00	20,600.00
2	Boiler, Gas-Fired, Condensing High Efficiency 4,500 MBH*	4	Ea	$ 34,380.00	$ 137,520.00	4	Ea	$ 25,289.00	$101,156.00	238,676.00
3	New Flue, all fuel, pressure tight, double wall, UL Listed, 1400 Deg F, 304 Stainless steel liner, aluminized steel outer jacket, 8" dia	30	LF	$ 60.00	$ 1,800.00	30	LF	$ 17.80	$ 534.00	2,334.00
	Subtotal				139,320.00				122,290.00	

Boiler pricing from vendor quote, all other cost data obtained from RS Means Costworks 2011
*Boiler labor cost includes installation of new boiler, gas piping, electrical, modifying hot water supply and return lines

SUBTOTAL =	$	261,610.00
MARKUP % =	$	0.15
MARKUP =	$	39,241.50
SUB-TOTAL w/ OH & P =	$	300,851.50
CONTINGENCY % =		0.25
CONTINGENCY =	$	75,212.88
BUDGET COST ESTIMATE =	$	376,064.38

Notes:
1. Bonds not included in estimate.
2. Escalation not included in estimate.
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ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	PS #15									
1	Remove existing boiler	3	Ea	0.00	$ -	3	Ea	$ 10,300.00	$ 30,900.00	30,900.00
2	Boiler, Gas-Fired, Condensing High Efficiency 5,000 MBH*	4	Ea	$ 36,000.00	$ 144,000.00	4	Ea	$ 26,620.00	$106,480.00	250,480.00
3	New Flue, all fuel, pressure tight, double wall, UL Listed, 1400 Deg F, 304 Stainless steel liner, aluminized steel outer jacket, 8" dia	50	LF	$ 60.00	$ 3,000.00	50	LF	$ 17.80	$ 890.00	3,890.00
	Subtotal				147,000.00				138,270.00	

Boiler pricing from vendor quote, all other cost data obtained from RS Means Costworks 2011
*Boiler labor cost includes installation of new boiler, gas piping, electrical, modifying hot water supply and return lines

SUBTOTAL =	$	285,270.00
MARKUP % =	$	0.15
MARKUP =	$	42,790.50
SUB-TOTAL w/ OH & P =	$	328,060.50
CONTINGENCY % =		0.25
CONTINGENCY =	$	82,015.13
BUDGET COST ESTIMATE =	$	410,075.63

Notes:
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Fax (518) 786-3810

ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

Location: Jersey City Board of Education
Estimate by: MJR
Checked by: CDW

ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	PS #3									0.00
1	Control Components/DDC Systems, applications software, boiler optimization	2.00	Ea.	1,200.00	$ 2,400.00				$ -	2,400.00
2	Control Components/DDC Systems, front end costs, engineering labor, excl. drafting	20.00	Point		$ -	20	Hr	80.00	$ 1,600.00	1,600.00
3				6.65	$ -					0.00
					$ -					0.00
										0.00
	Subtotal				0.00				0.00	

All cost data obtained from RS Means Costworks 2011
*incl. material & labor, D.D.C controller (avg. 50' run in conduit), mechanical room, 16 point controller, incl. 120V/1 phase power supply

SUBTOTAL =	$	4,000.00
MARKUP % =	$	0.15
MARKUP =	$	600.00
SUB-TOTAL w/ OH & P =	$	4,600.00
CONTINGENCY % =		0.25
CONTINGENCY =	$	1,150.00
BUDGET COST ESTIMATE =	$	5,750.00

Notes:
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ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

Location: Jersey City Board of Education
Estimate by: ANT
Checked by: CDW

ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	PS 16									
1	Remove existing boiler	2	Ea	0.00	$ -	2	Ea	$ 5,500.00	$ 11,000.00	11,000.00
2	Burner, commercial and industrial, gas/oil input, 1155 MBH	2	Ea	3,850.00	$ 7,700.00	2	Ea	$ 760.00	$ 1,520.00	9,220.00
3	Boiler, oil fired, flame retention burner, cast iron, steam, gross output, 1084 MBH, includes standard controls and insulated flush jacket, packaged	2	Ea	$ 9,550.00	$ 19,100.00	2	Ea	$ 5,600.00	$ 11,200.00	30,300.00
	Subtotal				19,100.00				11,200.00	

All cost data obtained from RS Means Costworks 2011
*includes standard controls, circulator, trim

SUBTOTAL =	$	50,520.00
MARKUP % =	$	0.15
MARKUP =	$	7,578.00
SUB-TOTAL w/ OH & P =	$	58,098.00
CONTINGENCY % =		0.25
CONTINGENCY =	$	14,524.50
BUDGET COST ESTIMATE =	$	72,622.50

Notes:
1. Bonds not included in estimate.
2. Escalation not included in estimate.
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ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

Location: Jersey City Board of Education
Estimate by: ANT
Checked by: CDW

ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	PS 15									
1	Remove existing boiler	2	Ea	0.00	$ -	2	Ea	$ 5,500.00	$ 11,000.00	11,000.00
2	Burner, commercial and industrial, gas/oil input, 1155 MBH	2		3,850.00	$ 7,700.00	2	Ea	$ 760.00	$ 1,520.00	9,220.00
3	Boiler, oil fired, flame retention burner, cast iron, steam, gross output, 1084 MBH, includes standard controls and insulated flush jacket, packaged	2	Ea	$ 9,550.00	$ 19,100.00	2	Ea	$ 5,600.00	$ 11,200.00	30,300.00
	Subtotal				19,100.00				11,200.00	

All cost data obtained from RS Means Costworks 2011
*includes standard controls, circulator, trim

SUBTOTAL =	$	50,520.00
MARKUP % =	$	0.15
MARKUP =	$	7,578.00
SUB-TOTAL w/ OH & P =	$	58,098.00
CONTINGENCY % =		0.25
CONTINGENCY =	$	14,524.50
BUDGET COST ESTIMATE =	$	72,622.50

Notes:
1. Bonds not included in estimate.
2. Escalation not included in estimate.
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ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	MS #41									
1	Remove existing boiler	2	Ea	0.00	$ -	2	Ea	$ 10,300.00	$ 20,600.00	20,600.00
2	Steam Boiler, Dual Fuel, Incremental Cost*	3	Ea	$ 15,100.00	$ 45,300.00	3	Ea	$ 15,425.00	$ 46,275.00	91,575.00
	Subtotal				45,300.00				66,875.00	

All cost data obtained from RS Means Costworks 2011

*Incremental cost is difference between 83% firetube boiler and a 80% efficient cast-iron boiler. Includes O2 trim

SUBTOTAL =	$	112,175.00
MARKUP % =	$	0.15
MARKUP =	$	16,826.25
SUB-TOTAL w/ OH & P =	$	129,001.25
CONTINGENCY % =		0.25
CONTINGENCY =	$	32,250.31
BUDGET COST ESTIMATE =	$	161,251.56

Notes:

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ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	MS #40									
1	Remove existing boiler	2	Ea	0.00	$ -	2	Ea	$ 5,500.00	$ 11,000.00	11,000.00
2	Steam Boiler, Dual Fuel, Incremental Cost*	2	Ea	$ 33,600.00	$ 67,200.00	2	Ea	$ 13,850.00	$ 27,700.00	94,900.00
	Subtotal				67,200.00				38,700.00	

All cost data obtained from RS Means Costworks 2011

*Incremental cost is difference between 83% firetube boiler and a 80% efficient cast-iron boiler. Includes O2 trim

SUBTOTAL =	$	105,900.00
MARKUP % =	$	0.15
MARKUP =	$	15,885.00
SUB-TOTAL w/ OH & P =	$	121,785.00
CONTINGENCY % =		0.25
CONTINGENCY =	$	30,446.25
BUDGET COST ESTIMATE =	$	152,231.25

Notes:

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ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

Location: Jersey City Board of Education
Estimate by: ANT
Checked by: CDW

ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	MS #4									0.00
1	Control Components/DDC Systems, applications software, time program	1.000	Point	$ 6.65	$ 6.65					6.65
2	Control Components/DDC Systems, applications software, demand limiting	1.000	Point	$ 19.85	$ 19.85					19.85
3	Control Components/DDC Systems, subcontractor's quote incl. material & la	1.000	Ea.	$ 400.00	$ 400.00				$ -	400.00
4	Control Components/DDC Systems, analog inputs, sensors (avg. 50' run in	1.000	Ea.	$ 640.00	$ 640.00					640.00
5	Control Components/DDC Systems, subcontractor's quote incl. material & la	1.000	Ea.	$ 545.00	$ 545.00					545.00
6	Control Components/DDC Systems, status (alarms), digital output (avg. 50'	1.000	Ea.	$ 330.00	$ 330.00					330.00
	Subtotal				1,941.50				0.00	

All cost data obtained from RS Means Costworks 2011

SUBTOTAL =	$	1,941.50
MARKUP % =	$	0.15
MARKUP =	$	291.23
SUB-TOTAL w/ OH & P =	$	2,232.73
CONTINGENCY % =		0.25
CONTINGENCY =	$	558.18
BUDGET COST ESTIMATE =	$	2,790.91

Notes:
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ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

Location: Jersey City Board of Education
Estimate by: MJR
Checked by: CDW

ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	McNair High School									0.00
1	Control Components/DDC Systems, applications software, boiler optimizatio	2.00	Ea.	1,200.00	$ 2,400.00				$ -	2,400.00
2	Control Components/DDC Systems, front end costs, engineering labor, excl.	20.00	Point		$ -	20	Hr	80.00	$ 1,600.00	1,600.00
3				6.65	$ -					0.00
					$ -					0.00
										0.00
	Subtotal				0.00				0.00	

All cost data obtained from RS Means Costworks 2011
*incl. material & labor, D.D.C controller (avg. 50' run in conduit), mechanical room, 16 point controller, incl. 120V/1 phase power supply

SUBTOTAL =	$	4,000.00
MARKUP % =	$	0.15
MARKUP =	$	600.00
SUB-TOTAL w/ OH & P =	$	4,600.00
CONTINGENCY % =		0.25
CONTINGENCY =	$	1,150.00
BUDGET COST ESTIMATE =	$	5,750.00

Notes:
1. Bonds not included in estimate.
2. Escalation not included in estimate.
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ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

Location: Jersey City Board of Education
Estimate by: AT
Checked by: CDW

ITEM	DESCRIPTION	QTY	UNIT	MATERIAL UNIT COST	MATERIAL SUBTOTAL	QTY	UNIT	LABOR COST	LABOR SUBTOTAL	TOTAL
	Regional Day School									0.00
1	Control Components/DDC Systems, front end costs, engineering labor, excl. drafting		Hr		$ -	20	Hr	80.00	$ 1,600.00	1,600.00
2	Control Components/DDC Systems, applications software, optimum start/stop	6.00	Ea	40.00	$ 240.00				$ -	240.00
3	Control Components/DDC Systems, applications software, time program	6.00	Ea	6.65	$ 39.90					39.90
					$ -					0.00
	Subtotal				0.00				0.00	0.00

All cost data obtained from RS Means Costworks 2011
*incl. material & labor, D.D.C controller (avg. 50' run in conduit), mechanical room, 16 point controller, incl. 120V/1 phase power supply

SUBTOTAL =	$	1,879.90
MARKUP % =	$	0.15
MARKUP =	$	281.99
SUB-TOTAL w/ OH & P =	$	2,161.89
CONTINGENCY % =		0.25
CONTINGENCY =	$	540.47
BUDGET COST ESTIMATE =	$	2,702.36

Notes:
1. Bonds not included in estimate.
2. Escalation not included in estimate.
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ITEM	DESCRIPTION	QTY	UNIT	MATERIAL & LABOR COST	TOTAL
1	**PS #38** Building Management System.	120,940	SF	$ 67,500.00	67,500.00
	Subtotal				

Pricing per RS Means Costworks 2011

One control or sensor point is estimated at $300, thus this system would provide for approximately 225 points

SUBTOTAL =	$	67,500.00
MARKUP % =	$	0.15
MARKUP =	$	10,125.00
SUB-TOTAL w/ OH & P =	$	77,625.00
CONTINGENCY % =		0.25
CONTINGENCY =	$	19,406.25
BUDGET COST ESTIMATE =	$	97,031.25

Notes:

1. CDM has no control over the cost of labor, materials, equipment, services furnished or market conditions.
2. CDM does not guarantee that this opinion will not vary from actual cost, or contractor's bids.
3. Bonds not included in estimate.
4. Escalation not included in estimate.

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Appendix I

Lifetime Savings Analysis - Photovoltaic Solar Energy Systems

ECM	Cunningham Center ECC	Snyder High School	MS #40	MS #41	JC Infinity Institute	#REF!	PS #15	PS #17
Assumed Inflation (Gas)								
Initial Yearly Savings (Gas)								
Assumed Inflation (Electricity)	3%	3%	3%	3%	3%	3%	3%	3%
Initial Yearly Savings (Electricity)	$7,356.00	$79,077.00	$60,687.00	$79,444.80	$17,531.80	$89,743.20	$41,193.60	$10,788.80
Assumed Average Useful Life (Years)	25	25	25	25	25	25	25	25
Lifetime Savings	**$268,194.35**	**$2,883,089.24**	**$2,212,603.37**	**$2,896,498.96**	**$639,196.53**	**$3,271,971.05**	**$1,501,888.35**	**$393,351.71**
Year	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings
1	$7,356.00	$79,077.00	$60,687.00	$79,444.80	$17,531.80	$89,743.20	$41,193.60	$10,788.80
2	$7,576.68	$81,449.31	$62,507.61	$81,828.14	$18,057.75	$92,435.50	$42,429.41	$11,112.46
3	$7,803.98	$83,892.79	$64,382.84	$84,282.99	$18,599.49	$95,208.56	$43,702.29	$11,445.84
4	$8,038.10	$86,409.57	$66,314.32	$86,811.48	$19,157.47	$98,064.82	$45,013.36	$11,789.21
5	$8,279.24	$89,001.86	$68,303.75	$89,415.82	$19,732.20	$101,006.76	$46,363.76	$12,142.89
6	$8,527.62	$91,671.92	$70,352.87	$92,098.30	$20,324.16	$104,036.97	$47,754.67	$12,507.18
7	$8,783.45	$94,422.07	$72,463.45	$94,861.25	$20,933.89	$107,158.07	$49,187.31	$12,882.39
8	$9,046.95	$97,254.74	$74,637.36	$97,707.08	$21,561.90	$110,372.82	$50,662.93	$13,268.86
9	$9,318.36	$100,172.38	$76,876.48	$100,638.30	$22,208.76	$113,684.00	$52,182.82	$13,666.93
10	$9,597.91	$103,177.55	$79,182.77	$103,657.44	$22,875.02	$117,094.52	$53,748.30	$14,076.94
11	$9,885.85	$106,272.88	$81,558.25	$106,767.17	$23,561.27	$120,607.36	$55,360.75	$14,499.25
12	$10,182.42	$109,461.06	$84,005.00	$109,970.18	$24,268.11	$124,225.58	$57,021.58	$14,934.22
13	$10,487.90	$112,744.89	$86,525.15	$113,269.29	$24,996.15	$127,952.34	$58,732.22	$15,382.25
14	$10,802.53	$116,127.24	$89,120.91	$116,667.37	$25,746.04	$131,790.91	$60,494.19	$15,843.72
15	$11,126.61	$119,611.06	$91,794.53	$120,167.39	$26,518.42	$135,744.64	$62,309.02	$16,319.03
16	$11,460.41	$123,199.39	$94,548.37	$123,772.41	$27,313.97	$139,816.98	$64,178.29	$16,808.60
17	$11,804.22	$126,895.37	$97,384.82	$127,485.58	$28,133.39	$144,011.49	$66,103.64	$17,312.86
18	$12,158.35	$130,702.23	$100,306.36	$131,310.15	$28,977.39	$148,331.84	$68,086.74	$17,832.24
19	$12,523.10	$134,623.30	$103,315.56	$135,249.45	$29,846.72	$152,781.79	$70,129.35	$18,367.21
20	$12,898.79	$138,662.00	$106,415.02	$139,306.94	$30,742.12	$157,365.24	$72,233.23	$18,918.23
21	$13,285.75	$142,821.86	$109,607.47	$143,486.15	$31,664.38	$162,086.20	$74,400.22	$19,485.77
22	$13,684.33	$147,106.51	$112,895.70	$147,790.73	$32,614.31	$166,948.79	$76,632.23	$20,070.35
23	$14,094.86	$151,519.71	$116,282.57	$152,224.45	$33,592.74	$171,957.25	$78,931.20	$20,672.46
24	$14,517.70	$156,065.30	$119,771.04	$156,791.19	$34,600.52	$177,115.97	$81,299.13	$21,292.63
25	$14,953.23	$160,747.26	$123,364.18	$161,494.92	$35,638.54	$182,429.45	$83,738.11	$21,931.41

Lifetime Savings Analysis - Photovoltaic Solar Energy Systems		
ECM	**PS#39**	**PS#1**
Assumed Inflation (Gas)		
Initial Yearly Savings (Gas)		
Assumed Inflation (Electricity)	3%	3%
Initial Yearly Savings (Electricity)	$8,238.72	$1,127.31
Assumed Average Useful Life (Years)	25	25
Lifetime Savings	**$300,377.67**	**$41,100.78**
Year	Annual Savings	Annual Savings
1	$8,238.72	$1,127.31
2	$8,485.88	$1,161.13
3	$8,740.46	$1,195.96
4	$9,002.67	$1,231.84
5	$9,272.75	$1,268.79
6	$9,550.93	$1,306.86
7	$9,837.46	$1,346.06
8	$10,132.59	$1,386.45
9	$10,436.56	$1,428.04
10	$10,749.66	$1,470.88
11	$11,072.15	$1,515.01
12	$11,404.32	$1,560.46
13	$11,746.44	$1,607.27
14	$12,098.84	$1,655.49
15	$12,461.80	$1,705.15
16	$12,835.66	$1,756.31
17	$13,220.73	$1,809.00
18	$13,617.35	$1,863.27
19	$14,025.87	$1,919.16
20	$14,446.65	$1,976.74
21	$14,880.04	$2,036.04
22	$15,326.45	$2,097.12
23	$15,786.24	$2,160.04
24	$16,259.83	$2,224.84
25	$16,747.62	$2,291.58

Lifetime Savings Analysis - Photovoltaic Solar Energy Systems								
ECM	**Dickenson**	**Liberty**	**PS #6**	**PS #11**	**PS #23**	**PS #24**	**PS #25**	**PS #27**
Assumed Inflation (Gas)								
Initial Yearly Savings (Gas)								
Assumed Inflation (Electricity)	3%	3%	3%	3%	3%	3%	3%	3%
Initial Yearly Savings (Electricity)	$65,284.50	$9,011.10	$19,566.96	$65,718.50	$37,515.60	$31,925.04	$50,204.70	$25,010.40
Assumed Average Useful Life (Years)	25	25	25	25	25	25	25	25
Lifetime Savings	**$2,380,224.84**	**$328,538.08**	**$713,396.97**	**$2,396,048.31**	**$1,367,791.18**	**$1,163,963.47**	**$1,830,426.43**	**$911,860.78**
Year	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings
1	$65,284.50	$9,011.10	$19,566.96	$65,718.50	$37,515.60	$31,925.04	$50,204.70	$25,010.40
2	$67,243.04	$9,281.43	$20,153.97	$67,690.06	$38,641.07	$32,882.79	$51,710.84	$25,760.71
3	$69,260.33	$9,559.88	$20,758.59	$69,720.76	$39,800.30	$33,869.27	$53,262.17	$26,533.53
4	$71,338.14	$9,846.67	$21,381.35	$71,812.38	$40,994.31	$34,885.35	$54,860.03	$27,329.54
5	$73,478.28	$10,142.07	$22,022.79	$73,966.76	$42,224.14	$35,931.91	$56,505.83	$28,149.43
6	$75,682.63	$10,446.33	$22,683.47	$76,185.76	$43,490.86	$37,009.87	$58,201.01	$28,993.91
7	$77,953.11	$10,759.72	$23,363.97	$78,471.33	$44,795.59	$38,120.17	$59,947.04	$29,863.73
8	$80,291.70	$11,082.52	$24,064.89	$80,825.47	$46,139.46	$39,263.77	$61,745.45	$30,759.64
9	$82,700.45	$11,414.99	$24,786.84	$83,250.23	$47,523.64	$40,441.69	$63,597.81	$31,682.43
10	$85,181.46	$11,757.44	$25,530.44	$85,747.74	$48,949.35	$41,654.94	$65,505.75	$32,632.90
11	$87,736.91	$12,110.16	$26,296.36	$88,320.17	$50,417.83	$42,904.58	$67,470.92	$33,611.89
12	$90,369.02	$12,473.47	$27,085.25	$90,969.78	$51,930.36	$44,191.72	$69,495.05	$34,620.24
13	$93,080.09	$12,847.67	$27,897.81	$93,698.87	$53,488.28	$45,517.47	$71,579.90	$35,658.85
14	$95,872.49	$13,233.10	$28,734.74	$96,509.84	$55,092.92	$46,883.00	$73,727.29	$36,728.62
15	$98,748.66	$13,630.10	$29,596.78	$99,405.13	$56,745.71	$48,289.49	$75,939.11	$37,830.47
16	$101,711.12	$14,039.00	$30,484.69	$102,387.29	$58,448.08	$49,738.17	$78,217.29	$38,965.39
17	$104,762.46	$14,460.17	$31,399.23	$105,458.91	$60,201.52	$51,230.32	$80,563.81	$40,134.35
18	$107,905.33	$14,893.98	$32,341.20	$108,622.67	$62,007.57	$52,767.23	$82,980.72	$41,338.38
19	$111,142.49	$15,340.79	$33,311.44	$111,881.35	$63,867.80	$54,350.24	$85,470.14	$42,578.53
20	$114,476.77	$15,801.02	$34,310.78	$115,237.79	$65,783.83	$55,980.75	$88,034.25	$43,855.89
21	$117,911.07	$16,275.05	$35,340.11	$118,694.93	$67,757.35	$57,660.17	$90,675.27	$45,171.56
22	$121,448.40	$16,763.30	$36,400.31	$122,255.78	$69,790.07	$59,389.98	$93,395.53	$46,526.71
23	$125,091.85	$17,266.20	$37,492.32	$125,923.45	$71,883.77	$61,171.68	$96,197.40	$47,922.51
24	$128,844.61	$17,784.19	$38,617.09	$129,701.15	$74,040.28	$63,006.83	$99,083.32	$49,360.19
25	$132,709.95	$18,317.71	$39,775.60	$133,592.19	$76,261.49	$64,897.03	$102,055.82	$50,840.99

Lifetime Savings Analysis - Photovoltaic Solar Energy Systems			
ECM	**Lincoln High School**	**McNair Academic High School**	**PS #5**
Assumed Inflation (Gas)			
Initial Yearly Savings (Gas)			
Assumed Inflation (Electricity)	3%	3%	3%
Initial Yearly Savings (Electricity)	$63,384.20	$33,102.00	$22,068.00
Assumed Average Useful Life (Years)	25	25	25
Lifetime Savings	**$2,310,941.30**	**$1,206,874.57**	**$804,583.05**
Year	Annual Savings	Annual Savings	Annual Savings
1	$63,384.20	$33,102.00	$22,068.00
2	$65,285.73	$34,095.06	$22,730.04
3	$67,244.30	$35,117.91	$23,411.94
4	$69,261.63	$36,171.45	$24,114.30
5	$71,339.48	$37,256.59	$24,837.73
6	$73,479.66	$38,374.29	$25,582.86
7	$75,684.05	$39,525.52	$26,350.35
8	$77,954.57	$40,711.28	$27,140.86
9	$80,293.21	$41,932.62	$27,955.08
10	$82,702.00	$43,190.60	$28,793.73
11	$85,183.06	$44,486.32	$29,657.55
12	$87,738.56	$45,820.91	$30,547.27
13	$90,370.71	$47,195.54	$31,463.69
14	$93,081.83	$48,611.40	$32,407.60
15	$95,874.29	$50,069.75	$33,379.83
16	$98,750.52	$51,571.84	$34,381.22
17	$101,713.03	$53,118.99	$35,412.66
18	$104,764.42	$54,712.56	$36,475.04
19	$107,907.36	$56,353.94	$37,569.29
20	$111,144.58	$58,044.56	$38,696.37
21	$114,478.92	$59,785.89	$39,857.26
22	$117,913.28	$61,579.47	$41,052.98
23	$121,450.68	$63,426.86	$42,284.57
24	$125,094.20	$65,329.66	$43,553.11
25	$128,847.03	$67,289.55	$44,859.70

Lifetime Savings Analysis - Photovoltaic Solar Energy Systems								
ECM	**MS #7**	**Regional Day**	**PS #22**	**PS #37**	**Ferris**	**PS #16**	**PS #12**	**PS #14**
Assumed Inflation (Gas)								
Initial Yearly Savings (Gas)								
Assumed Inflation (Electricity)	3%	3%	3%	3%	3%	3%	3%	3%
Initial Yearly Savings (Electricity)	$55,170.00	$33,347.20	$58,848.00	$31,876.00	$20,596.80	$18,390.00	$26,972.00	$26,972.00
Assumed Average Useful Life (Years)	25	25	25	25	25	25	25	25
Lifetime Savings	**$2,011,457.61**	**$1,215,814.38**	**$2,145,554.79**	**$1,162,175.51**	**$750,944.18**	**$670,485.87**	**$983,379.28**	**$983,379.28**
Year	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings
1	$55,170.00	$33,347.20	$58,848.00	$31,876.00	$20,596.80	$18,390.00	$26,972.00	$26,972.00
2	$56,825.10	$34,347.62	$60,613.44	$32,832.28	$21,214.70	$18,941.70	$27,781.16	$27,781.16
3	$58,529.85	$35,378.04	$62,431.84	$33,817.25	$21,851.15	$19,509.95	$28,614.59	$28,614.59
4	$60,285.75	$36,439.39	$64,304.80	$34,831.77	$22,506.68	$20,095.25	$29,473.03	$29,473.03
5	$62,094.32	$37,532.57	$66,233.94	$35,876.72	$23,181.88	$20,698.11	$30,357.22	$30,357.22
6	$63,957.15	$38,658.54	$68,220.96	$36,953.02	$23,877.34	$21,319.05	$31,267.94	$31,267.94
7	$65,875.87	$39,818.30	$70,267.59	$38,061.61	$24,593.66	$21,958.62	$32,205.98	$32,205.98
8	$67,852.14	$41,012.85	$72,375.62	$39,203.46	$25,331.47	$22,617.38	$33,172.16	$33,172.16
9	$69,887.71	$42,243.24	$74,546.89	$40,379.56	$26,091.41	$23,295.90	$34,167.32	$34,167.32
10	$71,984.34	$43,510.53	$76,783.29	$41,590.95	$26,874.15	$23,994.78	$35,192.34	$35,192.34
11	$74,143.87	$44,815.85	$79,086.79	$42,838.68	$27,680.38	$24,714.62	$36,248.11	$36,248.11
12	$76,368.18	$46,160.32	$81,459.39	$44,123.84	$28,510.79	$25,456.06	$37,335.56	$37,335.56
13	$78,659.23	$47,545.13	$83,903.18	$45,447.55	$29,366.11	$26,219.74	$38,455.62	$38,455.62
14	$81,019.00	$48,971.49	$86,420.27	$46,810.98	$30,247.10	$27,006.33	$39,609.29	$39,609.29
15	$83,449.58	$50,440.63	$89,012.88	$48,215.31	$31,154.51	$27,816.53	$40,797.57	$40,797.57
16	$85,953.06	$51,953.85	$91,683.27	$49,661.77	$32,089.14	$28,651.02	$42,021.50	$42,021.50
17	$88,531.65	$53,512.47	$94,433.76	$51,151.62	$33,051.82	$29,510.55	$43,282.14	$43,282.14
18	$91,187.60	$55,117.84	$97,266.78	$52,686.17	$34,043.37	$30,395.87	$44,580.61	$44,580.61
19	$93,923.23	$56,771.38	$100,184.78	$54,266.76	$35,064.67	$31,307.74	$45,918.02	$45,918.02
20	$96,740.93	$58,474.52	$103,190.32	$55,894.76	$36,116.61	$32,246.98	$47,295.57	$47,295.57
21	$99,643.16	$60,228.75	$106,286.03	$57,571.60	$37,200.11	$33,214.39	$48,714.43	$48,714.43
22	$102,632.45	$62,035.62	$109,474.61	$59,298.75	$38,316.12	$34,210.82	$50,175.87	$50,175.87
23	$105,711.43	$63,896.68	$112,758.85	$61,077.71	$39,465.60	$35,237.14	$51,681.14	$51,681.14
24	$108,882.77	$65,813.58	$116,141.62	$62,910.04	$40,649.57	$36,294.26	$53,231.58	$53,231.58
25	$112,149.25	$67,787.99	$119,625.87	$64,797.34	$41,869.05	$37,383.08	$54,828.52	$54,828.52

IRR, NPV, AROI

Inflation Rate: **3%**

Power Management Software	
Sample Facility	
Life of ECRM (Yrs):	**5**
Year	Cash Flow
0	**($1,840.00)**
1	**$3,205.08**
2	$3,301.23
3	$3,400.27
4	$3,502.28
5	$3,607.35
IRR	175.93%
NPV	$13,718.64
AROI	154.19%

Power Management Software

ECM	Sample Facility
Assumed Inflation (Gas)	
Initial Yearly Savings (Gas)	
Assumed Inflation (Electricity)	3%
Initial Yearly Savings (Electricity)	$3,205.08
Assumed Average Useful Life (Years)	5
Lifetime Savings	**$17,016.21**
Year	Annual Savings
1	$3,205.08
2	$3,301.23
3	$3,400.27
4	$3,502.28
5	$3,607.35

IRR, NPV, AROI

Inflation Rate: **3%**

Lighting Upgrades		**Lighting Upgrades**		**Lighting Upgrades**		**Lighting Upgrades**	
PS 15 (Whitney M. Young Jr.) - Total		**PS 38 (James F. Murry) - Total**		**PS 34 - Total**		**PS 17 (Joseph H. Brensinger) - Total**	
Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**
Year	Cash Flow	Year	Cash Flow	Year	Cash Flow	Year	Cash Flow
0	**($68,134.57)**	0	**($57,926.16)**	0	**($30,353.47)**	0	**($332,169.47)**
1	**$21,553.50**	1	**$12,986.89**	1	**$11,833.87**	1	**$57,072.95**
2	$22,200.10	2	$13,376.50	2	$12,188.88	2	$58,785.13
3	$22,866.11	3	$13,777.80	3	$12,554.55	3	$60,548.69
4	$23,552.09	4	$14,191.13	4	$12,931.18	4	$62,365.15
5	$24,258.65	5	$14,616.86	5	$13,319.12	5	$64,236.10
6	$24,986.41	6	$15,055.37	6	$13,718.69	6	$66,163.19
7	$25,736.01	7	$15,507.03	7	$14,130.25	7	$68,148.08
8	$26,508.09	8	$15,972.24	8	$14,554.16	8	$70,192.53
9	$27,303.33	9	$16,451.41	9	$14,990.79	9	$72,298.30
10	$28,122.43	10	$16,944.95	10	$15,440.51	10	$74,467.25
11	$28,966.10	11	$17,453.30	11	$15,903.73	11	$76,701.27
12	$29,835.08	12	$17,976.90	12	$16,380.84	12	$79,002.31
13	$30,730.14	13	$18,516.21	13	$16,872.26	13	$81,372.37
14	$31,652.04	14	$19,071.69	14	$17,378.43	14	$83,813.55
15	$32,601.60	15	$19,643.84	15	$17,899.78	15	$86,327.95
IRR	34.02%	IRR	24.04%	IRR	41.66%	IRR	17.92%
NPV	$245,751.35	NPV	$131,203.36	NPV	$141,984.38	NPV	$498,989.94
AROI	24.97%	AROI	15.75%	AROI	32.32%	AROI	10.52%
Lighting Upgrades		**Lighting Upgrades**		**Lighting Upgrades**		**Lighting Upgrades**	
PS 15 (Whitney M. Young Jr.) - Interior		**PS 38 (James F. Murry) - Interior**		**PS 34 - Interior**		**PS 17 (Joseph H. Brensinger) - Interior**	
Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**
Year	Cash Flow	Year	Cash Flow	Year	Cash Flow	Year	Cash Flow
0	**($50,743.07)**	0	**($40,534.66)**	0	**($12,860.72)**	0	**($312,805.97)**
1	**$20,403.95**	1	**$11,743.79**	1	**$9,191.44**	1	**$55,399.99**
2	$21,016.07	2	$12,096.11	2	$9,467.18	2	$57,061.99
3	$21,646.55	3	$12,458.99	3	$9,751.20	3	$58,773.85
4	$22,295.95	4	$12,832.76	4	$10,043.74	4	$60,537.07
5	$22,964.83	5	$13,217.74	5	$10,345.05	5	$62,353.18
6	$23,653.78	6	$13,614.27	6	$10,655.40	6	$64,223.77
7	$24,363.39	7	$14,022.70	7	$10,975.06	7	$66,150.49
8	$25,094.29	8	$14,443.38	8	$11,304.31	8	$68,135.00
9	$25,847.12	9	$14,876.68	9	$11,643.44	9	$70,179.05
10	$26,622.53	10	$15,322.98	10	$11,992.75	10	$72,284.42
11	$27,421.21	11	$15,782.67	11	$12,352.53	11	$74,452.95
12	$28,243.84	12	$16,256.15	12	$12,723.10	12	$76,686.54
13	$29,091.16	13	$16,743.84	13	$13,104.80	13	$78,987.14
14	$29,963.89	14	$17,246.15	14	$13,497.94	14	$81,356.75
15	$30,862.81	15	$17,763.54	15	$13,902.88	15	$83,797.46
IRR	42.91%	IRR	31.20%	IRR	74.44%	IRR	18.57%
NPV	$246,401.89	NPV	$130,491.43	NPV	$120,995.21	NPV	$493,990.01
AROI	33.54%	AROI	22.31%	AROI	64.80%	AROI	11.04%
Lighting Upgrades		**Lighting Upgrades**		**Lighting Upgrades**		**Lighting Upgrades**	
PS 15 (Whitney M. Young Jr.) - Exterior		**PS 38 (James F. Murry) - Exterior**		**PS 34 - Exterior**		**PS 17 (Joseph H. Brensinger) - Exterior**	
Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**
Year	Cash Flow	Year	Cash Flow	Year	Cash Flow	Year	Cash Flow
0	**($17,391.50)**	0	**($17,391.50)**	0	**($17,492.75)**	0	**($19,363.50)**
1	**$1,149.55**	1	**$1,243.10**	1	**$2,642.42**	1	**$1,672.96**
2	$1,184.03	2	$1,280.40	2	$2,721.70	2	$1,723.14
3	$1,219.55	3	$1,318.81	3	$2,803.35	3	$1,774.84
4	$1,256.14	4	$1,358.37	4	$2,887.45	4	$1,828.08
5	$1,293.82	5	$1,399.12	5	$2,974.07	5	$1,882.93
6	$1,332.64	6	$1,441.10	6	$3,063.29	6	$1,939.41
7	$1,372.62	7	$1,484.33	7	$3,155.19	7	$1,997.60
8	$1,413.80	8	$1,528.86	8	$3,249.85	8	$2,057.52
9	$1,456.21	9	$1,574.72	9	$3,347.34	9	$2,119.25
10	$1,499.90	10	$1,621.97	10	$3,447.77	10	$2,182.83
11	$1,544.89	11	$1,670.63	11	$3,551.20	11	$2,248.31
12	$1,591.24	12	$1,720.74	12	$3,657.73	12	$2,315.76
13	$1,638.98	13	$1,772.37	13	$3,767.47	13	$2,385.23
14	$1,688.15	14	$1,825.54	14	$3,880.49	14	$2,456.79
15	$1,738.79	15	$1,880.30	15	$3,996.90	15	$2,530.50
IRR	2.51%	IRR	3.52%	IRR	15.34%	IRR	6.11%
NPV	($650.54)	NPV	$711.93	NPV	$20,989.16	NPV	$4,999.93
AROI	-0.06%	AROI	0.48%	AROI	8.44%	AROI	1.97%

ECM	PS 15 (Whitney M. Young Jr.) - Total	PS 38 (James F. Murry) - Total	PS 34 - Total	PS 17 (Joseph H. Brensinger) - Total
Assumed Inflation (Gas)	2%	2%	2%	2%
Initial Yearly Savings (Gas)				
Assumed Inflation (Electricity)	3%	3%	3%	3%
Initial Yearly Savings (Electricity)	$19,291.95	$12,247.55	$11,801.13	$50,093.02
Assumed Average Useful Life (Years)	15	15	15	15
Lifetime Savings	**$358,809.28**	**$227,791.12**	**$219,488.24**	**$931,675.86**
Year	Annual Savings	Annual Savings	Annual Savings	Annual Savings
1	$19,291.95	$12,247.55	$11,801.13	$50,093.02
2	$19,870.71	$12,614.98	$12,155.17	$51,595.82
3	$20,466.83	$12,993.43	$12,519.82	$53,143.69
4	$21,080.83	$13,383.23	$12,895.42	$54,738.00
5	$21,713.26	$13,784.73	$13,282.28	$56,380.14
6	$22,364.66	$14,198.27	$13,680.75	$58,071.55
7	$23,035.59	$14,624.21	$14,091.17	$59,813.69
8	$23,726.66	$15,062.94	$14,513.90	$61,608.10
9	$24,438.46	$15,514.83	$14,949.32	$63,456.35
10	$25,171.62	$15,980.27	$15,397.80	$65,360.04
11	$25,926.76	$16,459.68	$15,859.73	$67,320.84
12	$26,704.57	$16,953.47	$16,335.53	$69,340.46
13	$27,505.70	$17,462.08	$16,825.59	$71,420.68
14	$28,330.88	$17,985.94	$17,330.36	$73,563.30
15	$29,180.80	$18,525.52	$17,850.27	$75,770.19

ECM	PS 15 (Whitney M. Young Jr.) - Interior	PS 38 (James F. Murry) - Interior	PS 34 - Interior	PS 17 (Joseph H. Brensinger) - Interior
Assumed Inflation (Gas)	2%	2%	2%	2%
Initial Yearly Savings (Gas)				
Assumed Inflation (Electricity)	3%	3%	3%	3%
Initial Yearly Savings (Electricity)	$18,169.27	$11,031.31	$9,180.14	$48,450.09
Assumed Average Useful Life (Years)	15	15	15	15
Lifetime Savings	**$337,928.62**	**$205,170.41**	**$170,740.64**	**$901,119.00**
Year	Annual Savings	Annual Savings	Annual Savings	Annual Savings
1	$18,169.27	$11,031.31	$9,180.14	$48,450.09
2	$18,714.34	$11,362.25	$9,455.54	$49,903.59
3	$19,275.77	$11,703.12	$9,739.21	$51,400.70
4	$19,854.05	$12,054.21	$10,031.39	$52,942.72
5	$20,449.67	$12,415.84	$10,332.33	$54,531.00
6	$21,063.16	$12,788.31	$10,642.30	$56,166.93
7	$21,695.05	$13,171.96	$10,961.57	$57,851.94
8	$22,345.91	$13,567.12	$11,290.41	$59,587.50
9	$23,016.28	$13,974.14	$11,629.13	$61,375.12
10	$23,706.77	$14,393.36	$11,978.00	$63,216.37
11	$24,417.97	$14,825.16	$12,337.34	$65,112.87
12	$25,150.51	$15,269.91	$12,707.46	$67,066.25
13	$25,905.03	$15,728.01	$13,088.68	$69,078.24
14	$26,682.18	$16,199.85	$13,481.35	$71,150.59
15	$27,482.65	$16,685.85	$13,885.79	$73,285.10

ECM	PS 15 (Whitney M. Young Jr.) - Exterior	PS 38 (James F. Murry) - Exterior	PS 34 - Exterior	PS 17 (Joseph H. Brensinger) - Exterior
Assumed Inflation (Gas)	2%	2%	2%	2%
Initial Yearly Savings (Gas)				
Assumed Inflation (Electricity)	3%	3%	3%	3%
Initial Yearly Savings (Electricity)	$1,122.68	$1,216.24	$2,620.99	$1,642.94
Assumed Average Useful Life (Years)	15	15	15	15
Lifetime Savings	**$20,880.66**	**$22,620.71**	**$48,747.60**	**$30,556.86**
Year	Annual Savings	Annual Savings	Annual Savings	Annual Savings
1	$1,122.68	$1,216.24	$2,620.99	$1,642.94
2	$1,156.36	$1,252.73	$2,699.62	$1,692.23
3	$1,191.05	$1,290.31	$2,780.61	$1,742.99
4	$1,226.78	$1,329.02	$2,864.03	$1,795.28
5	$1,263.59	$1,368.89	$2,949.95	$1,849.14
6	$1,301.50	$1,409.95	$3,038.45	$1,904.62
7	$1,340.54	$1,452.25	$3,129.60	$1,961.75
8	$1,380.76	$1,495.82	$3,223.49	$2,020.61
9	$1,422.18	$1,540.69	$3,320.19	$2,081.22
10	$1,464.84	$1,586.92	$3,419.80	$2,143.66
11	$1,508.79	$1,634.52	$3,522.39	$2,207.97
12	$1,554.05	$1,683.56	$3,628.07	$2,274.21
13	$1,600.68	$1,734.07	$3,736.91	$2,342.44
14	$1,648.70	$1,786.09	$3,849.02	$2,412.71
15	$1,698.16	$1,839.67	$3,964.49	$2,485.09

IRR, NPV, AROI

Inflation Rate: **3%**

Lighting Upgrades		**Lighting Upgrades**		**Lighting Upgrades**	
PS #20 - Total		**Cunningham ECC - Total**		**Infinity Institute - Total**	
Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**
Year	Cash Flow	Year	Cash Flow	Year	Cash Flow
0	**($167,669.38)**	0	**($11,656.97)**	0	**($23,540.03)**
1	**$33,604.57**	1	**$3,043.63**	1	**$5,575.56**
2	$34,612.70	2	$3,134.94	2	$5,742.82
3	$35,651.09	3	$3,228.99	3	$5,915.11
4	$36,720.62	4	$3,325.86	4	$6,092.56
5	$37,822.24	5	$3,425.64	5	$6,275.34
6	$38,956.90	6	$3,528.40	6	$6,463.60
7	$40,125.61	7	$3,634.26	7	$6,657.51
8	$41,329.38	8	$3,743.28	8	$6,857.23
9	$42,569.26	9	$3,855.58	9	$7,062.95
10	$43,846.34	10	$3,971.25	10	$7,274.84
11	$45,161.73	11	$4,090.39	11	$7,493.08
12	$46,516.58	12	$4,213.10	12	$7,717.88
13	$47,912.08	13	$4,339.49	13	$7,949.41
14	$49,349.44	14	$4,469.68	14	$8,187.89
15	$50,829.92	15	$4,603.77	15	$8,433.53
IRR	21.32%	IRR	28.12%	IRR	25.46%
NPV	$321,717.52	NPV	$32,667.78	NPV	$57,657.41
AROI	13.38%	AROI	19.44%	AROI	17.02%
Lighting Upgrades		**Lighting Upgrades**		**Lighting Upgrades**	
PS #20 - Interior		**Cunningham ECC - Interior**		**Infinity Institute - Interior**	
Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**
Year	Cash Flow	Year	Cash Flow	Year	Cash Flow
0	**($144,345.63)**	0	**($604.84)**	0	**($10,496.41)**
1	**$32,813.01**	1	**$1,578.61**	1	**$4,502.55**
2	$33,797.40	2	$1,625.97	2	$4,637.62
3	$34,811.33	3	$1,674.75	3	$4,776.75
4	$35,855.67	4	$1,724.99	4	$4,920.05
5	$36,931.34	5	$1,776.74	5	$5,067.65
6	$38,039.28	6	$1,830.04	6	$5,219.68
7	$39,180.45	7	$1,884.94	7	$5,376.27
8	$40,355.87	8	$1,941.49	8	$5,537.56
9	$41,566.54	9	$1,999.74	9	$5,703.69
10	$42,813.54	10	$2,059.73	10	$5,874.80
11	$44,097.95	11	$2,121.52	11	$6,051.04
12	$45,420.88	12	$2,185.17	12	$6,232.58
13	$46,783.51	13	$2,250.72	13	$6,419.55
14	$48,187.02	14	$2,318.24	14	$6,612.14
15	$49,632.63	15	$2,387.79	15	$6,810.50
IRR	24.39%	IRR	263.99%	IRR	45.66%
NPV	$333,513.79	NPV	$22,384.63	NPV	$55,074.64
AROI	16.07%	AROI	254.33%	AROI	36.23%
Lighting Upgrades		**Lighting Upgrades**		**Lighting Upgrades**	
PS #20 - Exterior		**Cunningham ECC - Exterior**		**Infinity Institute - Exterior**	
Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**
Year	Cash Flow	Year	Cash Flow	Year	Cash Flow
0	**($23,323.75)**	0	**($11,052.13)**	0	**($13,043.63)**
1	**$791.55**	1	**$1,465.02**	1	**$1,073.01**
2	$815.30	2	$1,508.97	2	$1,105.20
3	$839.76	3	$1,554.24	3	$1,138.36
4	$864.95	4	$1,600.87	4	$1,172.51
5	$890.90	5	$1,648.90	5	$1,207.68
6	$917.63	6	$1,698.36	6	$1,243.92
7	$945.16	7	$1,749.31	7	$1,281.23
8	$973.51	8	$1,801.79	8	$1,319.67
9	$1,002.72	9	$1,855.85	9	$1,359.26
10	$1,032.80	10	$1,911.52	10	$1,400.04
11	$1,063.78	11	$1,968.87	11	$1,442.04
12	$1,095.70	12	$2,027.93	12	$1,485.30
13	$1,128.57	13	$2,088.77	13	$1,529.86
14	$1,162.42	14	$2,151.43	14	$1,575.75
15	$1,197.30	15	$2,215.98	15	$1,623.03
IRR	-4.98%	IRR	12.92%	IRR	5.42%
NPV	($11,796.27)	NPV	$10,283.15	NPV	$2,582.77
AROI	-3.27%	AROI	6.59%	AROI	1.56%

Lighting Upgrades	
PS #40 (Ezra L. Nolan) - Total	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($137,043.75)**
1	**$26,405.81**
2	$27,197.99
3	$28,013.93
4	$28,854.34
5	$29,719.98
6	$30,611.57
7	$31,529.92
8	$32,475.82
9	$33,450.09
10	$34,453.60
11	$35,487.20
12	$36,551.82
13	$37,648.38
14	$38,777.83
15	$39,941.16
IRR	20.42%
NPV	$247,506.93
AROI	12.60%

Lighting Upgrades	
Academy I Middle School - Total	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($161,862.50)**
1	**$24,695.22**
2	$25,436.07
3	$26,199.16
4	$26,985.13
5	$27,794.68
6	$28,628.53
7	$29,487.38
8	$30,372.00
9	$31,283.16
10	$32,221.66
11	$33,188.31
12	$34,183.96
13	$35,209.48
14	$36,265.76
15	$37,353.73
IRR	15.53%
NPV	$197,776.59
AROI	8.59%

Lighting Upgrades	
PS #29 (Gladys Nunery School) - Total	
Life of ECRM (Yrs):	15
Year	Cash Flow
0	**($134,972.31)**
1	**$29,535.84**
2	$30,421.92
3	$31,334.57
4	$32,274.61
5	$33,242.85
6	$34,240.13
7	$35,267.34
8	$36,325.36
9	$37,415.12
10	$38,537.57
11	$39,693.70
12	$40,884.51
13	$42,111.05
14	$43,374.38
15	$44,675.61
IRR	23.43%
NPV	$295,161.29
AROI	15.22%

Lighting Upgrades	
PS #40 (Ezra L. Nolan) - Interior	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($118,559.75)**
1	**$24,340.67**
2	$25,070.89
3	$25,823.02
4	$26,597.71
5	$27,395.64
6	$28,217.51
7	$29,064.04
8	$29,935.96
9	$30,834.04
10	$31,759.06
11	$32,711.83
12	$33,693.18
13	$34,703.98
14	$35,745.10
15	$36,817.45
IRR	21.89%
NPV	$235,916.06
AROI	13.86%

Lighting Upgrades	
Academy I Middle School - Interior	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($148,930.13)**
1	**$23,525.00**
2	$24,230.75
3	$24,957.67
4	$25,706.40
5	$26,477.59
6	$27,271.92
7	$28,090.08
8	$28,932.78
9	$29,800.76
10	$30,694.79
11	$31,615.63
12	$32,564.10
13	$33,541.02
14	$34,547.25
15	$35,583.67
IRR	16.21%
NPV	$193,666.94
AROI	9.13%

Lighting Upgrades	
PS #29 (Gladys Nunery School) - Interior	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($120,947.44)**
1	**$27,551.82**
2	$28,378.37
3	$29,229.72
4	$30,106.61
5	$31,009.81
6	$31,940.11
7	$32,898.31
8	$33,885.26
9	$34,901.82
10	$35,948.87
11	$37,027.34
12	$38,138.16
13	$39,282.30
14	$40,460.77
15	$41,674.60
IRR	24.45%
NPV	$280,292.62
AROI	16.11%

Lighting Upgrades	
PS #40 (Ezra L. Nolan) - Exterior	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($18,484.00)**
1	**$2,065.14**
2	$2,127.10
3	$2,190.91
4	$2,256.64
5	$2,324.33
6	$2,394.06
7	$2,465.89
8	$2,539.86
9	$2,616.06
10	$2,694.54
11	$2,775.38
12	$2,858.64
13	$2,944.40
14	$3,032.73
15	$3,123.71
IRR	10.01%
NPV	$11,590.87
AROI	4.51%

Lighting Upgrades	
Academy I Middle School - Exterior	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($12,932.38)**
1	**$1,170.22**
2	$1,205.33
3	$1,241.49
4	$1,278.73
5	$1,317.09
6	$1,356.60
7	$1,397.30
8	$1,439.22
9	$1,482.40
10	$1,526.87
11	$1,572.68
12	$1,619.86
13	$1,668.45
14	$1,718.51
15	$1,770.06
IRR	6.78%
NPV	$4,109.65
AROI	2.38%

Lighting Upgrades	
PS #29 (Gladys Nunery School) - Exterior	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($14,024.88)**
1	**$1,984.02**
2	$2,043.54
3	$2,104.85
4	$2,168.00
5	$2,233.04
6	$2,300.03
7	$2,369.03
8	$2,440.10
9	$2,513.30
10	$2,588.70
11	$2,666.36
12	$2,746.35
13	$2,828.74
14	$2,913.60
15	$3,001.01
IRR	14.10%
NPV	$14,868.67
AROI	7.48%

Lighting Upgrades	
Henry Snyder High School - Total	
Life of ECRM (Yrs):	15
Year	Cash Flow
0	**($104,479.60)**
1	**$33,272.13**
2	$34,270.29
3	$35,298.40
4	$36,357.35
5	$37,448.08
6	$38,571.52
7	$39,728.66
8	$40,920.52
9	$42,148.14
10	$43,412.58
11	$44,714.96
12	$46,056.41
13	$47,438.10
14	$48,861.24
15	$50,327.08
IRR	34.25%
NPV	$380,065.98
AROI	25.18%

Lighting Upgrades	
JCPS Administrative Building - Total	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($145,853.88)**
1	**$21,780.87**
2	$22,434.30
3	$23,107.32
4	$23,800.54
5	$24,514.56
6	$25,250.00
7	$26,007.50
8	$26,787.72
9	$27,591.35
10	$28,419.09
11	$29,271.67
12	$30,149.82
13	$31,054.31
14	$31,985.94
15	$32,945.52
IRR	15.12%
NPV	$171,343.25
AROI	8.27%

Lighting Upgrades	
PS #30 - (Alexander D. Sullivan) - Total	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($40,864.28)**
1	**$45,278.31**
2	$46,636.66
3	$48,035.76
4	$49,476.83
5	$50,961.14
6	$52,489.97
7	$54,064.67
8	$55,686.61
9	$57,357.21
10	$59,077.92
11	$60,850.26
12	$62,675.77
13	$64,556.04
14	$66,492.73
15	$68,487.51
IRR	113.80%
NPV	$618,528.59
AROI	104.14%

Lighting Upgrades	
Henry Snyder High School - Interior	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($84,962.98)**
1	**$30,705.13**
2	$31,626.28
3	$32,575.07
4	$33,552.32
5	$34,558.89
6	$35,595.66
7	$36,663.53
8	$37,763.44
9	$38,896.34
10	$40,063.23
11	$41,265.13
12	$42,503.08
13	$43,778.17
14	$45,091.52
15	$46,444.26
IRR	38.72%
NPV	$362,199.10
AROI	29.47%

Lighting Upgrades	
JCPS Administrative Building - Interior	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($133,290.25)**
1	**$20,781.79**
2	$21,405.24
3	$22,047.40
4	$22,708.82
5	$23,390.09
6	$24,091.79
7	$24,814.55
8	$25,558.98
9	$26,325.75
10	$27,115.52
11	$27,928.99
12	$28,766.86
13	$29,629.87
14	$30,518.76
15	$31,434.32
IRR	15.95%
NPV	$169,357.20
AROI	8.92%

Lighting Upgrades	
PS #30 - (Alexander D. Sullivan) - Interior	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($153,700.00)**
1	**$43,342.79**
2	$44,643.07
3	$45,982.36
4	$47,361.83
5	$48,782.69
6	$50,246.17
7	$51,753.56
8	$53,306.16
9	$54,905.35
10	$56,552.51
11	$58,249.08
12	$59,996.56
13	$61,796.45
14	$63,650.35
15	$65,559.86
IRR	30.38%
NPV	$477,505.65
AROI	21.53%

Lighting Upgrades	
Henry Snyder High School - Exterior	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($19,516.63)**
1	**$2,567.00**
2	$2,644.01
3	$2,723.33
4	$2,805.03
5	$2,889.18
6	$2,975.86
7	$3,065.13
8	$3,157.09
9	$3,251.80
10	$3,349.35
11	$3,449.83
12	$3,553.33
13	$3,659.93
14	$3,769.73
15	$3,882.82
IRR	12.78%
NPV	$17,866.89
AROI	6.49%

Lighting Upgrades	
JCPS Administrative Building - Exterior	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($12,563.63)**
1	**$999.08**
2	$1,029.05
3	$1,059.92
4	$1,091.72
5	$1,124.47
6	$1,158.21
7	$1,192.95
8	$1,228.74
9	$1,265.60
10	$1,303.57
11	$1,342.68
12	$1,382.96
13	$1,424.45
14	$1,467.18
15	$1,511.20
IRR	4.95%
NPV	$1,986.05
AROI	1.29%

Lighting Upgrades	
PS #30 - (Alexander D. Sullivan) - Exterior	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($153,700.00)**
1	**$1,935.52**
2	$1,993.59
3	$2,053.40
4	$2,115.00
5	$2,178.45
6	$2,243.80
7	$2,311.11
8	$2,380.45
9	$2,451.86
10	$2,525.42
11	$2,601.18
12	$2,679.22
13	$2,759.59
14	$2,842.38
15	$2,927.65
IRR	-13.73%
NPV	($125,512.79)
AROI	-5.41%

Lighting Upgrades	
PS #41 - (Fred W. Martin) - Total	
Life of ECRM (Yrs):	15
Year	Cash Flow
0	**($40,864.28)**
1	**$13,942.70**
2	$14,360.98
3	$14,791.81
4	$15,235.57
5	$15,692.64
6	$16,163.41
7	$16,648.32
8	$17,147.77
9	$17,662.20
10	$18,192.07
11	$18,737.83
12	$19,299.96
13	$19,878.96
14	$20,475.33
15	$21,089.59
IRR	36.63%
NPV	$162,184.79
AROI	27.45%

Lighting Upgrades	
PS #41 - (Fred W. Martin) - Interior	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($24,128.53)**
1	**$14,674.74**
2	$15,114.98
3	$15,568.43
4	$16,035.48
5	$16,516.55
6	$17,012.04
7	$17,522.40
8	$18,048.08
9	$18,589.52
10	$19,147.20
11	$19,721.62
12	$20,313.27
13	$20,922.67
14	$21,550.35
15	$22,196.86
IRR	63.76%
NPV	$189,581.23
AROI	54.15%

Lighting Upgrades	
PS #41 - (Fred W. Martin) - Exterior	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($16,735.75)**
1	**$2,031.62**
2	$2,092.57
3	$2,155.34
4	$2,220.01
5	$2,286.61
6	$2,355.20
7	$2,425.86
8	$2,498.64
9	$2,573.59
10	$2,650.80
11	$2,730.33
12	$2,812.24
13	$2,896.60
14	$2,983.50
15	$3,073.01
IRR	11.39%
NPV	$12,850.94
AROI	5.47%

IRR, NPV, AROI

Inflation Rate: 3%

Lighting Upgrades PS #27 - Total	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($15,796.41)**
1	**$12,389.24**
2	$12,760.91
3	$13,143.74
4	$13,538.05
5	$13,944.19
6	$14,362.52
7	$14,793.40
8	$15,237.20
9	$15,694.31
10	$16,165.14
11	$16,650.10
12	$17,149.60
13	$17,664.09
14	$18,194.01
15	$18,739.83
IRR	81.41%
NPV	$164,629.35
AROI	71.76%

Lighting Upgrades PS #28 - Total	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($27,916.31)**
1	**$19,477.14**
2	$20,061.45
3	$20,663.30
4	$21,283.20
5	$21,921.69
6	$22,579.34
7	$23,256.72
8	$23,954.43
9	$24,673.06
10	$25,413.25
11	$26,175.65
12	$26,960.92
13	$27,769.74
14	$28,602.84
15	$29,460.92
IRR	72.74%
NPV	$255,731.36
AROI	63.10%

Lighting Upgrades PS #31 - Total	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($6,863.19)**
1	**$7,960.20**
2	$8,199.01
3	$8,444.98
4	$8,698.33
5	$8,959.28
6	$9,228.06
7	$9,504.90
8	$9,790.05
9	$10,083.75
10	$10,386.26
11	$10,697.85
12	$11,018.78
13	$11,349.35
14	$11,689.83
15	$12,040.52
IRR	118.98%
NPV	$109,062.11
AROI	109.32%

IRR, NPV, AROI

Inflation Rate: 3%

Lighting Upgrades PS #33 - Total	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($6,317.06)**
1	**$3,477.31**
2	$3,581.63
3	$3,689.08
4	$3,799.75
5	$3,913.74
6	$4,031.15
7	$4,152.09
8	$4,276.65
9	$4,404.95
10	$4,537.10
11	$4,673.21
12	$4,813.41
13	$4,957.81
14	$5,106.55
15	$5,259.74
IRR	57.96%
NPV	$44,323.36
AROI	48.38%

Lighting Upgrades PS #39 - Total	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($33,848.06)**
1	**$14,630.59**
2	$15,069.51
3	$15,521.60
4	$15,987.24
5	$16,466.86
6	$16,960.87
7	$17,469.69
8	$17,993.78
9	$18,533.60
10	$19,089.60
11	$19,662.29
12	$20,252.16
13	$20,859.73
14	$21,485.52
15	$22,130.08
IRR	45.99%
NPV	$179,218.82
AROI	36.56%

Lighting Upgrades PS #27 - Interior	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($11,671.03)**
1	**$11,692.38**
2	$12,043.15
3	$12,404.44
4	$12,776.58
5	$13,159.87
6	$13,554.67
7	$13,961.31
8	$14,380.15
9	$14,811.55
10	$15,255.90
11	$15,713.58
12	$16,184.99
13	$16,670.53
14	$17,170.65
15	$17,685.77
IRR	103.18%
NPV	$158,606.31
AROI	93.52%

Lighting Upgrades PS #28 - Interior	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($22,415.81)**
1	**$18,670.64**
2	$19,230.76
3	$19,807.68
4	$20,401.91
5	$21,013.97
6	$21,644.38
7	$22,293.72
8	$22,962.53
9	$23,651.40
10	$24,360.95
11	$25,091.77
12	$25,844.53
13	$26,619.86
14	$27,418.46
15	$28,241.01
IRR	86.28%
NPV	$249,486.66
AROI	76.63%

Lighting Upgrades PS #31 - Interior	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($4,112.94)**
1	**$7,434.31**
2	$7,657.34
3	$7,887.06
4	$8,123.67
5	$8,367.38
6	$8,618.40
7	$8,876.96
8	$9,143.27
9	$9,417.56
10	$9,700.09
11	$9,991.09
12	$10,290.83
13	$10,599.55
14	$10,917.54
15	$11,245.06
IRR	183.75%
NPV	$104,153.74
AROI	174.09%

Lighting Upgrades PS #33 - Interior	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($3,566.81)**
1	**$3,135.38**
2	$3,229.44
3	$3,326.32
4	$3,426.11
5	$3,528.89
6	$3,634.76
7	$3,743.80
8	$3,856.12
9	$3,971.80
10	$4,090.96
11	$4,213.68
12	$4,340.10
13	$4,470.30
14	$4,604.41
15	$4,742.54
IRR	90.90%
NPV	$42,094.02
AROI	81.24%

Lighting Upgrades PS #39 - Interior	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($26,972.44)**
1	**$13,357.47**
2	$13,758.20
3	$14,170.94
4	$14,596.07
5	$15,033.95
6	$15,484.97
7	$15,949.52
8	$16,428.01
9	$16,920.85
10	$17,428.47
11	$17,951.33
12	$18,489.87
13	$19,044.56
14	$19,615.90
15	$20,204.38
IRR	52.38%
NPV	$167,553.86
AROI	42.86%

Lighting Upgrades PS #27 - Exterior	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($4,125.38)**
1	**$696.86**
2	$717.76
3	$739.30
4	$761.48
5	$784.32
6	$807.85
7	$832.08
8	$857.05
9	$882.76
10	$909.24
11	$936.52
12	$964.61
13	$993.55
14	$1,023.36
15	$1,054.06
IRR	17.57%
NPV	$6,023.04
AROI	10.23%

Lighting Upgrades PS #28 - Exterior	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($5,500.50)**
1	**$806.50**
2	$830.70
3	$855.62
4	$881.29
5	$907.73
6	$934.96
7	$963.01
8	$991.90
9	$1,021.66
10	$1,052.30
11	$1,083.87
12	$1,116.39
13	$1,149.88
14	$1,184.38
15	$1,219.91
IRR	14.77%
NPV	$6,244.70
AROI	8.00%

Lighting Upgrades PS #31 - Exterior	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($2,750.25)**
1	**$525.89**
2	$541.67
3	$557.92
4	$574.66
5	$591.90
6	$609.65
7	$627.94
8	$646.78
9	$666.18
10	$686.17
11	$706.75
12	$727.96
13	$749.80
14	$772.29
15	$795.46
IRR	20.25%
NPV	$4,908.37
AROI	12.45%

Lighting Upgrades PS #33 - Exterior	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($2,750.25)**
1	**$341.93**
2	$352.19
3	$362.76
4	$373.64
5	$384.85
6	$396.39
7	$408.28
8	$420.53
9	$433.15
10	$446.14
11	$459.53
12	$473.31
13	$487.51
14	$502.14
15	$517.20
IRR	11.80%
NPV	$2,229.34
AROI	5.77%

Lighting Upgrades PS #39 - Exterior	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($6,875.63)**
1	**$1,273.12**
2	$1,311.31
3	$1,350.65
4	$1,391.17
5	$1,432.91
6	$1,475.90
7	$1,520.17
8	$1,565.78
9	$1,612.75
10	$1,661.13
11	$1,710.97
12	$1,762.30
13	$1,815.16
14	$1,869.62
15	$1,925.71
IRR	19.53%
NPV	$11,664.96
AROI	11.85%

ECM	PS #20 - Total	Cunningham ECC - Total	Infinity Institute - Total	PS #40 (Ezra L. Nolan) - Total	Academy I Middle School - Total	PS #29 (Gladys Nunery School) - Total	Henry Snyder High School - Total	JCPS Administrative Building - Total	PS #30 - (Alexander D. Sullivan) - Total	PS #41 - (Fred W. Martin) - Total
Assumed Inflation (Gas)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Initial Yearly Savings (Gas)										
Assumed Inflation (Electricity)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Initial Yearly Savings (Electricity)	$26,039.06	$3,019.57	$4,858.11	$137,043.75	$161,862.50	$134,972.31	$104,479.60	$145,853.88	$170,535.75	$40,864.28
Assumed Average Useful Life (Years)	15	15	15	15	15	24	15	24	15	15
Lifetime Savings	**$484,298.23**	**$56,160.76**	**$90,355.49**	**$2,548,864.90**	**$3,010,466.70**	**$2,510,338.42**	**$1,943,207.08**	**$2,712,723.66**	**$3,171,779.73**	**$760,031.25**
Year	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings
1	$26,039.06	$3,019.57	$4,858.11	$137,043.75	$161,862.50	$134,972.31	$104,479.60	$145,853.88	$170,535.75	$40,864.28
2	$26,820.23	$3,110.16	$5,003.85	$141,155.06	$166,718.38	$139,021.48	$107,613.99	$150,229.49	$175,651.82	$42,090.21
3	$27,624.84	$3,203.46	$5,153.96	$145,389.71	$171,719.93	$143,192.13	$110,842.41	$154,736.38	$180,921.38	$43,352.92
4	$28,453.58	$3,299.57	$5,308.58	$149,751.41	$176,871.52	$147,487.89	$114,167.68	$159,378.47	$186,349.02	$44,653.50
5	$29,307.19	$3,398.55	$5,467.84	$154,243.95	$182,177.67	$151,912.53	$117,592.71	$164,159.82	$191,939.49	$45,993.11
6	$30,186.41	$3,500.51	$5,631.88	$158,871.27	$187,643.00	$156,469.90	$121,120.49	$169,084.62	$197,697.67	$47,372.90
7	$31,092.00	$3,605.53	$5,800.83	$163,637.40	$193,272.29	$161,164.00	$124,754.11	$174,157.15	$203,628.60	$48,794.09
8	$32,024.76	$3,713.69	$5,974.86	$168,546.53	$199,070.46	$165,998.92	$128,496.73	$179,381.87	$209,737.46	$50,257.91
9	$32,985.50	$3,825.10	$6,154.10	$173,602.92	$205,042.57	$170,978.89	$132,351.63	$184,763.33	$216,029.59	$51,765.65
10	$33,975.07	$3,939.86	$6,338.73	$178,811.01	$211,193.85	$176,108.25	$136,322.18	$190,306.22	$222,510.47	$53,318.62
11	$34,994.32	$4,058.05	$6,528.89	$184,175.34	$217,529.66	$181,391.50	$140,411.85	$196,015.41	$229,185.79	$54,918.18
12	$36,044.15	$4,179.79	$6,724.75	$189,700.60	$224,055.55	$186,833.25	$144,624.20	$201,895.87	$236,061.36	$56,565.72
13	$37,125.47	$4,305.19	$6,926.50	$195,391.62	$230,777.22	$192,438.24	$148,962.93	$207,952.75	$243,143.20	$58,262.69
14	$38,239.24	$4,434.34	$7,134.29	$201,253.37	$237,700.54	$198,211.39	$153,431.81	$214,191.33	$250,437.50	$60,010.57
15	$39,386.41	$4,567.37	$7,348.32	$207,290.97	$244,831.55	$204,157.73	$158,034.77	$220,617.07	$257,950.62	$61,810.89

ECM	PS #20 - Interior	Cunningham ECC - Interior	Infinity Institute - Interior	PS #40 (Ezra L. Nolan) - Interior	Academy I Middle School - Interior	PS #29 (Gladys Nunery School) - Interior	Henry Snyder High School - Interior	JCPS Administrative Building - Interior	PS #30 - (Alexander D. Sullivan) - Interior	PS #41 - (Fred W. Martin) - Interior
Assumed Inflation (Gas)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Initial Yearly Savings (Gas)										
Assumed Inflation (Electricity)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Initial Yearly Savings (Electricity)	$25,261.17	$1,561.03	$3,805.59	$118,559.75	$148,930.13	$120,947.44	$84,962.98	$133,290.25	$153,700.00	$24,128.53
Assumed Average Useful Life (Years)	15	15	24	15	15	24	15	24	15	15
Lifetime Savings	**$469,830.35**	**$29,033.50**	**$70,779.87**	**$2,205,082.58**	**$2,769,938.57**	**$2,249,490.97**	**$1,580,219.06**	**$2,479,053.88**	**$2,858,653.06**	**$448,764.47**
Year	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings
1	$25,261.17	$1,561.03	$3,805.59	$118,559.75	$148,930.13	$120,947.44	$84,962.98	$133,290.25	$153,700.00	$24,128.53
2	$26,019.01	$1,607.86	$3,919.76	$122,116.54	$153,398.03	$124,575.86	$87,511.86	$137,288.96	$158,311.00	$24,852.39
3	$26,799.58	$1,656.10	$4,037.35	$125,780.04	$157,999.97	$128,313.14	$90,137.22	$141,407.63	$163,060.33	$25,597.96
4	$27,603.56	$1,705.78	$4,158.47	$129,553.44	$162,739.97	$132,162.53	$92,841.34	$145,649.86	$167,952.14	$26,365.90
5	$28,431.67	$1,756.96	$4,283.23	$133,440.04	$167,622.17	$136,127.41	$95,626.58	$150,019.35	$172,990.70	$27,156.87
6	$29,284.62	$1,809.66	$4,411.72	$137,443.24	$172,650.83	$140,211.23	$98,495.37	$154,519.93	$178,180.43	$27,971.58
7	$30,163.16	$1,863.95	$4,544.08	$141,566.54	$177,830.36	$144,417.57	$101,450.24	$159,155.53	$183,525.84	$28,810.73
8	$31,068.05	$1,919.87	$4,680.40	$145,813.54	$183,165.27	$148,750.09	$104,493.74	$163,930.19	$189,031.61	$29,675.05
9	$32,000.10	$1,977.47	$4,820.81	$150,187.94	$188,660.23	$153,212.60	$107,628.55	$168,848.10	$194,702.56	$30,565.30
10	$32,960.10	$2,036.79	$4,965.43	$154,693.58	$194,320.03	$157,808.97	$110,857.41	$173,913.54	$200,543.64	$31,482.26
11	$33,948.90	$2,097.90	$5,114.40	$159,334.39	$200,149.63	$162,543.24	$114,183.13	$179,130.95	$206,559.95	$32,426.73
12	$34,967.37	$2,160.83	$5,267.83	$164,114.42	$206,154.12	$167,419.54	$117,608.63	$184,504.88	$212,756.75	$33,399.53
13	$36,016.39	$2,225.66	$5,425.86	$169,037.85	$212,338.75	$172,442.13	$121,136.89	$190,040.03	$219,139.45	$34,401.52
14	$37,096.88	$2,292.43	$5,588.64	$174,108.99	$218,708.91	$177,615.39	$124,770.99	$195,741.23	$225,713.63	$35,433.56
15	$38,209.79	$2,361.20	$5,756.30	$179,332.26	$225,270.18	$182,943.85	$128,514.12	$201,613.46	$232,485.04	$36,496.57

ECM	PS #20 - Exterior	Cunningham ECC - Exterior	Infinity Institute - Exterior	PS #40 (Ezra L. Nolan) - Exterior	Academy I Middle School - Exterior	PS #29 (Gladys Nunery School) - Exterior	Henry Snyder High School - Exterior	JCPS Administrative Building - Exterior	PS #30 - (Alexander D. Sullivan) - Exterior	PS #41 - (Fred W. Martin) - Exterior
Assumed Inflation (Gas)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Initial Yearly Savings (Gas)										
Assumed Inflation (Electricity)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Initial Yearly Savings (Electricity)	$777.89	$1,458.54	$1,052.51	$18,484.00	$12,932.38	$14,024.88	$19,516.63	$12,563.63	$16,835.75	$16,735.75
Assumed Average Useful Life (Years)	15	15	15	15	15	24	15	24	15	15
Lifetime Savings	**$14,467.87**	**$25,533.47**	**$19,575.62**	**$343,782.32**	**$240,528.13**	**$260,847.44**	**$362,988.03**	**$233,669.78**	**$313,126.66**	**$311,266.77**
Year	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings
1	$777.89	$1,458.54	$1,052.51	$18,484.00	$12,932.38	$14,024.88	$19,516.63	$12,563.63	$16,835.75	$16,735.75
2	$801.22	$1,502.30	$1,084.09	$19,038.52	$13,320.35	$14,445.62	$20,102.12	$12,940.53	$17,340.82	$17,237.82
3	$825.26	$1,547.37	$1,116.61	$19,609.68	$13,719.96	$14,878.99	$20,705.19	$13,328.75	$17,861.05	$17,754.96
4	$850.02	FALSE	$1,150.11	$20,197.97	$14,131.56	$15,325.36	$21,326.34	$13,728.61	$18,396.88	$18,287.61
5	$875.52	$1,641.60	$1,184.61	$20,803.90	$14,555.50	$15,785.12	$21,966.13	$14,140.47	$18,948.78	$18,836.23
6	$901.79	$1,690.85	$1,220.15	$21,428.02	$14,992.17	$16,258.67	$22,625.12	$14,564.68	$19,517.25	$19,401.32
7	$928.84	$1,741.57	$1,256.76	$22,070.86	$15,441.93	$16,746.43	$23,303.87	$15,001.63	$20,102.77	$19,983.36
8	$956.70	$1,793.82	$1,294.46	$22,732.99	$15,905.19	$17,248.83	$24,002.99	$15,451.67	$20,705.85	$20,582.86
9	$985.41	$1,847.63	$1,333.29	$23,414.98	$16,382.35	$17,766.29	$24,723.08	$15,915.22	$21,327.02	$21,200.35
10	$1,014.97	$1,903.06	$1,373.29	$24,117.43	$16,873.82	$18,299.28	$25,464.77	$16,392.68	$21,966.84	$21,836.36
11	$1,045.42	$1,960.16	$1,414.49	$24,840.95	$17,380.03	$18,848.26	$26,228.71	$16,884.46	$22,625.84	$22,491.45
12	$1,076.78	$2,018.96	$1,456.93	$25,586.18	$17,901.43	$19,413.71	$27,015.57	$17,391.00	$23,304.62	$23,166.19
13	$1,109.08	$2,079.53	$1,500.63	$26,353.76	$18,438.47	$19,996.12	$27,826.04	$17,912.73	$24,003.75	$23,861.18
14	$1,142.35	$2,141.92	$1,545.65	$27,144.38	$18,991.63	$20,596.00	$28,660.82	$18,450.11	$24,723.87	$24,577.01
15	$1,176.63	$2,206.17	$1,592.02	$27,958.71	$19,561.38	$21,213.88	$29,520.65	$19,003.61	$25,465.58	$25,314.32

Lifetime Savings Analysis - Photovoltaic Solar Energy Systems		
ECM	**PS#39**	**PS#1**
Assumed Inflation (Gas)		
Initial Yearly Savings (Gas)		
Assumed Inflation (Electricity)	3%	3%
Initial Yearly Savings (Electricity)	$8,238.72	$1,127.31
Assumed Average Useful Life (Years)	25	25
Lifetime Savings	**$300,377.67**	**$41,100.78**
Year	Annual Savings	Annual Savings
1	$8,238.72	$1,127.31
2	$8,485.88	$1,161.13
3	$8,740.46	$1,195.96
4	$9,002.67	$1,231.84
5	$9,272.75	$1,268.79
6	$9,550.93	$1,306.86
7	$9,837.46	$1,346.06
8	$10,132.59	$1,386.45
9	$10,436.56	$1,428.04
10	$10,749.66	$1,470.88
11	$11,072.15	$1,515.01
12	$11,404.32	$1,560.46
13	$11,746.44	$1,607.27
14	$12,098.84	$1,655.49
15	$12,461.80	$1,705.15
16	$12,835.66	$1,756.31
17	$13,220.73	$1,809.00
18	$13,617.35	$1,863.27
19	$14,025.87	$1,919.16
20	$14,446.65	$1,976.74
21	$14,880.04	$2,036.04
22	$15,326.45	$2,097.12
23	$15,786.24	$2,160.04
24	$16,259.83	$2,224.84
25	$16,747.62	$2,291.58

IRR, NPV, AROI

Inflation Rate: **3%**

Lighting Upgrades **Dickinson High School - Total**		**Lighting Upgrades** **Liberty High School - Total**		**Lighting Upgrades** **PS #1 - Total**	
Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**
Year	Cash Flow	Year	Cash Flow	Year	Cash Flow
0	**($75,698.44)**	0	**($8,773.13)**	0	**($15,306.78)**
1	**$37,218.06**	1	**$4,441.30**	1	**$13,040.70**
2	$38,334.61	2	$4,574.54	2	$13,431.92
3	$39,484.64	3	$4,711.77	3	$13,834.88
4	$40,669.18	4	$4,853.13	4	$14,249.92
5	$41,889.26	5	$4,998.72	5	$14,677.42
6	$43,145.94	6	$5,148.68	6	$15,117.74
7	$44,440.31	7	$5,303.14	7	$15,571.28
8	$45,773.52	8	$5,462.24	8	$16,038.41
9	$47,146.73	9	$5,626.11	9	$16,519.57
10	$48,561.13	10	$5,794.89	10	$17,015.15
11	$50,017.97	11	$5,968.74	11	$17,525.61
12	$51,518.50	12	$6,147.80	12	$18,051.38
13	$53,064.06	13	$6,332.23	13	$18,592.92
14	$54,655.98	14	$6,522.20	14	$19,150.70
15	$56,295.66	15	$6,717.86	15	$19,725.23
IRR	52.02%	IRR	53.50%	IRR	88.19%
NPV	$466,312.20	NPV	$55,906.00	NPV	$174,606.30
AROI	42.50%	AROI	43.96%	AROI	78.53%
Lighting Upgrades **Dickinson High School - Interior**		**Lighting Upgrades** **Liberty High School - Interior**		**Lighting Upgrades** **PS #1 - Interior**	
Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**
Year	Cash Flow	Year	Cash Flow	Year	Cash Flow
0	**($63,322.31)**	0	**($4,647.75)**	0	**($9,806.28)**
1	**$37,218.06**	1	**$3,744.44**	1	**$12,104.55**
2	$38,334.61	2	$3,856.77	2	$12,467.68
3	$39,484.64	3	$3,972.48	3	$12,841.71
4	$40,669.18	4	$4,091.65	4	$13,226.96
5	$41,889.26	5	$4,214.40	5	$13,623.77
6	$43,145.94	6	$4,340.83	6	$14,032.49
7	$44,440.31	7	$4,471.06	7	$14,453.46
8	$45,773.52	8	$4,605.19	8	$14,887.06
9	$47,146.73	9	$4,743.35	9	$15,333.68
10	$48,561.13	10	$4,885.65	10	$15,793.69
11	$50,017.97	11	$5,032.22	11	$16,267.50
12	$51,518.50	12	$5,183.18	12	$16,755.52
13	$53,064.06	13	$5,338.68	13	$17,258.19
14	$54,655.98	14	$5,498.84	14	$17,775.93
15	$56,295.66	15	$5,663.80	15	$18,309.21
IRR	61.71%	IRR	83.55%	IRR	126.44%
NPV	$478,688.33	NPV	$49,882.95	NPV	$166,473.51
AROI	52.11%	AROI	73.90%	AROI	116.77%
Lighting Upgrades **Dickinson High School - Exterior**		**Lighting Upgrades** **Liberty High School - Exterior**		**Lighting Upgrades** **PS #1 - Exterior**	
Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**
Year	Cash Flow	Year	Cash Flow	Year	Cash Flow
0	**($12,376.13)**	0	**($4,125.38)**	0	**($5,500.50)**
1	**$2,090.57**	1	**$696.86**	1	**$936.15**
2	$2,153.29	2	$717.76	2	$964.24
3	$2,217.89	3	$739.30	3	$993.16
4	$2,284.43	4	$761.48	4	$1,022.96
5	$2,352.96	5	$784.32	5	$1,053.65
6	$2,423.55	6	$807.85	6	$1,085.26
7	$2,496.25	7	$832.08	7	$1,117.81
8	$2,571.14	8	$857.05	8	$1,151.35
9	$2,648.28	9	$882.76	9	$1,185.89
10	$2,727.72	10	$909.24	10	$1,221.47
11	$2,809.56	11	$936.52	11	$1,258.11
12	$2,893.84	12	$964.61	12	$1,295.85
13	$2,980.66	13	$993.55	13	$1,334.73
14	$3,070.08	14	$1,023.36	14	$1,374.77
15	$3,162.18	15	$1,054.06	15	$1,416.01
IRR	17.57%	IRR	17.57%	IRR	17.73%
NPV	$18,069.13	NPV	$6,023.04	NPV	$8,132.78
AROI	10.23%	AROI	10.23%	AROI	10.35%

IRR, NPV, AROI

Inflation Rate: **3%**

Lighting Upgrades PS #6 - Total		**Lighting Upgrades PS #8 - Total**		**Lighting Upgrades PS #11 - Total**		**Lighting Upgrades PS #23 - Total**	
Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	15
Year	Cash Flow	Year	Cash Flow	Year	Cash Flow	Year	Cash Flow
0	**($53,587.72)**	0	**($20,022.78)**	0	**($25,362.28)**	0	**($24,048.69)**
1	**$33,443.11**	1	**$14,603.94**	1	**$18,872.90**	1	**$16,791.31**
2	$34,446.40	2	$15,042.06	2	$19,439.09	2	$17,295.05
3	$35,479.80	3	$15,493.32	3	$20,022.26	3	$17,813.90
4	$36,544.19	4	$15,958.12	4	$20,622.93	4	$18,348.31
5	$37,640.52	5	$16,436.87	5	$21,241.62	5	$18,898.76
6	$38,769.73	6	$16,929.97	6	$21,878.86	6	$19,465.73
7	$39,932.82	7	$17,437.87	7	$22,535.23	7	$20,049.70
8	$41,130.81	8	$17,961.01	8	$23,211.29	8	$20,651.19
9	$42,364.73	9	$18,499.84	9	$23,907.63	9	$21,270.72
10	$43,635.67	10	$19,054.84	10	$24,624.85	10	$21,908.85
11	$44,944.75	11	$19,626.48	11	$25,363.60	11	$22,566.11
12	$46,293.09	12	$20,215.27	12	$26,124.51	12	$23,243.09
13	$47,681.88	13	$20,821.73	13	$26,908.24	13	$23,940.39
14	$49,112.34	14	$21,446.39	14	$27,715.49	14	$24,658.60
15	$50,585.71	15	$22,089.78	15	$28,546.96	15	$25,398.36
IRR	65.36%	IRR	75.91%	IRR	77.39%	IRR	72.79%
NPV	$433,447.88	NPV	$192,656.03	NPV	$249,485.79	NPV	$220,484.90
AROI	55.74%	AROI	66.27%	AROI	67.75%	AROI	63.16%
Lighting Upgrades PS #6 - Interior		**Lighting Upgrades PS #8 - Interior**		**Lighting Upgrades PS #11 - Interior**		**Lighting Upgrades PS #23 - Interior**	
Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**
Year	Cash Flow	Year	Cash Flow	Year	Cash Flow	Year	Cash Flow
0	**($43,961.84)**	0	**($11,772.03)**	0	**($18,486.66)**	0	**($15,797.94)**
1	**$31,338.81**	1	**$13,210.23**	1	**$17,711.47**	1	**$15,397.59**
2	$32,278.98	2	$13,606.54	2	$18,242.81	2	$15,859.52
3	$33,247.35	3	$14,014.73	3	$18,790.10	3	$16,335.30
4	$34,244.77	4	$14,435.17	4	$19,353.80	4	$16,825.36
5	$35,272.11	5	$14,868.23	5	$19,934.42	5	$17,330.12
6	$36,330.27	6	$15,314.28	6	$20,532.45	6	$17,850.03
7	$37,420.18	7	$15,773.70	7	$21,148.42	7	$18,385.53
8	$38,542.79	8	$16,246.92	8	$21,782.87	8	$18,937.09
9	$39,699.07	9	$16,734.32	9	$22,436.36	9	$19,505.21
10	$40,890.04	10	$17,236.35	10	$23,109.45	10	$20,090.36
11	$42,116.74	11	$17,753.44	11	$23,802.74	11	$20,693.07
12	$43,380.25	12	$18,286.05	12	$24,516.82	12	$21,313.87
13	$44,681.65	13	$18,834.63	13	$25,252.32	13	$21,953.28
14	$46,022.10	14	$19,399.67	14	$26,009.89	14	$22,611.88
15	$47,402.77	15	$19,981.66	15	$26,790.19	15	$23,290.24
IRR	74.26%	IRR	115.22%	IRR	98.80%	IRR	100.46%
NPV	$412,428.64	NPV	$180,609.94	NPV	$239,447.38	NPV	$208,438.81
AROI	64.62%	AROI	105.55%	AROI	89.14%	AROI	90.80%
Lighting Upgrades PS #6 - Exterior		**Lighting Upgrades PS #8 - Exterior**		**Lighting Upgrades PS #11 - Exterior**		**Lighting Upgrades PS #23 - Exterior**	
Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**
Year	Cash Flow	Year	Cash Flow	Year	Cash Flow	Year	Cash Flow
0	**($9,625.88)**	0	**($8,250.75)**	0	**($6,875.63)**	0	**($8,250.75)**
1	**$2,104.30**	1	**$1,393.72**	1	**$1,161.43**	1	**$1,393.72**
2	$2,167.43	2	$1,435.53	2	$1,196.27	2	$1,435.53
3	$2,232.45	3	$1,478.59	3	$1,232.16	3	$1,478.59
4	$2,299.42	4	$1,522.95	4	$1,269.13	4	$1,522.95
5	$2,368.41	5	$1,568.64	5	$1,307.20	5	$1,568.64
6	$2,439.46	6	$1,615.70	6	$1,346.42	6	$1,615.70
7	$2,512.64	7	$1,664.17	7	$1,386.81	7	$1,664.17
8	$2,588.02	8	$1,714.09	8	$1,428.41	8	$1,714.09
9	$2,665.66	9	$1,765.52	9	$1,471.26	9	$1,765.52
10	$2,745.63	10	$1,818.48	10	$1,515.40	10	$1,818.48
11	$2,828.00	11	$1,873.04	11	$1,560.86	11	$1,873.04
12	$2,912.84	12	$1,929.23	12	$1,607.69	12	$1,929.23
13	$3,000.23	13	$1,987.11	13	$1,655.92	13	$1,987.11
14	$3,090.23	14	$2,046.72	14	$1,705.60	14	$2,046.72
15	$3,182.94	15	$2,108.12	15	$1,756.77	15	$2,108.12
IRR	23.41%	IRR	17.57%	IRR	17.57%	IRR	17.57%
NPV	$21,019.24	NPV	$12,046.08	NPV	$10,038.40	NPV	$12,046.08
AROI	15.19%	AROI	10.23%	AROI	10.23%	AROI	10.23%

Lighting Upgrades **PS #23 Annex (Duncan) - Total**	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($4,768.47)**
1	**$3,738.26**
2	$3,850.40
3	$3,965.92
4	$4,084.89
5	$4,207.44
6	$4,333.66
7	$4,463.67
8	$4,597.58
9	$4,735.51
10	$4,877.58
11	$5,023.90
12	$5,174.62
13	$5,329.86
14	$5,489.76
15	$5,654.45
IRR	81.38%
NPV	$49,672.17
AROI	71.73%

Lighting Upgrades **PS #24 - Total**	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($51,960.16)**
1	**$32,765.70**
2	$33,748.67
3	$34,761.13
4	$35,803.96
5	$36,878.08
6	$37,984.42
7	$39,123.96
8	$40,297.67
9	$41,506.60
10	$42,751.80
11	$44,034.36
12	$45,355.39
13	$46,716.05
14	$48,117.53
15	$49,561.06
IRR	66.01%
NPV	$425,210.19
AROI	56.39%

Lighting Upgrades **PS #25 - Total**	
Life of ECRM (Yrs):	15
Year	Cash Flow
0	**($21,850.91)**
1	**$10,864.10**
2	$11,190.03
3	$11,525.73
4	$11,871.50
5	$12,227.64
6	$12,594.47
7	$12,972.31
8	$13,361.48
9	$13,762.32
10	$14,175.19
11	$14,600.45
12	$15,038.46
13	$15,489.61
14	$15,954.30
15	$16,432.93
IRR	52.58%
NPV	$136,364.19
AROI	43.05%

Lighting Upgrades **PS #23 Annex (Duncan) - Interior**	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($1,330.66)**
1	**$3,157.54**
2	$3,252.27
3	$3,349.84
4	$3,450.33
5	$3,553.84
6	$3,660.46
7	$3,770.27
8	$3,883.38
9	$3,999.88
10	$4,119.88
11	$4,243.47
12	$4,370.78
13	$4,501.90
14	$4,636.96
15	$4,776.07
IRR	240.29%
NPV	$44,652.97
AROI	230.63%

Lighting Upgrades **PS #24 - Interior**	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($43,021.84)**
1	**$9,039.48**
2	$9,310.66
3	$9,589.98
4	$9,877.68
5	$10,174.01
6	$10,479.23
7	$10,793.61
8	$11,117.42
9	$11,450.94
10	$11,794.47
11	$12,148.30
12	$12,512.75
13	$12,888.13
14	$13,274.78
15	$13,673.02
IRR	22.44%
NPV	$88,621.04
AROI	14.34%

Lighting Upgrades **PS #25 - Interior**	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($11,537.47)**
1	**$9,039.48**
2	$9,310.66
3	$9,589.98
4	$9,877.68
5	$10,174.01
6	$10,479.23
7	$10,793.61
8	$11,117.42
9	$11,450.94
10	$11,794.47
11	$12,148.30
12	$12,512.75
13	$12,888.13
14	$13,274.78
15	$13,673.02
IRR	81.33%
NPV	$120,105.41
AROI	71.68%

Lighting Upgrades **PS #23 Annex (Duncan) - Exterior**	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($3,437.81)**
1	**$580.72**
2	$598.14
3	$616.08
4	$634.56
5	$653.60
6	$673.21
7	$693.40
8	$714.21
9	$735.63
10	$757.70
11	$780.43
12	$803.85
13	$827.96
14	$852.80
15	$878.38
IRR	17.57%
NPV	$5,019.20
AROI	10.23%

Lighting Upgrades **PS #24 - Exterior**	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($8,938.31)**
1	**$1,824.63**
2	$1,879.36
3	$1,935.74
4	$1,993.82
5	$2,053.63
6	$2,115.24
7	$2,178.70
8	$2,244.06
9	$2,311.38
10	$2,380.72
11	$2,452.14
12	$2,525.71
13	$2,601.48
14	$2,679.52
15	$2,759.91
IRR	21.75%
NPV	$17,633.90
AROI	13.75%

Lighting Upgrades **PS #25 - Exterior**	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($10,313.44)**
1	**$1,824.63**
2	$1,879.36
3	$1,935.74
4	$1,993.82
5	$2,053.63
6	$2,115.24
7	$2,178.70
8	$2,244.06
9	$2,311.38
10	$2,380.72
11	$2,452.14
12	$2,525.71
13	$2,601.48
14	$2,679.52
15	$2,759.91
IRR	18.54%
NPV	$16,258.77
AROI	11.03%

ECM	Dickinson High School - Total	Liberty High School - Interior	PS #1 - Interior	PS #6 - Exterior	PS #8 - Exterior	PS #11 - Exterior	PS #23 - Exterior	PS #23 Annex (Duncan) - Exterior	PS #24 - Exterior	PS #25 - Exterior
Assumed Inflation (Gas)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Initial Yearly Savings (Gas)										
Assumed Inflation (Electricity)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Initial Yearly Savings (Electricity)	$37,872.58	$4,415.92	$12,971.20	$33,319.95	$14,589.93	$18,830.62	$15,285.60	$3,732.42	$32,679.81	$10,694.90
Assumed Average Useful Life (Years)	15	15	15	15	15	15	15	24	15	15
Lifetime Savings	**$704,388.80**	**$82,131.35**	**$241,250.27**	**$619,714.80**	**$271,356.83**	**$350,229.12**	**$284,295.64**	**$69,418.90**	**$607,809.02**	**$198,913.57**
Year	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings
1	$37,872.58	$4,415.92	$12,971.20	$33,319.95	$14,589.93	$18,830.62	$15,285.60	$3,732.42	$32,679.81	$10,694.90
2	$39,008.75	$4,548.40	$13,360.34	$34,319.54	$15,027.63	$19,395.54	$15,744.17	$3,844.39	$33,660.21	$11,015.75
3	$40,179.02	$4,684.85	$13,761.15	$35,349.13	$15,478.46	$19,977.41	$16,216.50	$3,959.72	$34,670.01	$11,346.22
4	$41,384.39	$4,825.40	$14,173.98	$36,409.60	$15,942.81	$20,576.73	$16,702.99	$4,078.51	$35,710.11	$11,686.61
5	$42,625.92	$4,970.16	$14,599.20	$37,501.89	$16,421.09	$21,194.03	$17,204.08	$4,200.87	$36,781.42	$12,037.21
6	$43,904.70	$5,119.26	$15,037.18	$38,626.95	$16,913.73	$21,829.85	$17,720.21	$4,326.89	$37,884.86	$12,398.32
7	$45,221.84	$5,272.84	$15,488.29	$39,785.76	$17,421.14	$22,484.75	$18,251.81	$4,456.70	$39,021.41	$12,770.27
8	$46,578.49	$5,431.03	$15,952.94	$40,979.33	$17,943.77	$23,159.29	$18,799.37	$4,590.40	$40,192.05	$13,153.38
9	$47,975.85	$5,593.96	$16,431.53	$42,208.71	$18,482.09	$23,854.07	$19,363.35	$4,728.11	$41,397.81	$13,547.98
10	$49,415.12	$5,761.78	$16,924.48	$43,474.97	$19,036.55	$24,569.69	$19,944.25	$4,869.96	$42,639.74	$13,954.42
11	$50,897.58	$5,934.63	$17,432.21	$44,779.22	$19,607.64	$25,306.78	$20,542.57	$5,016.06	$43,918.94	$14,373.05
12	$52,424.50	$6,112.67	$17,955.18	$46,122.60	$20,195.87	$26,065.98	$21,158.85	$5,166.54	$45,236.50	$14,804.25
13	$53,997.24	$6,296.05	$18,493.83	$47,506.28	$20,801.75	$26,847.96	$21,793.62	$5,321.53	$46,593.60	$15,248.37
14	$55,617.16	$6,484.93	$19,048.65	$48,931.46	$21,425.80	$27,653.40	$22,447.43	$5,481.18	$47,991.41	$15,705.83
15	$57,285.67	$6,679.48	$19,620.11	$50,399.41	$22,068.58	$28,483.01	$23,120.85	$5,645.62	$49,431.15	$16,177.00

ECM	Dickinson High School - Interior	Liberty High School - Exterior	PS #1 - Total	PS #6 - Total	PS #8 - Total	PS #11 - Total	PS #23 - Total	PS #23 Annex (Duncan) - Total	PS #24 - Total	PS #25 - Total
Assumed Inflation (Gas)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Initial Yearly Savings (Gas)										
Assumed Inflation (Electricity)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Initial Yearly Savings (Electricity)	$35,803.03	$3,726.07	$12,051.40	$31,281.06	$13,210.23	$17,680.87	$13,905.90	$3,157.54	$31,284.78	$8,970.28
Assumed Average Useful Life (Years)	15	15	15	15	15	15	15	24	15	15
Lifetime Savings	**$665,897.42**	**$69,300.89**	**$224,142.99**	**$581,793.66**	**$245,695.91**	**$328,845.02**	**$258,634.72**	**$58,726.85**	**$581,862.98**	**$166,837.42**
Year	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings
1	$35,803.03	$3,726.07	$12,051.40	$31,281.06	$13,210.23	$17,680.87	$13,905.90	$3,157.54	$31,284.78	$8,970.28
2	$36,877.12	$3,837.85	$12,412.94	$32,219.49	$13,606.54	$18,211.30	$14,323.08	$3,252.27	$32,223.33	$9,239.39
3	$37,983.43	$3,952.99	$12,785.33	$33,186.07	$14,014.73	$18,757.64	$14,752.77	$3,349.84	$33,190.03	$9,516.57
4	$39,122.93	$4,071.58	$13,168.89	$34,181.65	$14,435.17	$19,320.37	$15,195.36	$3,450.33	$34,185.73	$9,802.06
5	$40,296.62	$4,193.73	$13,563.96	$35,207.10	$14,868.23	$19,899.98	$15,651.22	$3,553.84	$35,211.30	$10,096.13
6	$41,505.52	$4,319.54	$13,970.88	$36,263.32	$15,314.28	$20,496.98	$16,120.75	$3,660.46	$36,267.64	$10,399.01
7	$42,750.69	$4,449.12	$14,390.00	$37,351.22	$15,773.70	$21,111.89	$16,604.38	$3,770.27	$37,355.67	$10,710.98
8	$44,033.21	$4,582.60	$14,821.70	$38,471.75	$16,246.92	$21,745.24	$17,102.51	$3,883.38	$38,476.34	$11,032.31
9	$45,354.20	$4,720.08	$15,266.36	$39,625.91	$16,734.32	$22,397.60	$17,615.58	$3,999.88	$39,630.63	$11,363.28
10	$46,714.83	$4,861.68	$15,724.35	$40,814.68	$17,236.35	$23,069.53	$18,144.05	$4,119.88	$40,819.55	$11,704.18
11	$48,116.27	$5,007.53	$16,196.08	$42,039.12	$17,753.44	$23,761.61	$18,688.37	$4,243.47	$42,044.13	$12,055.30
12	$49,559.76	$5,157.76	$16,681.96	$43,300.30	$18,286.05	$24,474.46	$19,249.02	$4,370.78	$43,305.46	$12,416.96
13	$51,046.56	$5,312.49	$17,182.42	$44,599.31	$18,834.63	$25,208.70	$19,826.49	$4,501.90	$44,604.62	$12,789.47
14	$52,577.95	$5,471.86	$17,697.89	$45,937.28	$19,399.67	$25,964.96	$20,421.29	$4,636.96	$45,942.76	$13,173.16
15	$54,155.29	$5,636.02	$18,228.83	$47,315.40	$19,981.66	$26,743.91	$21,033.93	$4,776.07	$47,321.04	$13,568.35

ECM	Dickinson High School - Exterior	Liberty High School - Total	PS #1 - Interior	PS #6 - Interior	PS #8 - Interior	PS #11 - Interior	PS #23 - Interior	PS #23 Annex (Duncan) - Interior	PS #24 - Interior	PS #25 - Interior
Assumed Inflation (Gas)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Initial Yearly Savings (Gas)										
Assumed Inflation (Electricity)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Initial Yearly Savings (Electricity)	$2,069.55	$689.85	$919.80	$2,038.89	$1,379.70	$1,149.75	$1,379.70	$574.88	$1,395.03	$1,724.63
Assumed Average Useful Life (Years)	15	15	15	15	15	15	15	24	15	15
Lifetime Savings	**$38,491.38**	**$12,830.46**	**$17,107.28**	**$37,921.14**	**$25,660.92**	**$21,384.10**	**$25,660.92**	**$10,692.05**	**$25,946.04**	**$32,076.15**
Year	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings
1	$2,069.55	$689.85	$919.80	$2,038.89	$1,379.70	$1,149.75	$1,379.70	$574.88	$1,395.03	$1,724.63
2	$2,131.64	$710.55	$947.39	$2,100.06	$1,421.09	$1,184.24	$1,421.09	$592.12	$1,436.88	$1,776.36
3	$2,195.59	$731.86	$975.82	$2,163.06	$1,463.72	$1,219.77	$1,463.72	$609.88	$1,479.99	$1,829.65
4	$2,261.45	$753.82	$1,005.09	$2,227.95	$1,507.64	$1,256.36	$1,507.64	$628.18	$1,524.39	$1,884.54
5	$2,329.30	$776.43	$1,035.24	$2,294.79	$1,552.86	$1,294.05	$1,552.86	$647.03	$1,570.12	$1,941.08
6	$2,399.18	$799.73	$1,066.30	$2,363.63	$1,599.45	$1,332.88	$1,599.45	$666.44	$1,617.22	$1,999.31
7	$2,471.15	$823.72	$1,098.29	$2,434.54	$1,647.43	$1,372.86	$1,647.43	$686.43	$1,665.74	$2,059.29
8	$2,545.29	$848.43	$1,131.24	$2,507.58	$1,696.86	$1,414.05	$1,696.86	$707.02	$1,715.71	$2,121.07
9	$2,621.64	$873.88	$1,165.18	$2,582.80	$1,747.76	$1,456.47	$1,747.76	$728.23	$1,767.18	$2,184.70
10	$2,700.29	$900.10	$1,200.13	$2,660.29	$1,800.20	$1,500.16	$1,800.20	$750.08	$1,820.20	$2,250.24
11	$2,781.30	$927.10	$1,236.13	$2,740.10	$1,854.20	$1,545.17	$1,854.20	$772.58	$1,874.80	$2,317.75
12	$2,864.74	$954.91	$1,273.22	$2,822.30	$1,909.83	$1,591.52	$1,909.83	$795.76	$1,931.05	$2,387.28
13	$2,950.68	$983.56	$1,311.41	$2,906.97	$1,967.12	$1,639.27	$1,967.12	$819.63	$1,988.98	$2,458.90
14	$3,039.20	$1,013.07	$1,350.76	$2,994.18	$2,026.14	$1,688.45	$2,026.14	$844.22	$2,048.65	$2,532.67
15	$3,130.38	$1,043.46	$1,391.28	$3,084.00	$2,086.92	$1,739.10	$2,086.92	$869.55	$2,110.11	$2,608.65

ECM	PS #7 - Total	Regional Day - Total	PS #22 - Total	PS #37 - Total	Ferris - Total	PS #16 - Total
Assumed Inflation (Gas)	2%	2%	2%	2%	2%	2%
Initial Yearly Savings (Gas)						
Assumed Inflation (Electricity)	3%	3%	3%	3%	3%	3%
Initial Yearly Savings (Electricity)	$22,689.95	$14,611.36	$87,204.47	$3,515.53	$28,873.12	$7,962.92
Assumed Average Useful Life (Years)	15	15	15	15	15	15
Lifetime Savings	**$422,008.40**	**$271,755.49**	**$1,621,908.41**	**$65,385.04**	**$537,008.59**	**$148,101.72**
Year	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings
1	$22,689.95	$14,611.36	$87,204.47	$3,515.53	$28,873.12	$7,962.92
2	$23,370.65	$15,049.70	$89,820.60	$3,621.00	$29,739.31	$8,201.81
3	$24,071.77	$15,501.20	$92,515.22	$3,729.63	$30,631.49	$8,447.87
4	$24,793.92	$15,966.23	$95,290.68	$3,841.51	$31,550.43	$8,701.30
5	$25,537.74	$16,445.22	$98,149.40	$3,956.76	$32,496.95	$8,962.34
6	$26,303.87	$16,938.57	$101,093.88	$4,075.46	$33,471.85	$9,231.21
7	$27,092.99	$17,446.73	$104,126.70	$4,197.73	$34,476.01	$9,508.15
8	$27,905.77	$17,970.13	$107,250.50	$4,323.66	$35,510.29	$9,793.39
9	$28,742.95	$18,509.24	$110,468.01	$4,453.37	$36,575.60	$10,087.19
10	$29,605.24	$19,064.52	$113,782.05	$4,586.97	$37,672.87	$10,389.81
11	$30,493.39	$19,636.45	$117,195.51	$4,724.58	$38,803.05	$10,701.50
12	$31,408.20	$20,225.54	$120,711.38	$4,866.32	$39,967.14	$11,022.55
13	$32,350.44	$20,832.31	$124,332.72	$5,012.31	$41,166.16	$11,353.22
14	$33,320.95	$21,457.28	$128,062.70	$5,162.67	$42,401.14	$11,693.82
15	$34,320.58	$22,101.00	$131,904.58	$5,317.55	$43,673.18	$12,044.64

ECM	PS #7 - Interior	Regional Day - Interior	PS #22 - Interior	PS #37 - Interior	Ferris - Interior	PS #16 - Interior
Assumed Inflation (Gas)	2%	2%	2%	2%	2%	2%
Initial Yearly Savings (Gas)						
Assumed Inflation (Electricity)	3%	3%	3%	3%	3%	3%
Initial Yearly Savings (Electricity)	$22,236.62	$14,440.11	$86,559.73	$3,122.64	$28,614.36	$7,822.51
Assumed Average Useful Life (Years)	15	15	15	15	15	15
Lifetime Savings	**$413,576.95**	**$268,570.27**	**$1,609,917.02**	**$58,077.79**	**$532,195.95**	**$145,490.16**
Year	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings
1	$22,236.62	$14,440.11	$86,559.73	$3,122.64	$28,614.36	$7,822.51
2	$22,903.72	$14,873.31	$89,156.53	$3,216.32	$29,472.79	$8,057.18
3	$23,590.83	$15,319.51	$91,831.22	$3,312.81	$30,356.97	$8,298.90
4	$24,298.55	$15,779.09	$94,586.16	$3,412.20	$31,267.68	$8,547.87
5	$25,027.51	$16,252.47	$97,423.74	$3,514.56	$32,205.71	$8,804.30
6	$25,778.34	$16,740.04	$100,346.45	$3,620.00	$33,171.88	$9,068.43
7	$26,551.69	$17,242.24	$103,356.85	$3,728.60	$34,167.04	$9,340.48
8	$27,348.24	$17,759.51	$106,457.55	$3,840.46	$35,192.05	$9,620.70
9	$28,168.68	$18,292.29	$109,651.28	$3,955.67	$36,247.81	$9,909.32
10	$29,013.74	$18,841.06	$112,940.82	$4,074.34	$37,335.24	$10,206.60
11	$29,884.16	$19,406.29	$116,329.04	$4,196.57	$38,455.30	$10,512.80
12	$30,780.68	$19,988.48	$119,818.91	$4,322.47	$39,608.96	$10,828.18
13	$31,704.10	$20,588.14	$123,413.48	$4,452.14	$40,797.23	$11,153.03
14	$32,655.22	$21,205.78	$127,115.89	$4,585.71	$42,021.15	$11,487.62
15	$33,634.88	$21,841.95	$130,929.36	$4,723.28	$43,281.78	$11,832.25

ECM	PS #7 - Exterior	Regional Day - Exterior	PS #22 - Exterior	PS #37 - Exterior	Ferris - Exterior	PS #16 - Exterior
Assumed Inflation (Gas)	2%	2%	2%	2%	2%	2%
Initial Yearly Savings (Gas)						
Assumed Inflation (Electricity)	3%	3%	3%	3%	3%	3%
Initial Yearly Savings (Electricity)	$453.33	$171.26	$644.74	$392.89	$258.76	$140.42
Assumed Average Useful Life (Years)	15	15	15	15	15	15
Lifetime Savings	**$8,431.45**	**$2,998.07**	**$11,991.39**	**$7,307.25**	**$4,812.64**	**$2,611.57**
Year	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings
1	$453.33	$171.26	$644.74	$392.89	$258.76	$140.42
2	$466.93	$176.40	$664.08	$404.67	$266.52	$144.63
3	$480.94	$181.69	$684.00	$416.81	$274.52	$148.97
4	$495.37	FALSE	$704.52	$429.32	$282.75	$153.44
5	$510.23	$192.75	$725.66	$442.20	$291.24	$158.04
6	$525.53	$198.53	$747.43	$455.46	$299.97	$162.78
7	$541.30	$204.49	$769.85	$469.13	$308.97	$167.66
8	$557.54	$210.63	$792.94	$483.20	$318.24	$172.69
9	$574.26	$216.94	$816.73	$497.70	$327.79	$177.87
10	$591.49	$223.45	$841.23	$512.63	$337.62	$183.21
11	$609.24	$230.16	$866.47	$528.01	$347.75	$188.71
12	$627.51	$237.06	$892.47	$543.85	$358.18	$194.37
13	$646.34	$244.17	$919.24	$560.16	$368.93	$200.20
14	$665.73	$251.50	$946.82	$576.97	$380.00	$206.20
15	$685.70	$259.04	$975.22	$594.28	$391.40	$212.39

ECM	Lincoln - Total	McNair - Total	PS #5 - Total
Assumed Inflation (Gas)	2%	2%	2%
Initial Yearly Savings (Gas)			
Assumed Inflation (Electricity)	3%	3%	3%
Initial Yearly Savings (Electricity)	$25,750.13	$22,609.07	$43,193.03
Assumed Average Useful Life (Years)	15	15	15
Lifetime Savings	**$478,924.49**	**$420,504.07**	**$803,343.45**
Year	Annual Savings	Annual Savings	Annual Savings
1	$25,750.13	$22,609.07	$43,193.03
2	$26,522.64	$23,287.34	$44,488.82
3	$27,318.32	$23,985.96	$45,823.49
4	$28,137.86	$24,705.54	$47,198.19
5	$28,982.00	$25,446.70	$48,614.14
6	$29,851.46	$26,210.10	$50,072.56
7	$30,747.00	$26,996.41	$51,574.74
8	$31,669.41	$27,806.30	$53,121.98
9	$32,619.50	$28,640.49	$54,715.64
10	$33,598.08	$29,499.70	$56,357.11
11	$34,606.02	$30,384.69	$58,047.82
12	$35,644.21	$31,296.23	$59,789.26
13	$36,713.53	$32,235.12	$61,582.93
14	$37,814.94	$33,202.18	$63,430.42
15	$38,949.39	$34,198.24	$65,333.33

ECM	Lincoln - Interior	McNair - Interior	PS #5 - Interior
Assumed Inflation (Gas)	2%	2%	2%
Initial Yearly Savings (Gas)			
Assumed Inflation (Electricity)	3%	3%	3%
Initial Yearly Savings (Electricity)	$25,196.06	$22,155.74	$42,830.37
Assumed Average Useful Life (Years)	15	15	15
Lifetime Savings	**$468,619.39**	**$412,072.62**	**$796,598.29**
Year	Annual Savings	Annual Savings	Annual Savings
1	$25,196.06	$22,155.74	$42,830.37
2	$25,951.94	$22,820.41	$44,115.28
3	$26,730.50	$23,505.02	$45,438.74
4	$27,532.42	$24,210.17	$46,801.90
5	$28,358.39	$24,936.48	$48,205.95
6	$29,209.14	$25,684.57	$49,652.13
7	$30,085.42	$26,455.11	$51,141.70
8	$30,987.98	$27,248.76	$52,675.95
9	$31,917.62	$28,066.22	$54,256.23
10	$32,875.15	$28,908.21	$55,883.91
11	$33,861.40	$29,775.46	$57,560.43
12	$34,877.24	$30,668.72	$59,287.24
13	$35,923.56	$31,588.78	$61,065.86
14	$37,001.27	$32,536.45	$62,897.84
15	$38,111.30	$33,512.54	$64,784.77

ECM	Lincoln - Exterior	McNair - Exterior	PS #5 - Exterior
Assumed Inflation (Gas)	2%	2%	2%
Initial Yearly Savings (Gas)			
Assumed Inflation (Electricity)	3%	3%	3%
Initial Yearly Savings (Electricity)	$554.07	$453.33	$362.66
Assumed Average Useful Life (Years)	15	15	15
Lifetime Savings	**$10,305.10**	**$7,936.08**	**$6,745.16**
Year	Annual Savings	Annual Savings	Annual Savings
1	$554.07	$453.33	$362.66
2	$570.69	$466.93	$373.54
3	$587.81	$480.94	$384.75
4	$605.45	FALSE	$396.29
5	$623.61	$510.23	$408.18
6	$642.32	$525.53	$420.43
7	$661.59	$541.30	$433.04
8	$681.44	$557.54	$446.03
9	$701.88	$574.26	$459.41
10	$722.94	$591.49	$473.19
11	$744.62	$609.24	$487.39
12	$766.96	$627.51	$502.01
13	$789.97	$646.34	$517.07
14	$813.67	$665.73	$532.58
15	$838.08	$685.70	$548.56

IRR, NPV, AROI

Inflation Rate: **3%**

Lighting Upgrades **Lincoln - Total**		**Lighting Upgrades** **McNair - Total**		**Lighting Upgrades** **PS #5 - Total**	
Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**
Year	Cash Flow	Year	Cash Flow	Year	Cash Flow
0	**($82,650.44)**	0	**($52,539.69)**	0	**($164,784.00)**
1	**$26,965.99**	1	**$22,654.37**	1	**$45,481.25**
2	$27,774.97	2	$23,334.00	2	$46,845.69
3	$28,608.22	3	$24,034.02	3	$48,251.06
4	$29,466.47	4	$24,755.04	4	$49,698.59
5	$30,350.46	5	$25,497.69	5	$51,189.55
6	$31,260.98	6	$26,262.62	6	$52,725.24
7	$32,198.81	7	$27,050.50	7	$54,306.99
8	$33,164.77	8	$27,862.02	8	$55,936.20
9	$34,159.71	9	$28,697.88	9	$57,614.29
10	$35,184.51	10	$29,558.81	10	$59,342.72
11	$36,240.04	11	$30,445.58	11	$61,123.00
12	$37,327.24	12	$31,358.95	12	$62,956.69
13	$38,447.06	13	$32,299.71	13	$64,845.39
14	$39,600.47	14	$33,268.71	14	$66,790.75
15	$40,788.49	15	$34,266.77	15	$68,794.48
IRR	35.07%	IRR	45.89%	IRR	29.73%
NPV	$310,058.21	NPV	$277,378.32	NPV	$497,564.34
AROI	25.96%	AROI	36.45%	AROI	20.93%
Lighting Upgrades **Lincoln - Interior**		**Lighting Upgrades** **McNair - Interior**		**Lighting Upgrades** **PS #5 - Interior**	
Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**
Year	Cash Flow	Year	Cash Flow	Year	Cash Flow
0	**($64,070.75)**	0	**($41,391.88)**	0	**($153,636.19)**
1	**$26,384.55**	1	**$22,184.61**	1	**$45,102.16**
2	$27,176.09	2	$22,850.15	2	$46,455.23
3	$27,991.37	3	$23,535.66	3	$47,848.89
4	$28,831.11	4	$24,241.73	4	$49,284.35
5	$29,696.04	5	$24,968.98	5	$50,762.88
6	$30,586.92	6	$25,718.05	6	$52,285.77
7	$31,504.53	7	$26,489.59	7	$53,854.34
8	$32,449.67	8	$27,284.28	8	$55,469.97
9	$33,423.16	9	$28,102.81	9	$57,134.07
10	$34,425.85	10	$28,945.89	10	$58,848.09
11	$35,458.63	11	$29,814.27	11	$60,613.54
12	$36,522.39	12	$30,708.70	12	$62,431.94
13	$37,618.06	13	$31,629.96	13	$64,304.90
14	$38,746.60	14	$32,578.85	14	$66,234.05
15	$39,909.00	15	$33,556.22	15	$68,221.07
IRR	43.91%	IRR	56.50%	IRR	31.61%
NPV	$320,170.26	NPV	$281,685.04	NPV	$503,191.43
AROI	34.51%	AROI	46.93%	AROI	22.69%
Lighting Upgrades **Lincoln - Exterior**		**Lighting Upgrades** **McNair - Exterior**		**Lighting Upgrades** **PS #5 - Exterior**	
Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**
Year	Cash Flow	Year	Cash Flow	Year	Cash Flow
0	**($18,579.69)**	0	**($11,147.81)**	0	**($11,147.81)**
1	**$581.45**	1	**$469.76**	1	**$379.09**
2	$598.89	2	$483.85	2	$390.46
3	$616.86	3	$498.36	3	$402.18
4	$635.36	4	$513.31	4	$414.24
5	$654.42	5	$528.71	5	$426.67
6	$674.05	6	$544.57	6	$439.47
7	$694.28	7	$560.91	7	$452.65
8	$715.10	8	$577.74	8	$466.23
9	$736.56	9	$595.07	9	$480.22
10	$758.65	10	$612.92	10	$494.63
11	$781.41	11	$631.31	11	$509.46
12	$804.86	12	$650.25	12	$524.75
13	$829.00	13	$669.76	13	$540.49
14	$853.87	14	$689.85	14	$556.70
15	$879.49	15	$710.55	15	$573.41
IRR	-5.78%	IRR	-2.73%	IRR	-4.96%
NPV	($10,112.04)	NPV	($4,306.72)	NPV	($5,627.10)
AROI	-3.54%	AROI	-2.45%	AROI	-3.27%

IRR, NPV, AROI

Inflation Rate: **3%**

Lighting Upgrades PS #7 - Total		**Lighting Upgrades Regional Day - Total**		**Lighting Upgrades PS #22 - Total**	
Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**
Year	Cash Flow	Year	Cash Flow	Year	Cash Flow
0	**($107,042.69)**	0	**($96,263.58)**	0	**($381,379.93)**
1	**$22,816.87**	1	**$15,858.83**	1	**$93,567.50**
2	$23,501.37	2	$16,334.60	2	$96,374.52
3	$24,206.41	3	$16,824.64	3	$99,265.76
4	$24,932.61	4	$17,329.37	4	$102,243.73
5	$25,680.58	5	$17,849.26	5	$105,311.04
6	$26,451.00	6	$18,384.73	6	$108,470.38
7	$27,244.53	7	$18,936.28	7	$111,724.49
8	$28,061.87	8	$19,504.36	8	$115,076.22
9	$28,903.72	9	$20,089.49	9	$118,528.51
10	$29,770.84	10	$20,692.18	10	$122,084.36
11	$30,663.96	11	$21,312.94	11	$125,746.90
12	$31,583.88	12	$21,952.33	12	$129,519.30
13	$32,531.40	13	$22,610.90	13	$133,404.88
14	$33,507.34	14	$23,289.23	14	$137,407.03
15	$34,512.56	15	$23,987.91	15	$141,529.24
IRR	22.79%	IRR	17.06%	IRR	26.40%
NPV	$225,241.77	NPV	$134,690.29	NPV	$981,253.56
AROI	14.65%	AROI	9.81%	AROI	17.87%
Lighting Upgrades PS #7 - Interior		**Lighting Upgrades Regional Day - Interior**		**Lighting Upgrades PS #22 - Interior**	
Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**
Year	Cash Flow	Year	Cash Flow	Year	Cash Flow
0	**($95,894.88)**	0	**($92,547.64)**	0	**($366,516.18)**
1	**$22,347.11**	1	**$15,682.10**	1	**$92,900.86**
2	$23,017.52	2	$16,152.56	2	$95,687.89
3	$23,708.05	3	$16,637.14	3	$98,558.53
4	$24,419.29	4	$17,136.25	4	$101,515.28
5	$25,151.87	5	$17,650.34	5	$104,560.74
6	$25,906.43	6	$18,179.85	6	$107,697.56
7	$26,683.62	7	$18,725.25	7	$110,928.49
8	$27,484.13	8	$19,287.00	8	$114,256.34
9	$28,308.65	9	$19,865.61	9	$117,684.03
10	$29,157.91	10	$20,461.58	10	$121,214.56
11	$30,032.65	11	$21,075.43	11	$124,850.99
12	$30,933.63	12	$21,707.69	12	$128,596.52
13	$31,861.64	13	$22,358.92	13	$132,454.42
14	$32,817.49	14	$23,029.69	14	$136,428.05
15	$33,802.01	15	$23,720.58	15	$140,520.89
IRR	25.03%	IRR	17.64%	IRR	27.29%
NPV	$229,548.49	NPV	$135,832.45	NPV	$986,409.02
AROI	16.64%	AROI	10.28%	AROI	18.68%
Lighting Upgrades PS #7 - Exterior		**Lighting Upgrades Regional Day - Exterior**		**Lighting Upgrades PS #22 - Exterior**	
Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**
Year	Cash Flow	Year	Cash Flow	Year	Cash Flow
0	**($11,147.81)**	0	**($3,715.94)**	0	**($14,863.75)**
1	**$469.76**	1	**$176.73**	1	**$666.64**
2	$483.85	2	$182.03	2	$686.64
3	$498.36	3	$187.50	3	$707.23
4	$513.31	4	$193.12	4	$728.45
5	$528.71	5	$198.91	5	$750.30
6	$544.57	6	$204.88	6	$772.81
7	$560.91	7	$211.03	7	$796.00
8	$577.74	8	$217.36	8	$819.88
9	$595.07	9	$223.88	9	$844.47
10	$612.92	10	$230.60	10	$869.81
11	$631.31	11	$237.51	11	$895.90
12	$650.25	12	$244.64	12	$922.78
13	$669.76	13	$251.98	13	$950.46
14	$689.85	14	$259.54	14	$978.98
15	$710.55	15	$267.32	15	$1,008.35
IRR	-2.73%	IRR	-1.40%	IRR	-2.05%
NPV	($4,306.72)	NPV	($1,142.16)	NPV	($5,155.46)
AROI	-2.45%	AROI	-1.91%	AROI	-2.18%

IRR, NPV, AROI

Inflation Rate: **3%**

Lighting Upgrades PS #37 - Total		**Lighting Upgrades Ferris - Total**		**Lighting Upgrades PS #16 - Total**		**Lighting Upgrades PS #12 - Total**	
Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	15
Year	Cash Flow	Year	Cash Flow	Year	Cash Flow	Year	Cash Flow
0	**($30,778.13)**	0	**($91,055.06)**	0	**($23,341.50)**	0	**($54,507.84)**
1	**$3,682.65**	1	**$29,687.39**	1	**$8,299.91**	1	**$8,980.48**
2	$3,793.13	2	$30,578.01	2	$8,548.91	2	$9,249.89
3	$3,906.92	3	$31,495.35	3	$8,805.38	3	$9,527.39
4	$4,024.13	4	$32,440.21	4	$9,069.54	4	$9,813.21
5	$4,144.86	5	$33,413.42	5	$9,341.62	5	$10,107.60
6	$4,269.20	6	$34,415.82	6	$9,621.87	6	$10,410.83
7	$4,397.28	7	$35,448.30	7	$9,910.53	7	$10,723.16
8	$4,529.20	8	$36,511.74	8	$10,207.84	8	$11,044.85
9	$4,665.07	9	$37,607.10	9	$10,514.08	9	$11,376.20
10	$4,805.02	10	$38,735.31	10	$10,829.50	10	$11,717.48
11	$4,949.17	11	$39,897.37	11	$11,154.39	11	$12,069.01
12	$5,097.65	12	$41,094.29	12	$11,489.02	12	$12,431.08
13	$5,250.58	13	$42,327.12	13	$11,833.69	13	$12,804.01
14	$5,408.10	14	$43,596.93	14	$12,188.70	14	$13,188.13
15	$5,570.34	15	$44,904.84	15	$12,554.36	15	$13,583.78
IRR	11.14%	IRR	35.04%	IRR	38.12%	IRR	17.06%
NPV	$22,852.71	NPV	$341,285.57	NPV	$97,531.00	NPV	$76,275.78
AROI	5.30%	AROI	25.94%	AROI	28.89%	AROI	9.81%
Lighting Upgrades PS #37 - Interior		**Lighting Upgrades Ferris - Interior**		**Lighting Upgrades PS #16 - Interior**		**Lighting Upgrades PS #12 - Interior**	
Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**
Year	Cash Flow	Year	Cash Flow	Year	Cash Flow	Year	Cash Flow
0	**($19,630.31)**	0	**($83,623.18)**	0	**($19,625.56)**	0	**($47,075.97)**
1	**$3,273.34**	1	**$29,417.68**	1	**$8,154.02**	1	**$8,759.94**
2	$3,371.54	2	$30,300.21	2	$8,398.64	2	$9,022.74
3	$3,472.69	3	$31,209.22	3	$8,650.60	3	$9,293.42
4	$3,576.87	4	$32,145.49	4	$8,910.12	4	$9,572.22
5	$3,684.17	5	$33,109.86	5	$9,177.42	5	$9,859.39
6	$3,794.70	6	$34,103.15	6	$9,452.75	6	$10,155.17
7	$3,908.54	7	$35,126.25	7	$9,736.33	7	$10,459.83
8	$4,025.79	8	$36,180.04	8	$10,028.42	8	$10,773.62
9	$4,146.57	9	$37,265.44	9	$10,329.27	9	$11,096.83
10	$4,270.97	10	$38,383.40	10	$10,639.15	10	$11,429.74
11	$4,399.09	11	$39,534.90	11	$10,958.32	11	$11,772.63
12	$4,531.07	12	$40,720.95	12	$11,287.07	12	$12,125.81
13	$4,667.00	13	$41,942.58	13	$11,625.69	13	$12,489.58
14	$4,807.01	14	$43,200.86	14	$11,974.46	14	$12,864.27
15	$4,951.22	15	$44,496.88	15	$12,333.69	15	$13,250.20
IRR	17.30%	IRR	37.73%	IRR	44.28%	IRR	19.64%
NPV	$28,039.68	NPV	$344,789.64	NPV	$99,122.33	NPV	$80,495.98
AROI	10.01%	AROI	28.51%	AROI	34.88%	AROI	11.94%
Lighting Upgrades PS #37 - Exterior		**Lighting Upgrades Ferris - Exterior**		**Lighting Upgrades PS #16 - Exterior**		**Lighting Upgrades PS #12 - Exterior**	
Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**
Year	Cash Flow	Year	Cash Flow	Year	Cash Flow	Year	Cash Flow
0	**($11,147.81)**	0	**($7,431.88)**	0	**($3,715.94)**	0	**($7,431.88)**
1	**$409.31**	1	**$269.71**	1	**$145.89**	1	**$220.54**
2	$421.59	2	$277.80	2	$150.27	2	$227.15
3	$434.24	3	$286.13	3	$154.77	3	$233.97
4	$447.27	4	$294.72	4	$159.42	4	$240.98
5	$460.68	5	$303.56	5	$164.20	5	$248.21
6	$474.50	6	$312.67	6	$169.13	6	$255.66
7	$488.74	7	$322.05	7	$174.20	7	$263.33
8	$503.40	8	$331.71	8	$179.43	8	$271.23
9	$518.50	9	$341.66	9	$184.81	9	$279.37
10	$534.06	10	$351.91	10	$190.35	10	$287.75
11	$550.08	11	$362.47	11	$196.06	11	$296.38
12	$566.58	12	$373.34	12	$201.95	12	$305.27
13	$583.58	13	$384.54	13	$208.00	13	$314.43
14	$601.09	14	$396.08	14	$214.24	14	$323.86
15	$619.12	15	$407.96	15	$220.67	15	$333.58
IRR	-4.18%	IRR	-4.30%	IRR	-3.48%	IRR	-6.30%
NPV	($5,186.97)	NPV	($3,504.07)	NPV	($1,591.33)	NPV	($4,220.20)
AROI	-2.99%	AROI	-3.04%	AROI	-2.74%	AROI	-3.70%

Lighting Upgrades **PS #14 - Total**	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($34,836.59)**
1	**$12,733.92**
2	$13,115.94
3	$13,509.41
4	$13,914.70
5	$14,332.14
6	$14,762.10
7	$15,204.97
8	$15,661.11
9	$16,130.95
10	$16,614.88
11	$17,113.32
12	$17,626.72
13	$18,155.52
14	$18,700.19
15	$19,261.20
IRR	39.15%
NPV	$150,608.83
AROI	29.89%

Lighting Upgrades **MS #4 - Total**	
Life of ECRM (Yrs):	15
Year	Cash Flow
0	**($23,270.50)**
1	**$826.49**
2	$851.28
3	$876.82
4	$903.13
5	$930.22
6	$958.13
7	$986.87
8	$1,016.48
9	$1,046.97
10	$1,078.38
11	$1,110.73
12	$1,144.05
13	$1,178.37
14	$1,213.73
15	$1,250.14
IRR	-4.52%
NPV	($11,234.26)
AROI	-3.12%

Lighting Upgrades **PS #3 - Total**	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($15,097.47)**
1	**$533.20**
2	$549.20
3	$565.68
4	$582.65
5	$600.13
6	$618.13
7	$636.67
8	$655.77
9	$675.45
10	$695.71
11	$716.58
12	$738.08
13	$760.22
14	$783.03
15	$806.52
IRR	-4.57%
NPV	($7,332.37)
AROI	-3.13%

Lighting Upgrades **PS #14 - Interior**	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($27,404.72)**
1	**$12,518.57**
2	$12,894.12
3	$13,280.95
4	$13,679.37
5	$14,089.76
6	$14,512.45
7	$14,947.82
8	$15,396.26
9	$15,858.14
10	$16,333.89
11	$16,823.91
12	$17,328.62
13	$17,848.48
14	$18,383.94
15	$18,935.45
IRR	48.49%
NPV	$154,904.49
AROI	39.01%

Lighting Upgrades **MS #4 - Interior**	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($974.88)**
1	**$1.23**
2	$1.27
3	$1.30
4	$1.34
5	$1.38
6	$1.42
7	$1.47
8	$1.51
9	$1.56
10	$1.60
11	$1.65
12	$1.70
13	$1.75
14	$1.80
15	$1.86
IRR	-28.78%
NPV	($956.98)
AROI	-6.54%

Lighting Upgrades **PS #3 - Interior**	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($233.72)**
1	**$27.75**
2	$28.58
3	$29.44
4	$30.33
5	$31.23
6	$32.17
7	$33.14
8	$34.13
9	$35.15
10	$36.21
11	$37.30
12	$38.41
13	$39.57
14	$40.75
15	$41.98
IRR	11.02%
NPV	$170.43
AROI	5.21%

Lighting Upgrades **PS #14 - Exterior**	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($7,431.88)**
1	**$480.89**
2	$495.31
3	$510.17
4	$525.48
5	$541.24
6	$557.48
7	$574.20
8	$591.43
9	$609.17
10	$627.45
11	$646.27
12	$665.66
13	$685.63
14	$706.20
15	$727.38
IRR	2.24%
NPV	($428.69)
AROI	-0.20%

Lighting Upgrades **MS #4 - Exterior**	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($22,295.63)**
1	**$220.54**
2	$227.15
3	$233.97
4	$240.98
5	$248.21
6	$255.66
7	$263.33
8	$271.23
9	$279.37
10	$287.75
11	$296.38
12	$305.27
13	$314.43
14	$323.86
15	$333.58
IRR	-15.59%
NPV	($19,083.95)
AROI	-5.68%

Lighting Upgrades **PS #3 - Exterior**	
Life of ECRM (Yrs):	**15**
Year	Cash Flow
0	**($14,863.75)**
1	**$505.45**
2	$520.62
3	$536.23
4	$552.32
5	$568.89
6	$585.96
7	$603.54
8	$621.64
9	$640.29
10	$659.50
11	$679.29
12	$699.66
13	$720.65
14	$742.27
15	$764.54
IRR	-4.96%
NPV	($7,502.80)
AROI	-3.27%

Lifetime Savings Analysis - Photovoltaic Solar Energy Systems

ECM	PS #30	PS #34	PS #38	JCPS Administrative Building
Assumed Inflation (Gas)				
Initial Yearly Savings (Gas)				
Assumed Inflation (Electricity)	3%	3%	3%	3%
Initial Yearly Savings (Electricity)	$25,010.40	$23,539.20	$31,263.00	$5,394.40
Assumed Average Useful Life (Years)	25	25	25	25
Lifetime Savings	**$911,860.78**	**$858,221.91**	**$1,139,825.98**	**$196,675.86**
Year	Annual Savings	Annual Savings	Annual Savings	Annual Savings
1	$25,010.40	$23,539.20	$31,263.00	$5,394.40
2	$25,760.71	$24,245.38	$32,200.89	$5,556.23
3	$26,533.53	$24,972.74	$33,166.92	$5,722.92
4	$27,329.54	$25,721.92	$34,161.92	$5,894.61
5	$28,149.43	$26,493.58	$35,186.78	$6,071.44
6	$28,993.91	$27,288.38	$36,242.39	$6,253.59
7	$29,863.73	$28,107.04	$37,329.66	$6,441.20
8	$30,759.64	$28,950.25	$38,449.55	$6,634.43
9	$31,682.43	$29,818.75	$39,603.03	$6,833.46
10	$32,632.90	$30,713.32	$40,791.12	$7,038.47
11	$33,611.89	$31,634.72	$42,014.86	$7,249.62
12	$34,620.24	$32,583.76	$43,275.30	$7,467.11
13	$35,658.85	$33,561.27	$44,573.56	$7,691.12
14	$36,728.62	$34,568.11	$45,910.77	$7,921.86
15	$37,830.47	$35,605.15	$47,288.09	$8,159.51
16	$38,965.39	$36,673.31	$48,706.74	$8,404.30
17	$40,134.35	$37,773.51	$50,167.94	$8,656.43
18	$41,338.38	$38,906.71	$51,672.98	$8,916.12
19	$42,578.53	$40,073.91	$53,223.16	$9,183.60
20	$43,855.89	$41,276.13	$54,819.86	$9,459.11
21	$45,171.56	$42,514.41	$56,464.46	$9,742.89
22	$46,526.71	$43,789.85	$58,158.39	$10,035.17
23	$47,922.51	$45,103.54	$59,903.14	$10,336.23
24	$49,360.19	$46,456.65	$61,700.24	$10,646.32
25	$50,840.99	$47,850.35	$63,551.24	$10,965.70

ECM	PS #3 Boiler OA Reset	Lincoln High School - Boiler OA Reset	PS #22 - Condensing Boiler	PS #5 - Condensing Boiler	PS #22 DCV	PS #22 Cafeteria controls	MS #4 DCV	Ferris High School Economizer	Lincoln High School Night Set Back	Regional Day Nigh Set Back	PS 3 - Night Setback	McNair - Night Setback
Assumed Inflation (Gas)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Initial Yearly Savings (Gas)	$2,701.00	$1,431.00	$1,000.00	$0.00	$0.00	$0.00	$1,248.00	$0.00	$275.00	$0.00	$5,668.00	$0.00
Assumed Inflation (Electricity)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Initial Yearly Savings (Electricity)	$5,300.00	$105.00	$500.00	$2,787.10	$513.00	$507.00	$220.00	$840.00	$20,193.00	$14,072.60	$4,796.00	$465.00
Assumed Average Useful Life (Years)	15	15	24	24	15	15	15	15	15	15	15	15
Lifetime Savings	**$145,283.76**	**$26,699.77**	**$47,635.10**	**$95,950.02**	**$9,541.24**	**$9,429.65**	**$25,673.95**	**$15,623.09**	**$380,323.56**	**$261,735.08**	**$187,219.48**	**$8,648.49**
Year	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings
1	$8,001.00	$1,536.00	$1,500.00	$2,787.10	$513.00	$507.00	$1,468.00	$840.00	$20,468.00	$14,072.60	$10,464.00	$465.00
2	$8,214.02	$1,567.77	$1,535.00	$2,870.71	$528.39	$522.21	$1,499.56	$865.20	$21,079.29	$14,494.78	$10,721.24	$478.95
3	$8,432.89	$1,600.21	$1,570.85	$2,956.83	$544.24	$537.88	$1,531.82	$891.16	$21,708.86	$14,929.62	$10,985.06	$493.32
4	$8,657.78	$1,633.32	$1,607.57	$3,045.54	$560.57	$554.01	$1,564.79	$917.89	$22,357.27	$15,377.51	$11,255.65	$508.12
5	$8,888.85	$1,667.14	$1,645.19	$3,136.91	$577.39	$570.63	$1,598.49	$945.43	$23,025.07	$15,838.84	$11,533.17	$523.36
6	$9,126.27	$1,701.66	$1,683.72	$3,231.01	$594.71	$587.75	$1,632.93	$973.79	$23,712.84	$16,314.00	$11,817.81	$539.06
7	$9,370.24	$1,736.91	$1,723.19	$3,327.94	$612.55	$605.38	$1,668.14	$1,003.00	$24,421.19	$16,803.42	$12,109.76	$555.23
8	$9,620.93	$1,772.91	$1,763.62	$3,427.78	$630.93	$623.55	$1,704.13	$1,033.09	$25,150.73	$17,307.52	$12,409.23	$571.89
9	$9,878.53	$1,809.66	$1,805.04	$3,530.61	$649.85	$642.25	$1,740.92	$1,064.09	$25,902.09	$17,826.75	$12,716.39	$589.05
10	$10,143.24	$1,847.18	$1,847.48	$3,636.53	$669.35	$661.52	$1,778.53	$1,096.01	$26,675.94	$18,361.55	$13,031.48	$606.72
11	$10,415.26	$1,885.49	$1,890.95	$3,745.63	$689.43	$681.37	$1,816.97	$1,128.89	$27,472.93	$18,912.40	$13,354.68	$624.92
12	$10,694.79	$1,924.61	$1,935.49	$3,858.00	$710.11	$701.81	$1,856.26	$1,162.76	$28,293.76	$19,479.77	$13,686.23	$643.67
13	$10,982.05	$1,964.56	$1,981.12	$3,973.74	$731.42	$722.86	$1,896.43	$1,197.64	$29,139.16	$20,064.16	$14,026.34	$662.98
14	$11,277.26	$2,005.35	$2,027.87	$4,092.95	$753.36	$744.55	$1,937.50	$1,233.57	$30,009.84	$20,666.09	$14,375.25	$682.87
15	$11,580.64	$2,047.00	$2,075.77	$4,215.74	$775.96	$766.88	$1,979.48	$1,270.58	$30,906.58	$21,286.07	$14,733.19	$703.35
16			$2,124.85	$4,342.21								
17			$2,175.14	$4,472.48								
18			$2,226.67	$4,606.65								
19			$2,279.46	$4,744.85								
20			$2,333.56	$4,887.20								
21			$2,389.00	$5,033.81								
22			$2,445.81	$5,184.83								
23			$2,504.03	$5,340.37								
24			$2,563.69	$5,500.58								
25												

IRR, NPV, AROI

Inflation Rate: **3%**

Boiler OA Reset **Lincoln High School**		**Boiler OA Reset** **PS #3**		**Boiler replacement** **PS #16**		**Boiler Replacement** **PS #5**		**DCV** **PS #22**		**DCV** **MS #4**	
Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**24**	Life of ECRM (Yrs):	**24**	Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**
Year	Cash Flow	Year	Cash Flow	Year	Cash Flow	Year	Cash Flow	Year	Cash Flow	Year	Cash Flow
0	**($5,750.00)**	0	**($5,750.00)**	0	**($27,173.75)**	0	**($69,122.00)**	0	**($1,430.00)**	0	**($2,790.00)**
1	**$1,536.00**	1	**$3,284.00**	1	**$382.00**	1	**$2,787.00**	1	**$507.00**	1	**$1,468.00**
2	$1,582.08	2	$3,382.52	2	$393.46	2	$2,870.61	2	$522.21	2	$1,512.04
3	$1,629.54	3	$3,484.00	3	$405.26	3	$2,956.73	3	$537.88	3	$1,557.40
4	$1,678.43	4	$3,588.52	4	$417.42	4	$3,045.43	4	$554.01	4	$1,604.12
5	$1,728.78	5	$3,696.17	5	$429.94	5	$3,136.79	5	$570.63	5	$1,652.25
6	$1,780.64	6	$3,807.06	6	$442.84	6	$3,230.90	6	$587.75	6	$1,701.81
7	$1,834.06	7	$3,921.27	7	$456.13	7	$3,327.82	7	$605.38	7	$1,752.87
8	$1,889.09	8	$4,038.91	8	$469.81	8	$3,427.66	8	$623.55	8	$1,805.45
9	$1,945.76	9	$4,160.07	9	$483.91	9	$3,530.49	9	$642.25	9	$1,859.62
10	$2,004.13	10	$4,284.88	10	$498.42	10	$3,636.40	10	$661.52	10	$1,915.41
11	$2,064.26	11	$4,413.42	11	$513.38	11	$3,745.49	11	$681.37	11	$1,972.87
12	$2,126.18	12	$4,545.82	12	$528.78	12	$3,857.86	12	$701.81	12	$2,032.06
13	$2,189.97	13	$4,682.20	13	$544.64	13	$3,973.60	13	$722.86	13	$2,093.02
14	$2,255.67	14	$4,822.66	14	$560.98	14	$4,092.80	14	$744.55	14	$2,155.81
15	$2,323.34	15	$4,967.34	15	$577.81	15	$4,215.59	15	$766.88	15	$2,220.48
				16	$595.14	16	$4,342.06				
				17	$613.00	17	$4,472.32				
				18	$631.39	18	$4,606.49				
				19	$650.33	19	$4,744.68				
				20	$669.84	20	$4,887.02				
				21	$689.93	21	$5,033.63				
				22	$710.63	22	$5,184.64				
				23	$731.95	23	$5,340.18				
				24	$753.91	24	$5,500.39				
IRR	28.78%	IRR	60.04%	IRR	-4.72%	IRR	2.49%	IRR	38.01%	IRR	55.51%
NPV	$16,618.93	NPV	$42,075.24	NPV	($18,272.78)	NPV	($4,182.19)	NPV	$5,953.50	NPV	$18,588.64
AROI	20.05%	AROI	50.45%	AROI	-2.76%	AROI	-0.13%	AROI	28.79%	AROI	45.95%

Night Set Back **Lincoln High School**		**Night Set back** **Regional Day School**		**Night Set Back** **PS #3**		**Night Set Back** **McNair High School**		**Economizer** **Ferris High School**	
Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	**15**	Life of ECRM (Yrs):	15	Life of ECRM (Yrs):	**15**
Year	Cash Flow	Year	Cash Flow	Year	Cash Flow	Year	Cash Flow	Year	Cash Flow
0	**($2,702.00)**	0	**($14,930.00)**	0	**($2,702.00)**	0	**($5,750.00)**	0	**($2,790.00)**
1	**$10,464.00**	1	**$5,280.00**	1	**$10,464.00**	1	**$465.00**	1	**$840.00**
2	$10,777.92	2	$5,438.40	2	$10,777.92	2	$478.95	2	$865.20
3	$11,101.26	3	$5,601.55	3	$11,101.26	3	$493.32	3	$891.16
4	$11,434.30	4	$5,769.60	4	$11,434.30	4	$508.12	4	$917.89
5	$11,777.32	5	$5,942.69	5	$11,777.32	5	$523.36	5	$945.43
6	$12,130.64	6	$6,120.97	6	$12,130.64	6	$539.06	6	$973.79
7	$12,494.56	7	$6,304.60	7	$12,494.56	7	$555.23	7	$1,003.00
8	$12,869.40	8	$6,493.73	8	$12,869.40	8	$571.89	8	$1,033.09
9	$13,255.48	9	$6,688.55	9	$13,255.48	9	$589.05	9	$1,064.09
10	$13,653.15	10	$6,889.20	10	$13,653.15	10	$606.72	10	$1,096.01
11	$14,062.74	11	$7,095.88	11	$14,062.74	11	$624.92	11	$1,128.89
12	$14,484.62	12	$7,308.75	12	$14,484.62	12	$643.67	12	$1,162.76
13	$14,919.16	13	$7,528.02	13	$14,919.16	13	$662.98	13	$1,197.64
14	$15,366.74	14	$7,753.86	14	$15,366.74	14	$682.87	14	$1,233.57
15	$15,827.74	15	$7,986.47	15	$15,827.74	15	$703.35	15	$1,270.58
IRR	390.27%	IRR	37.92%	IRR	390.27%	IRR	5.18%	IRR	32.41%
NPV	$149,686.35	NPV	$61,963.20	NPV	$149,686.35	NPV	$1,021.84	NPV	$9,443.01
AROI	380.60%	AROI	28.70%	AROI	380.60%	AROI	-6.67%	AROI	23.44%

IRR, NPV, AROI

Inflation Rate: **3%**

Boiler Replacement Public School #1		**Boiler Replacement Public School #8**		**Boiler Replacement Public School #11**		**Boiler Replacement Public School #23**		**Boiler Replacement Public School #24**	
Life of ECRM (Yrs):	**24**	Life of ECRM (Yrs):	**24**	Life of ECRM (Yrs):	**24**	Life of ECRM (Yrs):	**24**	Life of ECRM (Yrs):	24
Year	Cash Flow	Year	Cash Flow	Year	Cash Flow	Year	Cash Flow	Year	Cash Flow
0	**($160,856.00)**	0	**($436,138.00)**	0	**($219,794.00)**	0	**($283,156.00)**	0	**($436,138.00)**
1	**$1,658.00**	1	**$7,480.00**	1	**$20,047.00**	1	**$224.00**	1	**$95,795.00**
2	$1,707.74	2	$7,704.40	2	$20,648.41	2	$230.72	2	$98,668.85
3	$1,758.97	3	$7,935.53	3	$21,267.86	3	$237.64	3	$101,628.92
4	$1,811.74	4	$8,173.60	4	$21,905.90	4	$244.77	4	$104,677.78
5	$1,866.09	5	$8,418.81	5	$22,563.08	5	$252.11	5	$107,818.12
6	$1,922.08	6	$8,671.37	6	$23,239.97	6	$259.68	6	$111,052.66
7	$1,979.74	7	$8,931.51	7	$23,937.17	7	$267.47	7	$114,384.24
8	$2,039.13	8	$9,199.46	8	$24,655.28	8	$275.49	8	$117,815.77
9	$2,100.30	9	$9,475.44	9	$25,394.94	9	$283.76	9	$121,350.24
10	$2,163.31	10	$9,759.70	10	$26,156.79	10	$292.27	10	$124,990.75
11	$2,228.21	11	$10,052.49	11	$26,941.49	11	$301.04	11	$128,740.47
12	$2,295.06	12	$10,354.07	12	$27,749.74	12	$310.07	12	$132,602.68
13	$2,363.91	13	$10,664.69	13	$28,582.23	13	$319.37	13	$136,580.76
14	$2,434.83	14	$10,984.63	14	$29,439.70	14	$328.95	14	$140,678.19
15	$2,507.87	15	$11,314.17	15	$30,322.89	15	$338.82	15	$144,898.53
16	$2,583.11	16	$11,653.60	16	$31,232.57	16	$348.98	16	$149,245.49
17	$2,660.60	17	$12,003.20	17	$32,169.55	17	$359.45	17	$153,722.85
18	$2,740.42	18	$12,363.30	18	$33,134.64	18	$370.24	18	$158,334.54
19	$2,822.63	19	$12,734.20	19	$34,128.68	19	$381.35	19	$163,084.58
20	$2,907.31	20	$13,116.23	20	$35,152.54	20	$392.79	20	$167,977.11
21	$2,994.53	21	$13,509.71	21	$36,207.11	21	$404.57	21	$173,016.43
22	$3,084.37	22	$13,915.00	22	$37,293.33	22	$416.71	22	$178,206.92
23	$3,176.90	23	$14,332.45	23	$38,412.13	23	$429.21	23	$183,553.13
24	$3,272.21	24	$14,762.43	24	$39,564.49	24	$442.08	24	$189,059.72
IRR	-6.51%	IRR	-3.52%	IRR	10.39%	IRR	-18.46%	IRR	24.74%
NPV	($122,222.99)	NPV	($261,846.74)	NPV	$247,320.56	NPV	($277,936.58)	NPV	$1,795,978.50
AROI	-3.14%	AROI	-2.45%	AROI	4.95%	AROI	-6.67%	AROI	-6.67%

Boiler Replacement Public School #25		**Boiler Replacement Public School #33**		**Boiler Replacement Public School #39**		**Boiler Replacement Liberty High School**	
Life of ECRM (Yrs):	**24**	Life of ECRM (Yrs):	**24**	Life of ECRM (Yrs):	**24**	Life of ECRM (Yrs):	**24**
Year	Cash Flow	Year	Cash Flow	Year	Cash Flow	Year	Cash Flow
0	**($219,794.00)**	0	**($219,794.00)**	0	**($436,138.00)**	0	**($283,156.00)**
1	**$1,067.00**	1	**$7,307.00**	1	**$2,792.00**	1	**$978.00**
2	$1,099.01	2	$7,526.21	2	$2,875.76	2	$1,007.34
3	$1,131.98	3	$7,752.00	3	$2,962.03	3	$1,037.56
4	$1,165.94	4	$7,984.56	4	$3,050.89	4	$1,068.69
5	$1,200.92	5	$8,224.09	5	$3,142.42	5	$1,100.75
6	$1,236.95	6	$8,470.82	6	$3,236.69	6	$1,133.77
7	$1,274.05	7	$8,724.94	7	$3,333.79	7	$1,167.78
8	$1,312.28	8	$8,986.69	8	$3,433.81	8	$1,202.82
9	$1,351.64	9	$9,256.29	9	$3,536.82	9	$1,238.90
10	$1,392.19	10	$9,533.98	10	$3,642.93	10	$1,276.07
11	$1,433.96	11	$9,820.00	11	$3,752.21	11	$1,314.35
12	$1,476.98	12	$10,114.60	12	$3,864.78	12	$1,353.78
13	$1,521.29	13	$10,418.03	13	$3,980.72	13	$1,394.39
14	$1,566.93	14	$10,730.58	14	$4,100.15	14	$1,436.23
15	$1,613.93	15	$11,052.49	15	$4,223.15	15	$1,479.31
16	$1,662.35	16	$11,384.07	16	$4,349.85	16	$1,523.69
17	$1,712.22	17	$11,725.59	17	$4,480.34	17	$1,569.40
18	$1,763.59	18	$12,077.36	18	$4,614.75	18	$1,616.48
19	$1,816.50	19	$12,439.68	19	$4,753.19	19	$1,664.98
20	$1,870.99	20	$12,812.87	20	$4,895.79	20	$1,714.93
21	$1,927.12	21	$13,197.25	21	$5,042.66	21	$1,766.38
22	$1,984.93	22	$13,593.17	22	$5,193.94	22	$1,819.37
23	$2,044.48	23	$14,000.97	23	$5,349.76	23	$1,873.95
24	$2,105.82	24	$14,421.00	24	$5,510.25	24	$1,930.17
IRR	-10.44%	IRR	0.99%	IRR	-9.05%	IRR	-12.08%
NPV	($194,931.86)	NPV	($49,533.81)	NPV	($371,081.69)	NPV	($260,367.65)
AROI	-3.68%	AROI	-0.84%	AROI	-3.53%	AROI	-6.67%

ECM	PS #1 Boiler Replacement	PS #8 Boiler Replacement	PS #11 Boiler Replacement	PS #23 Boiler Replacement	PS #24 Boiler Replacement
Assumed Inflation (Gas/Oil)	2%	2%	2%	2%	2%
Initial Yearly Savings (Gas/Oil)	$1,658.00	$7,480.00	$20,047.00	$224.00	$95,795.00
Assumed Inflation (Electricity)	3%	3%	3%	3%	3%
Initial Yearly Savings (Electricity)					
Assumed Average Useful Life (Years)	24	24	24	24	24
Lifetime Savings	**$50,439.45**	**$227,555.53**	**$609,867.08**	**$6,814.50**	**$2,914,262.32**
Year	Annual Savings	Annual Savings	Annual Savings	Annual Savings	Annual Savings
1	$1,658.00	$7,480.00	$20,047.00	$224.00	$95,795.00
2	$1,691.16	$7,629.60	$20,447.94	$228.48	$97,710.90
3	$1,724.98	$7,782.19	$20,856.90	$233.05	$99,665.12
4	$1,759.48	$7,937.84	$21,274.04	$237.71	$101,658.42
5	$1,794.67	$8,096.59	$21,699.52	$242.46	$103,691.59
6	$1,830.57	$8,258.52	$22,133.51	$247.31	$105,765.42
7	$1,867.18	$8,423.69	$22,576.18	$252.26	$107,880.73
8	$1,904.52	$8,592.17	$23,027.70	$257.31	$110,038.34
9	$1,942.61	$8,764.01	$23,488.26	$262.45	$112,239.11
10	$1,981.46	$8,939.29	$23,958.02	$267.70	$114,483.89
11	$2,021.09	$9,118.08	$24,437.18	$273.05	$116,773.57
12	$2,061.51	$9,300.44	$24,925.92	$278.52	$119,109.04
13	$2,102.74	$9,486.45	$25,424.44	$284.09	$121,491.22
14	$2,144.80	$9,676.18	$25,932.93	$289.77	$123,921.05
15	$2,187.70	$9,869.70	$26,451.59	$295.56	$126,399.47
16	$2,231.45	$10,067.10	$26,980.62	$301.47	$128,927.46
17	$2,276.08	$10,268.44	$27,520.24	$307.50	$131,506.01
18	$2,321.60	$10,473.81	$28,070.64	$313.65	$134,136.13
19	$2,368.03	$10,683.28	$28,632.05	$319.93	$136,818.85
20	$2,415.39	$10,896.95	$29,204.69	$326.33	$139,555.23
21	$2,463.70	$11,114.89	$29,788.79	$332.85	$142,346.33
22	$2,512.97	$11,337.18	$30,384.56	$339.51	$145,193.26
23	$2,563.23	$11,563.93	$30,992.25	$346.30	$148,097.12
24	$2,614.50	$11,795.21	$31,612.10	$353.23	$151,059.07
25					

ECM	PS #25 Boiler Replacement	PS #33 Boiler Replacement	PS #39 Boiler Replacement	Liberty High School Boiler Replacement
Assumed Inflation (Gas/Oil)	2%	2%	2%	2%
Initial Yearly Savings (Gas/Oil)	$1,067.00	$7,307.00	$2,792.00	$978.00
Assumed Inflation (Electricity)	3%	3%	3%	3%
Initial Yearly Savings (Electricity)		$4,070.00	$1,934.00	$2,485.00
Assumed Average Useful Life (Years)	24	24	24	24
Lifetime Savings	**$32,460.13**	**$70,112.53**	**$222,011.79**	**$576,392.25**
Year	Annual Savings	Annual Savings	Annual Savings	Annual Savings
1	$1,067.00	$11,377.00	$4,726.00	$3,463.00
2	$1,088.34	$11,645.24	$4,839.86	$3,557.11
3	$1,110.11	$1,724.98	$7,782.19	$20,856.90
4	$1,132.31	$1,759.48	$7,937.84	$21,274.04
5	$1,154.96	$1,794.67	$8,096.59	$21,699.52
6	$1,178.05	$1,830.57	$8,258.52	$22,133.51
7	$1,201.62	$1,867.18	$8,423.69	$22,576.18
8	$1,225.65	$1,904.52	$8,592.17	$23,027.70
9	$1,250.16	$1,942.61	$8,764.01	$23,488.26
10	$1,275.16	$1,981.46	$8,939.29	$23,958.02
11	$1,300.67	$2,021.09	$9,118.08	$24,437.18
12	$1,326.68	$2,061.51	$9,300.44	$24,925.92
13	$1,353.21	$2,102.74	$9,486.45	$25,424.44
14	$1,380.28	$2,144.80	$9,676.18	$25,932.93
15	$1,407.88	$2,187.70	$9,869.70	$26,451.59
16	$1,436.04	$2,231.45	$10,067.10	$26,980.62
17	$1,464.76	$2,276.08	$10,268.44	$27,520.24
18	$1,494.06	$2,321.60	$10,473.81	$28,070.64
19	$1,523.94	$2,368.03	$10,683.28	$28,632.05
20	$1,554.42	$2,415.39	$10,896.95	$29,204.69
21	$1,585.51	$2,463.70	$11,114.89	$29,788.79
22	$1,617.22	$2,512.97	$11,337.18	$30,384.56
23	$1,649.56	$2,563.23	$11,563.93	$30,992.25
24	$1,682.55	$2,614.50	$11,795.21	$31,612.10

IRR, NPV, AROI - PV Solar Energy Systems

Financial Calculations

Based on inflation of: 3%

O&M inflation: 3%

PS #30					PS #34					PS #38					JCPS Administrative Building				
Year	Energy Savings	SREC Sales	Maitenance Cost	Cash Flow	Year	Energy Savings	SREC Sales	Maitenance Cost	Cash Flow	Year	Energy Savings	SREC Sales	Maitenance Cost	Cash Flow	Year	Energy Savings	SREC Sales	Maitenance Cost	Cash Flow
0				($1,475,000)	0				($1,475,000)	0				($2,037,500)	0				($575,000)
1	$25,010.4	$62,232	($2,942)	$84,300	1	$23,539.2	$62,232	($2,942)	$82,829	1	$31,263.0	$88,162	($4,168)	$115,256	1	$5,394.4	$20,744	($981)	$25,158
2	$25,631.9	$61,921	($2,928)	$84,625	2	$24,124.1	$61,921	($2,928)	$83,117	2	$32,039.9	$87,721	($4,148)	$115,613	2	$5,528.5	$20,640	($976)	$25,193
3	$26,268.9	$61,611	($2,913)	$84,967	3	$24,723.6	$61,611	($2,913)	$83,422	3	$32,836.1	$87,282	($4,127)	$115,992	3	$5,665.8	$20,537	($971)	$25,232
4	$26,921.6	$61,303	($2,898)	$85,326	4	$25,338.0	$61,303	($2,898)	$83,742	4	$33,652.1	$86,846	($4,106)	$116,392	4	$5,806.6	$20,434	($966)	$25,275
5	$27,590.6	$60,996	($2,884)	$85,703	5	$25,967.7	$60,996	($2,884)	$84,080	5	$34,488.3	$86,412	($4,086)	$116,814	5	$5,950.9	$20,332	($961)	$25,322
6	$28,276.3	$60,691	($2,870)	$86,098	6	$26,613.0	$60,691	($2,870)	$84,435	6	$35,345.3	$85,980	($4,065)	$117,260	6	$6,098.8	$20,230	($957)	$25,373
7	$28,978.9	$60,388	($2,855)	$86,512	7	$27,274.3	$60,388	($2,855)	$84,807	7	$36,223.7	$85,550	($4,045)	$117,728	7	$6,250.4	$20,129	($952)	$25,428
8	$29,699.1	$60,086	($2,841)	$86,944	8	$27,952.1	$60,086	($2,841)	$85,197	8	$37,123.8	$85,122	($4,025)	$118,221	8	$6,405.7	$20,029	($947)	$25,487
9	$30,437.1	$59,786	($2,827)	$87,396	9	$28,646.7	$59,786	($2,827)	$85,606	9	$38,046.4	$84,696	($4,005)	$118,738	9	$6,564.9	$19,929	($942)	$25,551
10	$31,193.4	$59,487	($2,813)	$87,868	10	$29,358.5	$59,487	($2,813)	$86,033	10	$38,991.8	$84,273	($3,985)	$119,280	10	$6,728.0	$19,829	($938)	$25,619
11	$31,968.6	$59,189	($2,799)	$88,359	11	$30,088.1	$59,189	($2,799)	$86,479	11	$39,960.8	$83,851	($3,965)	$119,848	11	$6,895.2	$19,730	($933)	$25,692
12	$32,763.0	$58,893	($2,785)	$88,872	12	$30,835.8	$58,893	($2,785)	$86,945	12	$40,953.8	$83,432	($3,945)	$120,441	12	$7,066.5	$19,631	($928)	$25,769
13	$33,577.2	$58,599	($2,771)	$89,405	13	$31,602.1	$58,599	($2,771)	$87,430	13	$41,971.5	$83,015	($3,925)	$121,061	13	$7,242.1	$19,533	($924)	$25,852
14	$34,411.6	$58,306	($2,757)	$89,961	14	$32,387.4	$58,306	($2,757)	$87,936	14	$43,014.5	$82,600	($3,905)	$121,709	14	$7,422.1	$19,435	($919)	$25,938
15	$35,266.7	$58,014	($2,743)	$90,538	15	$33,192.2	$58,014	($2,743)	$88,464	15	$44,083.4	$82,187	($3,886)	$122,384	15	$7,606.5	$19,338	($914)	$26,030
16	$36,143.1	$3,412	($2,729)	$36,825	16	$34,017.0	$3,412	($2,729)	$34,699	16	$45,178.9	$4,833	($3,866)	$46,145	16	$7,795.6	$1,137	($910)	$8,023
17	$37,041.2	$3,395	($2,716)	$37,720	17	$34,862.3	$3,395	($2,716)	$35,541	17	$46,301.6	$4,809	($3,847)	$47,263	17	$7,989.3	$1,132	($905)	$8,216
18	$37,961.7	$3,378	($2,702)	$38,637	18	$35,728.7	$3,378	($2,702)	$36,404	18	$47,452.1	$4,785	($3,828)	$48,409	18	$8,187.8	$1,126	($901)	$8,413
19	$38,905.1	$3,361	($2,689)	$39,577	19	$36,616.5	$3,361	($2,689)	$37,289	19	$48,631.3	$4,761	($3,809)	$49,584	19	$8,391.3	$1,120	($896)	$8,615
20	$39,871.9	$3,344	($2,675)	$40,541	20	$37,526.5	$3,344	($2,675)	$38,195	20	$49,839.8	$4,737	($3,790)	$50,787	20	$8,599.8	$1,115	($892)	$8,823
21	$40,862.7	$3,327	($2,662)	$41,528	21	$38,459.0	$3,327	($2,662)	$39,124	21	$51,078.3	$4,713	($3,771)	$52,021	21	$8,813.5	$1,109	($887)	$9,035
22	$41,878.1	$3,311	($2,648)	$42,540	22	$39,414.7	$3,311	($2,648)	$40,077	22	$52,347.6	$4,690	($3,752)	$53,286	22	$9,032.5	$1,104	($883)	$9,253
23	$42,918.8	$3,294	($2,635)	$43,578	23	$40,394.1	$3,294	($2,635)	$41,053	23	$53,648.5	$4,666	($3,733)	$54,582	23	$9,257.0	$1,098	($878)	$9,477
24	$43,985.3	$3,277	($2,622)	$44,641	24	$41,397.9	$3,277	($2,622)	$42,053	24	$54,981.6	$4,643	($3,714)	$55,910	24	$9,487.0	$1,092	($874)	$9,706
25	$45,078.3	$3,261	($2,609)	$45,731	25	$42,426.7	$3,261	($2,609)	$43,079	25	$56,347.9	$4,620	($3,696)	$57,272	25	$9,722.8	$1,087	($870)	$9,940
			IRR	1.42%				IRR	1.15%				IRR	1.11%				IRR	-1.80%
			NPV	($213,924.65)				NPV	($247,570.79)				NPV	($346,307.30)				NPV	($221,933.81)
			AROI	1.72%				AROI	1.62%				AROI	1.66%				AROI	0.38%

IRR, NPV, AROI - PV Solar Energy Systems

Financial Calculations

Based on inflation of: 3%

O&M inflation: 3%

Cunningham Center ECC					**Snyder High School**					**MS #40**				
Year	Energy Savings	SREC Sales	Maitenance Cost	Cash Flow	Year	Energy Savings	SREC Sales	Maitenance Cost	Cash Flow	Year	Energy Savings	SREC Sales	Maitenance Cost	Cash Flow
0				($575,000)	0				($4,962,500)	0				($3,837,500)
1	$7,356.0	$20,744	($981)	$27,119	1	$79,077.0	$222,997	($10,544)	$291,531	1	$60,687.0	$171,137	($8,092)	$223,733
2	$7,538.8	$20,640	($976)	$27,203	2	$81,042.1	$221,882	($10,491)	$292,433	2	$62,195.1	$170,282	($8,051)	$224,426
3	$7,726.1	$20,537	($971)	$27,292	3	$83,056.0	$220,773	($10,438)	$293,390	3	$63,740.6	$169,430	($8,011)	$225,160
4	$7,918.1	$20,434	($966)	$27,386	4	$85,119.9	$219,669	($10,386)	$294,403	4	$65,324.6	$168,583	($7,971)	$225,937
5	$8,114.9	$20,332	($961)	$27,486	5	$87,235.1	$218,571	($10,334)	$295,471	5	$66,947.9	$167,740	($7,931)	$226,757
6	$8,316.6	$20,230	($957)	$27,591	6	$89,402.9	$217,478	($10,283)	$296,598	6	$68,611.5	$166,901	($7,891)	$227,622
7	$8,523.2	$20,129	($952)	$27,701	7	$91,624.6	$216,390	($10,231)	$297,784	7	$70,316.5	$166,067	($7,852)	$228,532
8	$8,735.0	$20,029	($947)	$27,817	8	$93,901.5	$215,308	($10,180)	$299,030	8	$72,063.9	$165,237	($7,813)	$229,488
9	$8,952.1	$19,929	($942)	$27,938	9	$96,234.9	$214,232	($10,129)	$300,338	9	$73,854.7	$164,410	($7,774)	$230,492
10	$9,174.5	$19,829	($938)	$28,066	10	$98,626.3	$213,161	($10,079)	$301,708	10	$75,690.0	$163,588	($7,735)	$231,544
11	$9,402.5	$19,730	($933)	$28,199	11	$101,077.2	$212,095	($10,028)	$303,144	11	$77,570.9	$162,770	($7,696)	$232,645
12	$9,636.2	$19,631	($928)	$28,339	12	$103,589.0	$211,034	($9,978)	$304,645	12	$79,498.5	$161,957	($7,658)	$233,798
13	$9,875.6	$19,533	($924)	$28,485	13	$106,163.2	$209,979	($9,928)	$306,214	13	$81,474.1	$161,147	($7,619)	$235,002
14	$10,121.1	$19,435	($919)	$28,637	14	$108,801.3	$208,929	($9,878)	$307,852	14	$83,498.7	$160,341	($7,581)	$236,259
15	$10,372.6	$19,338	($914)	$28,796	15	$111,505.0	$207,885	($9,829)	$309,561	15	$85,573.6	$159,539	($7,543)	$237,570
16	$10,630.3	$1,137	($910)	$10,858	16	$114,275.9	$12,225	($9,780)	$116,721	16	$87,700.1	$9,382	($7,506)	$89,577
17	$10,894.5	$1,132	($905)	$11,121	17	$117,115.7	$12,164	($9,731)	$119,548	17	$89,879.5	$9,335	($7,468)	$91,746
18	$11,165.2	$1,126	($901)	$11,390	18	$120,026.0	$12,103	($9,682)	$122,447	18	$92,113.0	$9,288	($7,431)	$93,971
19	$11,442.7	$1,120	($896)	$11,667	19	$123,008.7	$12,042	($9,634)	$125,417	19	$94,402.0	$9,242	($7,393)	$96,250
20	$11,727.0	$1,115	($892)	$11,950	20	$126,065.4	$11,982	($9,586)	$128,462	20	$96,747.9	$9,196	($7,357)	$98,587
21	$12,018.4	$1,109	($887)	$12,240	21	$129,198.1	$11,922	($9,538)	$131,583	21	$99,152.1	$9,150	($7,320)	$100,982
22	$12,317.1	$1,104	($883)	$12,538	22	$132,408.7	$11,863	($9,490)	$134,781	22	$101,616.0	$9,104	($7,283)	$103,437
23	$12,623.2	$1,098	($878)	$12,843	23	$135,699.1	$11,803	($9,443)	$138,060	23	$104,141.2	$9,058	($7,247)	$105,953
24	$12,936.9	$1,092	($874)	$13,155	24	$139,071.2	$11,744	($9,395)	$141,420	24	$106,729.1	$9,013	($7,210)	$108,532
25	$13,258.3	$1,087	($870)	$13,476	25	$142,527.1	$11,686	($9,349)	$144,864	25	$109,381.3	$8,968	($7,174)	$111,175
			IRR	-0.58%				IRR	1.48%				IRR	1.40%
			NPV	($177,072.31)				NPV	($684,777.29)				NPV	($554,596.52)
			AROI	0.72%				AROI	1.87%				AROI	1.83%

IRR, NPV, AROI - PV Solar Energy Systems

Financial Calculations

Based on inflation of: 3%

O&M inflation: 3%

MS #41					**JC Infinity Institute**					**PS #15**				
Year	Energy Savings	SREC Sales	Maitenance Cost	Cash Flow	Year	Energy Savings	SREC Sales	Maitenance Cost	Cash Flow	Year	Energy Savings	SREC Sales	Maitenance Cost	Cash Flow
0				($4,175,000)	0				($1,587,500)	0				($3,275,000)
1	$79,444.8	$186,695	($8,827)	$257,313	1	$17,531.8	$67,418	($3,188)	$81,762	1	$41,193.6	$145,207	($6,866)	$179,535
2	$81,419.0	$185,762	($8,783)	$258,398	2	$17,967.5	$67,081	($3,172)	$81,876	2	$42,217.3	$144,481	($6,831)	$179,867
3	$83,442.3	$184,833	($8,739)	$259,536	3	$18,414.0	$66,745	($3,156)	$82,003	3	$43,266.4	$143,759	($6,797)	$180,228
4	$85,515.8	$183,909	($8,695)	$260,729	4	$18,871.5	$66,412	($3,140)	$82,143	4	$44,341.5	$143,040	($6,763)	$180,619
5	$87,640.9	$182,989	($8,652)	$261,978	5	$19,340.5	$66,079	($3,124)	$82,296	5	$45,443.4	$142,325	($6,729)	$181,039
6	$89,818.7	$182,074	($8,609)	$263,284	6	$19,821.1	$65,749	($3,109)	$82,461	6	$46,572.7	$141,613	($6,696)	$181,490
7	$92,050.7	$181,164	($8,566)	$264,649	7	$20,313.7	$65,420	($3,093)	$82,641	7	$47,730.0	$140,905	($6,662)	$181,973
8	$94,338.2	$180,258	($8,523)	$266,074	8	$20,818.5	$65,093	($3,078)	$82,834	8	$48,916.1	$140,201	($6,629)	$182,488
9	$96,682.5	$179,357	($8,480)	$267,559	9	$21,335.8	$64,768	($3,062)	$83,041	9	$50,131.7	$139,500	($6,596)	$183,036
10	$99,085.1	$178,460	($8,438)	$269,107	10	$21,866.0	$64,444	($3,047)	$83,263	10	$51,377.4	$138,802	($6,563)	$183,617
11	$101,547.3	$177,568	($8,396)	$270,719	11	$22,409.4	$64,122	($3,032)	$83,499	11	$52,654.2	$138,108	($6,530)	$184,232
12	$104,070.8	$176,680	($8,354)	$272,397	12	$22,966.2	$63,801	($3,017)	$83,751	12	$53,962.6	$137,418	($6,497)	$184,883
13	$106,656.9	$175,797	($8,312)	$274,142	13	$23,536.9	$63,482	($3,002)	$84,018	13	$55,303.6	$136,731	($6,465)	$185,569
14	$109,307.4	$174,918	($8,270)	$275,955	14	$24,121.8	$63,165	($2,987)	$84,300	14	$56,677.9	$136,047	($6,432)	$186,292
15	$112,023.7	$174,043	($8,229)	$277,838	15	$24,721.3	$62,849	($2,972)	$84,599	15	$58,086.3	$135,367	($6,400)	$187,053
16	$114,807.4	$10,235	($8,188)	$116,854	16	$25,335.6	$3,696	($2,957)	$26,075	16	$59,529.8	$7,960	($6,368)	$61,122
17	$117,660.4	$10,184	($8,147)	$119,697	17	$25,965.2	$3,677	($2,942)	$26,701	17	$61,009.1	$7,921	($6,336)	$62,593
18	$120,584.3	$10,133	($8,106)	$122,611	18	$26,610.4	$3,659	($2,927)	$27,342	18	$62,525.2	$7,881	($6,305)	$64,101
19	$123,580.8	$10,082	($8,066)	$125,597	19	$27,271.7	$3,641	($2,913)	$28,000	19	$64,078.9	$7,842	($6,273)	$65,647
20	$126,651.8	$10,032	($8,025)	$128,658	20	$27,949.4	$3,623	($2,898)	$28,674	20	$65,671.3	$7,802	($6,242)	$67,232
21	$129,799.1	$9,981	($7,985)	$131,795	21	$28,643.9	$3,604	($2,884)	$29,365	21	$67,303.2	$7,763	($6,211)	$68,856
22	$133,024.6	$9,932	($7,945)	$135,011	22	$29,355.7	$3,586	($2,869)	$30,073	22	$68,975.7	$7,725	($6,180)	$70,521
23	$136,330.2	$9,882	($7,906)	$138,307	23	$30,085.2	$3,568	($2,855)	$30,799	23	$70,689.8	$7,686	($6,149)	$72,227
24	$139,718.0	$9,832	($7,866)	$141,685	24	$30,832.8	$3,551	($2,840)	$31,543	24	$72,446.4	$7,647	($6,118)	$73,976
25	$143,190.0	$9,783	($7,827)	$145,147	25	$31,599.0	$3,533	($2,826)	$32,306	25	$74,246.7	$7,609	($6,087)	$75,769
			IRR	2.26%				IRR	-0.32%				IRR	0.43%
			NPV	($290,835.57)				NPV	($440,034.90)				NPV	($725,029.06)
			AROI	2.16%				AROI	1.15%				AROI	1.48%

IRR, NPV, AROI - PV Solar Energy Systems

Financial Calculations

Based on inflation of: 3%

O&M inflation: 3%

PS #17					**PS #20**					**PS #29**				
Year	Energy Savings	SREC Sales	Maitenance Cost	Cash Flow	Year	Energy Savings	SREC Sales	Maitenance Cost	Cash Flow	Year	Energy Savings	SREC Sales	Maitenance Cost	Cash Flow
0				($1,025,000)	0				($575,000)	0				($1,475,000)
1	$10,788.8	$41,488	($1,962)	$50,315	1	$7,356.0	$20,744	($981)	$27,119	1	$19,125.6	$62,232	($2,942)	$78,415
2	$11,056.9	$41,280	($1,952)	$50,386	2	$7,538.8	$20,640	($976)	$27,203	2	$19,600.9	$61,921	($2,928)	$78,594
3	$11,331.7	$41,074	($1,942)	$50,464	3	$7,726.1	$20,537	($971)	$27,292	3	$20,088.0	$61,611	($2,913)	$78,786
4	$11,613.3	$40,869	($1,932)	$50,550	4	$7,918.1	$20,434	($966)	$27,386	4	$20,587.1	$61,303	($2,898)	$78,992
5	$11,901.8	$40,664	($1,923)	$50,643	5	$8,114.9	$20,332	($961)	$27,486	5	$21,098.7	$60,996	($2,884)	$79,211
6	$12,197.6	$40,461	($1,913)	$50,746	6	$8,316.6	$20,230	($957)	$27,591	6	$21,623.0	$60,691	($2,870)	$79,445
7	$12,500.7	$40,259	($1,903)	$50,856	7	$8,523.2	$20,129	($952)	$27,701	7	$22,160.4	$60,388	($2,855)	$79,693
8	$12,811.4	$40,057	($1,894)	$50,975	8	$8,735.0	$20,029	($947)	$27,817	8	$22,711.0	$60,086	($2,841)	$79,956
9	$13,129.7	$39,857	($1,884)	$51,102	9	$8,952.1	$19,929	($942)	$27,938	9	$23,275.4	$59,786	($2,827)	$80,234
10	$13,456.0	$39,658	($1,875)	$51,239	10	$9,174.5	$19,829	($938)	$28,066	10	$23,853.8	$59,487	($2,813)	$80,528
11	$13,790.4	$39,460	($1,866)	$51,384	11	$9,402.5	$19,730	($933)	$28,199	11	$24,446.6	$59,189	($2,799)	$80,837
12	$14,133.1	$39,262	($1,856)	$51,539	12	$9,636.2	$19,631	($928)	$28,339	12	$25,054.1	$58,893	($2,785)	$81,163
13	$14,484.3	$39,066	($1,847)	$51,703	13	$9,875.6	$19,533	($924)	$28,485	13	$25,676.7	$58,599	($2,771)	$81,505
14	$14,844.2	$38,871	($1,838)	$51,877	14	$10,121.1	$19,435	($919)	$28,637	14	$26,314.7	$58,306	($2,757)	$81,864
15	$15,213.1	$38,676	($1,829)	$52,061	15	$10,372.6	$19,338	($914)	$28,796	15	$26,968.7	$58,014	($2,743)	$82,240
16	$15,591.1	$2,274	($1,820)	$16,046	16	$10,630.3	$1,137	($910)	$10,858	16	$27,638.8	$3,412	($2,729)	$28,321
17	$15,978.6	$2,263	($1,810)	$16,431	17	$10,894.5	$1,132	($905)	$11,121	17	$28,325.7	$3,395	($2,716)	$29,005
18	$16,375.6	$2,252	($1,801)	$16,826	18	$11,165.2	$1,126	($901)	$11,390	18	$29,029.5	$3,378	($2,702)	$29,705
19	$16,782.6	$2,240	($1,792)	$17,231	19	$11,442.7	$1,120	($896)	$11,667	19	$29,750.9	$3,361	($2,689)	$30,423
20	$17,199.6	$2,229	($1,783)	$17,645	20	$11,727.0	$1,115	($892)	$11,950	20	$30,490.2	$3,344	($2,675)	$31,159
21	$17,627.0	$2,218	($1,774)	$18,071	21	$12,018.4	$1,109	($887)	$12,240	21	$31,247.9	$3,327	($2,662)	$31,913
22	$18,065.1	$2,207	($1,766)	$18,506	22	$12,317.1	$1,104	($883)	$12,538	22	$32,024.4	$3,311	($2,648)	$32,687
23	$18,514.0	$2,196	($1,757)	$18,953	23	$12,623.2	$1,098	($878)	$12,843	23	$32,820.2	$3,294	($2,635)	$33,479
24	$18,974.1	$2,185	($1,748)	$19,411	24	$12,936.9	$1,092	($874)	$13,155	24	$33,635.8	$3,277	($2,622)	$34,291
25	$19,445.6	$2,174	($1,739)	$19,880	25	$13,258.3	$1,087	($870)	$13,476	25	$34,471.7	$3,261	($2,609)	$35,124
			IRR	-0.77%				IRR	-0.58%				IRR	0.27%
			NPV	($318,867.63)				NPV	##########				NPV	($348,509.18)
			AROI	0.91%				AROI	0.72%				AROI	1.32%

IRR, NPV, AROI - PV Solar Energy Systems

Financial Calculations

Based on inflation of: 3%

O&M inflation: 3%

PS#39					PS#1				
Year	Energy Savings	SREC Sales	Maitenance Cost	Cash Flow	Year	Energy Savings	SREC Sales	Maitenance Cost	Cash Flow
0				($597,500)	0				($193,963)
1	$8,238.7	$21,781	($1,030)	$28,990	1	$1,127.3	$3,179	($150)	$4,156
2	$8,443.5	$21,672	($1,025)	$29,091	2	$1,155.3	$3,163	($150)	$4,169
3	$8,653.3	$21,564	($1,020)	$29,198	3	$1,184.0	$3,147	($149)	$4,183
4	$8,868.3	$21,456	($1,014)	$29,310	4	$1,213.5	$3,132	($148)	$4,197
5	$9,088.7	$21,349	($1,009)	$29,428	5	$1,243.6	$3,116	($147)	$4,212
6	$9,314.5	$21,242	($1,004)	$29,552	6	$1,274.5	$3,100	($147)	$4,228
7	$9,546.0	$21,136	($999)	$29,682	7	$1,306.2	$3,085	($146)	$4,245
8	$9,783.2	$21,030	($994)	$29,819	8	$1,338.6	$3,069	($145)	$4,263
9	$10,026.3	$20,925	($989)	$29,962	9	$1,371.9	$3,054	($144)	$4,282
10	$10,275.5	$20,820	($984)	$30,111	10	$1,406.0	$3,039	($144)	$4,301
11	$10,530.8	$20,716	($979)	$30,268	11	$1,440.9	$3,024	($143)	$4,322
12	$10,792.5	$20,613	($975)	$30,431	12	$1,476.7	$3,008	($142)	$4,343
13	$11,060.7	$20,510	($970)	$30,601	13	$1,513.4	$2,993	($142)	$4,365
14	$11,335.6	$20,407	($965)	$30,778	14	$1,551.1	$2,978	($141)	$4,389
15	$11,617.3	$20,305	($960)	$30,962	15	$1,589.6	$2,964	($140)	$4,413
16	$11,906.0	$1,194	($955)	$12,145	16	$1,629.1	$174	($139)	$1,664
17	$12,201.8	$1,188	($950)	$12,439	17	$1,669.6	$173	($139)	$1,704
18	$12,505.0	$1,182	($946)	$12,741	18	$1,711.1	$173	($138)	$1,746
19	$12,815.8	$1,176	($941)	$13,051	19	$1,753.6	$172	($137)	$1,788
20	$13,134.3	$1,170	($936)	$13,368	20	$1,797.2	$171	($137)	$1,831
21	$13,460.6	$1,165	($932)	$13,694	21	$1,841.8	$170	($136)	$1,876
22	$13,795.1	$1,159	($927)	$14,027	22	$1,887.6	$169	($135)	$1,921
23	$14,138.0	$1,153	($922)	$14,369	23	$1,934.5	$168	($135)	$1,968
24	$14,489.3	$1,147	($918)	$14,719	24	$1,982.6	$167	($134)	$2,016
25	$14,849.3	$1,141	($913)	$15,078	25	$2,031.8	$167	($133)	$2,065
			IRR	-0.21%				IRR	#NUM!
			NPV	($167,899.78)				NPV	($132,980.08)
			AROI	0.85%				AROI	-1.86%

IRR, NPV, AROI - PV Solar Energy Systems

Financial Calculations

Based on inflation of: 3%

O&M inflation: 3%

Dickenson					Liberty					PS #6					PS #11				
Year	Energy Savings	SREC Sales	Maitenance Cost	Cash Flow	Year	Energy Savings	SREC Sales	Maitenance Cost	Cash Flow	Year	Energy Savings	SREC Sales	Maitenance Cost	Cash Flow	Year	Energy Savings	SREC Sales	Maitenance Cost	Cash Flow
0				($4,118,750)	0				($676,250)	0				($1,070,000)	0				($4,145,300)
1	$65,284.5	$184,102	($8,705)	$240,682	1	$9,011.1	$25,411	($1,201)	$33,221	1	$19,567.0	$43,562	($2,060)	$61,070	1	$65,718.5	$185,326	($8,762)	$242,282
2	$66,906.8	$183,182	($8,661)	$241,428	2	$9,235.0	$25,284	($1,195)	$33,324	2	$20,053.2	$43,344	($2,049)	$61,348	2	$67,351.6	$184,400	($8,719)	$243,033
3	$68,569.5	$182,266	($8,618)	$242,218	3	$9,464.5	$25,158	($1,189)	$33,433	3	$20,551.5	$43,128	($2,039)	$61,640	3	$69,025.3	$183,478	($8,675)	$243,828
4	$70,273.4	$181,355	($8,575)	$243,053	4	$9,699.7	$25,032	($1,184)	$33,548	4	$21,062.2	$42,912	($2,029)	$61,945	4	$70,740.6	$182,560	($8,632)	$244,669
5	$72,019.7	$180,448	($8,532)	$243,936	5	$9,940.7	$24,907	($1,178)	$33,670	5	$21,585.6	$42,697	($2,019)	$62,264	5	$72,498.5	$181,647	($8,589)	$245,557
6	$73,809.4	$179,546	($8,489)	$244,866	6	$10,187.8	$24,782	($1,172)	$33,798	6	$22,122.0	$42,484	($2,009)	$62,597	6	$74,300.1	$180,739	($8,546)	$246,494
7	$75,643.6	$178,648	($8,447)	$245,845	7	$10,440.9	$24,658	($1,166)	$33,933	7	$22,671.8	$42,272	($1,999)	$62,945	7	$76,146.4	$179,835	($8,503)	$247,479
8	$77,523.3	$177,755	($8,404)	$246,873	8	$10,700.4	$24,535	($1,160)	$34,075	8	$23,235.2	$42,060	($1,989)	$63,307	8	$78,038.7	$178,936	($8,460)	$248,515
9	$79,449.7	$176,866	($8,362)	$247,953	9	$10,966.3	$24,412	($1,154)	$34,225	9	$23,812.5	$41,850	($1,979)	$63,684	9	$79,977.9	$178,042	($8,418)	$249,601
10	$81,424.1	$175,981	($8,321)	$249,085	10	$11,238.8	$24,290	($1,148)	$34,381	10	$24,404.3	$41,641	($1,969)	$64,076	10	$81,965.4	$177,151	($8,376)	$250,741
11	$83,447.5	$175,102	($8,279)	$250,270	11	$11,518.1	$24,169	($1,143)	$34,544	11	$25,010.7	$41,432	($1,959)	$64,484	11	$84,002.2	$176,266	($8,334)	$251,934
12	$85,521.1	$174,226	($8,238)	$251,510	12	$11,804.3	$24,048	($1,137)	$34,715	12	$25,632.2	$41,225	($1,949)	$64,908	12	$86,089.7	$175,384	($8,292)	$253,182
13	$87,646.3	$173,355	($8,196)	$252,805	13	$12,097.7	$23,928	($1,131)	$34,894	13	$26,269.2	$41,019	($1,939)	$65,349	13	$88,229.0	$174,507	($8,251)	$254,485
14	$89,824.3	$172,488	($8,155)	$254,157	14	$12,398.3	$23,808	($1,126)	$35,081	14	$26,922.0	$40,814	($1,930)	$65,806	14	$90,421.5	$173,635	($8,210)	$255,847
15	$92,056.5	$171,626	($8,115)	$255,567	15	$12,706.4	$23,689	($1,120)	$35,276	15	$27,591.0	$40,610	($1,920)	$66,281	15	$92,668.5	$172,767	($8,169)	$257,266
16	$94,344.1	$10,093	($8,074)	$96,363	16	$13,022.1	$1,393	($1,114)	$13,301	16	$28,276.6	$2,388	($1,910)	$28,754	16	$94,971.3	$10,160	($8,128)	$97,003
17	$96,688.5	$10,042	($8,034)	$98,697	17	$13,345.7	$1,386	($1,109)	$13,623	17	$28,979.3	$2,376	($1,901)	$29,455	17	$97,331.3	$10,109	($8,087)	$99,353
18	$99,091.2	$9,992	($7,994)	$101,090	18	$13,677.4	$1,379	($1,103)	$13,953	18	$29,699.5	$2,364	($1,891)	$30,172	18	$99,750.0	$10,058	($8,047)	$101,762
19	$101,553.7	$9,942	($7,954)	$103,542	19	$14,017.3	$1,372	($1,098)	$14,292	19	$30,437.5	$2,352	($1,882)	$30,908	19	$102,228.8	$10,008	($8,006)	$104,230
20	$104,077.3	$9,892	($7,914)	$106,056	20	$14,365.6	$1,365	($1,092)	$14,639	20	$31,193.9	$2,341	($1,873)	$31,662	20	$104,769.2	$9,958	($7,966)	$106,761
21	$106,663.6	$9,843	($7,874)	$108,632	21	$14,722.6	$1,359	($1,087)	$14,994	21	$31,969.0	$2,329	($1,863)	$32,435	21	$107,372.7	$9,908	($7,927)	$109,354
22	$109,314.2	$9,794	($7,835)	$111,273	22	$15,088.4	$1,352	($1,081)	$15,359	22	$32,763.5	$2,317	($1,854)	$33,227	22	$110,040.9	$9,859	($7,887)	$112,013
23	$112,030.6	$9,745	($7,796)	$113,980	23	$15,463.4	$1,345	($1,076)	$15,732	23	$33,577.6	$2,306	($1,845)	$34,039	23	$112,775.4	$9,809	($7,848)	$114,737
24	$114,814.6	$9,696	($7,757)	$116,754	24	$15,847.6	$1,338	($1,071)	$16,115	24	$34,412.0	$2,294	($1,835)	$34,871	24	$115,577.9	$9,760	($7,808)	$117,530
25	$117,667.7	$9,647	($7,718)	$119,597	25	$16,241.5	$1,332	($1,065)	$16,508	25	$35,267.2	$2,283	($1,826)	$35,724	25	$118,450.0	$9,712	($7,769)	$120,392
			IRR	1.43%				IRR	-0.21%				IRR	1.60%				IRR	1.43%
			NPV	($587,141.71)				NPV	($188,788.57)				NPV	($140,142.67)				NPV	($590,213.98)
			AROI	1.84%				AROI	0.91%				AROI	1.71%				AROI	1.84%

IRR, NPV, AROI - PV Solar Energy Systems

Financial Calculations

Based on inflation of:

O&M inflation:

PS #23					PS #24					PS #25					PS #27				
Year	Energy Savings	SREC Sales	Maitenance Cost	Cash Flow	Year	Energy Savings	SREC Sales	Maitenance Cost	Cash Flow	Year	Energy Savings	SREC Sales	Maitenance Cost	Cash Flow	Year	Energy Savings	SREC Sales	Maitenance Cost	Cash Flow
0				($2,420,000)	0				($2,217,500)	0				($3,196,250)	0				($1,655,000)
1	$37,515.6	$105,794	($5,002)	$138,308	1	$31,925.0	$96,459	($4,561)	$123,824	1	$50,204.7	$141,577	($6,694)	$185,088	1	$25,010.4	$70,529	($3,335)	$92,205
2	$38,447.9	$105,265	($4,977)	$138,736	2	$32,718.4	$95,977	($4,538)	$124,157	2	$51,452.3	$140,869	($6,660)	$185,661	2	$25,631.9	$70,177	($3,318)	$92,491
3	$39,403.3	$104,739	($4,952)	$139,190	3	$33,531.4	$95,497	($4,515)	$124,513	3	$52,730.9	$140,165	($6,627)	$186,269	3	$26,268.9	$69,826	($3,301)	$92,793
4	$40,382.5	$104,215	($4,927)	$139,670	4	$34,364.7	$95,020	($4,493)	$124,892	4	$54,041.2	$139,464	($6,594)	$186,911	4	$26,921.6	$69,477	($3,285)	$93,113
5	$41,386.0	$103,694	($4,903)	$140,177	5	$35,218.6	$94,544	($4,470)	$125,293	5	$55,384.2	$138,767	($6,561)	$187,590	5	$27,590.6	$69,129	($3,269)	$93,451
6	$42,414.4	$103,175	($4,878)	$140,712	6	$36,093.8	$94,072	($4,448)	$125,718	6	$56,760.5	$138,073	($6,528)	$188,305	6	$28,276.3	$68,784	($3,252)	$93,808
7	$43,468.4	$102,660	($4,854)	$141,274	7	$36,990.8	$93,601	($4,426)	$126,167	7	$58,171.0	$137,383	($6,496)	$189,058	7	$28,978.9	$68,440	($3,236)	$94,183
8	$44,548.6	$102,146	($4,830)	$141,865	8	$37,910.0	$93,133	($4,403)	$126,640	8	$59,616.5	$136,696	($6,463)	$189,849	8	$29,699.1	$68,098	($3,220)	$94,577
9	$45,655.6	$101,636	($4,805)	$142,486	9	$38,852.0	$92,668	($4,381)	$127,138	9	$61,098.0	$136,012	($6,431)	$190,679	9	$30,437.1	$67,757	($3,204)	$94,990
10	$46,790.2	$101,127	($4,781)	$143,136	10	$39,817.5	$92,204	($4,360)	$127,662	10	$62,616.3	$135,332	($6,399)	$191,550	10	$31,193.4	$67,418	($3,188)	$95,424
11	$47,952.9	$100,622	($4,758)	$143,817	11	$40,807.0	$91,743	($4,338)	$128,213	11	$64,172.3	$134,656	($6,367)	$192,461	11	$31,968.6	$67,081	($3,172)	$95,878
12	$49,144.5	$100,119	($4,734)	$144,529	12	$41,821.0	$91,285	($4,316)	$128,790	12	$65,767.0	$133,982	($6,335)	$193,414	12	$32,763.0	$66,746	($3,156)	$96,353
13	$50,365.8	$99,618	($4,710)	$145,274	13	$42,860.3	$90,828	($4,294)	$129,394	13	$67,401.3	$133,312	($6,303)	$194,410	13	$33,577.2	$66,412	($3,140)	$96,849
14	$51,617.4	$99,120	($4,687)	$146,051	14	$43,925.4	$90,374	($4,273)	$130,026	14	$69,076.2	$132,646	($6,272)	$195,450	14	$34,411.6	$66,080	($3,124)	$97,367
15	$52,900.1	$98,624	($4,663)	$146,861	15	$45,016.9	$89,922	($4,252)	$130,687	15	$70,792.7	$131,983	($6,240)	$196,535	15	$35,266.7	$65,750	($3,109)	$97,908
16	$54,214.6	$5,800	($4,640)	$55,375	16	$46,135.6	$5,288	($4,230)	$47,193	16	$72,551.9	$7,761	($6,209)	$74,104	16	$36,143.1	$3,866	($3,093)	$36,916
17	$55,561.9	$5,771	($4,617)	$56,716	17	$47,282.1	$5,262	($4,209)	$48,334	17	$74,354.8	$7,723	($6,178)	$75,899	17	$37,041.2	$3,847	($3,078)	$37,811
18	$56,942.6	$5,742	($4,593)	$58,091	18	$48,457.0	$5,235	($4,188)	$49,504	18	$76,202.6	$7,684	($6,147)	$77,739	18	$37,961.7	$3,828	($3,062)	$38,727
19	$58,357.6	$5,713	($4,571)	$59,500	19	$49,661.2	$5,209	($4,167)	$50,703	19	$78,096.2	$7,646	($6,116)	$79,625	19	$38,905.1	$3,809	($3,047)	$39,667
20	$59,807.8	$5,685	($4,548)	$60,945	20	$50,895.3	$5,183	($4,146)	$51,932	20	$80,036.9	$7,607	($6,086)	$81,558	20	$39,871.9	$3,790	($3,032)	$40,630
21	$61,294.0	$5,656	($4,525)	$62,425	21	$52,160.0	$5,157	($4,126)	$53,191	21	$82,025.8	$7,569	($6,055)	$83,540	21	$40,862.7	$3,771	($3,017)	$41,617
22	$62,817.2	$5,628	($4,502)	$63,943	22	$53,456.2	$5,131	($4,105)	$54,482	22	$84,064.1	$7,531	($6,025)	$85,570	22	$41,878.1	$3,752	($3,002)	$42,628
23	$64,378.2	$5,600	($4,480)	$65,498	23	$54,784.6	$5,106	($4,085)	$55,806	23	$86,153.1	$7,494	($5,995)	$87,652	23	$42,918.8	$3,733	($2,987)	$43,665
24	$65,978.0	$5,572	($4,457)	$67,092	24	$56,146.0	$5,080	($4,064)	$57,162	24	$88,294.0	$7,456	($5,965)	$89,785	24	$43,985.3	$3,714	($2,972)	$44,728
25	$67,617.5	$5,544	($4,435)	$68,726	25	$57,541.2	$5,055	($4,044)	$58,552	25	$90,488.1	$7,419	($5,935)	$91,972	25	$45,078.3	$3,696	($2,957)	$45,818
			IRR	1.21%				IRR	0.87%				IRR	1.34%				IRR	0.96%
			NPV	($390,568.76)				NPV	($419,287.73)				NPV	($480,393.49)				NPV	($302,045.84)
			AROI	1.72%				AROI	1.58%				AROI	1.79%				AROI	1.57%

IRR, NPV, AROI - PV Solar Energy Systems

Financial Calculations

Based on inflation of: 3%

O&M inflation: 3%

Lincoln High School					**McNair Academic High School**					**PS #5**				
Year	Energy Savings	SREC Sales	Maitenance Cost	Cash Flow	Year	Energy Savings	SREC Sales	Maitenance Cost	Cash Flow	Year	Energy Savings	SREC Sales	Maitenance Cost	Cash Flow
0				($5,412,500)	0				($2,150,000)	0				($1,812,500)
1	$63,384.2	$243,741	($11,524)	$295,601	1	$33,102.0	$93,348	($4,414)	$122,036	1	$22,068.0	$77,790	($3,678)	$96,180
2	$64,959.3	$242,522	($11,467)	$296,015	2	$33,924.6	$92,881	($4,392)	$122,414	2	$22,616.4	$77,401	($3,660)	$96,358
3	$66,573.5	$241,310	($11,409)	$296,474	3	$34,767.6	$92,416	($4,370)	$122,815	3	$23,178.4	$77,014	($3,641)	$96,551
4	$68,227.9	$240,103	($11,352)	$296,979	4	$35,631.6	$91,954	($4,348)	$123,238	4	$23,754.4	$76,629	($3,623)	$96,760
5	$69,923.4	$238,903	($11,296)	$297,530	5	$36,517.0	$91,495	($4,326)	$123,686	5	$24,344.7	$76,246	($3,605)	$96,985
6	$71,660.9	$237,708	($11,239)	$298,130	6	$37,424.5	$91,037	($4,304)	$124,157	6	$24,949.7	$75,864	($3,587)	$97,227
7	$73,441.7	$236,520	($11,183)	$298,778	7	$38,354.5	$90,582	($4,283)	$124,654	7	$25,569.7	$75,485	($3,569)	$97,486
8	$75,266.7	$235,337	($11,127)	$299,477	8	$39,307.6	$90,129	($4,261)	$125,175	8	$26,205.1	$75,108	($3,551)	$97,761
9	$77,137.1	$234,160	($11,071)	$300,226	9	$40,284.4	$89,678	($4,240)	$125,723	9	$26,856.3	$74,732	($3,533)	$98,055
10	$79,054.0	$232,990	($11,016)	$301,027	10	$41,285.4	$89,230	($4,219)	$126,297	10	$27,523.6	$74,358	($3,516)	$98,366
11	$81,018.5	$231,825	($10,961)	$301,882	11	$42,311.4	$88,784	($4,198)	$126,897	11	$28,207.6	$73,987	($3,498)	$98,696
12	$83,031.8	$230,665	($10,906)	$302,791	12	$43,362.8	$88,340	($4,177)	$127,526	12	$28,908.6	$73,617	($3,481)	$99,044
13	$85,095.1	$229,512	($10,852)	$303,756	13	$44,440.4	$87,898	($4,156)	$128,183	13	$29,626.9	$73,249	($3,463)	$99,412
14	$87,209.7	$228,365	($10,797)	$304,777	14	$45,544.7	$87,459	($4,135)	$128,868	14	$30,363.2	$72,882	($3,446)	$99,799
15	$89,376.9	$227,223	($10,743)	$305,856	15	$46,676.5	$87,021	($4,114)	$129,584	15	$31,117.7	$72,518	($3,429)	$100,207
16	$91,597.9	$13,362	($10,690)	$94,270	16	$47,836.4	$5,117	($4,094)	$48,860	16	$31,891.0	$4,264	($3,412)	$32,744
17	$93,874.1	$13,295	($10,636)	$96,533	17	$49,025.2	$5,092	($4,073)	$50,044	17	$32,683.4	$4,243	($3,395)	$33,532
18	$96,206.9	$13,229	($10,583)	$98,853	18	$50,243.4	$5,066	($4,053)	$51,257	18	$33,495.6	$4,222	($3,378)	$34,340
19	$98,597.6	$13,163	($10,530)	$101,230	19	$51,492.0	$5,041	($4,033)	$52,500	19	$34,328.0	$4,201	($3,361)	$35,168
20	$101,047.8	$13,097	($10,477)	$103,667	20	$52,771.6	$5,016	($4,013)	$53,775	20	$35,181.0	$4,180	($3,344)	$36,017
21	$103,558.8	$13,031	($10,425)	$106,165	21	$54,082.9	$4,991	($3,993)	$55,081	21	$36,055.3	$4,159	($3,327)	$36,887
22	$106,132.3	$12,966	($10,373)	$108,726	22	$55,426.9	$4,966	($3,973)	$56,420	22	$36,951.3	$4,138	($3,311)	$37,779
23	$108,769.7	$12,901	($10,321)	$111,350	23	$56,804.3	$4,941	($3,953)	$57,792	23	$37,869.5	$4,117	($3,294)	$38,693
24	$111,472.6	$12,837	($10,269)	$114,040	24	$58,215.9	$4,916	($3,933)	$59,199	24	$38,810.6	$4,097	($3,277)	$39,630
25	$114,242.7	$12,773	($10,218)	$116,797	25	$59,662.5	$4,892	($3,913)	$60,641	25	$39,775.0	$4,076	($3,261)	$40,590
			IRR	0.24%				IRR	1.14%				IRR	0.11%
			NPV	($1,263,972.32)				NPV	($359,325.38)				NPV	($446,444.14)
			AROI	1.46%				AROI	1.68%				AROI	1.31%

IRR, NPV, AROI - PV Solar Energy Systems

Financial Calculations

Based on inflation of: 3%

O&M inflation: 3%

MS #7					Regional Day					PS #22					PS #37				
Year	Energy Savings	SREC Sales	Maitenance Cost	Cash Flow	Year	Energy Savings	SREC Sales	Maitenance Cost	Cash Flow	Year	Energy Savings	SREC Sales	Maitenance Cost	Cash Flow	Year	Energy Savings	SREC Sales	Maitenance Cost	Cash Flow
0				($3,500,000)	0				($1,925,000)	0				($3,500,000)	0				($2,375,000)
1	$55,170.0	$155,579	($7,356)	$203,393	1	$33,347.2	$82,976	($3,923)	$112,400	1	$58,848.0	$155,579	($7,356)	$207,071	1	$31,876.0	$103,720	($4,904)	$130,692
2	$56,541.0	$154,802	($7,319)	$204,023	2	$34,175.9	$82,561	($3,904)	$112,833	2	$60,310.4	$154,802	($7,319)	$207,793	2	$32,668.1	$103,201	($4,879)	$130,990
3	$57,946.0	$154,027	($7,283)	$204,691	3	$35,025.1	$82,148	($3,884)	$113,289	3	$61,809.1	$154,027	($7,283)	$208,554	3	$33,479.9	$102,685	($4,855)	$131,310
4	$59,386.0	$153,257	($7,246)	$205,397	4	$35,895.5	$81,737	($3,865)	$113,768	4	$63,345.0	$153,257	($7,246)	$209,356	4	$34,311.9	$102,172	($4,831)	$131,653
5	$60,861.7	$152,491	($7,210)	$206,143	5	$36,787.5	$81,329	($3,845)	$114,271	5	$64,919.2	$152,491	($7,210)	$210,200	5	$35,164.5	$101,661	($4,807)	$132,019
6	$62,374.1	$151,729	($7,174)	$206,929	6	$37,701.7	$80,922	($3,826)	$114,798	6	$66,532.4	$151,729	($7,174)	$211,087	6	$36,038.4	$101,152	($4,783)	$132,408
7	$63,924.1	$150,970	($7,138)	$207,756	7	$38,638.6	$80,517	($3,807)	$115,349	7	$68,185.7	$150,970	($7,138)	$212,018	7	$36,933.9	$100,647	($4,759)	$132,822
8	$65,512.6	$150,215	($7,102)	$208,625	8	$39,598.8	$80,115	($3,788)	$115,926	8	$69,880.2	$150,215	($7,102)	$212,993	8	$37,851.7	$100,143	($4,735)	$133,260
9	$67,140.6	$149,464	($7,067)	$209,538	9	$40,582.8	$79,714	($3,769)	$116,528	9	$71,616.7	$149,464	($7,067)	$214,014	9	$38,792.4	$99,643	($4,711)	$133,724
10	$68,809.1	$148,717	($7,032)	$210,494	10	$41,591.3	$79,316	($3,750)	$117,157	10	$73,396.3	$148,717	($7,032)	$215,082	10	$39,756.4	$99,144	($4,688)	$134,213
11	$70,519.0	$147,973	($6,996)	$211,496	11	$42,624.8	$78,919	($3,731)	$117,812	11	$75,220.2	$147,973	($6,996)	$216,197	11	$40,744.3	$98,649	($4,664)	$134,729
12	$72,271.4	$147,233	($6,961)	$212,543	12	$43,684.0	$78,524	($3,713)	$118,496	12	$77,089.5	$147,233	($6,961)	$217,361	12	$41,756.8	$98,156	($4,641)	$135,271
13	$74,067.3	$146,497	($6,927)	$213,638	13	$44,769.6	$78,132	($3,694)	$119,207	13	$79,005.1	$146,497	($6,927)	$218,576	13	$42,794.5	$97,665	($4,618)	$135,841
14	$75,907.9	$145,765	($6,892)	$214,781	14	$45,882.1	$77,741	($3,676)	$119,948	14	$80,968.4	$145,765	($6,892)	$219,841	14	$43,857.9	$97,176	($4,595)	$136,440
15	$77,794.2	$145,036	($6,857)	$215,973	15	$47,022.3	$77,352	($3,657)	$120,717	15	$82,980.5	$145,036	($6,857)	$221,159	15	$44,947.8	$96,691	($4,572)	$137,067
16	$79,727.4	$8,529	($6,823)	$81,433	16	$48,190.8	$4,549	($3,639)	$49,101	16	$85,042.6	$8,529	($6,823)	$86,748	16	$46,064.7	$5,686	($4,549)	$47,202
17	$81,708.6	$8,486	($6,789)	$83,406	17	$49,388.3	$4,526	($3,621)	$50,294	17	$87,155.9	$8,486	($6,789)	$88,853	17	$47,209.4	$5,658	($4,526)	$48,341
18	$83,739.1	$8,444	($6,755)	$85,428	18	$50,615.6	$4,503	($3,603)	$51,516	18	$89,321.7	$8,444	($6,755)	$91,010	18	$48,382.6	$5,629	($4,503)	$49,508
19	$85,820.0	$8,402	($6,721)	$87,500	19	$51,873.4	$4,481	($3,585)	$52,770	19	$91,541.3	$8,402	($6,721)	$93,222	19	$49,584.9	$5,601	($4,481)	$50,705
20	$87,952.6	$8,360	($6,688)	$89,625	20	$53,162.5	$4,459	($3,567)	$54,054	20	$93,816.1	$8,360	($6,688)	$95,488	20	$50,817.1	$5,573	($4,459)	$51,932
21	$90,138.2	$8,318	($6,654)	$91,802	21	$54,483.6	$4,436	($3,549)	$55,371	21	$96,147.5	$8,318	($6,654)	$97,811	21	$52,079.9	$5,545	($4,436)	$53,189
22	$92,378.2	$8,276	($6,621)	$94,033	22	$55,837.5	$4,414	($3,531)	$56,720	22	$98,536.7	$8,276	($6,621)	$100,192	22	$53,374.1	$5,518	($4,414)	$54,478
23	$94,673.8	$8,235	($6,588)	$96,321	23	$57,225.0	$4,392	($3,514)	$58,103	23	$100,985.4	$8,235	($6,588)	$102,632	23	$54,700.4	$5,490	($4,392)	$55,798
24	$97,026.4	$8,194	($6,555)	$98,665	24	$58,647.1	$4,370	($3,496)	$59,521	24	$103,494.8	$8,194	($6,555)	$105,134	24	$56,059.7	$5,462	($4,370)	$57,152
25	$99,437.5	$8,153	($6,522)	$101,068	25	$60,104.5	$4,348	($3,479)	$60,974	25	$106,066.7	$8,153	($6,522)	$107,697	25	$57,452.8	$5,435	($4,348)	$58,540
			IRR	1.37%				IRR	1.63%				IRR	1.66%				IRR	0.60%
			NPV	($515,542.29)				NPV	($243,566.21)				NPV	($431,426.96)				NPV	($497,515.30)
			AROI	1.81%				AROI	1.84%				AROI	1.92%				AROI	1.50%

IRR, NPV, AROI - PV Solar Energy Systems

Financial Calculations

Based on inflation of:

O&M inflation:

Ferris					PS #16					PS #12					PS #14				
Year	Energy Savings	SREC Sales	Maitenance Cost	Cash Flow	Year	Energy Savings	SREC Sales	Maitenance Cost	Cash Flow	Year	Energy Savings	SREC Sales	Maitenance Cost	Cash Flow	Year	Energy Savings	SREC Sales	Maitenance Cost	Cash Flow
0				($1,475,000)	0				($1,250,000)	0				($2,375,000)	0				($2,375,000)
1	$20,596.8	$62,232	($2,942)	$79,886	1	$18,390.0	$51,860	($2,452)	$67,798	1	$26,972.0	$103,720	($4,904)	$125,788	1	$26,972.0	$103,720	($4,904)	$125,788
2	$21,108.6	$61,921	($2,928)	$80,102	2	$18,847.0	$51,601	($2,440)	$68,008	2	$27,642.3	$103,201	($4,879)	$125,964	2	$27,642.3	$103,201	($4,879)	$125,964
3	$21,633.2	$61,611	($2,913)	$80,331	3	$19,315.3	$51,342	($2,428)	$68,230	3	$28,329.2	$102,685	($4,855)	$126,159	3	$28,329.2	$102,685	($4,855)	$126,159
4	$22,170.8	$61,303	($2,898)	$80,575	4	$19,795.3	$51,086	($2,415)	$68,466	4	$29,033.1	$102,172	($4,831)	$126,374	4	$29,033.1	$102,172	($4,831)	$126,374
5	$22,721.7	$60,996	($2,884)	$80,834	5	$20,287.2	$50,830	($2,403)	$68,714	5	$29,754.6	$101,661	($4,807)	$126,609	5	$29,754.6	$101,661	($4,807)	$126,609
6	$23,286.3	$60,691	($2,870)	$81,108	6	$20,791.4	$50,576	($2,391)	$68,976	6	$30,494.0	$101,152	($4,783)	$126,864	6	$30,494.0	$101,152	($4,783)	$126,864
7	$23,865.0	$60,388	($2,855)	$81,398	7	$21,308.0	$50,323	($2,379)	$69,252	7	$31,251.8	$100,647	($4,759)	$127,140	7	$31,251.8	$100,647	($4,759)	$127,140
8	$24,458.1	$60,086	($2,841)	$81,703	8	$21,837.5	$50,072	($2,367)	$69,542	8	$32,028.4	$100,143	($4,735)	$127,437	8	$32,028.4	$100,143	($4,735)	$127,437
9	$25,065.8	$59,786	($2,827)	$82,025	9	$22,380.2	$49,821	($2,356)	$69,846	9	$32,824.3	$99,643	($4,711)	$127,756	9	$32,824.3	$99,643	($4,711)	$127,756
10	$25,688.7	$59,487	($2,813)	$82,363	10	$22,936.4	$49,572	($2,344)	$70,165	10	$33,640.0	$99,144	($4,688)	$128,097	10	$33,640.0	$99,144	($4,688)	$128,097
11	$26,327.1	$59,189	($2,799)	$82,718	11	$23,506.3	$49,324	($2,332)	$70,499	11	$34,475.9	$98,649	($4,664)	$128,460	11	$34,475.9	$98,649	($4,664)	$128,460
12	$26,981.3	$58,893	($2,785)	$83,090	12	$24,090.5	$49,078	($2,320)	$70,848	12	$35,332.7	$98,156	($4,641)	$128,847	12	$35,332.7	$98,156	($4,641)	$128,847
13	$27,651.8	$58,599	($2,771)	$83,480	13	$24,689.1	$48,832	($2,309)	$71,213	13	$36,210.7	$97,665	($4,618)	$129,258	13	$36,210.7	$97,665	($4,618)	$129,258
14	$28,338.9	$58,306	($2,757)	$83,888	14	$25,302.6	$48,588	($2,297)	$71,594	14	$37,110.5	$97,176	($4,595)	$129,692	14	$37,110.5	$97,176	($4,595)	$129,692
15	$29,043.2	$58,014	($2,743)	$84,314	15	$25,931.4	$48,345	($2,286)	$71,991	15	$38,032.7	$96,691	($4,572)	$130,152	15	$38,032.7	$96,691	($4,572)	$130,152
16	$29,764.9	$3,412	($2,729)	$30,447	16	$26,575.8	$2,843	($2,274)	$27,144	16	$38,977.8	$5,686	($4,549)	$40,115	16	$38,977.8	$5,686	($4,549)	$40,115
17	$30,504.6	$3,395	($2,716)	$31,183	17	$27,236.2	$2,829	($2,263)	$27,802	17	$39,946.4	$5,658	($4,526)	$41,078	17	$39,946.4	$5,658	($4,526)	$41,078
18	$31,262.6	$3,378	($2,702)	$31,938	18	$27,913.0	$2,815	($2,252)	$28,476	18	$40,939.1	$5,629	($4,503)	$42,065	18	$40,939.1	$5,629	($4,503)	$42,065
19	$32,039.5	$3,361	($2,689)	$32,712	19	$28,606.7	$2,801	($2,240)	$29,167	19	$41,956.4	$5,601	($4,481)	$43,077	19	$41,956.4	$5,601	($4,481)	$43,077
20	$32,835.6	$3,344	($2,675)	$33,504	20	$29,317.5	$2,787	($2,229)	$29,875	20	$42,999.1	$5,573	($4,459)	$44,114	20	$42,999.1	$5,573	($4,459)	$44,114
21	$33,651.6	$3,327	($2,662)	$34,317	21	$30,046.1	$2,773	($2,218)	$30,601	21	$44,067.6	$5,545	($4,436)	$45,177	21	$44,067.6	$5,545	($4,436)	$45,177
22	$34,487.9	$3,311	($2,648)	$35,150	22	$30,792.7	$2,759	($2,207)	$31,344	22	$45,162.7	$5,518	($4,414)	$46,266	22	$45,162.7	$5,518	($4,414)	$46,266
23	$35,344.9	$3,294	($2,635)	$36,004	23	$31,557.9	$2,745	($2,196)	$32,107	23	$46,285.0	$5,490	($4,392)	$47,383	23	$46,285.0	$5,490	($4,392)	$47,383
24	$36,223.2	$3,277	($2,622)	$36,879	24	$32,342.1	$2,731	($2,185)	$32,888	24	$47,435.1	$5,462	($4,370)	$48,528	24	$47,435.1	$5,462	($4,370)	$48,528
25	$37,123.3	$3,261	($2,609)	$37,776	25	$33,145.8	$2,718	($2,174)	$33,689	25	$48,613.9	$5,435	($4,348)	$49,701	25	$48,613.9	$5,435	($4,348)	$49,701
			IRR	0.57%				IRR	0.71%				IRR	-0.05%				IRR	-0.05%
			NPV	($314,863.05)				NPV	($255,180.76)				NPV	($609,669.07)				NPV	($609,669.07)
			AROI	1.42%				AROI	1.42%				AROI	1.30%				AROI	1.30%

Lighting Maintenance Cost Savings

T12 to T8 Retrofit		T12 Bulb Cost	T8 Blub Cost	T12 Bulb Average Lifetime (Years)	T8 Bulb Average Lifetime (Years)	Quantity of T12 Replacements vs. T8 Replacements	Cost of T12 Replacement over T8 Life	T8 Bulb Replacements Over Lifetime (15 Yrs)
1	Lamp	$25.0	$23.5	4.6	5.7	1.25	$31.2	3
2	Lamp	$69.9	$67.0	4.6	5.7	1.25	$87.4	3
3	Lamp	$94.9	$90.5	4.6	5.7	1.25	$118.6	3
4	Lamp	$119.8	$114.0	4.6	5.7	1.25	$149.8	3

Incandescent to CFL Retrofit		Incandescent Cost	CFL Cost	Incandescent Average Lifetime (Years)	CFL Average Lifetime (Years)	Quantity of Incandescent Replacements vs. CFL Replacements	Cost of Incandescent Replacement over CFL Life	CFL Replacements Over Lifetime (15 Yrs)
13	Watt	$13.0	$25.0	0.5	2.3	5	$65.0	7
25	Watt	$18.0	$27.0	0.5	2.3	5	$90.0	7
26	Watt	$19.0	$28.5	0.5	2.3	5	$95.0	7
65	Watt	$20.0	$37.0	0.5	2.3	5	$100.0	7
120	Watt	$22.0	$48.5	0.5	2.3	5	$110.0	7

HID to Induction Retrofit		HID Cost	Induction Cost	HID Average Lifetime (Years)	Induction Average Lifetime (years)	Quantity of HID Replacements vs. Induction Replacements	Cost of HID Replacement over Induction Life	Induction Replacements Over Lifetime (15 Yrs)
400	Watt	$86.0	$485.0	4.6	22.8	5	$430.0	1
250	Watt	$80.0	$390.0	4.6	22.8	5	$400.0	1
175	Watt	$78.0	$380.0	4.6	22.8	5	$390.0	1
150	Watt	$74.0	$380.0	4.6	22.8	5	$370.0	1
100	Watt	$55.0	$380.0	4.6	22.8	5	$275.0	1
70	Watt	$25.0	$380.0	4.6	22.8	5	$125.0	1

Metal Halide to Fluorescent		Metal Halide Cost	Fluorescent Cost	Metal Halide Average Lifetime (Years)	Fluorescent Average Lifetime (years)	Quantity of Metal Halide Replacements vs. Fluorescent Replacements	Cost of Metal Halide Replacement over Fluorescent Life	Replacements Over Lifetime (15 Yrs)
6	Lamp	$86.0	$288.0	4.6	5.7	1.25	$107.5	3
4	Lamp	$48.0	$174.0	4.6	5.7	1.25	$60.0	3

Interior & Exterior

Building	INC-CFL (13W)	INC-CFL (25W)	T12->T8 (1 Lamp)	T12->T8 (2 Lamp)	T12->T8 (3 Lamp)	HID to Fluorescent	70W HID->INCUCTION	150W HID->INCUCTION	250W HID->INCUCTION	400W HID->INCUCTION	Total Maintenance Cost Savings	Annual Maintenance Cost Savings	Building
PS #27	$0.0	$0.0	$38.2	$0.0	$0.0	$0.0	$0.0	$0.0	$105.1	$0.0	$143.4	$9.56	PS #27
PS #28	$0.0	$0.0	$688.5	$0.0	$0.0	$0.0	$0.0	$0.0	$140.2	$226.0	$1,054.6	$70.31	PS #28
PS #31	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$70.1	$0.0	$70.1	$4.67	PS #31
PS #33	$996.5	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$70.1	$0.0	$1,066.5	$71.10	PS #33
PS #39	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$700.8	$0.0	$700.8	$46.72	PS #39

Interior

Building	INC-CFL (13W)	INC-CFL (25W)	T12->T8 (1 Lamp)	T12->T8 (2 Lamp)	T12->T8 (3 Lamp)	HID to Fluorescent	400W HID->INCUCTION	Total Maintenance Cost Savings	Annual Maintenance Cost Savings	Building
PS #27	$0.0	$0.0	$38.2	$0.0	$0.0	$0.0	$0.0	$38.2	$2.55	PS #27
PS #28	$0.0	$0.0	$688.5	$0.0	$0.0	$0.0	$0.0	$688.5	$45.90	PS #28
PS #31	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.00	PS #31
PS #33	$996.5	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$996.5	$66.43	PS #33
PS #39	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.00	PS #39

Exterior

Building	INC-CFL (13W)	70W HID->INCUCTION	150W HID->INCUCTION	250W HID->INCUCTION	400W HID->INCUCTION	Total Maintenance Cost Savings	Annual Maintenance Cost Savings	Building
PS #27	$0.0	$0.0	$0.0	$105.1	$0.0	$105.1	$7.01	PS #27
PS #28	$0.0	$0.0	$0.0	$140.2	$0.0	$140.2	$9.34	PS #28
PS #31	$0.0	$0.0	$0.0	$70.1	$0.0	$70.1	$4.67	PS #31
PS #33	$0.0	$0.0	$0.0	$70.1	$0.0	$70.1	$4.67	PS #33
PS #39	$0.0	$0.0	$0.0	$700.8	$0.0	$700.8	$46.72	PS #39

Lighting Maintenance Cost Savings

T12 to T8 Retrofit		T12 Bulb Cost	T8 Blub Cost	T12 Bulb Average Lifetime (Years)	T8 Bulb Average Lifetime (Years)	Quantity of T12 Replacements vs. T8 Replacements	Cost of T12 Replacement over T8 Life	T8 Bulb Replacements Over Lifetime (15 Yrs)
1	Lamp	$25.0	$23.5	4.6	5.7	1.25	$31.2	3
2	Lamp	$69.9	$67.0	4.6	5.7	1.25	$87.4	3
3	Lamp	$94.9	$90.5	4.6	5.7	1.25	$118.6	3
4	Lamp	$119.8	$114.0	4.6	5.7	1.25	$149.8	3

Incandescent to CFL Retrofit		Incandescent Cost	CFL Cost	Incandescent Average Lifetime (Years)	CFL Average Lifetime (Years)	Quantity of Incandescent Replacements vs. CFL Replacements	Cost of Incandescent Replacement over CFL Life	CFL Replacements Over Lifetime (15 Yrs)
13	Watt	$13.0	$25.0	0.5	2.3	5	$65.0	7
25	Watt	$18.0	$27.0	0.5	2.3	5	$90.0	7
26	Watt	$19.0	$28.5	0.5	2.3	5	$95.0	7
65	Watt	$20.0	$37.0	0.5	2.3	5	$100.0	7
120	Watt	$22.0	$48.5	0.5	2.3	5	$110.0	7

HID to Induction Retrofit		HID Cost	Induction Cost	HID Average Lifetime (Years)	Induction Average Lifetime (years)	Quantity of HID Replacements vs. Induction Replacements	Cost of HID Replacement over Induction Life	Induction Replacements Over Lifetime (15 Yrs)
400	Watt	$86.0	$485.0	4.6	22.8	5	$430.0	1
250	Watt	$80.0	$390.0	4.6	22.8	5	$400.0	1
175	Watt	$78.0	$380.0	4.6	22.8	5	$390.0	1
150	Watt	$74.0	$380.0	4.6	22.8	5	$370.0	1
100	Watt	$55.0	$380.0	4.6	22.8	5	$275.0	1
70	Watt	$25.0	$380.0	4.6	22.8	5	$125.0	1

Metal Halide to Fluorescent		Metal Halide Cost	Fluorescent Cost	Metal Halide Average Lifetime (Years)	Fluorescent Average Lifetime (years)	Quantity of Metal Halide Replacements vs. Fluorescent Replacements	Cost of Metal Halide Replacement over Fluorescent Life	Replacements Over Lifetime (15 Yrs)
6	Lamp	$86.0	$288.0	4.6	5.7	1.25	$107.5	3
4	Lamp	$48.0	$174.0	4.6	5.7	1.25	$60.0	3

Interior & Exterior

Building	INC-CFL (13W)	INC-CFL (25W)	T12->T8 (1 Lamp)	T12->T8 (2 Lamp)	T12->T8 (3 Lamp)	HID to Fluorescent	70W HID->INCUCTION	150W HID->INCUCTION	250W HID->INCUCTION	400W HID->INCUCTION	Total Maintenance Cost Savings	Annual Maintenance Cost Savings	Building
Dickinson High School	$0.0	$11,865.4	$7,190.7	$0.0	$2,056.4	$0.0	$0.0	$0.0	$315.4	$0.0	$21,427.9	$1,428.53	Dickinson High School
Liberty High School	$0.0	$0.0	$0.0	$275.5	$0.0	$0.0	$0.0	$0.0	$105.1	$0.0	$380.7	$25.38	Liberty High School
PS #1	$797.2	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$245.3	$0.0	$1,042.4	$69.50	PS #1
PS #6	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$981.1	$0.0	$981.1	$65.41	PS #6
PS #8	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$210.2	$0.0	$210.2	$14.02	PS #8
PS #11	$0.0	$0.0	$459.0	$0.0	$0.0	$0.0	$0.0	$0.0	$175.2	$0.0	$634.2	$42.28	PS #11
PS #23	$0.0	$0.0	$1,491.7	$0.0	$0.0	$0.0	$0.0	$0.0	$210.2	$0.0	$1,701.9	$113.46	PS #23
PS #23 Annex (Duncan)	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$87.6	$0.0	$87.6	$5.84	PS #23 Annex (Duncan)
PS #24	$0.0	$0.0	$382.5	$0.0	$0.0	$0.0	$0.0	$0.0	$227.8	$678.0	$1,288.3	$85.88	PS #24
PS #25	$0.0	$275.9	$573.7	$0.0	$0.0	$0.0	$0.0	$0.0	$1,500.0	$188.3	$2,538.0	$169.20	PS #25

Interior

Building	INC-CFL (13W)	INC-CFL (25W)	T12->T8 (1 Lamp)	T12->T8 (2 Lamp)	T12->T8 (3 Lamp)	HID to Fluorescent	400W HID->INCUCTION	Total Maintenance Cost Savings	Annual Maintenance Cost Savings	Building
Dickinson High School	$0.0	$11,865.4	$7,190.7	$0.0	$2,056.4	$0.0	$113.0	$21,225.6	$1,415.04	Dickinson High School
Liberty High School	$0.0	$0.0	$0.0	$275.5	$0.0	$0.0	$0.0	$275.5	$18.37	Liberty High School
PS #1	$797.2	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$797.2	$53.14	PS #1
PS #6	$0.0	$0.0	$0.0	$0.0	$0.0	$113.0	$753.4	$866.4	$57.76	PS #6
PS #8	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.00	PS #8
PS #11	$0.0	$0.0	$459.0	$0.0	$0.0	$0.0	$0.0	$459.0	$30.60	PS #11
PS #23	$0.0	$0.0	$1,491.7	$0.0	$0.0	$0.0	$0.0	$1,491.7	$99.45	PS #23
PS #23 Annex (Duncan)	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.00	PS #23 Annex (Duncan)
PS #24	$0.0	$0.0	$382.5	$0.0	$0.0	$0.0	$678.0	$1,060.5	$70.70	PS #24
PS #25	$0.0	$275.9	$573.7	$0.0	$0.0	$0.0	$188.34	$1,038.0	$69.20	PS #25

Exterior

Building	INC-CFL (13W)	70W HID->INCUCTION	150W HID->INCUCTION	250W HID->INCUCTION	400W HID->INCUCTION	Total Maintenance Cost Savings	Annual Maintenance Cost Savings	Building
Dickinson High School	$0.0	$0.0	$0.0	$315.4	$0.0	$315.4	$21.02	Dickinson High School
Liberty High School	$0.0	$0.0	$0.0	$105.1	$0.0	$105.1	$7.01	Liberty High School
PS #1	$0.0	$0.0	$0.0	$245.3	$0.0	$245.3	$16.35	PS #1
PS #6	$0.0	$0.0	$0.0	$981.1	$0.0	$981.1	$65.41	PS #6
PS #8	$0.0	$0.0	$0.0	$210.2	$0.0	$210.2	$14.02	PS #8
PS #11	$0.0	$0.0	$0.0	$175.2	$0.0	$175.2	$11.68	PS #11
PS #23	$0.0	$0.0	$0.0	$210.2	$0.0	$210.2	$14.02	PS #23
PS #23 Annex (Duncan)	$0.0	$0.0	$0.0	$87.6	$0.0	$87.6	$5.84	PS #23 Annex (Duncan)
PS #24	$0.0	$0.0	$0.0	$227.8	$0.0	$227.8	$15.18	PS #24
PS #25	$0.0	$0.0	$0.0	$1,500.0	$0.0	$1,500.0	$100.00	PS #25

Lighting Maintenance Cost Savings

T12 to T8 Retrofit		T12 Bulb Cost	T8 Blub Cost	T12 Bulb Average Lifetime (Years)	T8 Bulb Average Lifetime (Years)	Quantity of T12 Replacements vs. T8 Replacements	Cost of T12 Replacement over T8 Life	T8 Bulb Replacements Over Lifetime (15 Yrs)
1	Lamp	$25.0	$23.5	4.6	5.7	1.25	$31.2	3
2	Lamp	$69.9	$67.0	4.6	5.7	1.25	$87.4	3
3	Lamp	$94.9	$90.5	4.6	5.7	1.25	$118.6	3
4	Lamp	$119.8	$114.0	4.6	5.7	1.25	$149.8	3

Incandescent to CFL Retrofit		Incandescent Cost	CFL Cost	Incandescent Average Lifetime (Years)	CFL Average Lifetime (Years)	Quantity of Incandescent Replacements vs. CFL Replacements	Cost of Incandescent Replacement over CFL Life	CFL Replacements Over Lifetime (15 Yrs)
13	Watt	$13.0	$25.0	0.5	2.3	5	$65.0	7
25	Watt	$18.0	$27.0	0.5	2.3	5	$90.0	7
26	Watt	$19.0	$28.5	0.5	2.3	5	$95.0	7
65	Watt	$20.0	$37.0	0.5	2.3	5	$100.0	7
120	Watt	$22.0	$48.5	0.5	2.3	5	$110.0	7

HID to Induction Retrofit		HID Cost	Induction Cost	HID Average Lifetime (Years)	Induction Average Lifetime (years)	Quantity of HID Replacements vs. Induction Replacements	Cost of HID Replacement over Induction Life	Induction Replacements Over Lifetime (15 Yrs)
400	Watt	$86.0	$485.0	4.6	22.8	5	$430.0	1
250	Watt	$80.0	$390.0	4.6	22.8	5	$400.0	1
175	Watt	$78.0	$380.0	4.6	22.8	5	$390.0	1
150	Watt	$74.0	$380.0	4.6	22.8	5	$370.0	1
100	Watt	$55.0	$380.0	4.6	22.8	5	$275.0	1
70	Watt	$25.0	$380.0	4.6	22.8	5	$125.0	1

Metal Halide to Fluorescent		Metal Halide Cost	Fluorescent Cost	Metal Halide Average Lifetime (Years)	Fluorescent Average Lifetime (years)	Quantity of Metal Halide Replacements vs. Fluorescent Replacements	Cost of Metal Halide Replacement over Fluorescent Life	Replacements Over Lifetime (15 Yrs)
6	Lamp	$86.0	$288.0	4.6	5.7	1.25	$107.5	3
4	Lamp	$48.0	$174.0	4.6	5.7	1.25	$60.0	3

Interior & Exterior

Building	INC-CFL (13W)	INC-CFL (25W)	INC-CFL (65W)	T12->T8 (1 Lamp)	T12->T8 (2 Lamp)	T12->T8 (3 Lamp)	HID to Fluorescent	70W HID->INCUCTION	150W HID->INCUCTION	250W HID->INCUCTION	400W HID->INCUCTION	Total Maintenance Cost Savings	Annual Maintenance Cost Savings	Building
PS 15 (Whitney M. Young Jr.) - Total	$0.0	$29,801.5	$1,839.6	$0.0	$1,102.2	$0.0	$0.0	$262.8	$0.0	$578.2	$339.0	$33,923.3	$2,261.55	PS 15 (Whitney M. Young Jr.) - Total
PS 38 (James F. Murry) - Total	$0.0	$9,933.8	$0.0	$0.0	$0.0	$0.0	$0.0	$262.8	$0.0	$140.2	$753.4	$11,090.2	$739.34	PS 38 (James F. Murry) - Total
PS 34 - Total	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$65.7	$0.0	$105.1	$320.2	$491.0	$32.73	PS 34 - Total
PS 17 (Joseph H. Brensinger) - Total	$0.0	$13,797.0	$9,198.0	$0.0	$28,151.6	$51,971.9	$0.0	$197.1	$0.0	$140.2	$1,243.0	$104,698.8	$6,979.92	PS 17 (Joseph H. Brensinger) - Total

Interior

Building	INC-CFL (13W)	INC-CFL (25W)	INC-CFL (65W)	T12->T8 (1 Lamp)	T12->T8 (2 Lamp)	T12->T8 (3 Lamp)	HID to Fluorescent	250W HID->INCUCTION	400W HID->INCUCTION	Total Maintenance Cost Savings	Annual Maintenance Cost Savings	Building
PS 15 (Whitney M. Young Jr.) - Interi	$0.0	$29,801.5	$1,839.6	$0.0	$1,102.2	$0.0	$0.0	$438.0	$339.0	$33,520.3	$2,234.69	PS 15 (Whitney M. Young Jr.) - Interior
PS 38 (James F. Murry) - Interior	$0.0	$9,933.8	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$753.4	$10,687.2	$712.48	PS 38 (James F. Murry) - Interior
PS 34 - Interior	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$169.5	$169.5	$11.30	PS 34 - Interior
PS 17 (Joseph H. Brensinger) - Interi	$0.0	$13,797.0	$9,198.0	$0.0	$28,151.6	$51,971.9	$0.0	$0.0	$1,130.0	$104,248.6	$6,949.90	PS 17 (Joseph H. Brensinger) - Interior

Exterior

Building	INC-CFL (13W)	70W HID->INCUCTION	150W HID->INCUCTION	250W HID->INCUCTION	400W HID->INCUCTION	Total Maintenance Cost Savings	Annual Maintenance Cost Savings	Building
PS 15 (Whitney M. Young Jr.) - Exter	$0.0	$262.8	$0.0	$140.2	$0.0	$403.0	$26.86	PS 15 (Whitney M. Young Jr.) - Exterior
PS 38 (James F. Murry) - Exterior	$0.0	$262.8	$0.0	$140.2	$0.0	$403.0	$26.86	PS 38 (James F. Murry) - Exterior
PS 34 - Exterior	$0.0	$65.7	$0.0	$105.1	$150.7	$321.5	$21.43	PS 34 - Exterior
PS 17 (Joseph H. Brensinger) - Exter	$0.0	$197.1	$0.0	$140.2	$113.0	$450.3	$30.02	PS 17 (Joseph H. Brensinger) - Exterior

Lighting Maintenance Cost Savings

T12 to T8 Retrofit		T12 Bulb Cost	T8 Blub Cost	T12 Bulb Average Lifetime (Years)	T8 Bulb Average Lifetime (Years)	Quantity of T12 Replacements vs. T8 Replacements	Cost of T12 Replacement over T8 Life	T8 Bulb Replacements Over Lifetime (15 Yrs)
1	Lamp	$25.0	$23.5	4.6	5.7	1.25	$31.2	3
2	Lamp	$69.9	$67.0	4.6	5.7	1.25	$87.4	3
3	Lamp	$94.9	$90.5	4.6	5.7	1.25	$118.6	3
4	Lamp	$119.8	$114.0	4.6	5.7	1.25	$149.8	3

Incandescent to CFL Retrofit		Incandescent Cost	CFL Cost	Incandescent Average Lifetime (Years)	CFL Average Lifetime (Years)	Quantity of Incandescent Replacements vs. CFL Replacements	Cost of Incandescent Replacement over CFL Life	CFL Replacements Over Lifetime (15 Yrs)
13	Watt	$13.0	$25.0	0.5	2.3	5	$65.0	7
25	Watt	$18.0	$27.0	0.5	2.3	5	$90.0	7
26	Watt	$19.0	$28.5	0.5	2.3	5	$95.0	7
65	Watt	$20.0	$37.0	0.5	2.3	5	$100.0	7
120	Watt	$22.0	$48.5	0.5	2.3	5	$110.0	7

Metal Halide to Induction Retrofit		Metal Halide Cost	Induction Cost	Metal Halide Average Lifetime (Years)	Induction Average Lifetime (years)	Quantity of Metal Halide Replacements vs. Induction Replacements	Cost of Metal Halide Replacement over Induction Life	Induction Replacements Over Lifetime (15 Yrs)
400	Watt	$86.0	$485.0	4.6	22.8	5	$430.0	1
250	Watt	$80.0	$390.0	4.6	22.8	5	$400.0	1

HPS to Indcution Retrofit		HPS Cost	Induction Cost	HPS Average Lifetime (Years)	Induction Average Lifetime (years)	Quantity of HPS Replacements vs. Induction Replacements	Cost of HPS over Induction Life	Induction Replacements Over Lifetime (15 Yrs)
250	Watt	$80.0	$390.0	4.6	22.8	5	$400.0	1
175	Watt	$78.0	$380.0	4.6	22.8	5	$390.0	1
150	Watt	$74.0	$380.0	4.6	22.8	5	$370.0	1
100	Watt	$55.0	$380.0	4.6	22.8	5	$275.0	1
70	Watt	$25.0	$380.0	4.6	22.8	5	$125.0	1

Halogen to Indcution Retrofit		Halogen Cost	Induction Cost	Halogen Average Lifetime (Years)	Induction Average Lifetime (years)	Quantity of Halogen Replacements vs. Induction Replacements	Cost of Halogen over Induction Life	Induction Replacements Over Lifetime (15 Yrs)
500	Watt	$20.0	$390.0	0.2	22.8	114.1552511	$2,283.1	1

Metal Halide to Fluorescent		Metal Halide Cost	Fluorescent Cost	Metal Halide Average Lifetime (Years)	Fluorescent Average Lifetime (years)	Quantity of Metal Halide Replacements vs. Fluorescent Replacements	Cost of Metal Halide Replacement over Fluorescent Life	Replacements Over Lifetime (15 Yrs)
6	Lamp	$86.0	$288.0	4.6	5.7	1.25	$107.5	3
4	Lamp	$48.0	$174.0	4.6	5.7	1.25	$60.0	3

Interior & Exterior

Building	INC-CFL (13W)	INC-CFL (25W)	INC-CFL (65W)	T12->T8 (3 Lamp)	T12->T8 (3 Lamp)	T12->T8 (4 Lamp)	400W HID->INCUCTION	70W HID->INCUCTION	250W HID->INCUCTION	Total Maintenance Cost Savings	Annual Maintenance Cost Savings	Building
PS #20 - Total	$0.0	$31,733.1	$7,971.6	$72,223.6	$186.9	$314.8	$922.9	$129.6	$0.0	$113,482.6	$7,565.51	PS #20 - Total
Cunningham ECC - Total	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$263.7	$97.2	$0.0	$360.9	$24.06	Cunningham ECC - Total
Infinity Institute - Total	$1,793.6	$8,278.2	$0.0	$0.0	$62.3	$0.0	$320.2	$194.5	$113.0	$10,761.8	$717.45	Infinity Institute - Total
PS #40 (Ezra L. Nolan) - Total	$0.0	$6,346.6	$0.0	$4,500.6	$0.0	$0.0	$3,141.9	$0.0	$4,415.0	$18,404.1	$1,226.94	PS #40 (Ezra L. Nolan) - Total
Academy I Middle School - Total	$597.9	$551.9	$0.0	$70,830.6	$0.0	$0.0	$0.0	$2,759.4	$129.6	$74,869.4	$4,991.29	Academy I Middle School - Total
PS #29 (Gladys Nunery School) - Total	$797.2	$2,207.5	$0.0	$60,114.9	$0.0	$1,699.2	$150.7	$2,759.4	$0.0	$67,728.9	$4,515.26	PS #29 (Gladys Nunery School) - Total
Henry Snyder High School - Total	$1,992.9	$11,865.4	$0.0	$10,501.4	$32.8	$0.0	$150.7	$3,311.3	$97.2	$27,951.6	$1,863.44	Henry Snyder High School - Total
JCPS Administrative Building - Total	$0.0	$0.0	$0.0	$21,431.3	$3,376.8	$4,913.9	$0.0	$3,311.3	$97.2	$33,130.5	$2,208.70	JCPS Administrative Building - Total
PS #30 - (Alexander D. Sullivan) - Total	$797.2	$18,763.9	$0.0	$59,472.0	$0.0	$2,066.6	$1,234.7	$4,415.0	$0.0	$86,749.4	$5,783.29	PS #30 - (Alexander D. Sullivan) - Total
PS #41 - (Fred W. Martin) - Total	$0.0	$13,245.1	$0.0	$23,681.6	$0.0	$0.0	$113.0	$4,415.0	$0.0	$41,454.8	$2,763.65	PS #41 - (Fred W. Martin) - Total

Interior

Building	INC-CFL (13W)	INC-CFL (25W)	INC-CFL (65W)	T12->T8 (2 Lamp)	T12->T8 (3 Lamp)	T12->T8 (4 Lamp)	400W HID->INCUCTION (INTERIOR)	250W HID->INCUCTION	Total Maintenance Cost Savings	Annual Maintenance Cost Savings	Building
PS #20 - Total	$0.0	$31,733.1	$7,971.6	$72,223.6	$186.9	$314.8	$847.5	$0.0	$113,277.6	$7,551.84	PS #20 - Total
Cunningham ECC - Total	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$263.7	$0.0	$263.7	$17.58	Cunningham ECC - Total
Infinity Institute - Total	$1,793.6	$8,278.2	$0.0	$0.0	$62.3	$0.0	$320.2	$140.2	$10,454.3	$696.95	Infinity Institute - Total
PS #40 (Ezra L. Nolan) - Total	$0.0	$6,346.6	$0.0	$4,500.6	$0.0	$0.0	$2,991.2	$1,927.2	$13,838.4	$922.56	PS #40 (Ezra L. Nolan) - Total
Academy I Middle School - Total	$597.9	$551.9	$0.0	$70,830.6	$0.0	$0.0	$0.0	$0.0	$71,980.3	$4,798.69	Academy I Middle School - Total
PS #29 (Gladys Nunery School) - Total	$797.2	$2,207.5	$0.0	$60,114.9	$0.0	$1,699.2	$0.0	$0.0	$64,818.8	$4,321.25	PS #29 (Gladys Nunery School) - Total
Henry Snyder High School - Total	$1,992.9	$11,865.4	$0.0	$10,501.4	$32.8	$0.0	$0.0	$805.9	$24,392.5	$1,626.16	Henry Snyder High School - Total
JCPS Administrative Building - Total	$0.0	$0.0	$0.0	$21,431.3	$3,376.8	$4,913.9	$0.0	$0.0	$29,722.0	$1,981.47	JCPS Administrative Building - Total
PS #30 - (Alexander D. Sullivan) - Total	$797.2	$18,763.9	$0.0	$59,472.0	$0.0	$2,066.6	$1,121.7	$350.4	$82,221.3	$5,481.42	PS #30 - (Alexander D. Sullivan) - Total
PS #41 - (Fred W. Martin) - Total	$0.0	$13,245.1	$0.0	$23,681.6	$0.0	$0.0	$0.0	$770.9	$36,926.8	$2,461.78	PS #41 - (Fred W. Martin) - Total

Exterior

Building	70W HID->INCUCTION	250W HID->INCUCTION	400W HID->INCUCTION	Total Maintenance Cost Savings	Annual Maintenance Cost Savings	Building
PS #20 - Total	$129.6	$0.0	$75.3	$205.0	$13.67	PS #20 - Total
Cunningham ECC - Total	$97.2	$0.0	$0.0	$97.2	$6.48	Cunningham ECC - Total
Infinity Institute - Total	$194.5	$113.0	$0.0	$307.5	$20.50	Infinity Institute - Total
PS #40 (Ezra L. Nolan) - Total	$4,415.0	$0.0	$150.7	$4,565.7	$304.38	PS #40 (Ezra L. Nolan) - Total
Academy I Middle School - Total	$2,759.4	$129.6	$0.0	$2,889.0	$192.60	Academy I Middle School - Total
PS #29 (Gladys Nunery School) - Total	$2,759.4	$0.0	$150.7	$2,910.1	$194.00	PS #29 (Gladys Nunery School) - Total
Henry Snyder High School - Total	$3,311.3	$97.2	$150.7	$3,559.2	$237.28	Henry Snyder High School - Total
JCPS Administrative Building - Total	$3,311.3	$97.2	$0.0	$3,408.5	$227.23	JCPS Administrative Building - Total
PS #30 - (Alexander D. Sullivan) - Total	$4,415.0	$0.0	$113.0	$4,528.0	$301.87	PS #30 - (Alexander D. Sullivan) - Total
PS #41 - (Fred W. Martin) - Total	$4,415.0	$0.0	$113.0	$4,528.0	$301.87	PS #41 - (Fred W. Martin) - Total

Lighting Maintenance Cost Savings

T12 to T8 Retrofit		T12 Bulb Cost	T8 Blub Cost	T12 Bulb Average Lifetime (Years)	T8 Bulb Average Lifetime (Years)	Quantity of T12 Replacements vs. T8 Replacements	Cost of T12 Replacement over T8 Life	T8 Bulb Replacements Over Lifetime (15 Yrs)
1	Lamp	$25.0	$23.5	4.6	5.7	1.25	$31.2	3
2	Lamp	$69.9	$67.0	4.6	5.7	1.25	$87.4	3
3	Lamp	$94.9	$90.5	4.6	5.7	1.25	$118.6	3
4	Lamp	$119.8	$114.0	4.6	5.7	1.25	$149.8	3

Incandescent to CFL Retrofit		Incandescent Cost	CFL Cost	Incandescent Average Lifetime (Years)	CFL Average Lifetime (Years)	Quantity of Incandescent Replacements vs. CFL Replacements	Cost of Incandescent Replacement over CFL Life	CFL Replacements Over Lifetime (15 Yrs)
13	Watt	$13.0	$25.0	0.5	2.3	5	$65.0	7
25	Watt	$18.0	$27.0	0.5	2.3	5	$90.0	7
26	Watt	$19.0	$28.5	0.5	2.3	5	$95.0	7
65	Watt	$20.0	$37.0	0.5	2.3	5	$100.0	7
120	Watt	$22.0	$48.5	0.5	2.3	5	$110.0	7

HID to Induction Retrofit		HID Cost	Induction Cost	HID Average Lifetime (Years)	Induction Average Lifetime (years)	Quantity of HID Replacements vs. Induction Replacements	Cost of HID Replacement over Induction Life	Induction Replacements Over Lifetime (15 Yrs)
400	Watt	$86.0	$485.0	4.6	22.8	5	$430.0	1
250	Watt	$80.0	$390.0	4.6	22.8	5	$400.0	1
175	Watt	$78.0	$380.0	4.6	22.8	5	$390.0	1
150	Watt	$74.0	$380.0	4.6	22.8	5	$370.0	1
100	Watt	$55.0	$380.0	4.6	22.8	5	$275.0	1
70	Watt	$25.0	$380.0	4.6	22.8	5	$125.0	1

Metal Halide to Fluorescent		Metal Halide Cost	Fluorescent Cost	Metal Halide Average Lifetime (Years)	Fluorescent Average Lifetime (years)	Quantity of Metal Halide Replacements vs. Fluorescent Replacements	Cost of Metal Halide Replacement over Fluorescent Life	Replacements Over Lifetime (15 Yrs)
6	Lamp	$86.0	$288.0	4.6	5.7	1.25	$107.5	3
4	Lamp	$48.0	$174.0	4.6	5.7	1.25	$60.0	3

Interior & Exterior

Building	INC-CFL (13W)	INC-CFL (25W)	INC-CFL (65W)	T12->T8 (1 Lamp)	T12->T8 (2 Lamp)	T12->T8 (4 Lamp)	HID to Fluorescent	70W HID->INCUCTION	150W HID->INCUCTION	250W HID->INCUCTION	400W HID->INCUCTION	Total Maintenance Cost Savings	Annual Maintenance Cost Savings	Building
Lincoln - Total	$398.6	$13,797.0	$306.6	$0.0	$2,571.8	$0.0	$0.0	$410.6	$0.0	$0.0	$753.4	$18,237.9	$1,215.86	Lincoln - Total
McNair - Total	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$246.4	$0.0	$0.0	$433.2	$679.6	$45.30	McNair - Total
PS #5 - Total	$0.0	$1,103.8	$0.0	$267.7	$8,541.9	$24,163.5	$0.0	$246.4	$0.0	$0.0	$0.0	$34,323.3	$2,288.22	PS #5 - Total

Interior

Building	INC-CFL (13W)	INC-CFL (25W)	INC-CFL (65W)	T12->T8 (1 Lamp)	T12->T8 (2 Lamp)	T12->T8 (4 Lamp)	HID to Fluorescent	400W HID->INCUCTION	Total Maintenance Cost Savings	Annual Maintenance Cost Savings	Building
Lincoln - Interior	$398.6	$13,797.0	$306.6	$0.0	$2,571.8	$0.0	$0.0	$753.4	$17,827.3	$1,188.49	Lincoln - Interior
McNair - Interior	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$433.2	$433.2	$28.88	McNair - Interior
PS #5 - Interior	$0.0	$1,103.8	$0.0	$267.7	$8,541.9	$24,163.5	$0.0	$0.0	$34,077.0	$2,271.80	PS #5 - Interior

Exterior

Building	INC-CFL (13W)	70W HID->INCUCTION	150W HID->INCUCTION	250W HID->INCUCTION	400W HID->INCUCTION	Total Maintenance Cost Savings	Annual Maintenance Cost Savings	Building
Lincoln - Exterior	$0.0	$410.6	$0.0	$0.0	$0.0	$410.6	$27.38	Lincoln - Exterior
McNair - Exterior	$0.0	$246.4	$0.0	$0.0	$0.0	$246.4	$16.43	McNair - Exterior
PS #5 - Exterior	$0.0	$246.4	$0.0	$0.0	$0.0	$246.4	$16.43	PS #5 - Exterior

Lighting Maintenance Cost Savings

T12 to T8 Retrofit		T12 Bulb Cost	T8 Blub Cost	T12 Bulb Average Lifetime (Years)	T8 Bulb Average Lifetime (Years)	Quantity of T12 Replacements vs. T8 Replacements	Cost of T12 Replacement over T8 Life	T8 Bulb Replacements Over Lifetime (15 Yrs)
1	Lamp	$25.0	$23.5	4.6	5.7	1.25	$31.2	3
2	Lamp	$69.9	$67.0	4.6	5.7	1.25	$87.4	3
3	Lamp	$94.9	$90.5	4.6	5.7	1.25	$118.6	3
4	Lamp	$119.8	$114.0	4.6	5.7	1.25	$149.8	3

Incandescent to CFL Retrofit		Incandescent Cost	CFL Cost	Incandescent Average Lifetime (Years)	CFL Average Lifetime (Years)	Quantity of Incandescent Replacements vs. CFL Replacements	Cost of Incandescent Replacement over CFL Life	CFL Replacements Over Lifetime (15 Yrs)
13	Watt	$13.0	$25.0	0.5	2.3	5	$65.0	7
25	Watt	$18.0	$27.0	0.5	2.3	5	$90.0	7
26	Watt	$19.0	$28.5	0.5	2.3	5	$95.0	7
65	Watt	$20.0	$37.0	0.5	2.3	5	$100.0	7
120	Watt	$22.0	$48.5	0.5	2.3	5	$110.0	7

HID to Induction Retrofit		HID Cost	Induction Cost	HID Average Lifetime (Years)	Induction Average Lifetime (years)	Quantity of HID Replacements vs. Induction Replacements	Cost of HID Replacement over Induction Life	Induction Replacements Over Lifetime (15 Yrs)
400	Watt	$86.0	$485.0	4.6	22.8	5	$430.0	1
250	Watt	$80.0	$390.0	4.6	22.8	5	$400.0	1
175	Watt	$78.0	$380.0	4.6	22.8	5	$390.0	1
150	Watt	$74.0	$380.0	4.6	22.8	5	$370.0	1
100	Watt	$55.0	$380.0	4.6	22.8	5	$275.0	1
70	Watt	$25.0	$380.0	4.6	22.8	5	$125.0	1

Metal Halide to Fluorescent		Metal Halide Cost	Fluorescent Cost	Metal Halide Average Lifetime (Years)	Fluorescent Average Lifetime (years)	Quantity of Metal Halide Replacements vs. Fluorescent Replacements	Cost of Metal Halide Replacement over Fluorescent Life	Replacements Over Lifetime (15 Yrs)
6	Lamp	$86.0	$288.0	4.6	5.7	1.25	$107.5	3
4	Lamp	$48.0	$174.0	4.6	5.7	1.25	$60.0	3

Interior & Exterior

Building	INC-CFL (13W)	INC-CFL (25W)	INC-CFL (65W)	T12->T8 (1 Lamp)	T12->T8 (2 Lamp)	T12->T8 (3 Lamp)	T12->T8 (4 Lamp)	HID to Fluorescent	70W HID->INCUCTION	150W HID->INCUCTION	250W HID->INCUCTION	400W HID->INCUCTION	Total Maintenance Cost Savings	Annual Maintenance Cost Savings	Building
PS #7 - Total	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$246.4	$0.0	$0.0	$1,657.4	$1,903.8	$126.92	PS #7 - Total
Regional Day - Total	$0.0	$0.0	$0.0	$76.5	$18,553.4	$0.0	$0.0	$0.0	$82.1	$0.0	$0.0	$0.0	$18,712.0	$1,247.47	Regional Day
PS #22 - Total	$398.6	$0.0	$0.0	$76.5	$28,105.7	$872.4	$65,249.4	$0.0	$328.5	$0.0	$0.0	$414.3	$95,445.5	$6,363.03	PS #22 - Tota
PS #37 - Total	$597.9	$0.0	$0.0	$0.0	$1,285.9	$0.0	$0.0	$246.4	$0.0	$0.0	$0.0	$376.7	$2,506.8	$167.12	PS #37 - Tota
Ferris - Total	$7,772.3	$827.8	$0.0	$459.0	$2,388.1	$0.0	$0.0	$0.0	$164.3	$0.0	$0.0	$602.7	$12,214.1	$814.27	Ferris - Total
PS #16 - Total	$797.2	$1,655.6	$0.0	$0.0	$2,388.1	$0.0	$0.0	$0.0	$82.1	$0.0	$0.0	$131.8	$5,054.8	$336.99	PS #16 - Tota
PS #12 - Total	$1,395.0	$0.0	$0.0	$0.0	$1,377.7	$0.0	$0.0	$0.0	$164.3	$0.0	$0.0	$715.7	$3,652.7	$243.51	PS #12 - Tota
PS #14 - Total	$1,395.0	$0.0	$613.2	$0.0	$1,974.7	$0.0	$0.0	$0.0	$164.3	$0.0	$0.0	$0.0	$4,147.2	$276.48	PS #14 - Tota
MS #4 - Total	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$492.8	$0.0	$0.0	$0.0	$492.8	$32.85	MS #4 - Total
PS #3 - Total	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$328.5	$0.0	$0.0	$0.0	$328.5	$21.90	PS #3 - Total

Interior

Building	INC-CFL (13W)	INC-CFL (25W)	INC-CFL (65W)	T12->T8 (1 Lamp)	T12->T8 (2 Lamp)	T12->T8 (3 Lamp)	T12->T8 (4 Lamp)	HID to Fluorescent	400W HID->INCUCTION	Total Maintenance Cost Savings	Annual Maintenance Cost Savings	Building
PS #7 - Interior	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$1,657.4	$1,657.4	$110.49	PS #7 - Interior
Regional Day - Interior	$0.0	$0.0	$0.0	$76.5	$18,553.4	$0.0	$0.0	$0.0	$0.0	$18,629.9	$1,241.99	Regional Day - Interior
PS #22 - Interior	$398.6	$0.0	$0.0	$76.5	$28,105.7	$872.4	$65,249.4	$0.0	$414.3	$95,117.0	$6,341.13	PS #22 - Interior
PS #37 - Interior	$597.9	$0.0	$0.0	$0.0	$1,285.9	$0.0	$0.0	$0.0	$376.7	$2,260.4	$150.70	PS #37 - Interior
Ferris - Interior	$7,772.3	$827.8	$0.0	$459.0	$2,388.1	$0.0	$0.0	$0.0	$602.7	$12,049.9	$803.32	Ferris - Interior
PS #16 - Interior	$797.2	$1,655.6	$0.0	$0.0	$2,388.1	$0.0	$0.0	$0.0	$131.8	$4,972.7	$331.51	PS #16 - Interior
PS #12 - Interior	$1,395.0	$0.0	$0.0	$0.0	$1,377.7	$0.0	$0.0	$0.0	$715.7	$3,488.5	$232.56	PS #12 - Interior
PS #14 - Interior	$1,395.0	$0.0	$613.2	$0.0	$1,974.7	$0.0	$0.0	$0.0	$0.0	$3,983.0	$265.53	PS #14 - Interior
MS #4 - Interior	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.00	$0.00	MS #4 - Interior
PS #3 - Interior	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.00	$0.00	PS #3 - Interior

Exterior

Building	INC-CFL (13W)	70W HID->INCUCTION	150W HID->INCUCTION	250W HID->INCUCTION	400W HID->INCUCTION	Total Maintenance Cost Savings	Annual Maintenance Cost Savings	Building
PS #7 - Exterior	$0.0	$246.4	$0.0	$0.0	$0.0	$246.4	$16.43	PS #7 - Exterior
Regional Day - Exterior	$0.0	$82.1	$0.0	$0.0	$0.0	$82.1	$5.48	Regional Day - Exterior
PS #22 - Exterior	$0.0	$328.5	$0.0	$0.0	$0.0	$328.5	$21.90	PS #22 - Exterior
PS #37 - Exterior	$0.0	$246.4	$0.0	$0.0	$0.0	$246.4	$16.43	PS #37 - Exterior
Ferris - Exterior	$0.0	$164.3	$0.0	$0.0	$0.0	$164.3	$10.95	Ferris - Exterior
PS #16 - Exterior	$0.0	$82.1	$0.0	$0.0	$0.0	$82.1	$5.48	PS #16 - Exterior
PS #12 - Exterior	$0.0	$164.3	$0.0	$0.0	$0.0	$164.3	$10.95	PS #12 - Exterior
PS #14 - Exterior	$0.0	$164.3	$0.0	$0.0	$0.0	$164.3	$10.95	PS #14 - Exterior
MS #4 - Exterior	$0.0	$492.8	$0.0	$0.0	$0.0	$492.8	$32.85	MS #4 - Exterior
PS #3 - Exterior	$0.0	$328.5	$0.0	$0.0	$0.00	$328.5	$21.90	PS #3 - Exterior

Appendix J

Jersey City Board of Education
(Minimum Site Wind Speed @42.7m - 4.36 m/s)

Annual kWh	74,405
Engineer's Opinion of Probable Cost	$450,000.00

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	$0.02/kWh Production
REC Factor	$25/MWh Production
REIP Incentive	$3.20/kWh First 16,000 kWh
	$0.50/kWh 16,000 kWh - 750,000 kWh

Year	Utility Price	Annual Wind kWh Production	Utility Savings	Renewable Energy Credits (RECs)	Renewable Energy Incentive Program (REIP)	Maintenance Costs	Annual Cash Flow	Cumulative Cash Flow
1	0.1500	74,405.0	$11,160.8	$1,860	$80,403	($1,488)	$11,532.8	$11,532.8
2	0.1545	74,033.0	$11,438.1	$1,851	$0	($1,481)	$11,808.3	$23,341.0
3	0.1591	73,662.8	$11,722.3	$1,842	$0	($1,473)	$12,090.6	$35,431.7
4	0.1639	73,294.5	$12,013.6	$1,832	$0	($1,466)	$12,380.1	$47,811.8
5	0.1688	72,928.0	$12,312.2	$1,823	$0	($1,459)	$12,676.8	$60,488.6
6	0.1739	72,563.4	$12,618.1	$1,814	$0	($1,451)	$12,980.9	$73,469.5
7	0.1791	72,200.6	$12,931.7	$1,805	$0	($1,444)	$13,292.7	$86,762.2
8	0.1845	71,839.6	$13,253.0	$1,796	$0	($1,437)	$13,612.2	$100,374.5
9	0.1900	71,480.4	$13,582.4	$1,787	$0	($1,430)	$13,939.8	$114,314.2
10	0.1957	71,123.0	$13,919.9	$1,778	$0	($1,422)	$14,275.5	$128,589.8
11	0.2016	70,767.3	$14,265.8	$1,769	$0	($1,415)	$14,619.6	$143,209.4
12	0.2076	70,413.5	$14,620.3	$1,760	$0	($1,408)	$14,972.4	$158,181.8
13	0.2139	70,061.4	$14,983.6	$1,752	$0	($1,401)	$15,333.9	$173,515.7
14	0.2203	69,711.1	$15,356.0	$1,743	$0	($1,394)	$15,704.5	$189,220.3
15	0.2269	69,362.6	$15,737.6	$1,734	$0	($1,387)	$16,084.4	$205,304.6
16	0.2337	69,015.8	$16,128.6	$1,725	$0	($1,380)	$16,473.7	$221,778.4
17	0.2407	68,670.7	$16,529.4	$1,717	$0	($1,373)	$16,872.8	$238,651.2
18	0.2479	68,327.3	$16,940.2	$1,708	$0	($1,367)	$17,281.8	$255,933.0
19	0.2554	67,985.7	$17,361.2	$1,700	$0	($1,360)	$17,701.1	$273,634.1
20	0.2630	67,645.8	$17,792.6	$1,691	$0	($1,353)	$18,130.8	$291,764.9
21	0.2709	67,307.5	$18,234.7	$1,683	$0	($1,346)	$18,571.3	$310,336.2
22	0.2790	66,971.0	$18,687.9	$1,674	$0	($1,339)	$19,022.7	$329,358.9
23	0.2874	66,636.2	$19,152.3	$1,666	$0	($1,333)	$19,485.4	$348,844.4
24	0.2960	66,303.0	$19,628.2	$1,658	$0	($1,326)	$19,959.7	$368,804.1
25	0.3049	65,971.5	$20,116.0	$1,649	$0	($1,319)	$20,445.8	$389,249.9

Jersey City Board of Education
(Maximum Site Wind Speed @42.7m - 6.3 m/s)

Annual kWh	154,347
Engineer's Opinion of Probable Cost	$450,000.00

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	$0.02/kWh Production
REC Factor	$25/MWh Production
REIP Incentive	$3.20/kWh First 16,000 kWh
	$0.50/kWh 16,000 kWh - 750,000 kWh

Year	Utility Price	Annual Wind kWh Production	Utility Savings	Renewable Energy Credits (RECs)	Renewable Energy Incentive Program (REIP)	Maintenance Costs	Annual Cash Flow	Cumulative Cash Flow
1	0.1500	154,347.0	$23,152.1	$3,859	$120,374	($3,087)	$23,923.8	$23,923.8
2	0.1545	153,575.3	$23,727.4	$3,839	$0	($3,072)	$24,495.3	$48,419.0
3	0.1591	152,807.4	$24,317.0	$3,820	$0	($3,056)	$25,081.0	$73,500.1
4	0.1639	152,043.4	$24,921.3	$3,801	$0	($3,041)	$25,681.5	$99,181.6
5	0.1688	151,283.1	$25,540.6	$3,782	$0	($3,026)	$26,297.0	$125,478.6
6	0.1739	150,526.7	$26,175.3	$3,763	$0	($3,011)	$26,927.9	$152,406.5
7	0.1791	149,774.1	$26,825.7	$3,744	$0	($2,995)	$27,574.6	$179,981.0
8	0.1845	149,025.2	$27,492.3	$3,726	$0	($2,981)	$28,237.5	$208,218.5
9	0.1900	148,280.1	$28,175.5	$3,707	$0	($2,966)	$28,916.9	$237,135.4
10	0.1957	147,538.7	$28,875.7	$3,688	$0	($2,951)	$29,613.4	$266,748.8
11	0.2016	146,801.0	$29,593.2	$3,670	$0	($2,936)	$30,327.2	$297,076.0
12	0.2076	146,067.0	$30,328.6	$3,652	$0	($2,921)	$31,059.0	$328,135.0
13	0.2139	145,336.7	$31,082.3	$3,633	$0	($2,907)	$31,809.0	$359,944.0
14	0.2203	144,610.0	$31,854.7	$3,615	$0	($2,892)	$32,577.7	$392,521.7
15	0.2269	143,886.9	$32,646.3	$3,597	$0	($2,878)	$33,365.7	$425,887.4
16	0.2337	143,167.5	$33,457.5	$3,579	$0	($2,863)	$34,173.4	$460,060.8
17	0.2407	142,451.7	$34,289.0	$3,561	$0	($2,849)	$35,001.2	$495,062.0
18	0.2479	141,739.4	$35,141.0	$3,543	$0	($2,835)	$35,849.7	$530,911.8
19	0.2554	141,030.7	$36,014.3	$3,526	$0	($2,821)	$36,719.5	$567,631.2
20	0.2630	140,325.5	$36,909.3	$3,508	$0	($2,807)	$37,610.9	$605,242.1
21	0.2709	139,623.9	$37,826.4	$3,491	$0	($2,792)	$38,524.6	$643,766.7
22	0.2790	138,925.8	$38,766.4	$3,473	$0	($2,779)	$39,461.1	$683,227.7
23	0.2874	138,231.2	$39,729.8	$3,456	$0	($2,765)	$40,420.9	$723,648.7
24	0.2960	137,540.0	$40,717.1	$3,439	$0	($2,751)	$41,404.8	$765,053.5
25	0.3049	136,852.3	$41,728.9	$3,421	$0	($2,737)	$42,413.1	$807,466.6

Jersey City Board of Education
(Average Site Wind Speed @42.7m - 5.41 m/s)

w

Annual kWh	120,107
Engineer's Opinion of Probable Cost	$450,000.00

Assumptions

Annual System Degredation	0.50%
Annual Utility Inflation	3.00%
Annual Maintenance Costs	$0.02/kWh Production
REC Factor	$25/MWh Production
REIP Incentive	$3.20/kWh First 16,000 kWh
	$0.50/kWh 16,000 kWh - 750,000 kWh

Year	Utility Price	Annual Wind kWh Production	Utility Savings	Renewable Energy Credits (RECs)	Renewable Energy Incentive Program (REIP)	Maintenance Costs	Annual Cash Flow	Cumulative Cash Flow
1	0.1500	120,107.0	$18,016.1	$3,003	$103,254	($2,402)	$18,616.6	$18,616.6
2	0.1545	119,506.5	$18,463.7	$2,988	$0	($2,390)	$19,061.3	$37,677.9
3	0.1591	118,908.9	$18,922.6	$2,973	$0	($2,378)	$19,517.1	$57,195.0
4	0.1639	118,314.4	$19,392.8	$2,958	$0	($2,366)	$19,984.4	$77,179.4
5	0.1688	117,722.8	$19,874.7	$2,943	$0	($2,354)	$20,463.3	$97,642.7
6	0.1739	117,134.2	$20,368.6	$2,928	$0	($2,343)	$20,954.3	$118,596.9
7	0.1791	116,548.5	$20,874.8	$2,914	$0	($2,331)	$21,457.5	$140,054.4
8	0.1845	115,965.8	$21,393.5	$2,899	$0	($2,319)	$21,973.3	$162,027.8
9	0.1900	115,386.0	$21,925.1	$2,885	$0	($2,308)	$22,502.1	$184,529.8
10	0.1957	114,809.0	$22,470.0	$2,870	$0	($2,296)	$23,044.0	$207,573.8
11	0.2016	114,235.0	$23,028.3	$2,856	$0	($2,285)	$23,599.5	$231,173.3
12	0.2076	113,663.8	$23,600.6	$2,842	$0	($2,273)	$24,168.9	$255,342.3
13	0.2139	113,095.5	$24,187.1	$2,827	$0	($2,262)	$24,752.5	$280,094.8
14	0.2203	112,530.0	$24,788.1	$2,813	$0	($2,251)	$25,350.8	$305,445.6
15	0.2269	111,967.4	$25,404.1	$2,799	$0	($2,239)	$25,963.9	$331,409.5
16	0.2337	111,407.5	$26,035.4	$2,785	$0	($2,228)	$26,592.4	$358,001.9
17	0.2407	110,850.5	$26,682.4	$2,771	$0	($2,217)	$27,236.6	$385,238.6
18	0.2479	110,296.2	$27,345.4	$2,757	$0	($2,206)	$27,896.9	$413,135.5
19	0.2554	109,744.8	$28,025.0	$2,744	$0	($2,195)	$28,573.7	$441,709.2
20	0.2630	109,196.0	$28,721.4	$2,730	$0	($2,184)	$29,267.4	$470,976.5
21	0.2709	108,650.1	$29,435.1	$2,716	$0	($2,173)	$29,978.4	$500,954.9
22	0.2790	108,106.8	$30,166.6	$2,703	$0	($2,162)	$30,707.1	$531,662.0
23	0.2874	107,566.3	$30,916.2	$2,689	$0	($2,151)	$31,454.0	$563,116.0
24	0.2960	107,028.4	$31,684.5	$2,676	$0	($2,141)	$32,219.6	$595,335.7
25	0.3049	106,493.3	$32,471.8	$2,662	$0	($2,130)	$33,004.3	$628,340.0

Appendix K

WindCad Turbine Performance Model

Endurance S-343 Wind Turbine, Grid - Intertie

Prepared For:	**Jersey City School District**
Site Location:	**Jersey City, NJ**
Data Source:	**NASA Atmospheric Science Data Center**
Date:	**11/4/2011**

35 kW

Inputs:

Ave. Wind (m/s) =	4.36
Weibull K =	2
Site Altitude (m) =	0
Wind Shear Exp. =	0.180
Anem. Height (m) =	42.7
Tower Height (m) =	42.7
Turbulence Factor =	2.0%

Results:

Hub Average Wind Speed (m/s) =	4.36
Air Density Factor =	0%
Average Output Power (kW) =	8.49
Daily Energy Output (kWh) =	203.8
Annual Energy Output (kWh) =	**74,405**
Monthly Energy Output =	6,200
Percent Operating Time =	60.0%

Weibull Performance Calculations

Wind Speed Bin (m/s)	Power (kW)	Wind Probability (f)	Net kW @ V
1	0.00	7.99%	0.000
2	0.00	14.11%	0.000
3	0.00	17.18%	0.000
4	2.45	17.11%	0.419
5	7.45	14.70%	1.095
6	14.70	11.16%	1.640
7	24.50	7.57%	1.855
8	35.28	4.63%	1.634
9	38.22	2.57%	0.981
10	38.22	1.29%	0.494
11	38.22	0.59%	0.226
12	38.22	0.25%	0.095
13	38.22	0.09%	0.036
14	38.22	0.03%	0.013
15	38.22	0.01%	0.004
16	38.22	0.00%	0.001
17	38.22	0.00%	0.000
18	38.22	0.00%	0.000
19	38.22	0.00%	0.000
20	38.22	0.00%	0.000
2008, BWC	Totals:	99.30%	8.494

Weibull Calculations:
Wind speed probability is calculated as a Weibull curve defined by the average wind speed and a shape factor, K. To facilitate piece-wise integration, the wind speed range is broken down into "bins" of 1 m/s in width (Column 1). For each wind speed bin, instantaneous wind turbine power (W, Column 2)) is multiplied by the Weibull wind speed probability (f, Column 3). This cross product (Net W, Column 4) is the contribution to average turbine power output contributed by wind speeds in that bin. The sum of these contributions is the average power output of the turbine on a continuous, 24 hour, basis.
Best results are achieved using annual or monthly average wind speeds. Use of daily or hourly average speeds is not recommended.

WindCad Turbine Performance Model

Endurance S-343 Wind Turbine, Grid - Intertie

Prepared For:	**Jersey City School District**
Site Location:	**Jersey City, NJ**
Data Source:	**NASA Atmospheric Science Data Center**
Date:	**11/4/2011**

35 kW

Inputs:

Ave. Wind (m/s) =	6.3
Weibull K =	2
Site Altitude (m) =	0
Wind Shear Exp. =	0.180
Anem. Height (m) =	42.7
Tower Height (m) =	42.7
Turbulence Factor =	2.0%

Results:

Hub Average Wind Speed (m/s) =	6.30
Air Density Factor =	0%
Average Output Power (kW) =	17.62
Daily Energy Output (kWh) =	422.9
Annual Energy Output (kWh) =	**154,347**
Monthly Energy Output =	12,862
Percent Operating Time =	78.4%

Weibull Performance Calculations

Wind Speed Bin (m/s)	Power (kW)	Wind Probability (f)	Net kW @ V
1	0.00	3.91%	0.000
2	0.00	7.37%	0.000
3	0.00	10.01%	0.000
4	2.45	11.60%	0.284
5	7.45	12.12%	0.903
6	14.70	11.68%	1.716
7	24.50	10.51%	2.575
8	35.28	8.90%	3.141
9	38.22	7.13%	2.727
10	38.22	5.43%	2.073
11	38.22	3.92%	1.500
12	38.22	2.71%	1.034
13	38.22	1.78%	0.680
14	38.22	1.12%	0.427
15	38.22	0.67%	0.257
16	38.22	0.39%	0.147
17	38.22	0.21%	0.081
18	38.22	0.11%	0.043
19	38.22	0.06%	0.022
20	38.22	0.03%	0.010
2008, BWC	Totals:	99.64%	17.620

Weibull Calculations:
Wind speed probability is calculated as a Weibull curve defined by the average wind speed and a shape factor, K. To facilitate piece-wise integration, the wind speed range is broken down into "bins" of 1 m/s in width (Column 1). For each wind speed bin, instantaneous wind turbine power (W, Column 2)) is multiplied by the Weibull wind speed probability (f, Column 3). This cross product (Net W, Column 4) is the contribution to average turbine power output contributed by wind speeds in that bin. The sum of these contributions is the average power output of the turbine on a continuous, 24 hour, basis.
Best results are achieved using annual or monthly average wind speeds. Use of daily or hourly average speeds is not recommended.

WindCad Turbine Performance Model

Endurance S-343 Wind Turbine, Grid - Intertie

Prepared For:	**Jersey City School District**
Site Location:	**Jersey City, NJ**
Data Source:	**NASA Atmospheric Science Data Center**
Date:	**11/4/2011**

35 kW

Inputs:

Ave. Wind (m/s) =	5.41
Weibull K =	2
Site Altitude (m) =	0
Wind Shear Exp. =	0.180
Anem. Height (m) =	42.7
Tower Height (m) =	42.7
Turbulence Factor =	2.0%

Results:

Hub Average Wind Speed (m/s) =	5.41
Air Density Factor =	0%
Average Output Power (kW) =	13.71
Daily Energy Output (kWh) =	329.1
Annual Energy Output (kWh) =	**120,107**
Monthly Energy Output =	10,009
Percent Operating Time =	71.8%

Weibull Performance Calculations

Wind Speed Bin (m/s)	Power (kW)	Wind Probability (f)	Net kW @ V
1	0.00	5.27%	0.000
2	0.00	9.71%	0.000
3	0.00	12.73%	0.000
4	2.45	14.04%	0.344
5	7.45	13.76%	1.025
6	14.70	12.26%	1.802
7	24.50	10.06%	2.465
8	35.28	7.66%	2.703
9	38.22	5.44%	2.079
10	38.22	3.61%	1.381
11	38.22	2.25%	0.861
12	38.22	1.32%	0.504
13	38.22	0.73%	0.278
14	38.22	0.38%	0.144
15	38.22	0.18%	0.070
16	38.22	0.08%	0.032
17	38.22	0.04%	0.014
18	38.22	0.02%	0.006
19	38.22	0.01%	0.002
20	38.22	0.00%	0.001
2008, BWC	Totals:	99.55%	13.711

Weibull Calculations:
Wind speed probability is calculated as a Weibull curve defined by the average wind speed and a shape factor, K. To facilitate piece-wise integration, the wind speed range is broken down into "bins" of 1 m/s in width (Column 1). For each wind speed bin, instantaneous wind turbine power (W, Column 2)) is multiplied by the Weibull wind speed probability (f, Column 3). This cross product (Net W, Column 4) is the contribution to average turbine power output contributed by wind speeds in that bin. The sum of these contributions is the average power output of the turbine on a continuous, 24 hour, basis.
Best results are achieved using annual or monthly average wind speeds. Use of daily or hourly average speeds is not recommended.

Appendix L

CLEAN ENERGY... JUST PLUG IT IN

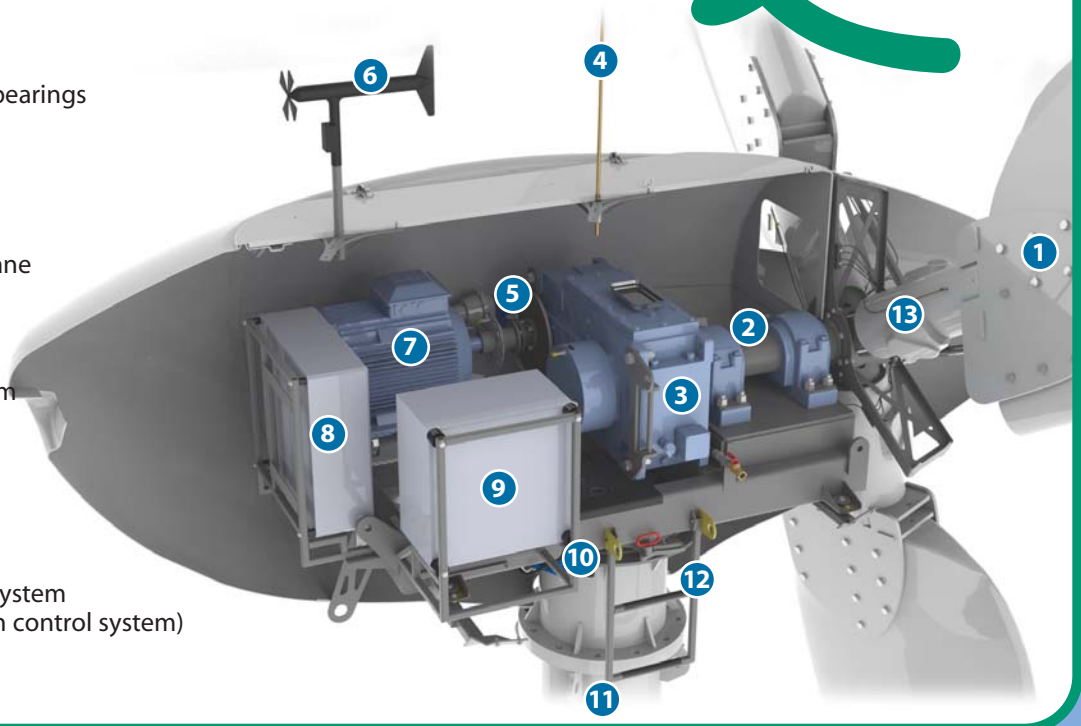
Endurance wind power

G-3120



G-3120 35 kW model

1. 9 m blade
2. Main shaft with two bearings
3. Gearbox
4. Lightning protection
5. Disk brake
6. Anemometer wind vane
7. Generator
8. Control panel
9. Braking control system
10. Passive yaw control with brake
11. Tower
12. Access ladder
13. Aerodynamic safety system (patent pending pitch control system)



ENDURANCE WIND TURBINES GREEN ENERGY THAT WORKS

SPECIFICATIONS

G-3120



TURBINE

Configuration	3 blades, horizontal axis, downwind
Rated power @ 11 m/s	35 kW
Applications	Direct grid-tied
Rotor speed	36 rpm
Cut-in wind speed	3.5 m/s (7.8 mph)
Cut-out wind speed	25 m/s (56 mph)
Survival wind speed	52 m/s (116 mph)
Design lifetime	30 years *
Overall weight	4,130 kg (9,105 lbs) - single phase turbine 3,850 kg (8,488 lbs) - three phase turbine

ROTOR

Rotor diameter	19.2 m (63 ft)
Swept area	290 m^2 (3,120 ft^2)
Blade length	9 m (29.5 ft)
Blade material	Fiberglass / Epoxy
Power regulation	Stall control (constant speed)

GENERATOR

Frequency	60 Hz
Voltage	240 V - single phase; 480 V - three phase
Phase	Single phase and three phase
Type	Induction generator

BRAKE & SAFETY SYSTEMS

Main brake system	Rapid fail-safe brake on high speed shaft
Secondary safety system	Pitch control system (for over speed regulation) using passive spring loaded mechanism (patent pending)
Automatic shut down triggered by :	- Over speed - High wind speed - Grid failure - All other fault conditions

CONTROLS

PLC based	Includes remote monitoring software

WARRANTY

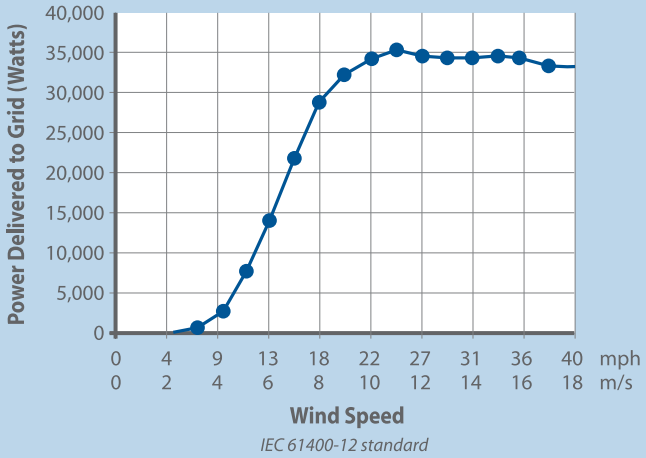
Turbine, controls	5 years

TOWERS

Types and heights	Standard Monopole 30.5 m (100 ft) Standard Lattice 42.7 m (140 ft) Custom heights available
Maintenance Access	Working space inside the nacelle Top work platform and safety cable climbing system

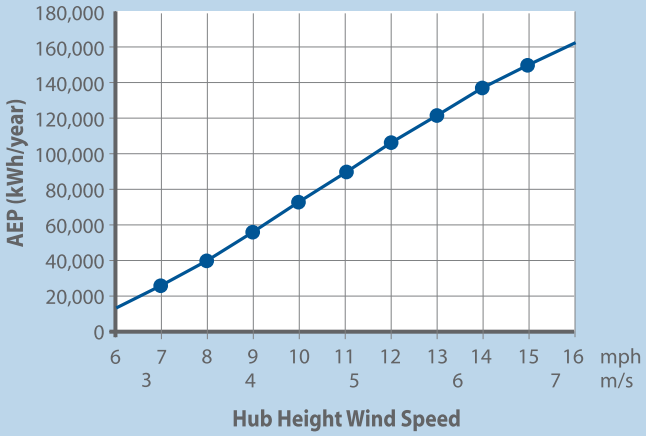
*Provided service and maintenance schedules are strictly followed

POWER CURVE



IEC 61400-12 standard

ANNUAL ENERGY PRODUCTION (AEP)



WIND SPEED CONVERSION TABLE

m/s	4	5	6	7	8	9	10	12	14	25	32	45
km/h	14	18	22	25	29	32	36	43	50	90	125	160
mph	9	11	13	16	18	20	22	27	31	56	80	100

canwea
MEMBER

Endurance wind power

Toll Free 1-888-440-4451
info@endurancewindpower.com
www.endurancewindpower.com

Appendix M

ECRM: Computer Power Management Software Installation

Software Cost (per computer) $18.40

Location	Desktop Computer Quantity	Watts	Electricity Costs ($/kWh)	Annual Operational Hours Before Software	Operational Hours After Software	Annual Energy Usage Cost Before	Annual Energy Usage Cost After	Annual Energy Cost Savings	Software Cost	Simple Payback
Sample Facility	100.0	92.1	0.15	3,840.0	1,520.0	$5,305	$2,100	$3,205.1	$1,840.0	0.57
					Totals	$5,305	$2,100	$3,205	$1,840	0.57

Assumptions	Before Implementation	After Implementation
Hours that computers are on:	24	9.5
Days per week computers are used:	5	5
Months per year computers are used:	8	8

Appendix N

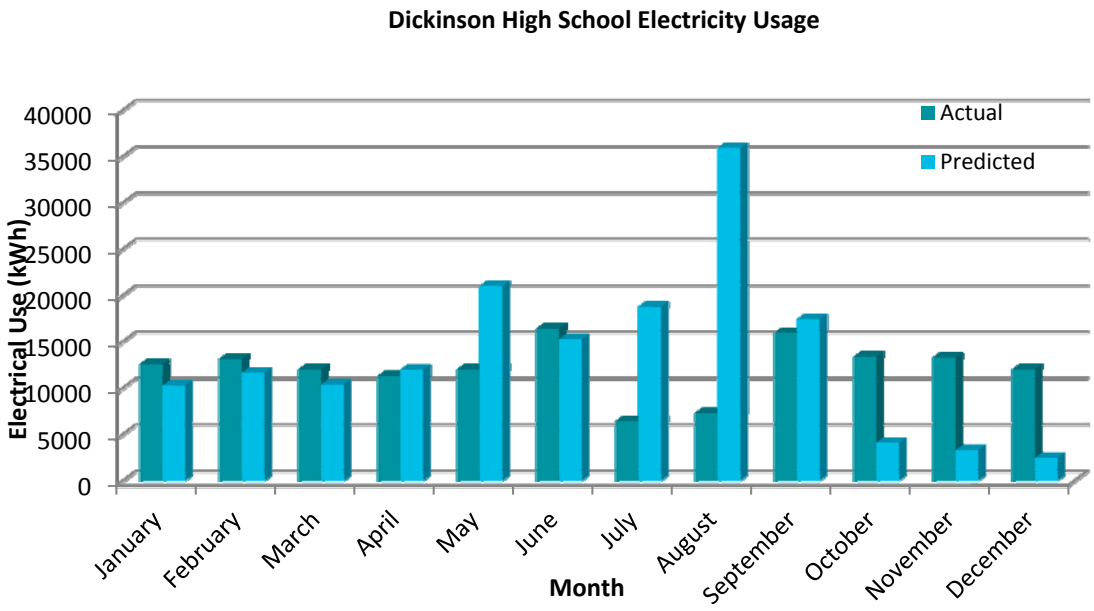
eQuest Calibrations

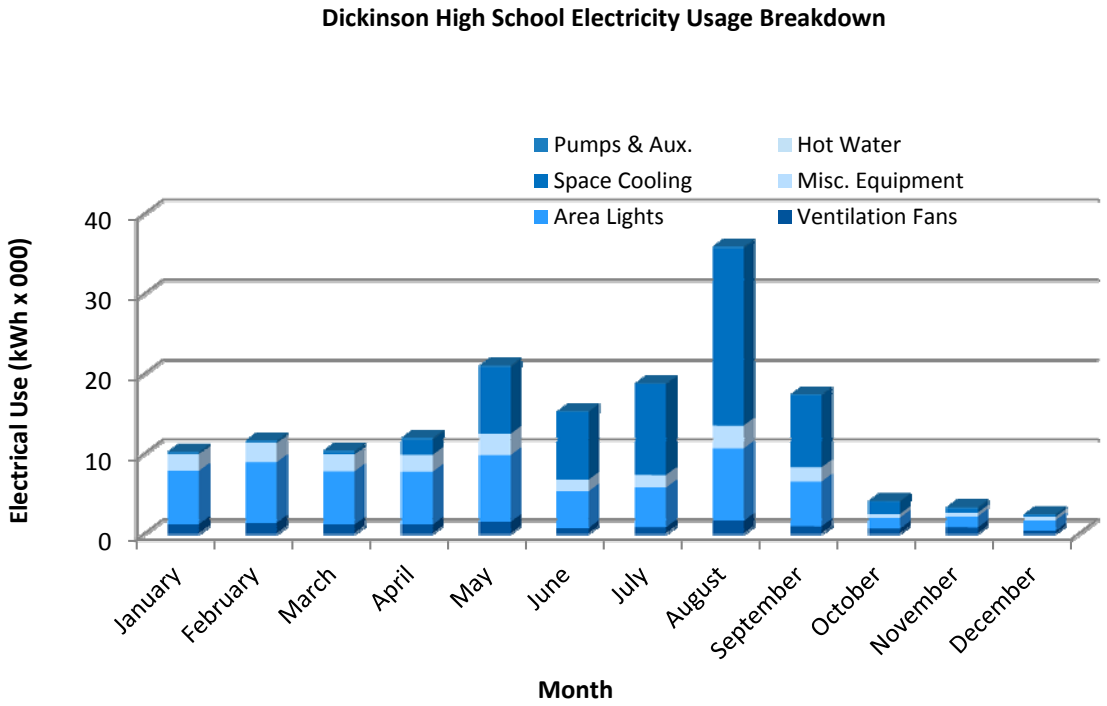
A model of each building was created in eQuest to predict heating and cooling loads. To calibrate these models, CDM used either utility bills or annual usage summaries provided by the Board, depending on what was available.

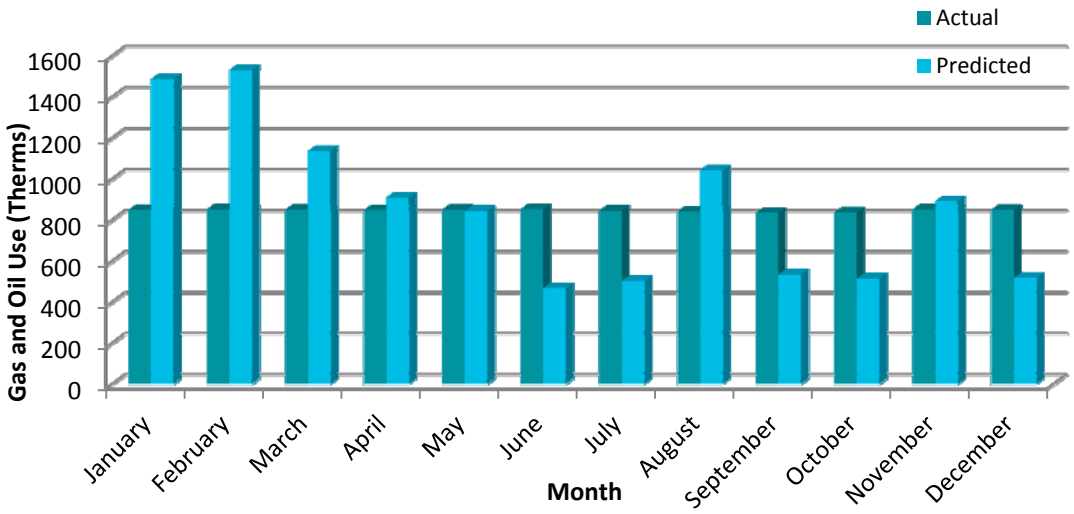
This appendix contains graphs that demonstrate the historical energy usage compared to the model-predicted energy usage for each building.

Once each eQuest model was calibrated, it could be used to predict approximate major usage categories, such as lighting, plug loads (miscellaneous), ventilation, and cooling. It should be noted that these are only estimated usages based on information gathered during CDM's field audit. In addition to comparative energy usage graphs, a graph has been provided for each building which aims to predict the portion of energy usage dedicated to each of these categories

Dickinson High School

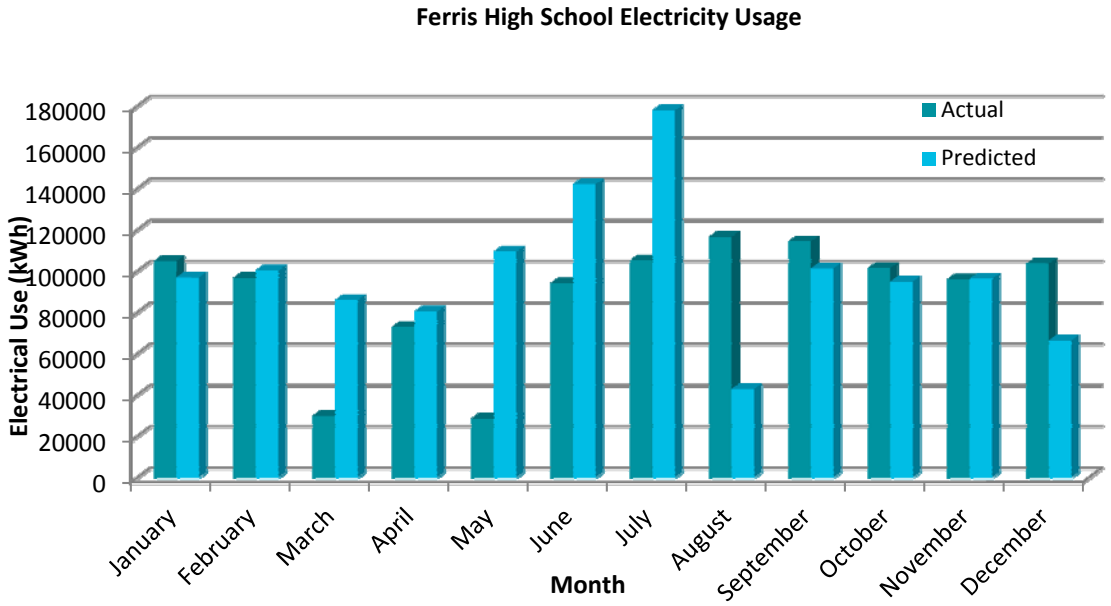


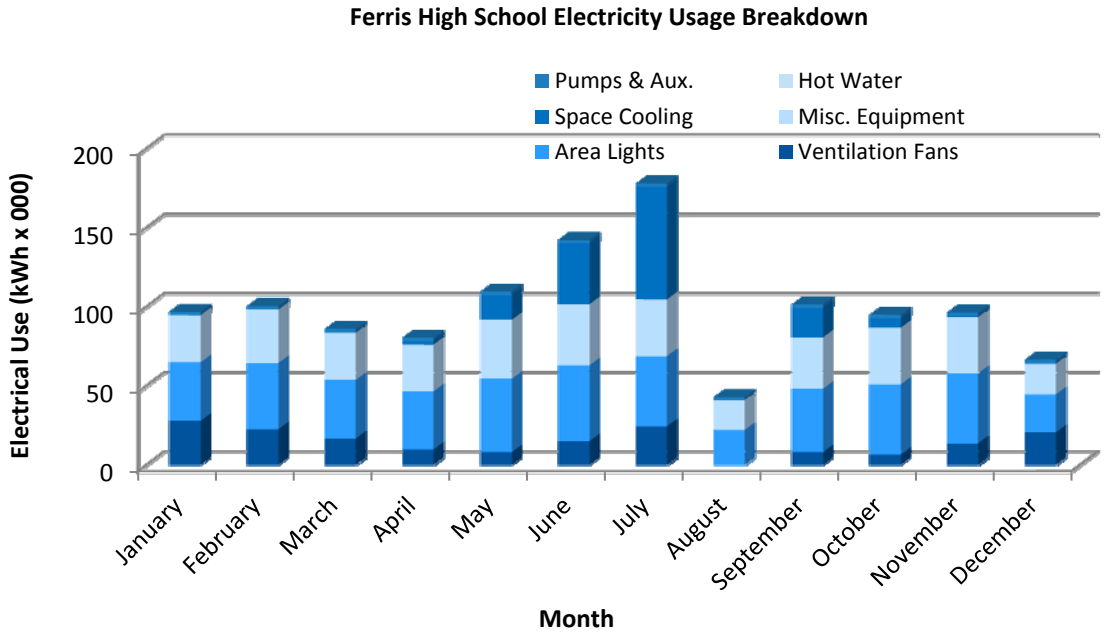




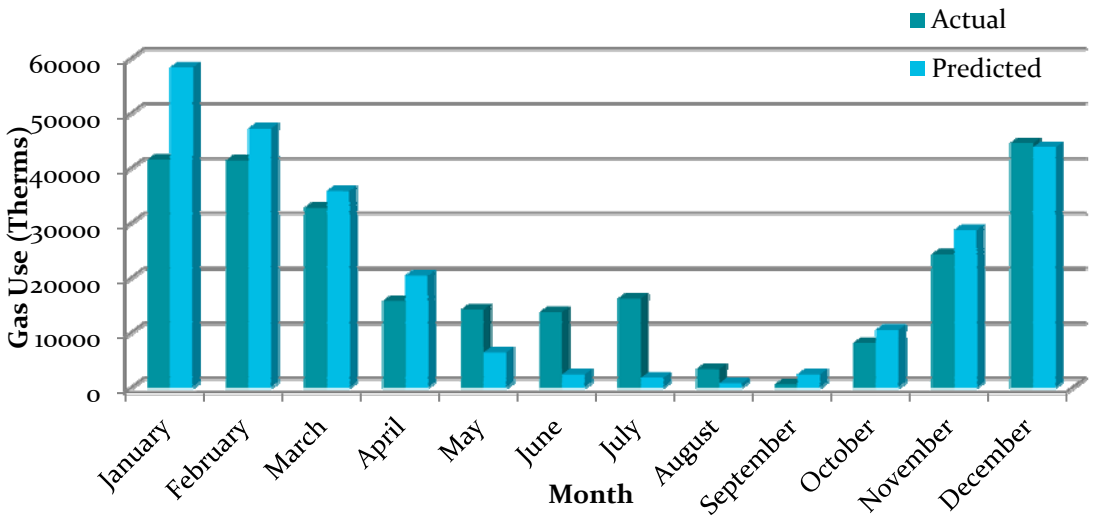
Actual gas usage based upon annual usage according to the facility data report.

Ferris High School



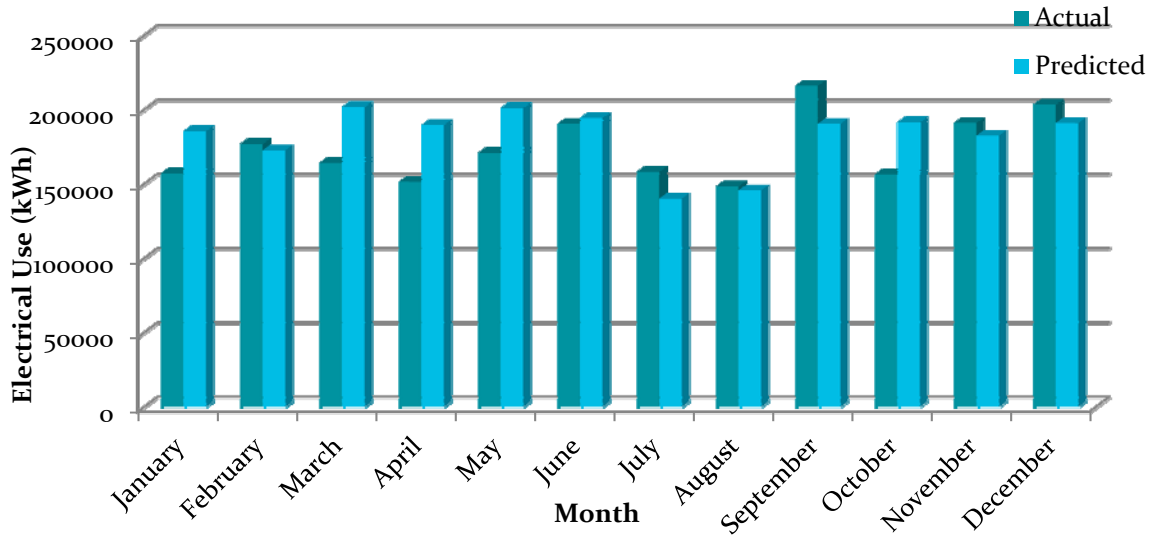


Ferris High School Natural Gas Usage

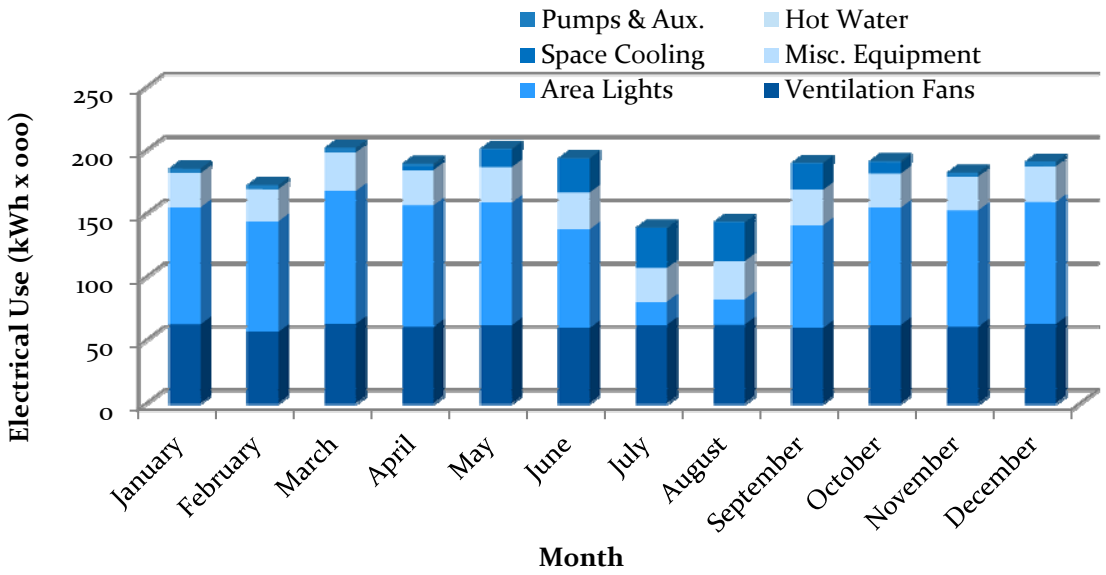


Lincoln High School

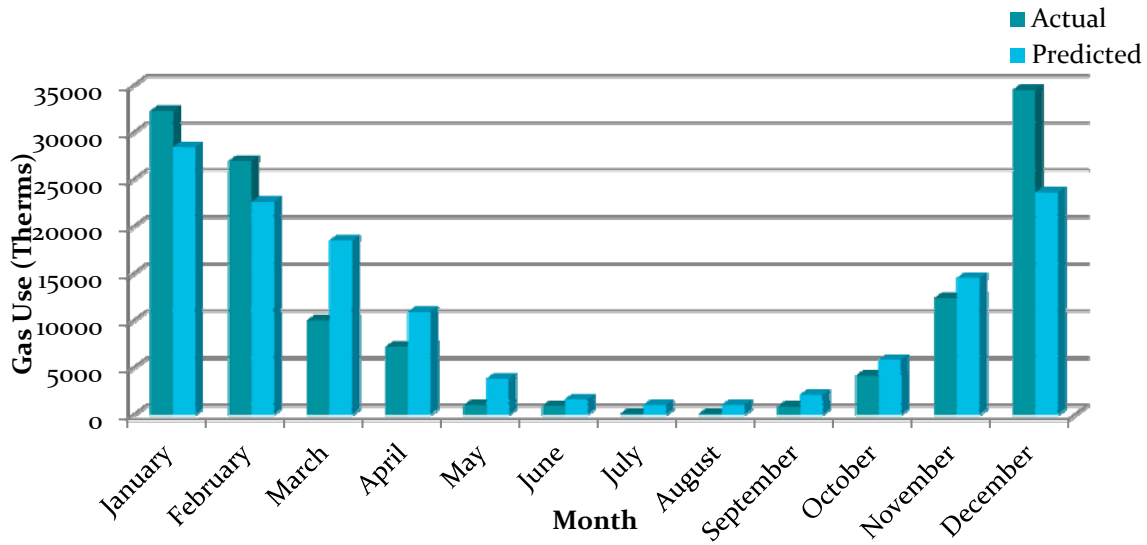
Lincoln High School Electricity Usage



Lincoln High School Electricity Usage Breakdown

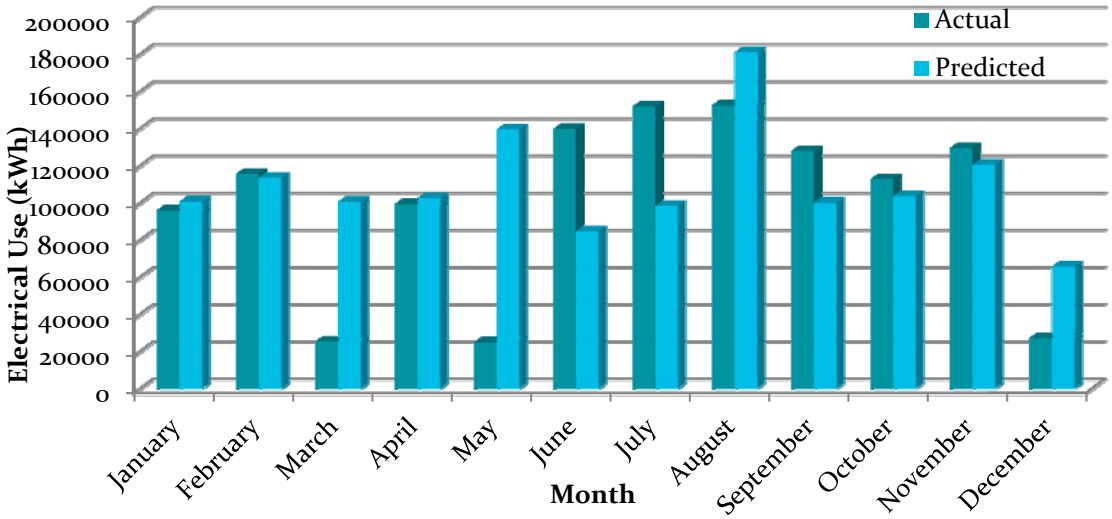


Lincoln High School Natural Gas Usage

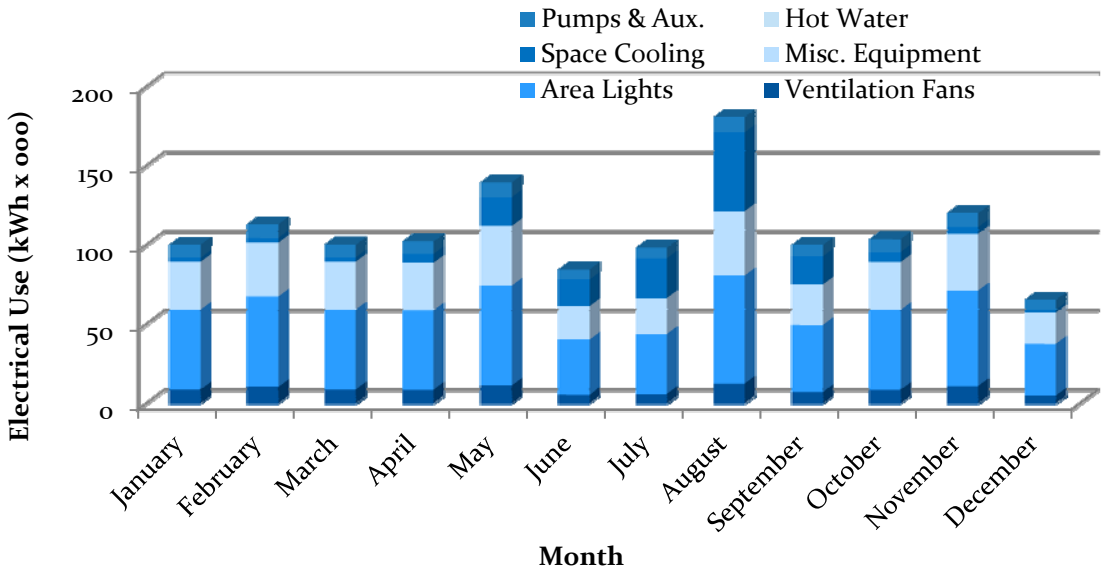


McNair High School

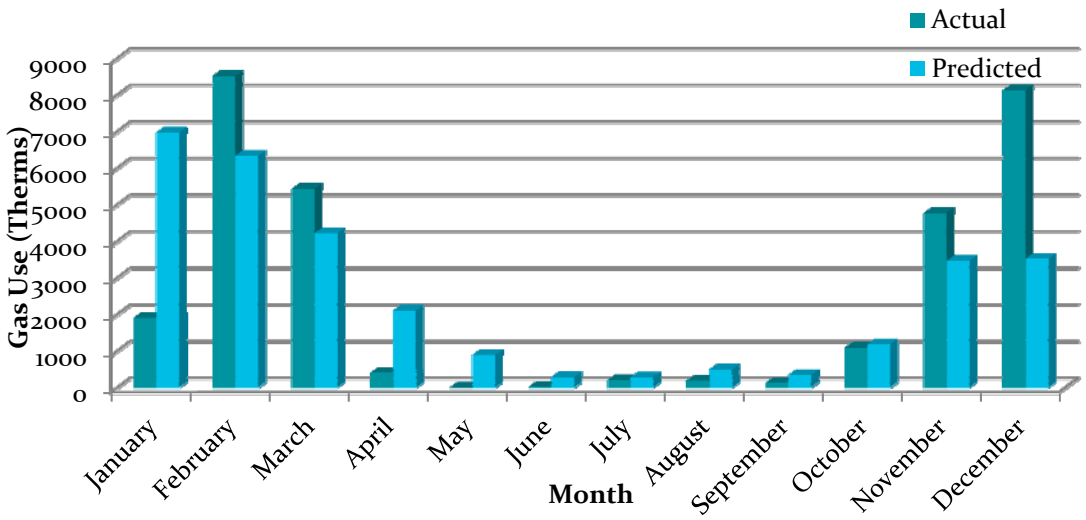
McNair High School Electricity Usage



McNair High School Electricity Usage Breakdown

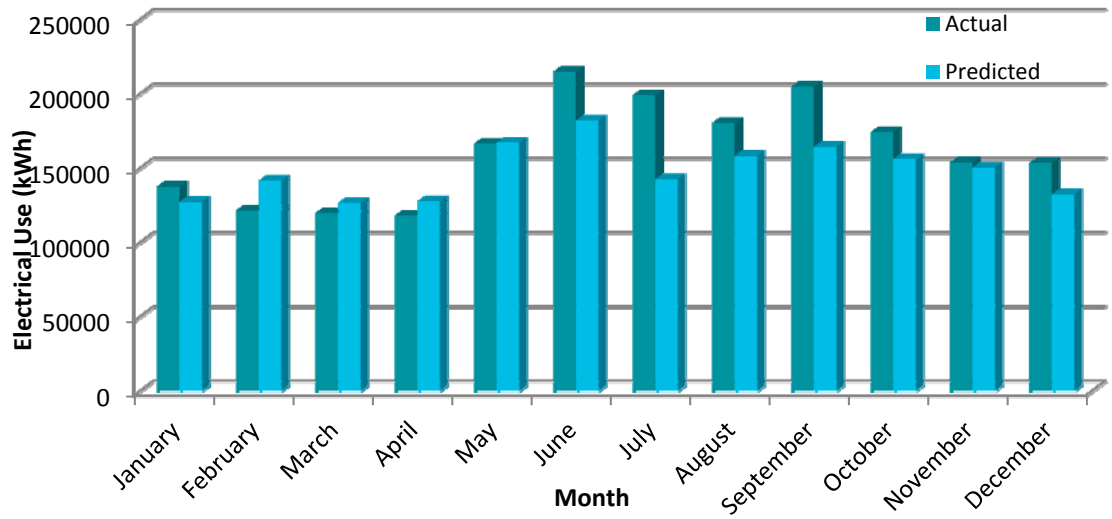


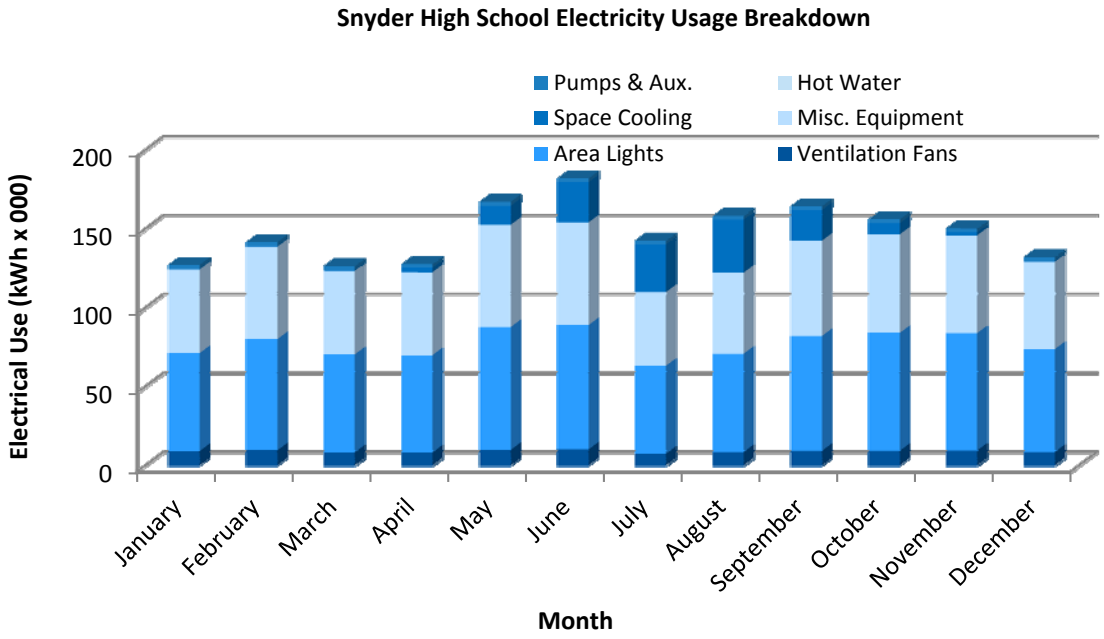
McNair High School Natural Gas Usage

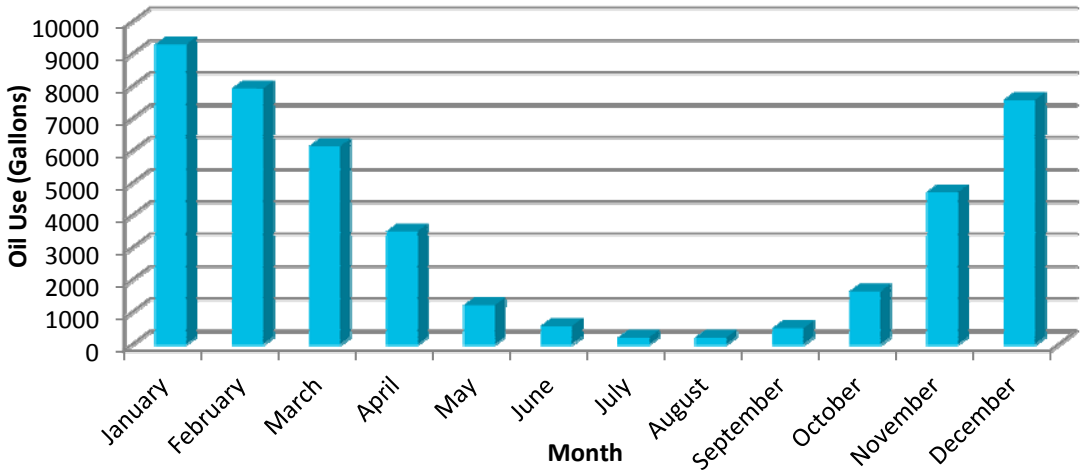


Snyder High School

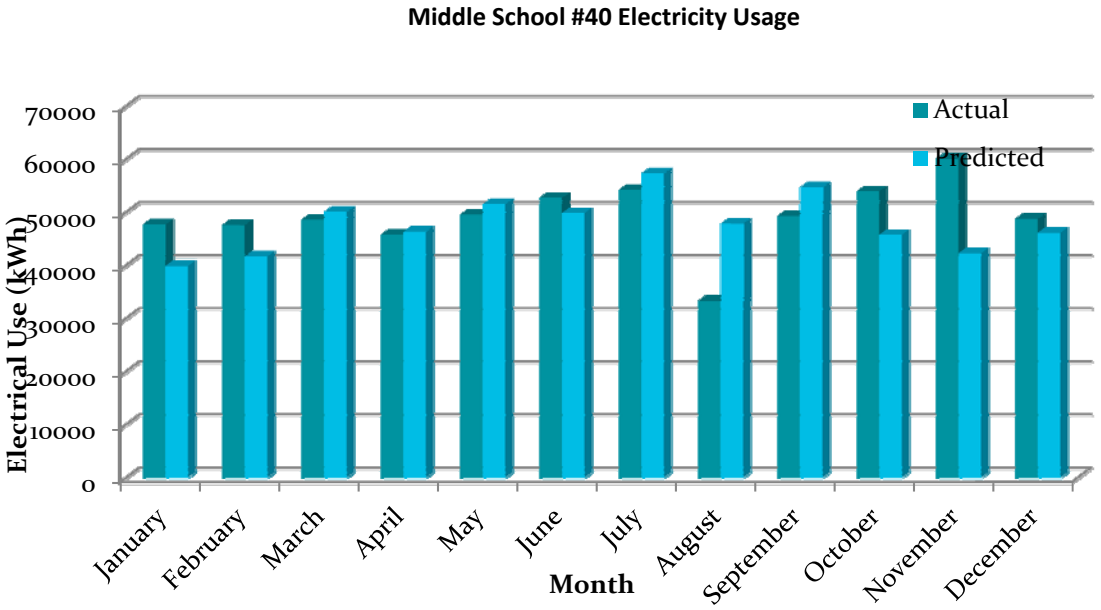
Snyder High School Electricity Usage

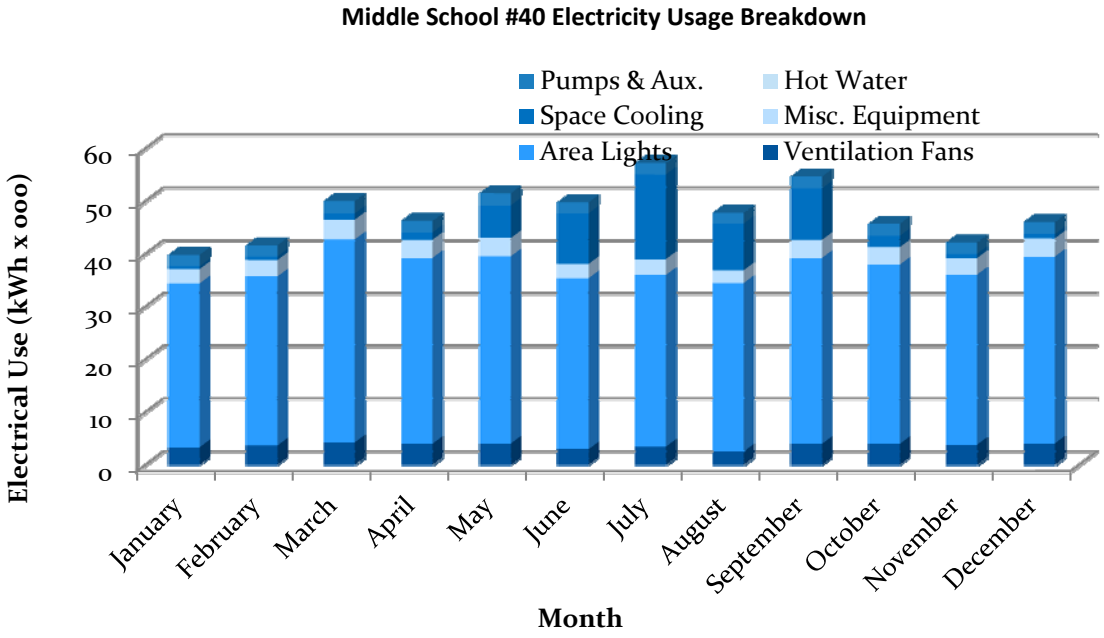



Snyder High School Electricity Usage Breakdown
Pumps & Aux.
Hot Water
Space Cooling
Misc. Equipment
Area Lights
Ventilation Fans
Electrical Use (kWh x 000)
200
150
100
50
0
January
February
March
April
May
June
July
August
September
October
November
December
Month

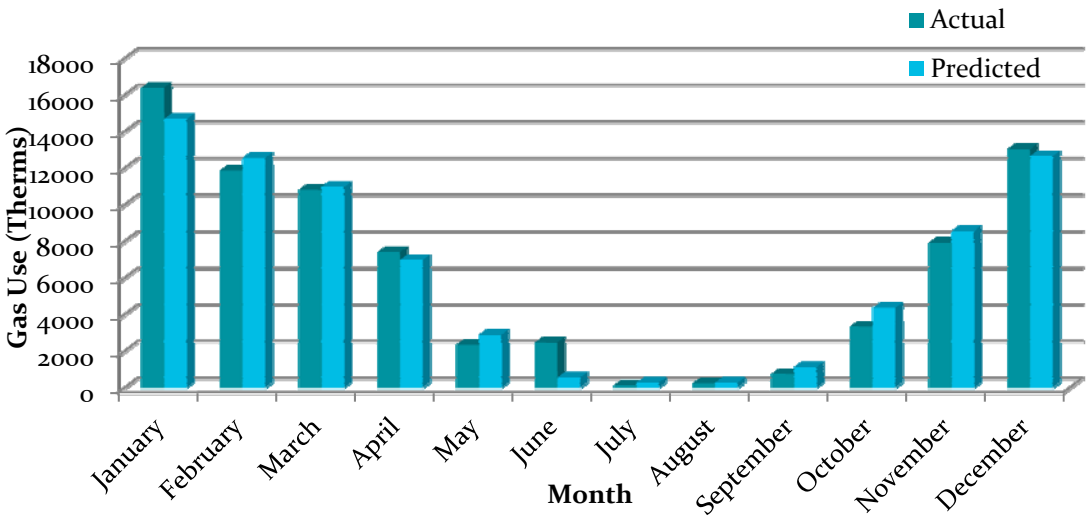

Snyder High School Fuel Oil Usage
Oil Use (Gallons)
10000
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
January
February
March
April
May
June
July
August
September
October
November
December
Month

Middle School #40

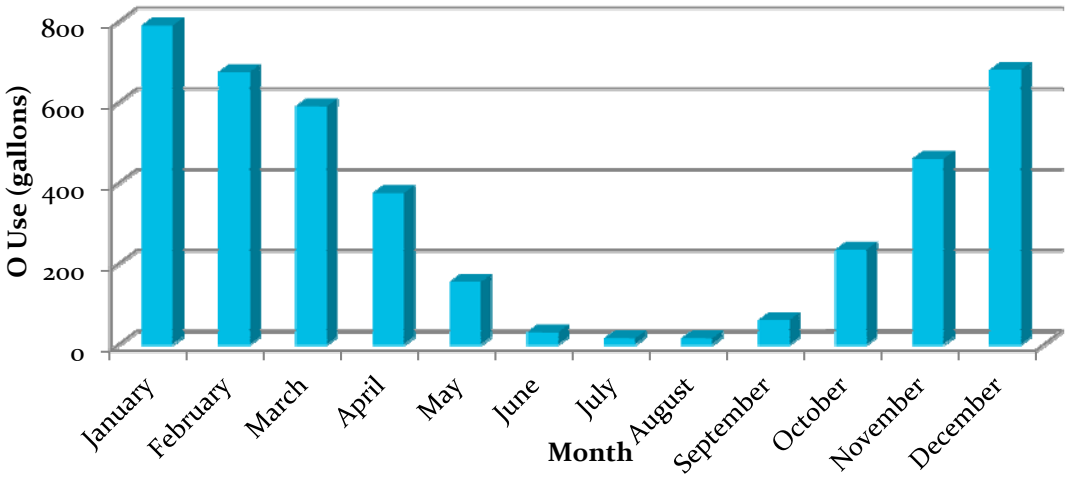




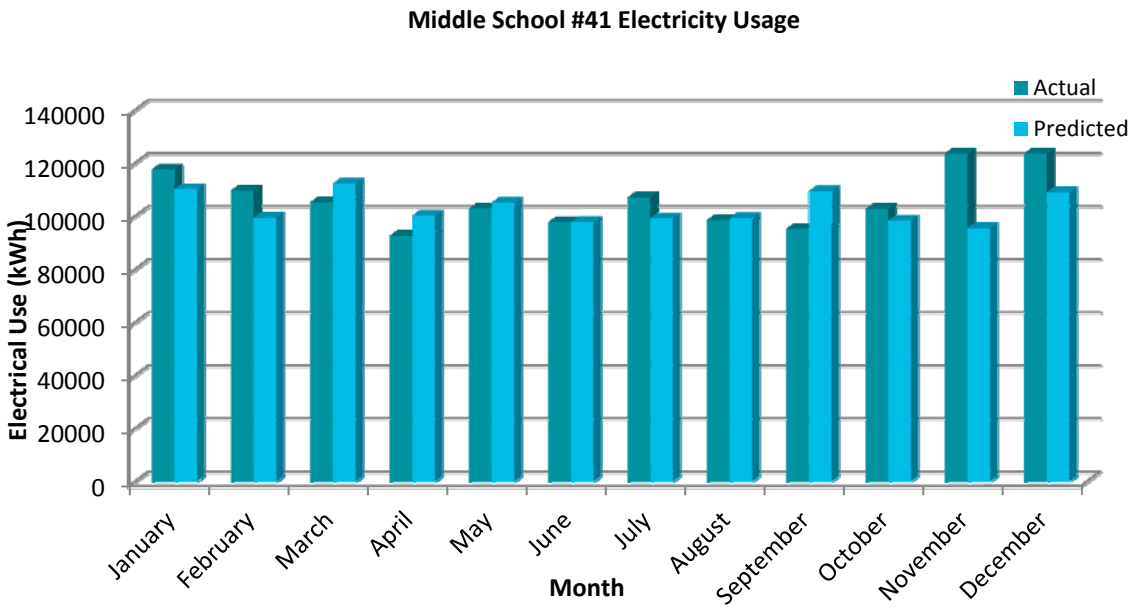
Middle School #40 Natural Gas Usage

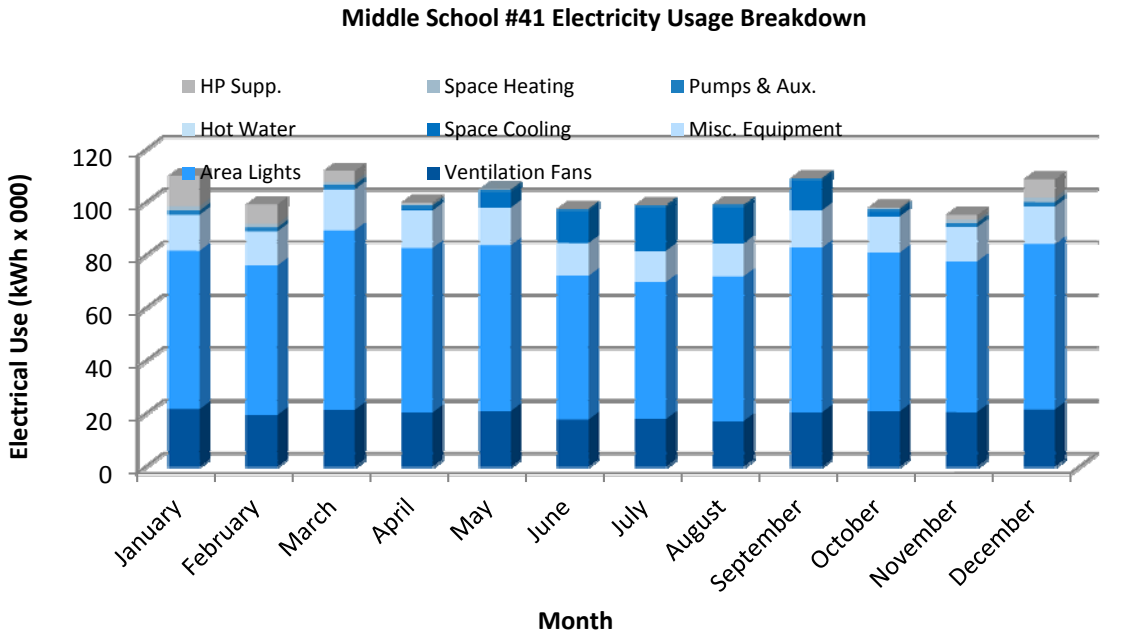


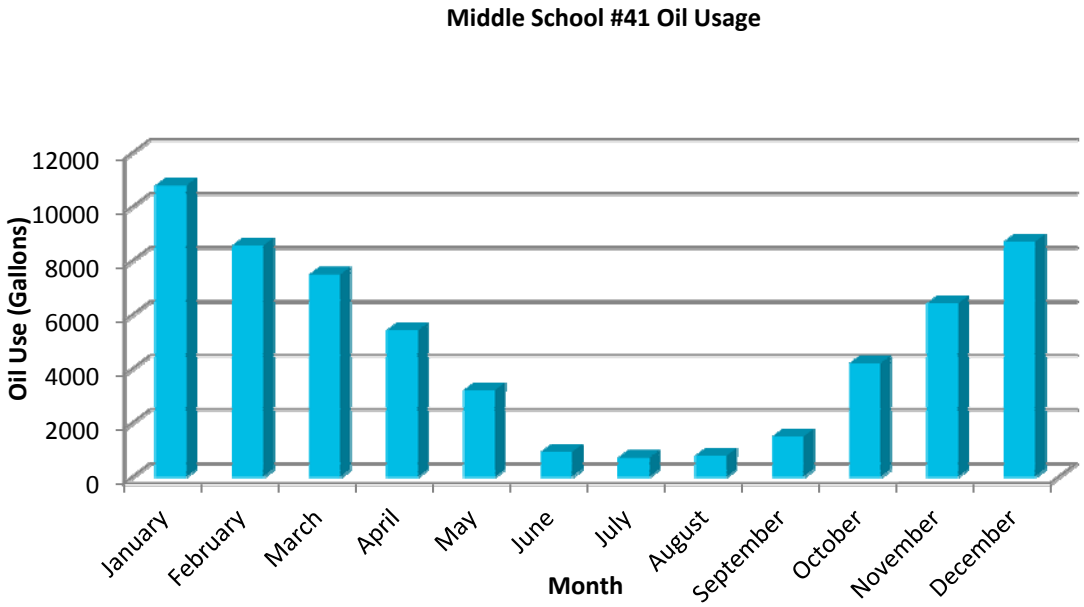
Middle School #40 Fuel Oil Usage



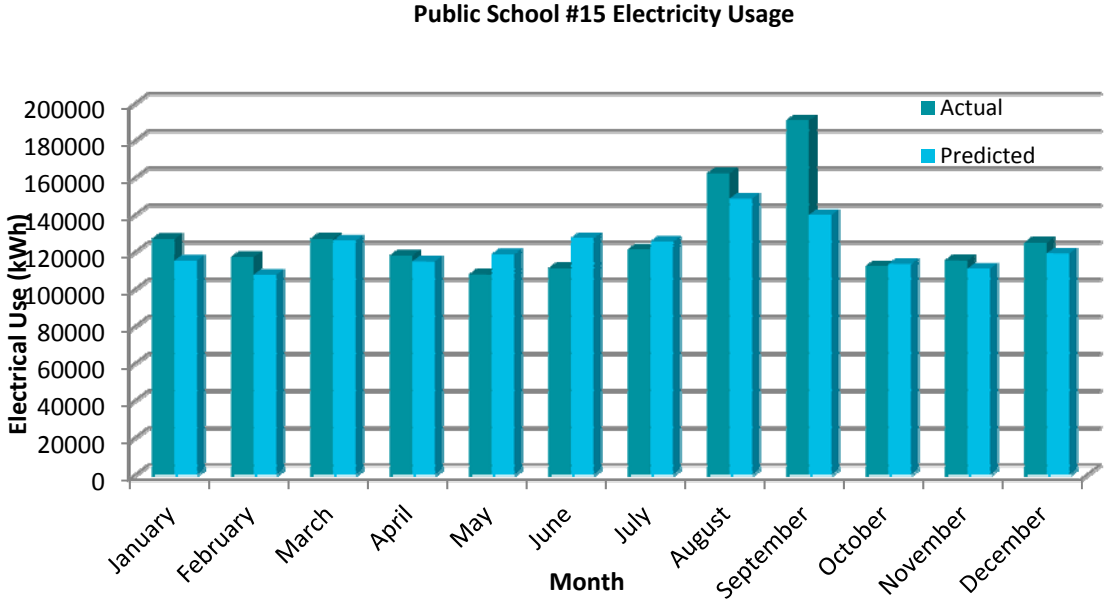
Middle School #41



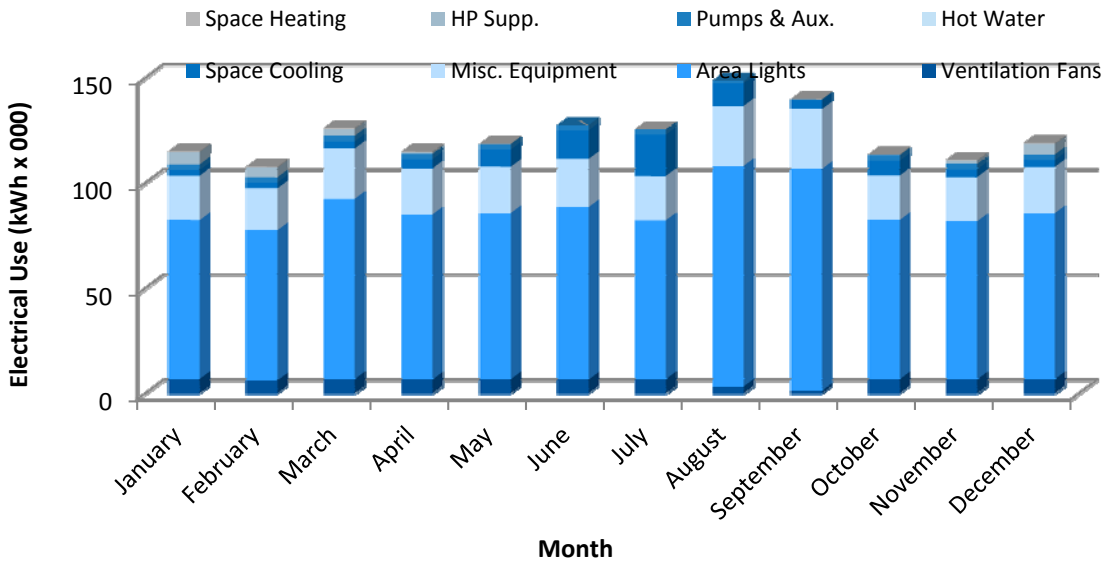




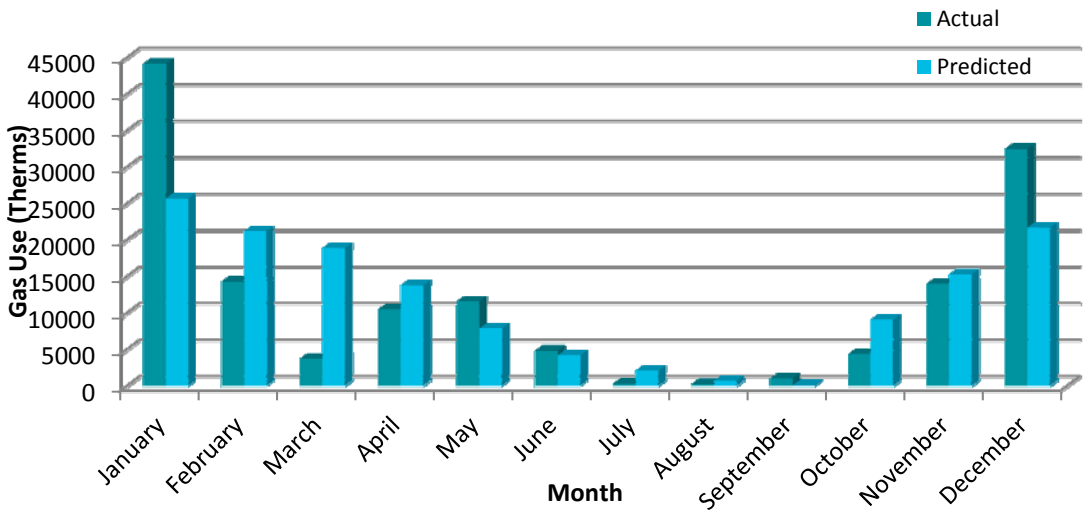
Public School #15



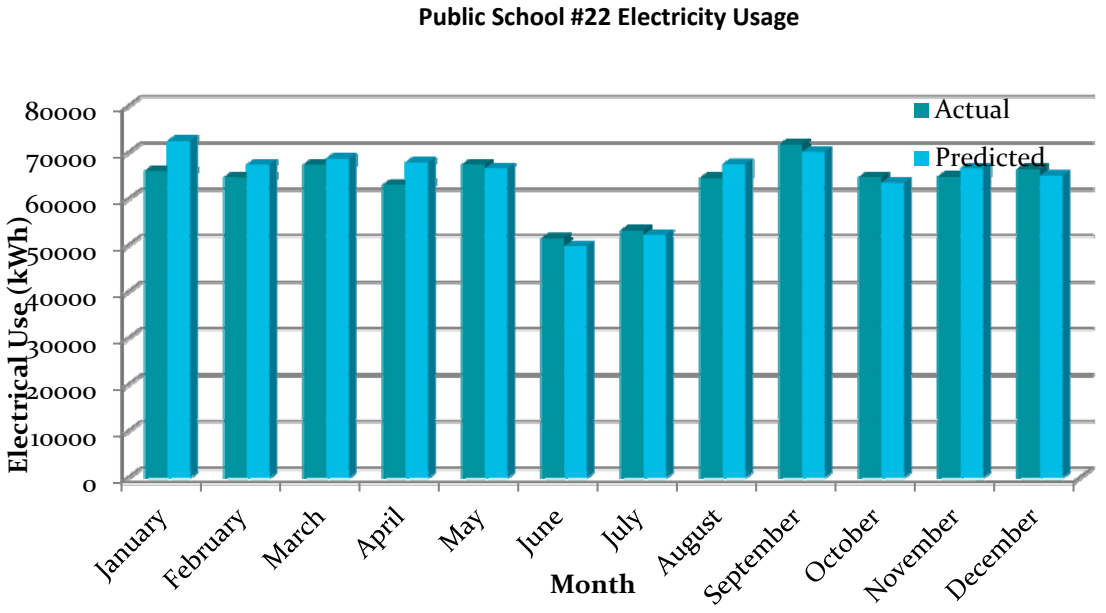
Public School #15 Electricity Usage Breakdown

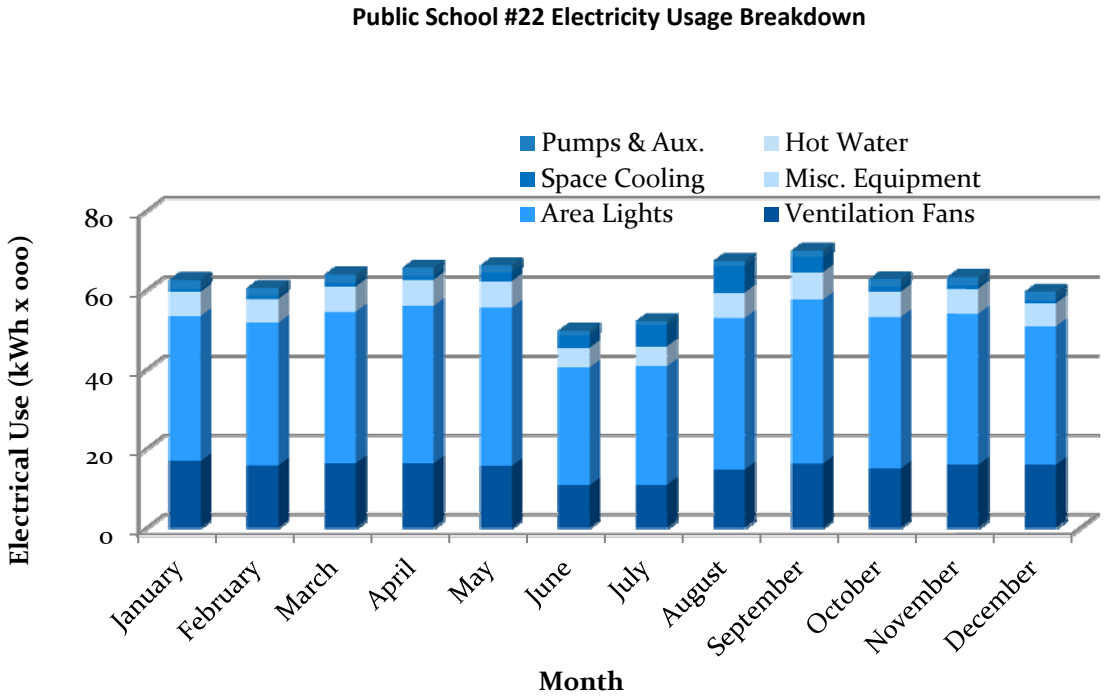


Public School #15 Natural Gas Usage

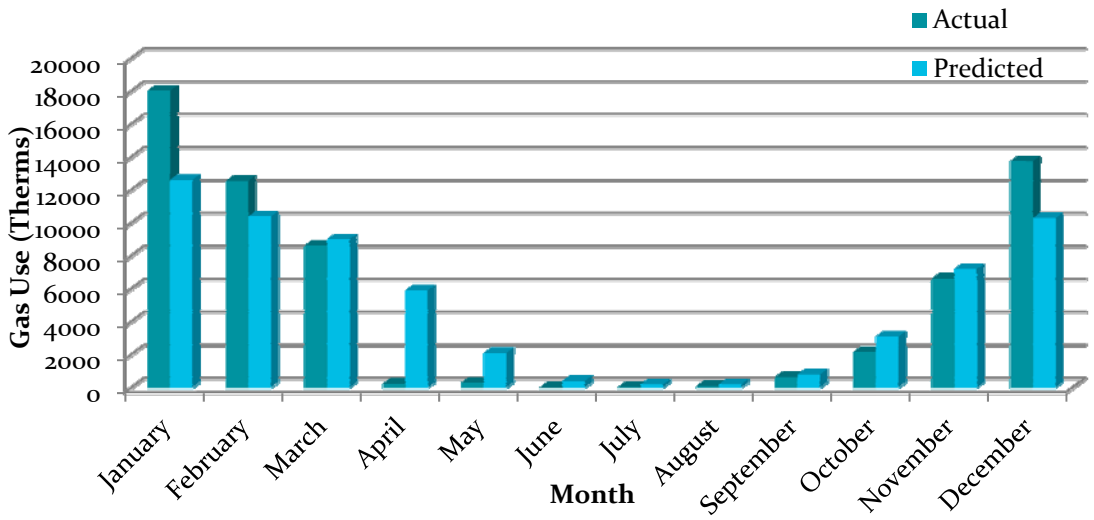


Public School #22



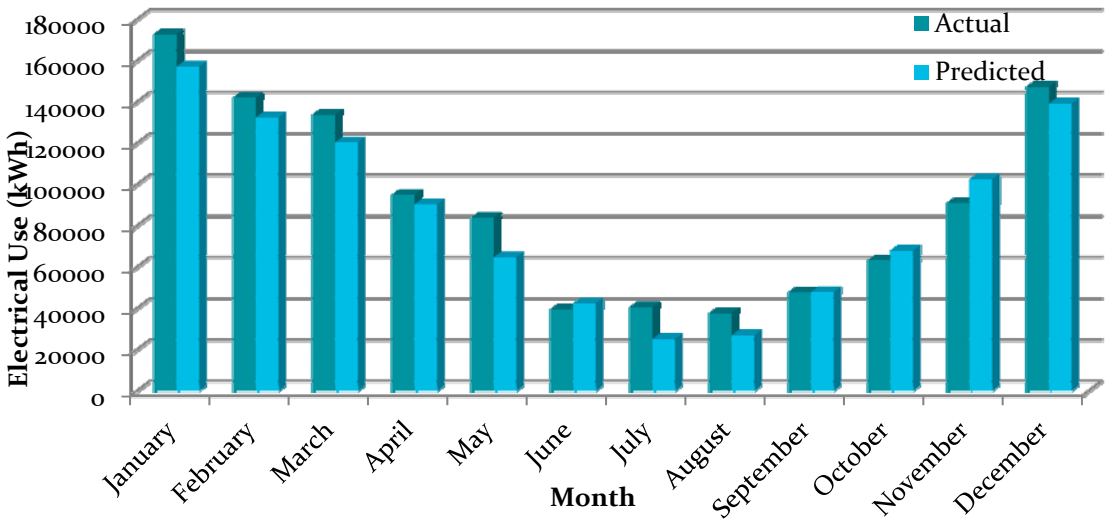


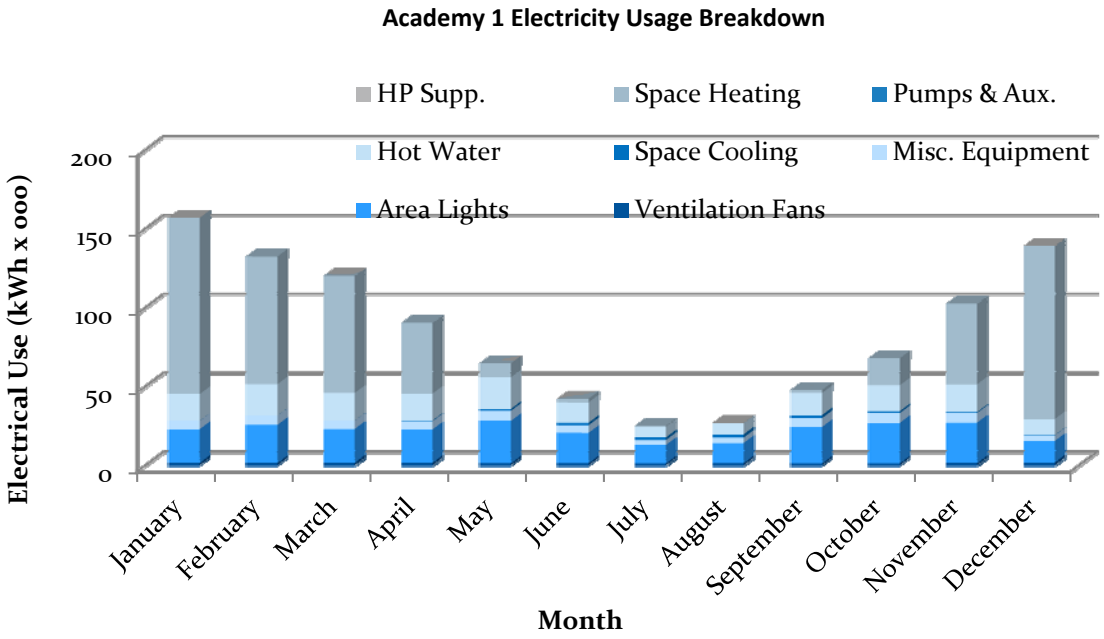
Public School #22 Natural Gas Usage



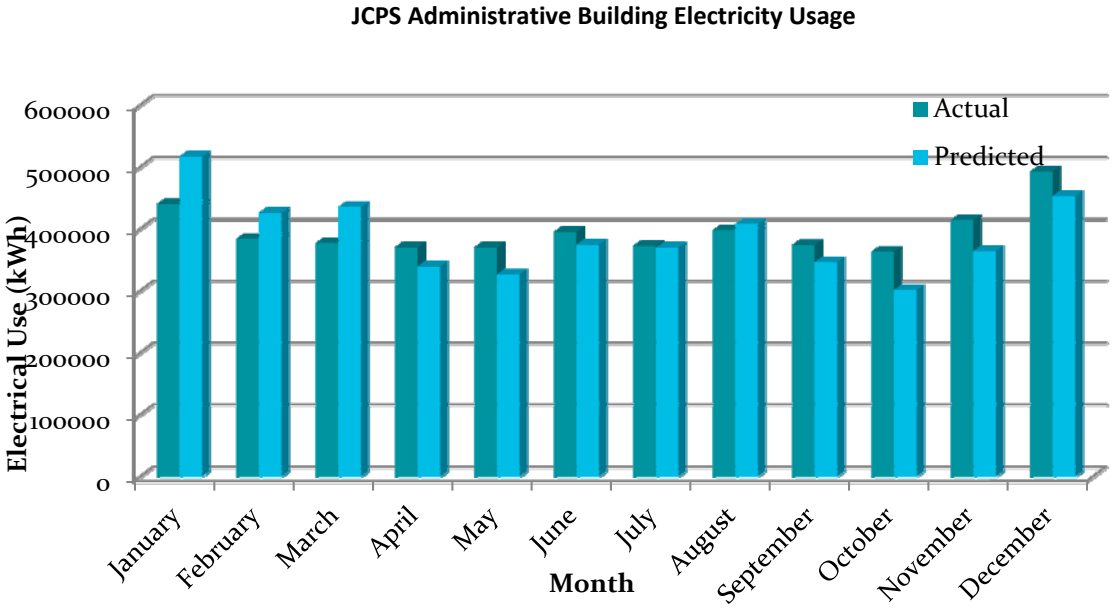
Academy 1

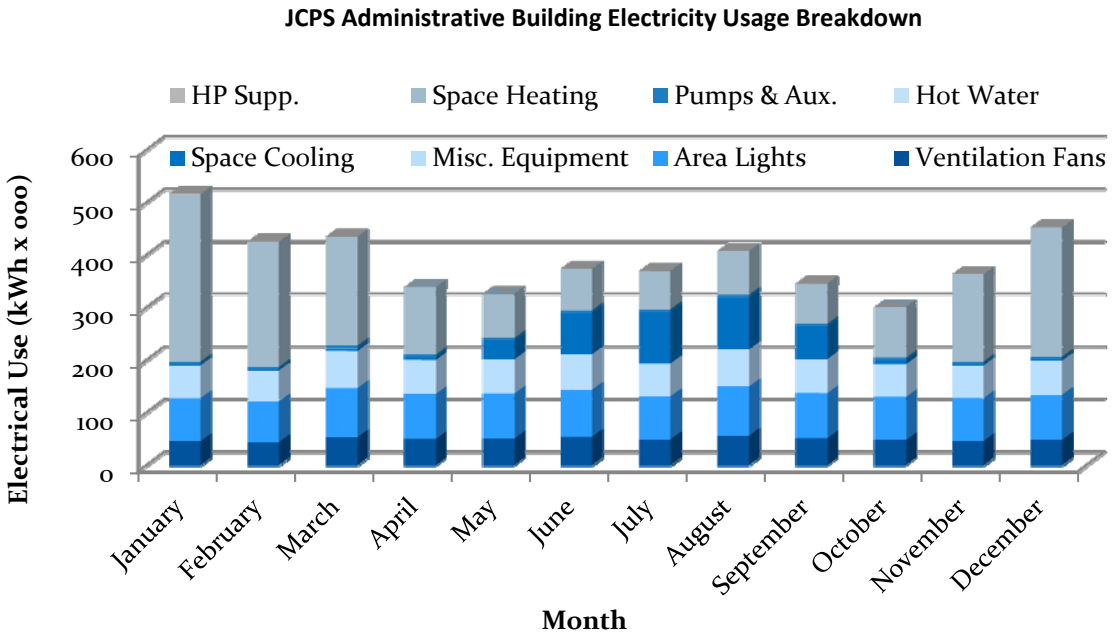
Academy 1 Electricity Usage



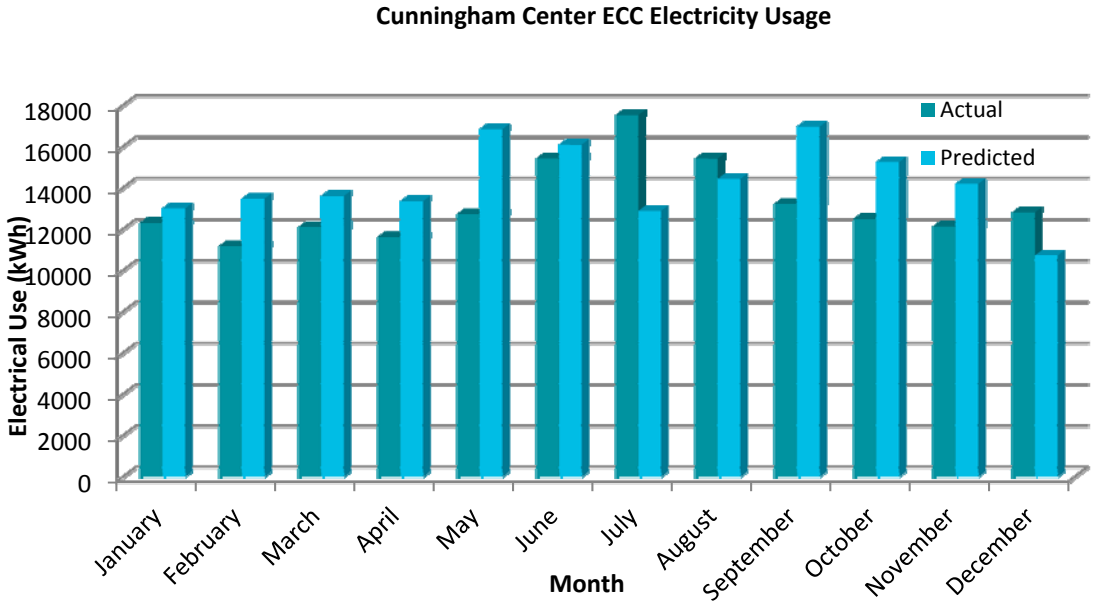


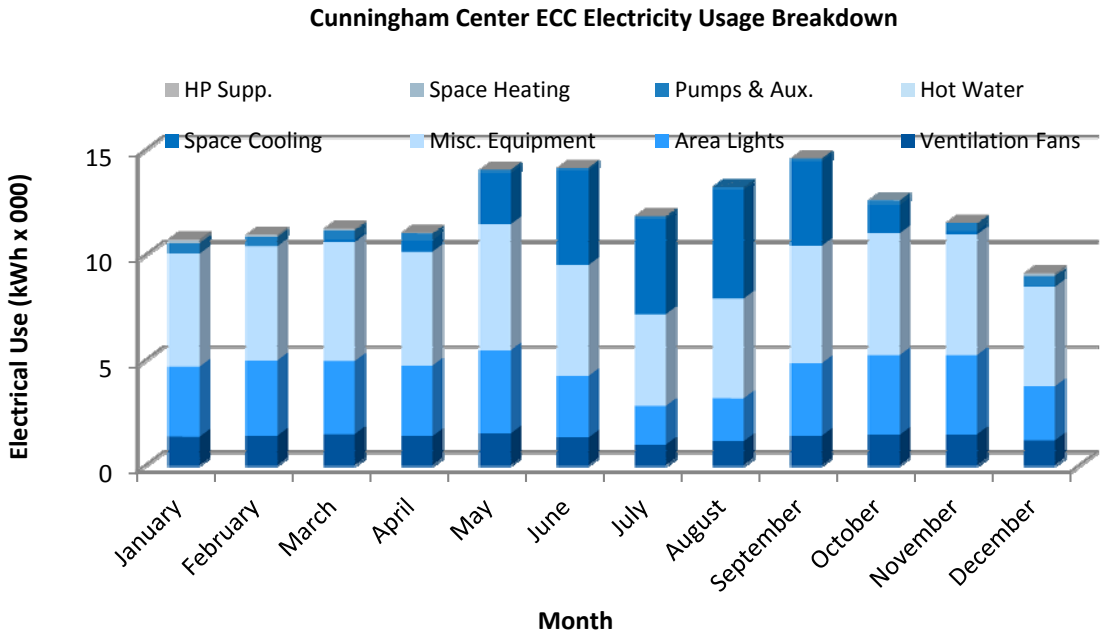
JCPS Administrative Building

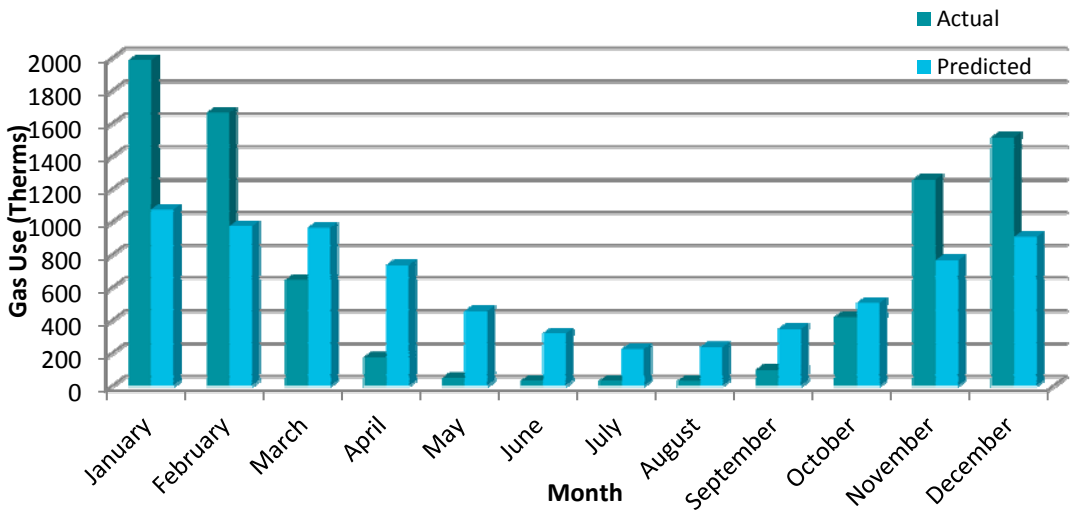




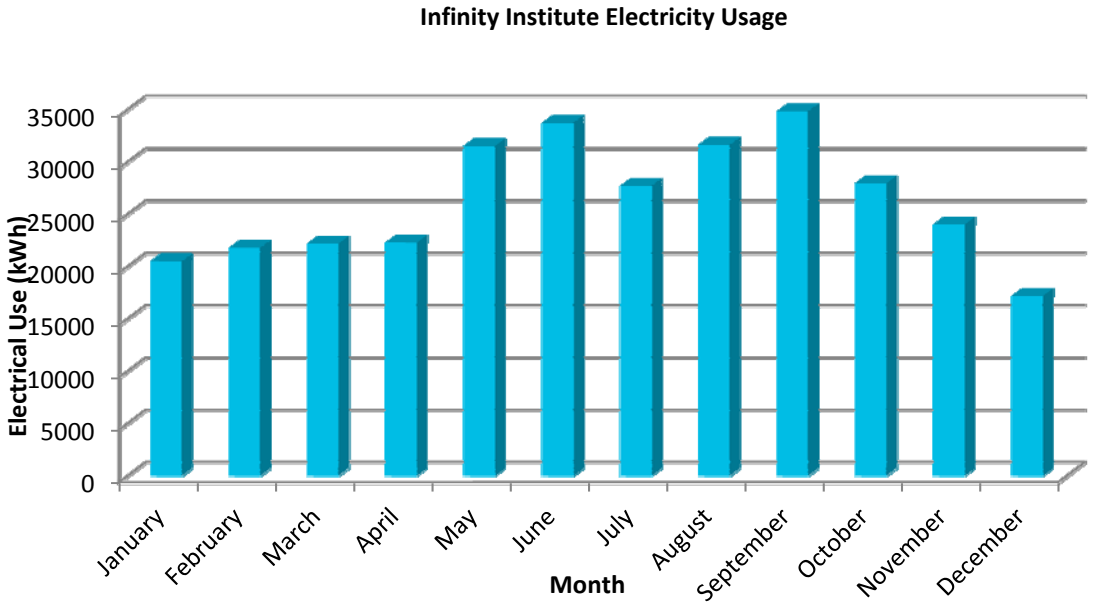
Cunningham Center ECC

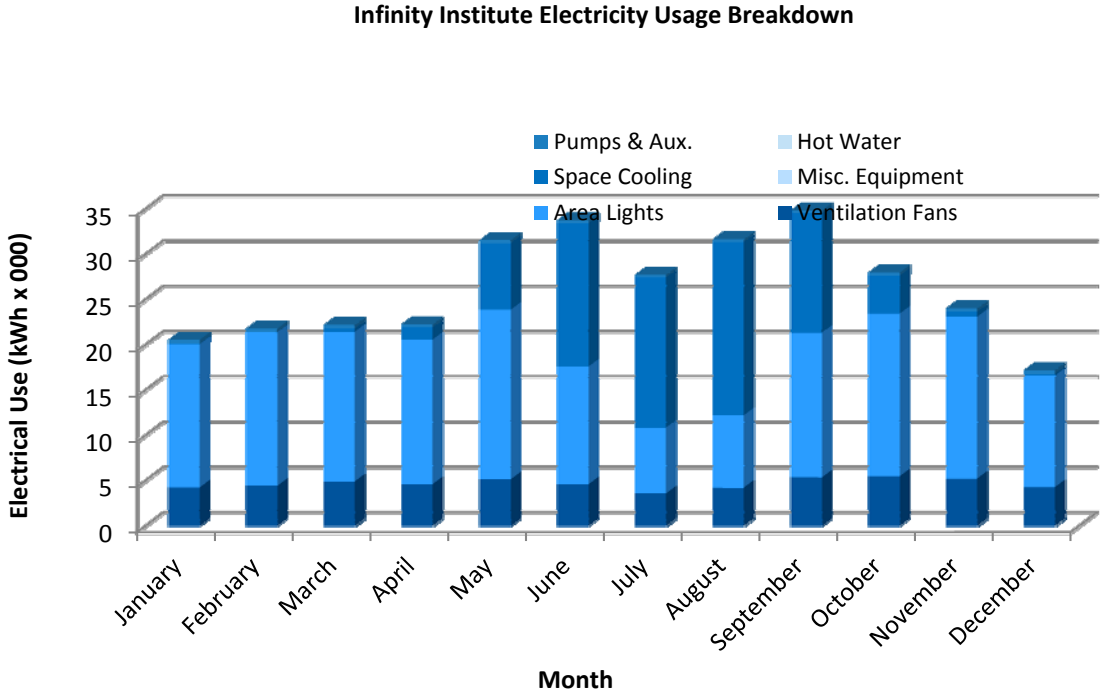


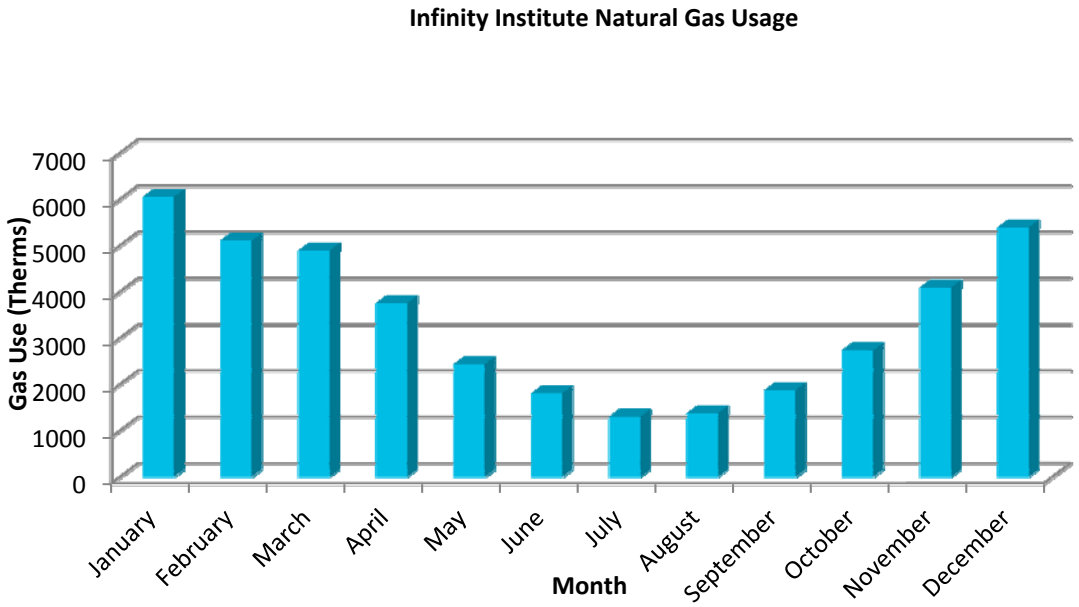

Cunningham Center ECC Electricity Usage Breakdown
HP Supp.
Space Heating
Pumps & Aux.
Hot Water
Space Cooling
Misc. Equipment
Area Lights
Ventilation Fans
Electrical Use (kWh x 000)
15
10
5
0
January
February
March
April
May
June
July
August
September
October
November
December
Month


Cunningham Center ECC Natural Gas Usage
Actual
Predicted
Gas Use (Therms)
2000
1800
1600
1400
1200
1000
800
600
400
200
0
January
February
March
April
May
June
July
August
September
October
November
December
Month

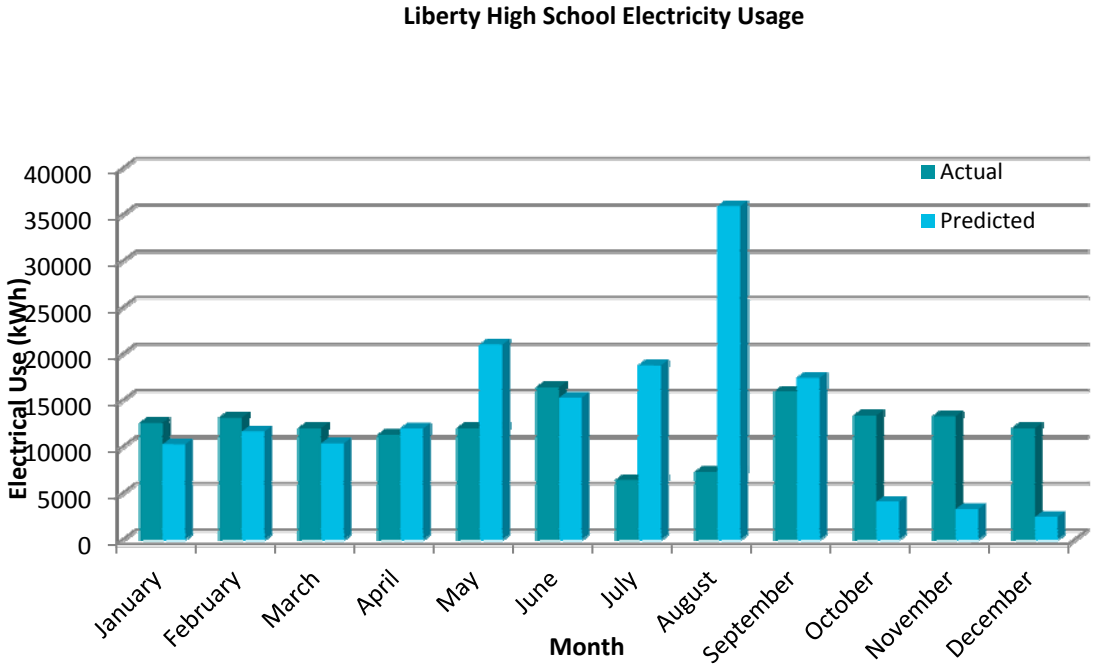
Infinity Institute



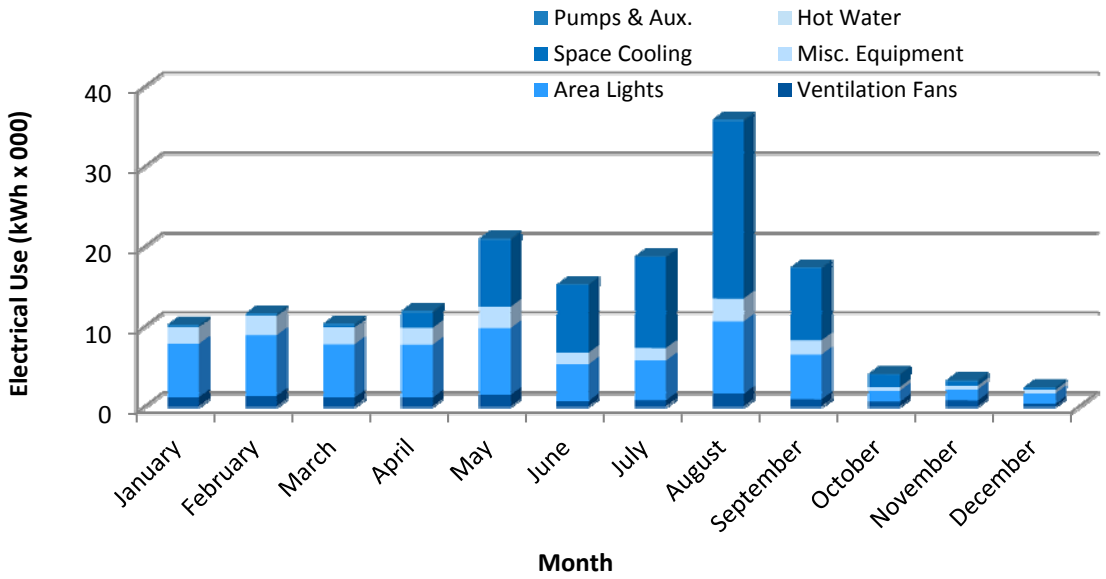




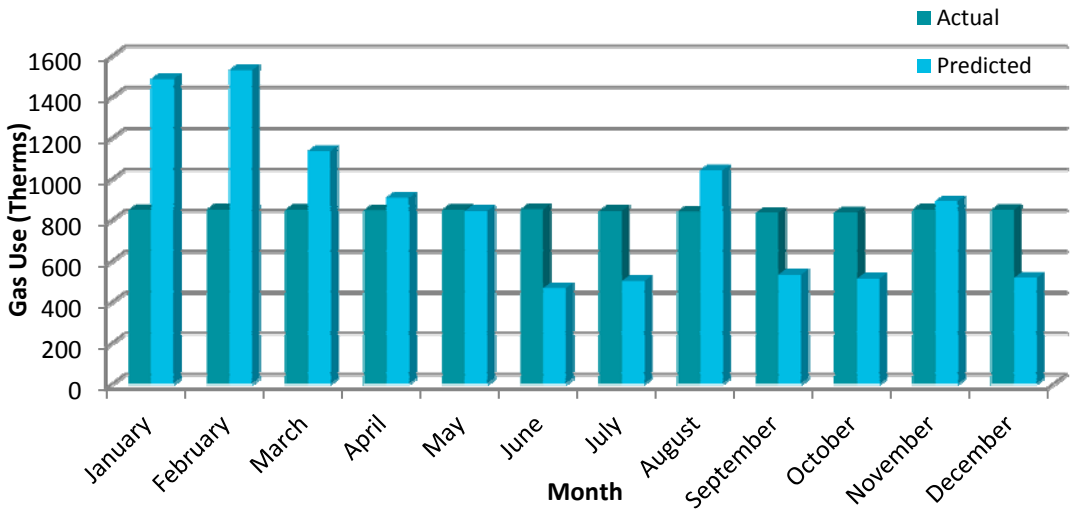
Liberty High School



Liberty High School Electricity Usage Breakdown

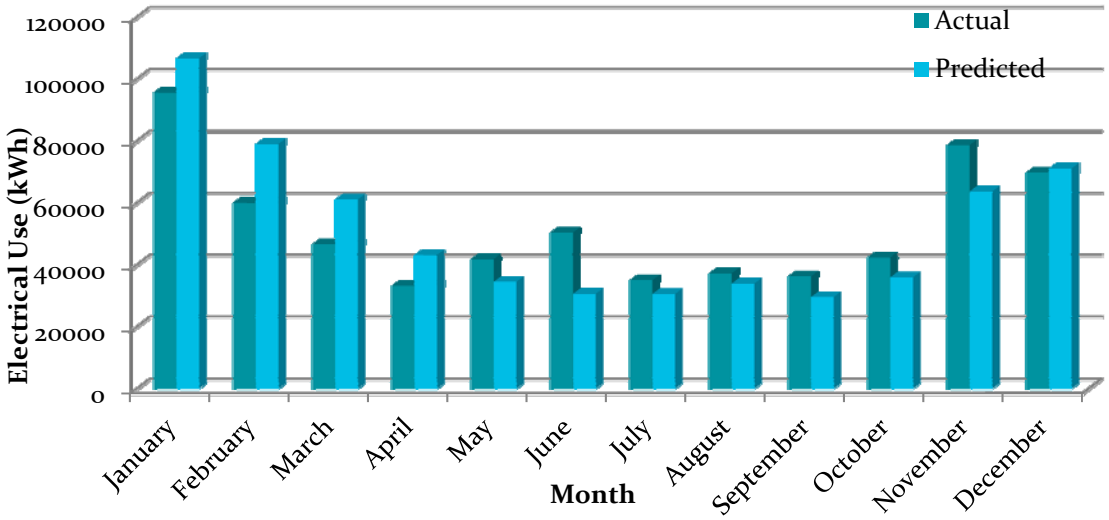


Liberty High School Natural Gas Usage

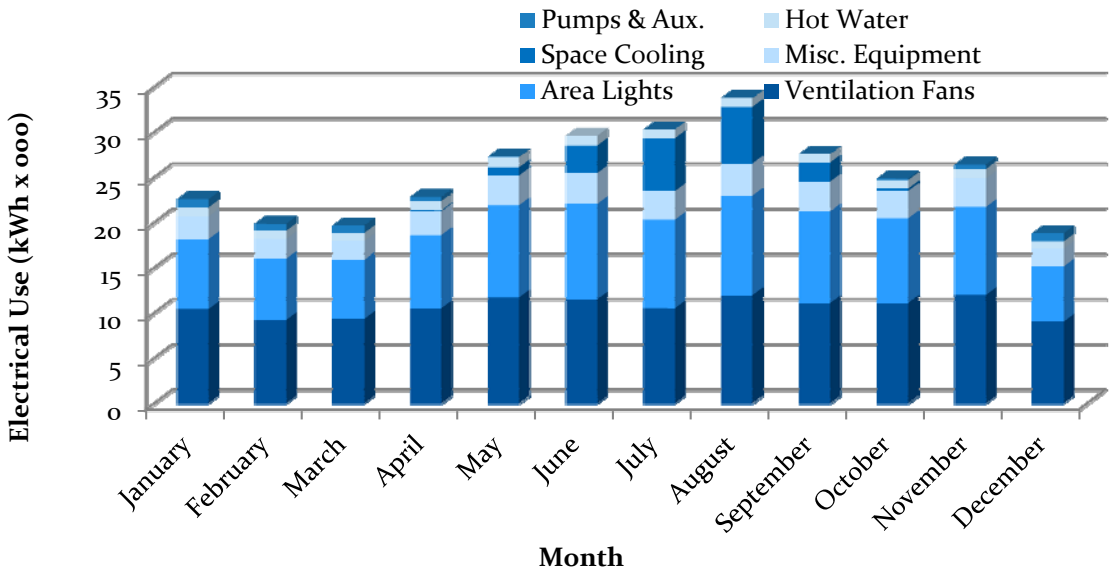


Regional Day School

Regional Day School Electricity Usage

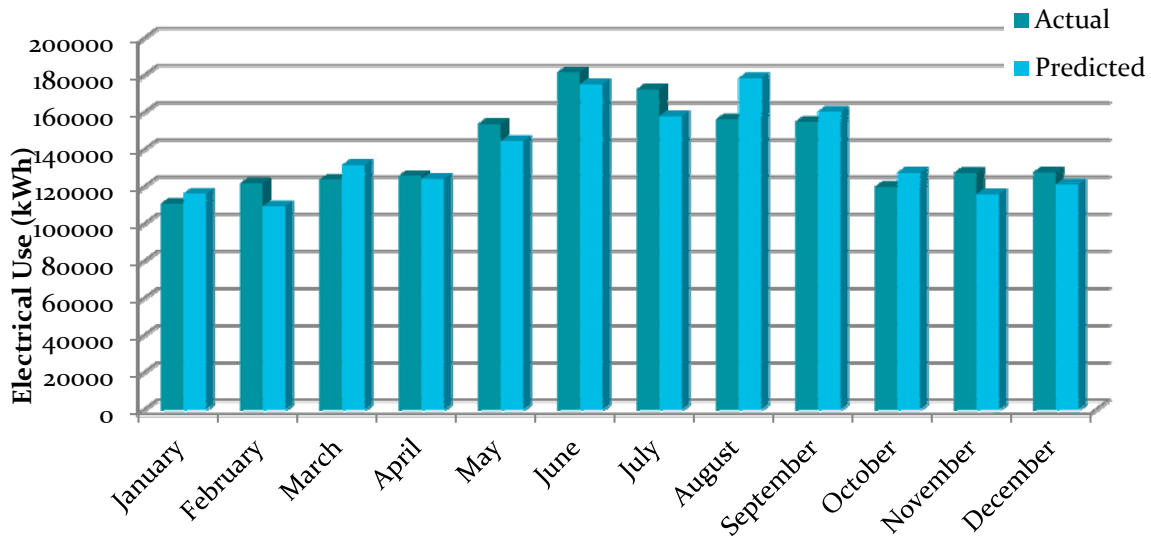


Regional Day School Electricity Usage Breakdown

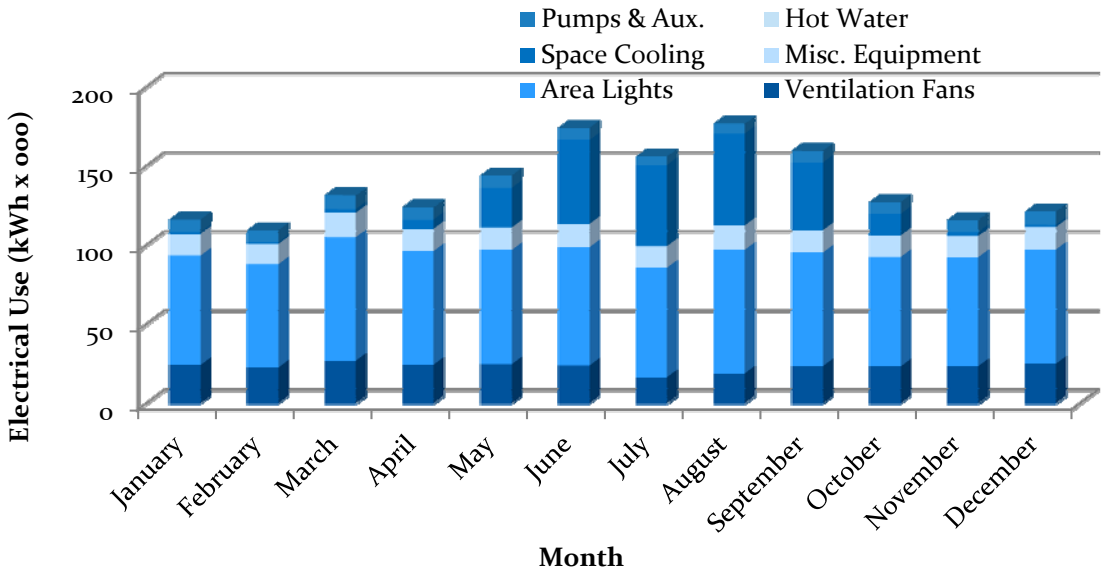


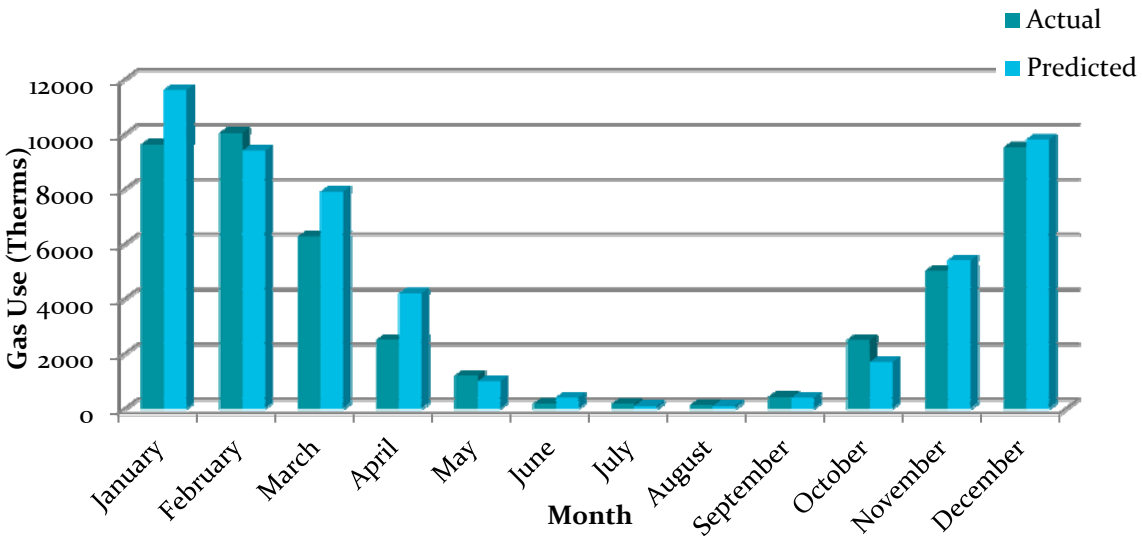
Middle School #4

Middle School #4 Electricity Usage



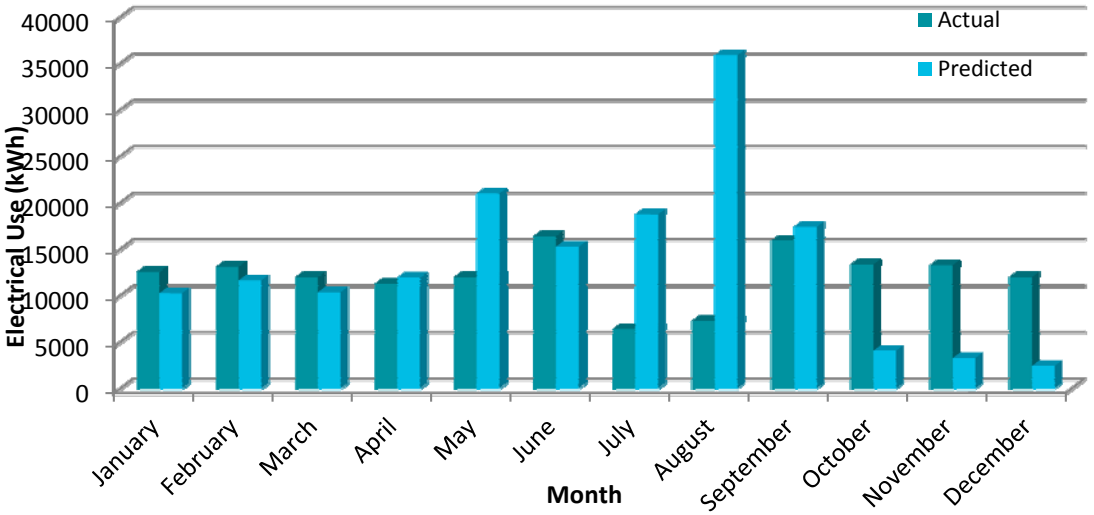
Middle School #4 Electricity Usage Breakdown



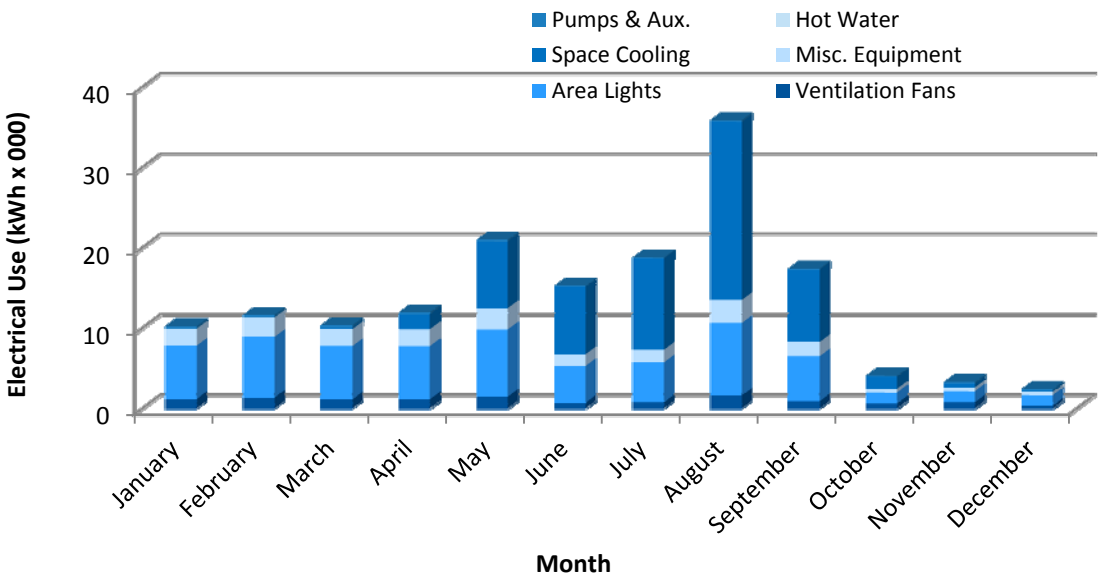

Middle School #4 Natural Gas Usage
Actual
Predicted
Gas Use (Therms)
12000
10000
8000
6000
4000
2000
0
January
February
March
April
May
June
July
August
September
October
November
December
Month

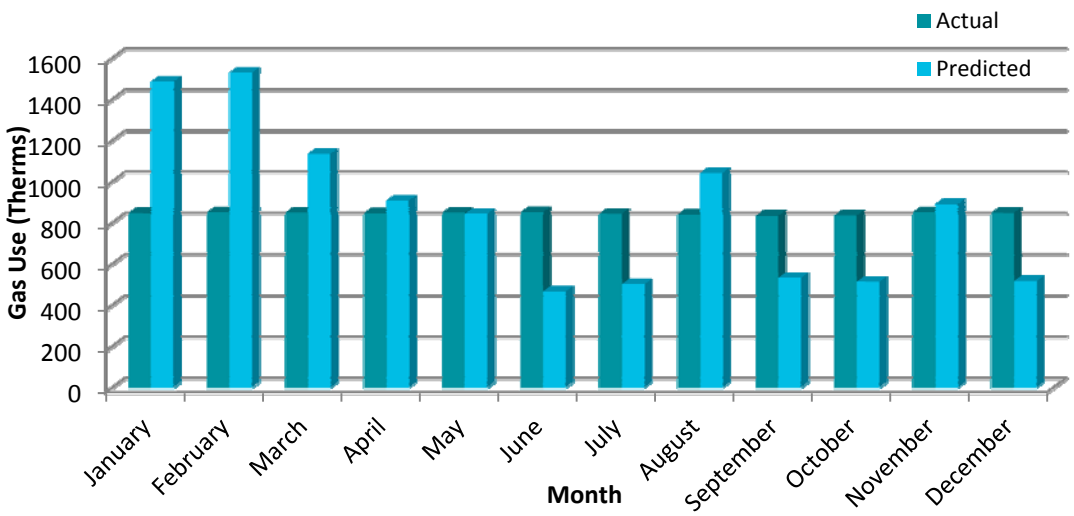
Public School #1

Public School #1 Electricity Usage

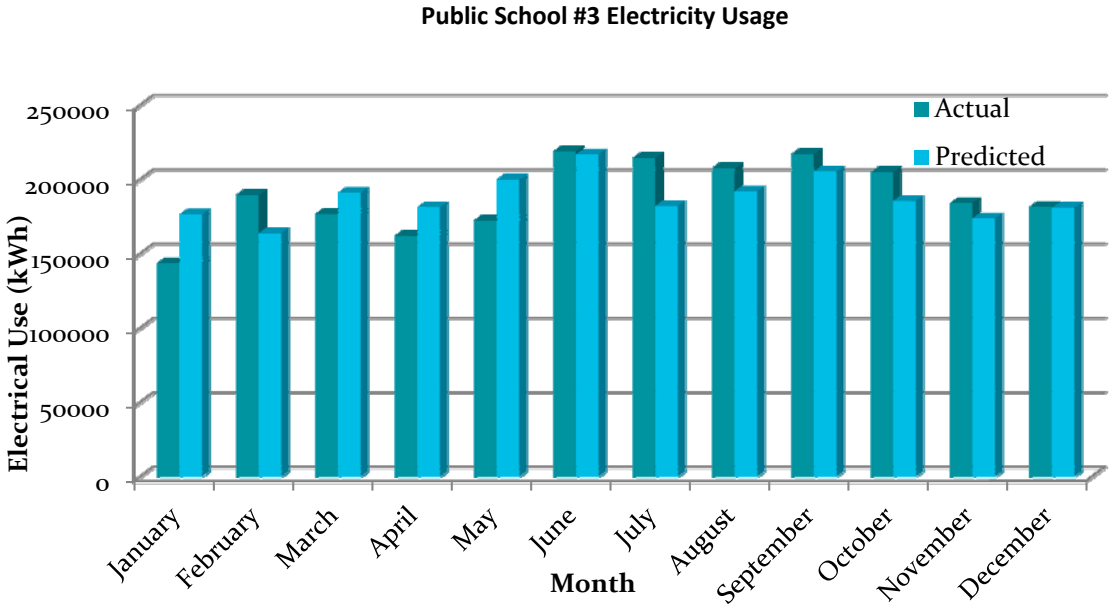


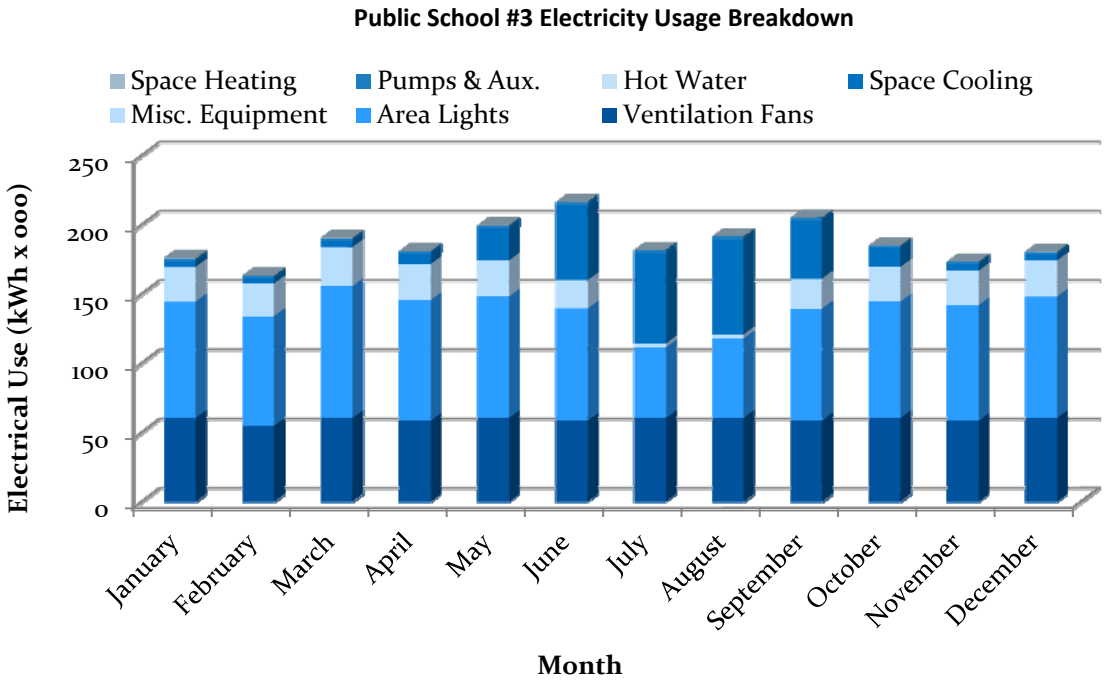
Public School #1 Electricity Usage Breakdown

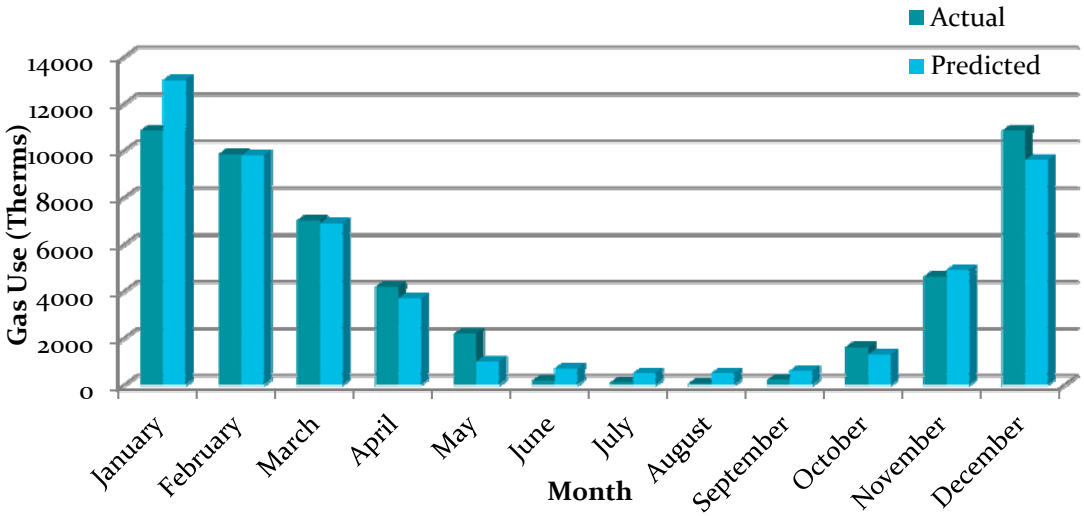




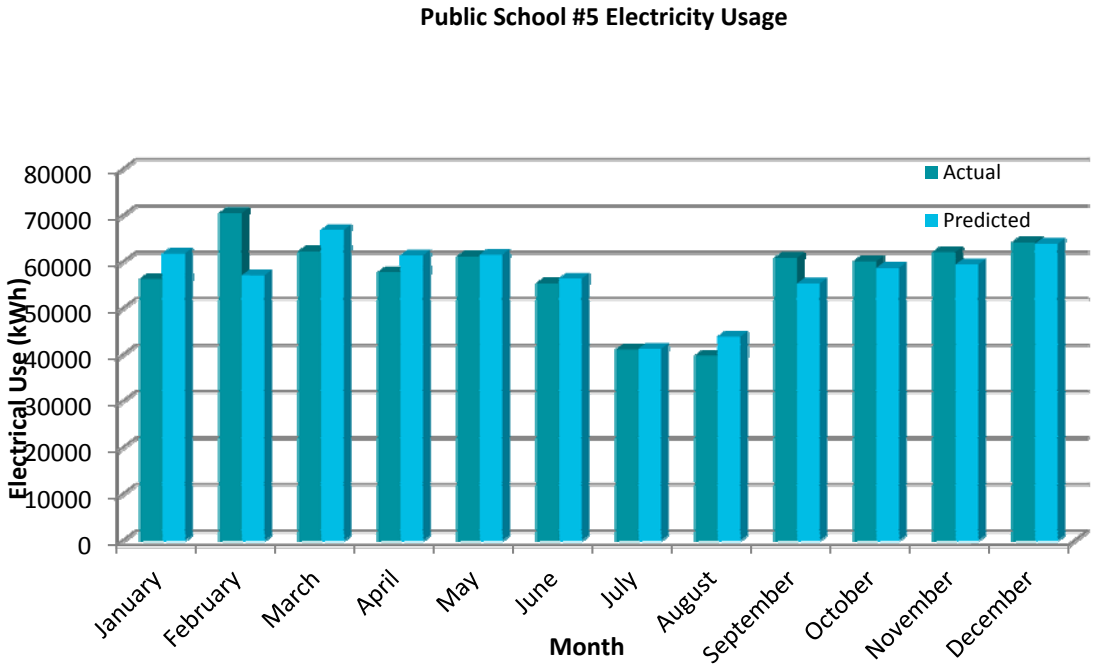
Public School #3

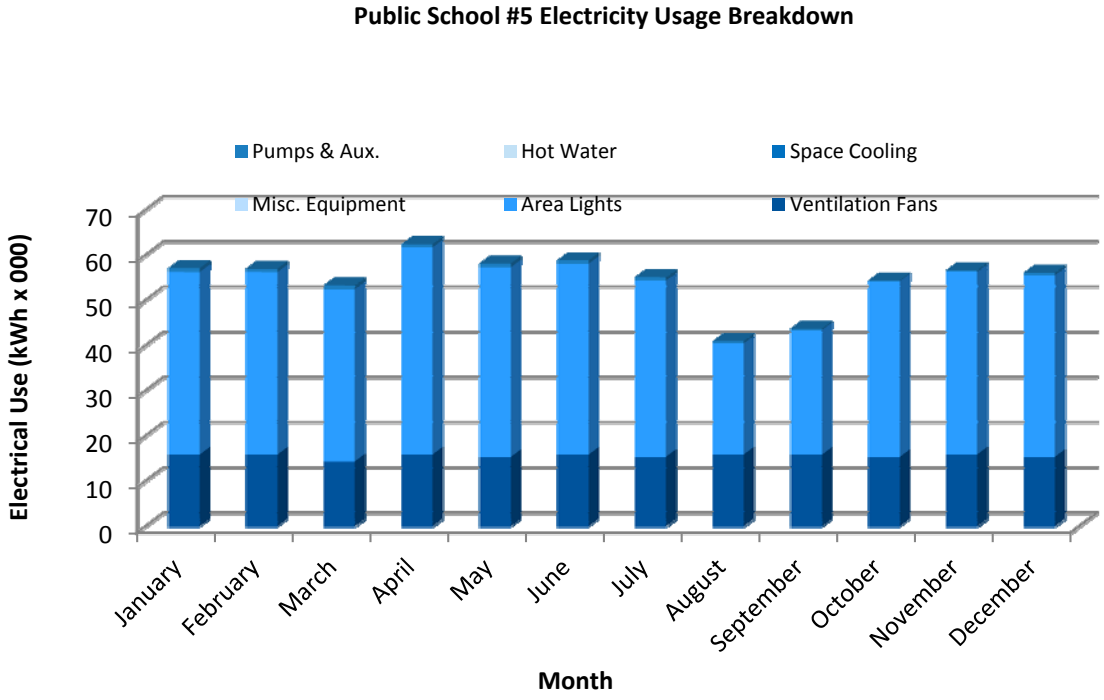



Public School #3 Electricity Usage Breakdown
Space Heating
Pumps & Aux.
Hot Water
Space Cooling
Misc. Equipment
Area Lights
Ventilation Fans
Electrical Use (kWh x 000)
250
200
150
100
50
0
January
February
March
April
May
June
July
August
September
October
November
December
Month

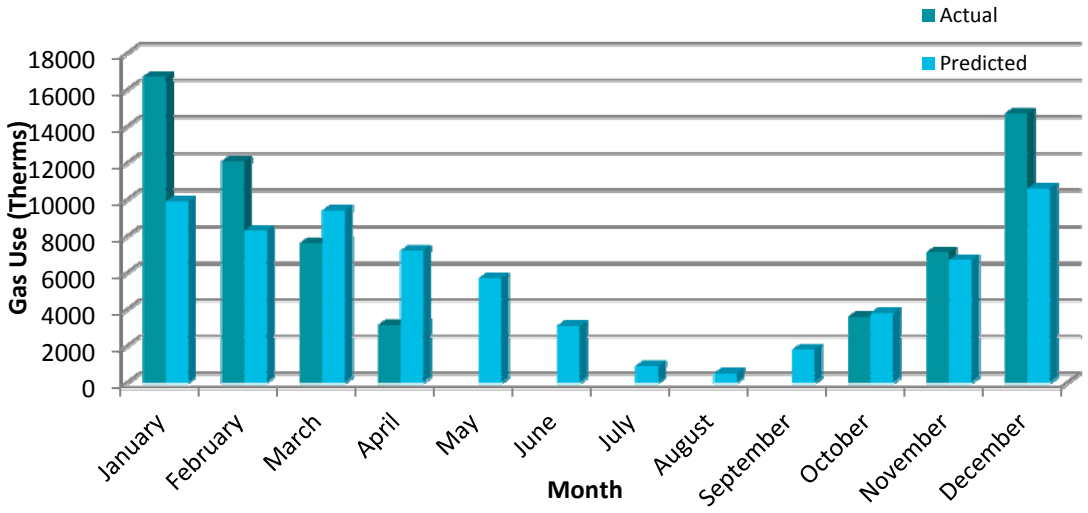

Public School #3 Natural Gas Usage
Actual
Predicted
Gas Use (Therms)
14000
12000
10000
8000
6000
4000
2000
0
January
February
March
April
May
June
July
August
September
October
November
December
Month

Public School #5



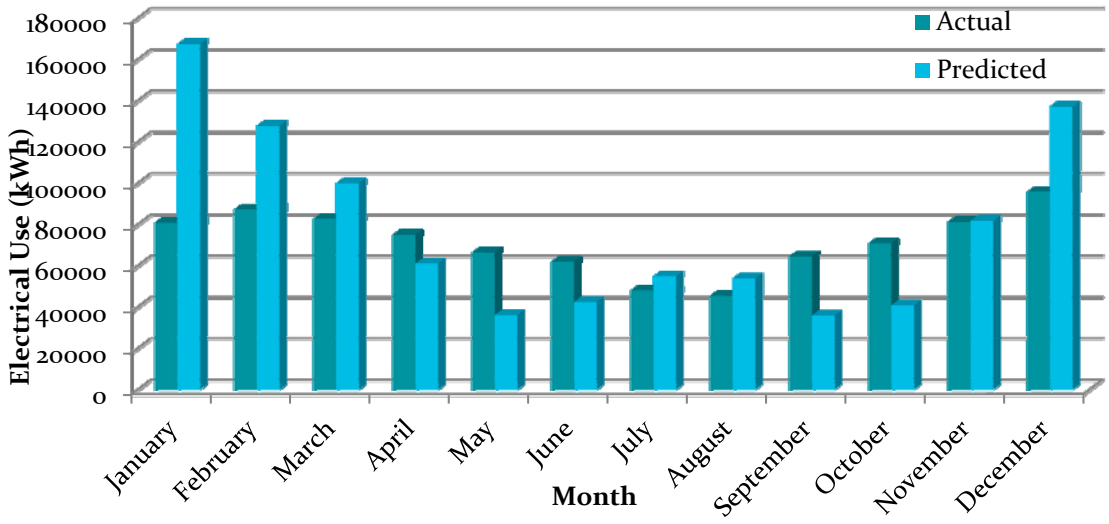


Public School #5 Natural Gas Usage

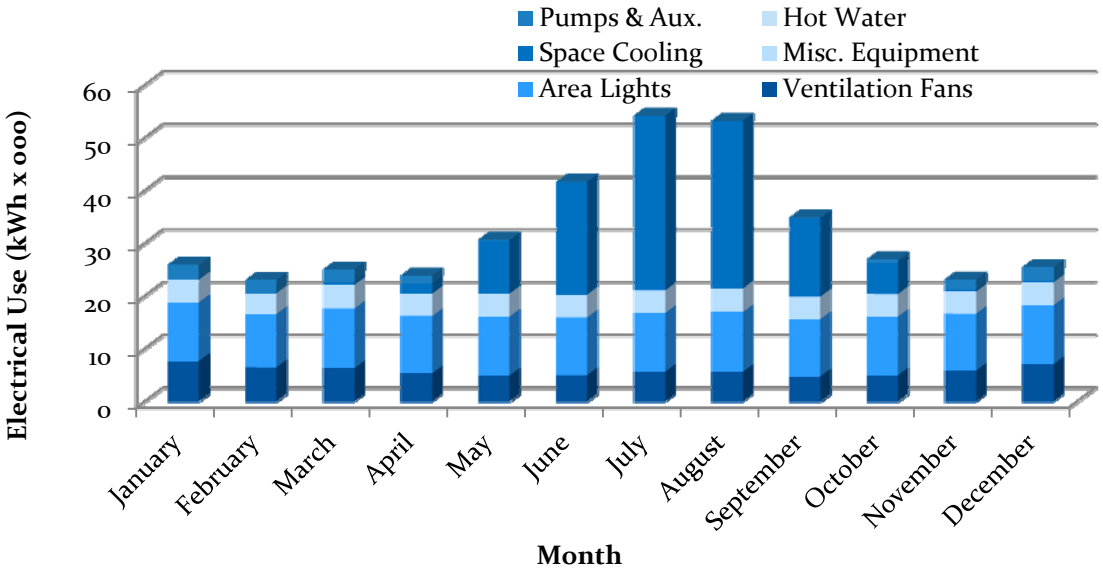


Public School #6

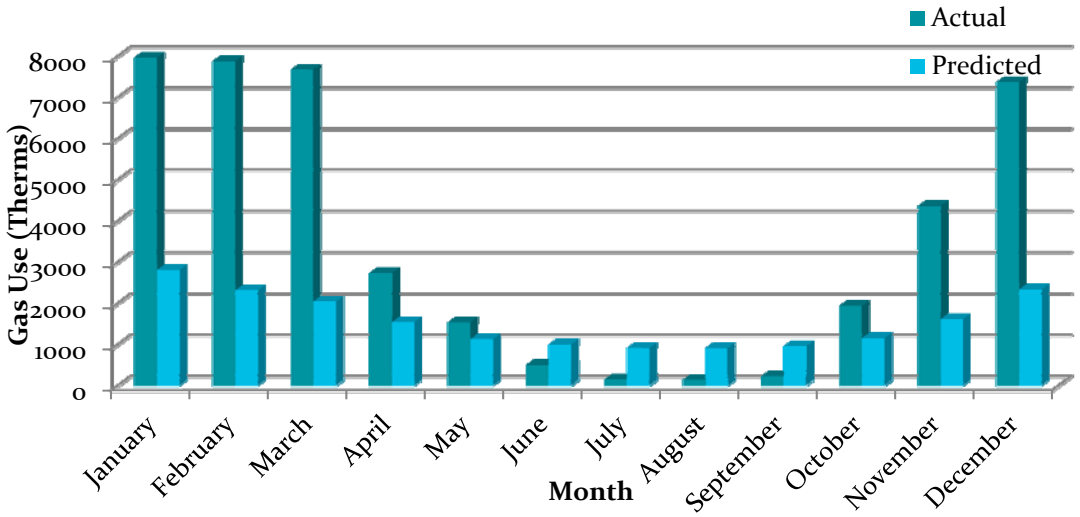
Public School #6 Electricity Usage



Public School #6 Electricity Usage Breakdown

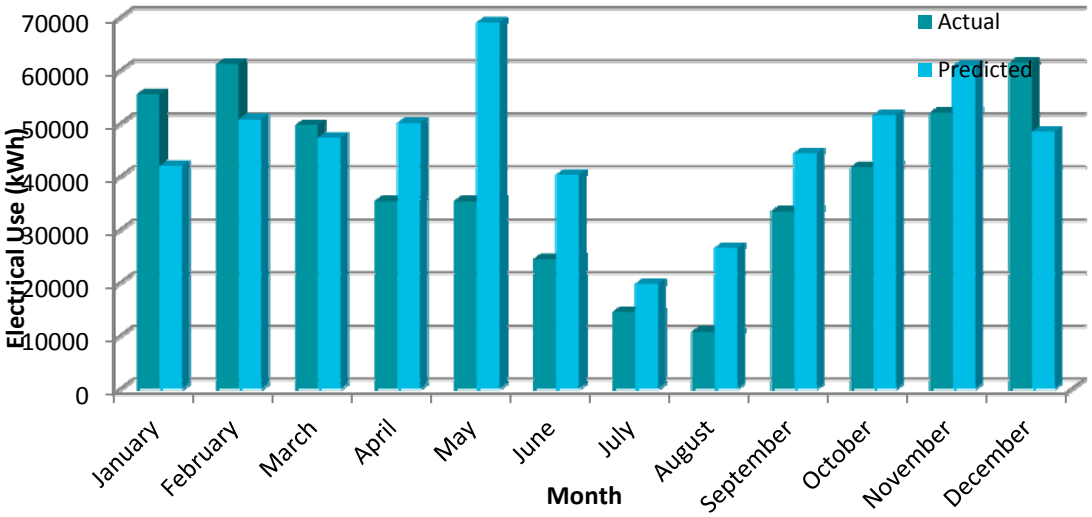


Public School #6 Natural Gas Usage

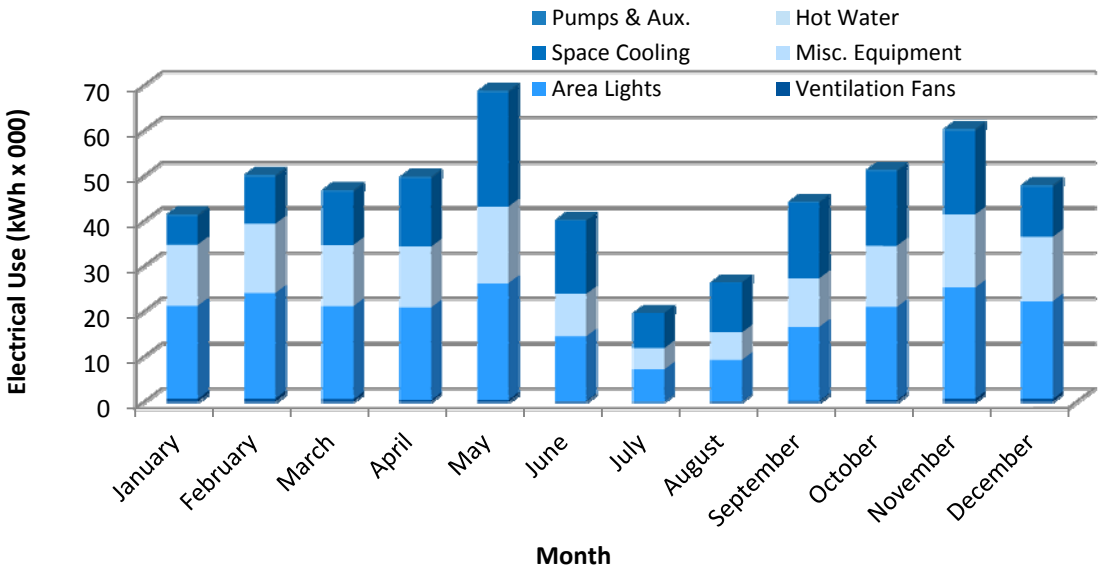


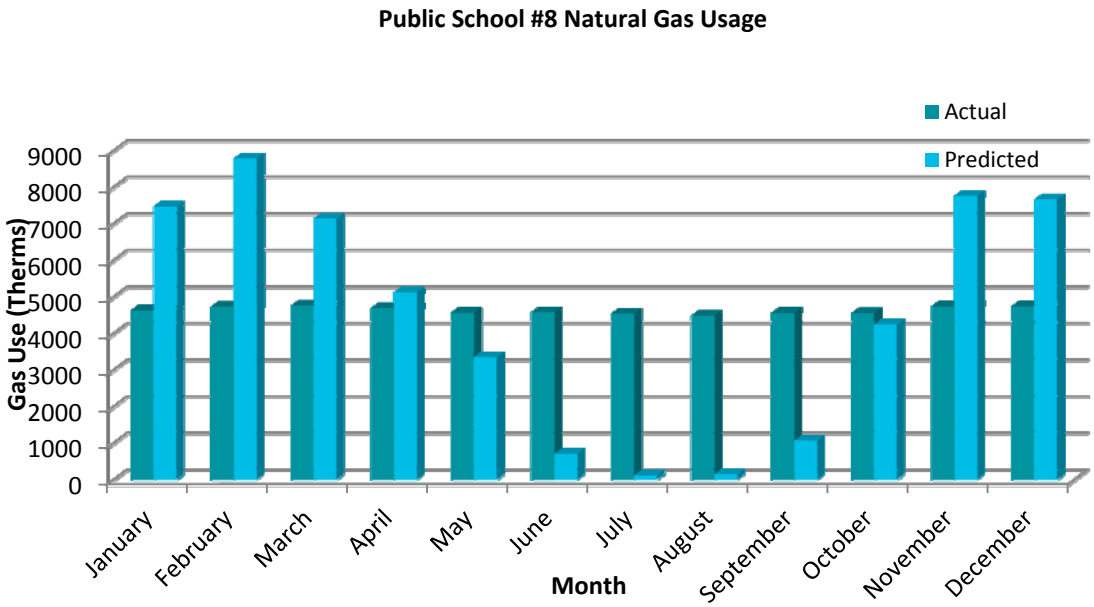
Public School #8

Public School #8 Electricity Usage

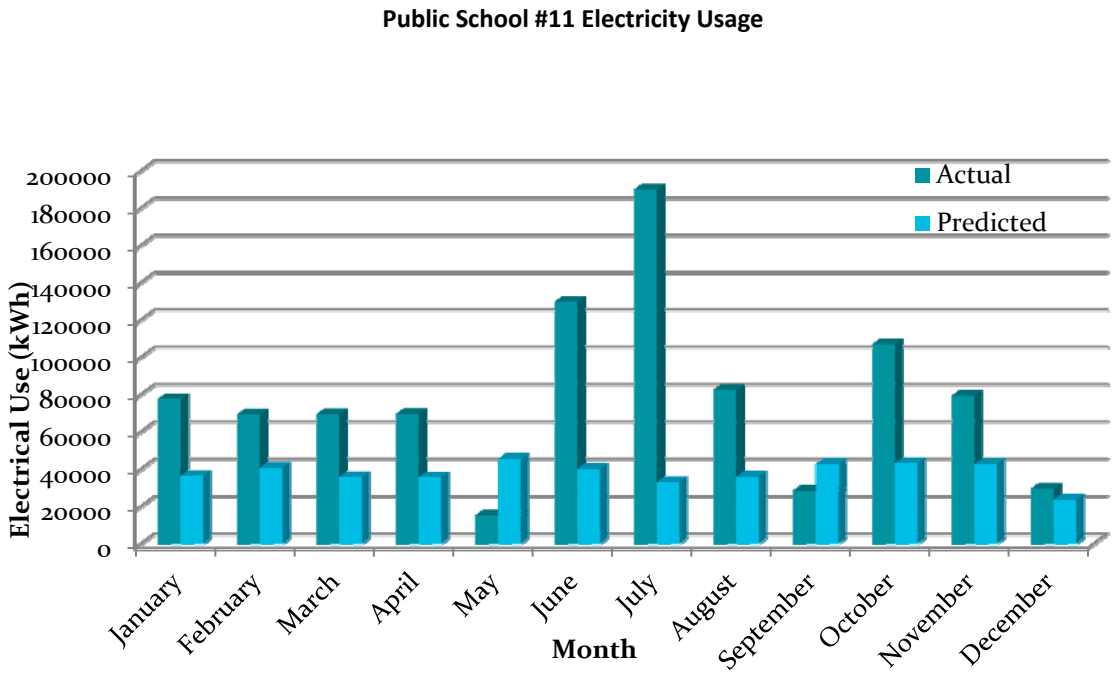


Public School #8 Electricity Usage Breakdown

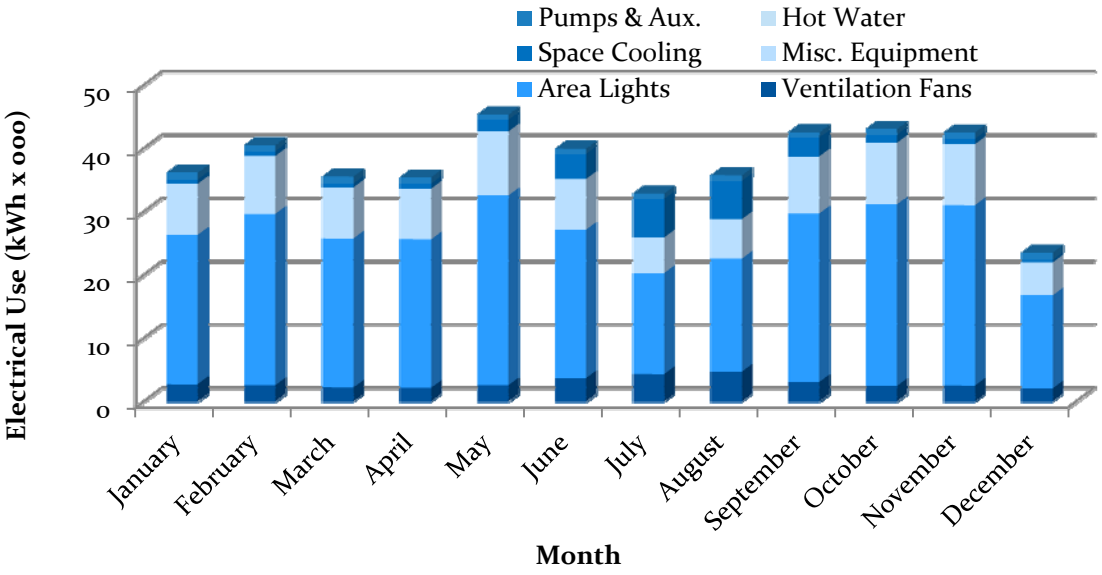




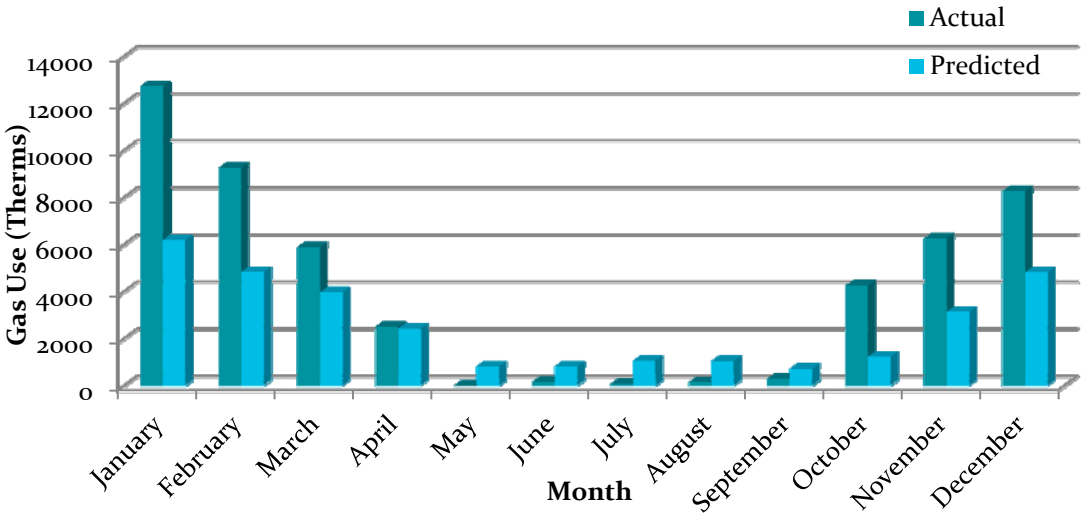
Public School #11



Public School #11 Electricity Usage Breakdown

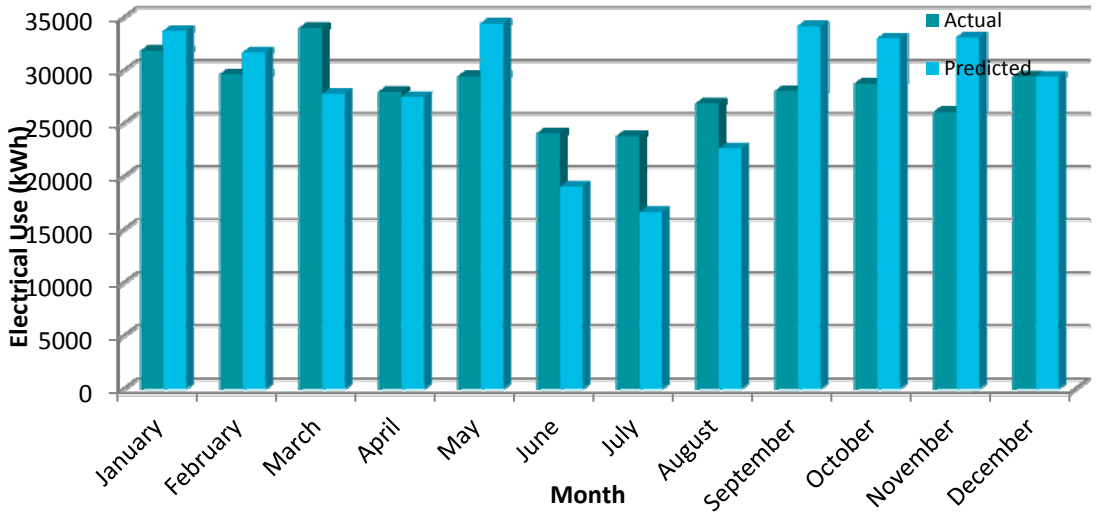


Public School #11 Natural Gas Usage

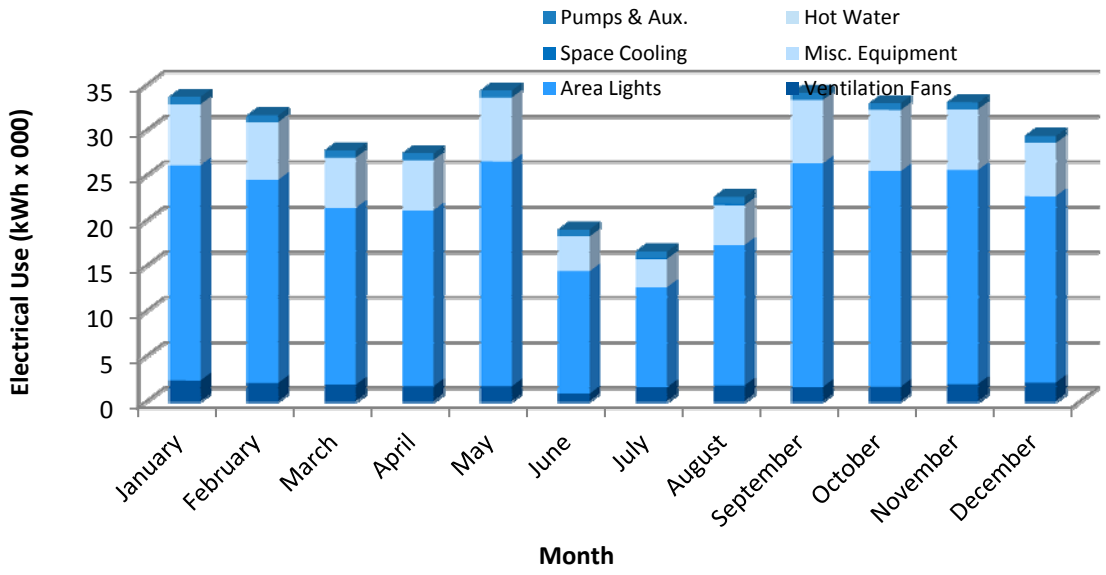


Public School #12

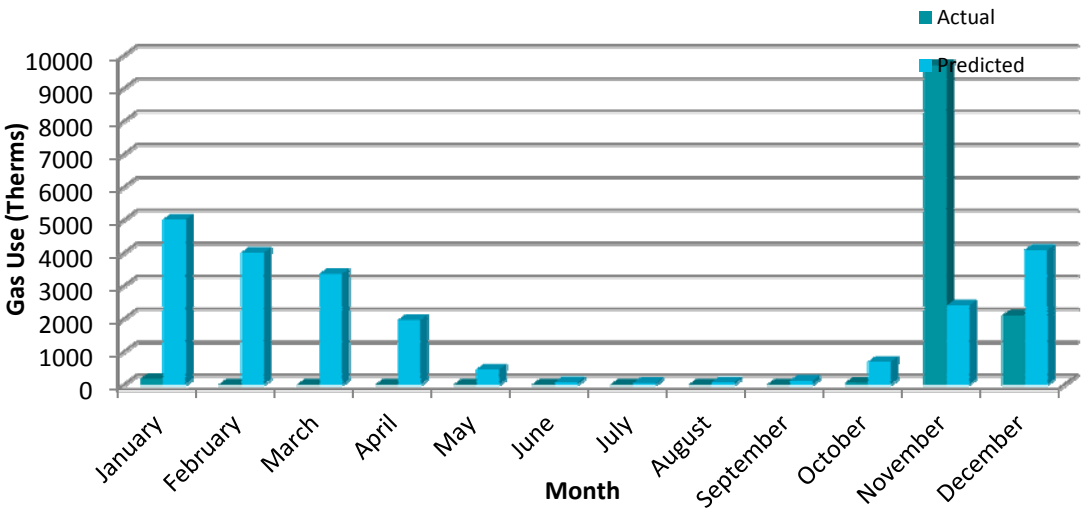
Public School #12 Electricity Usage



Public School #12 Electricity Usage Breakdown

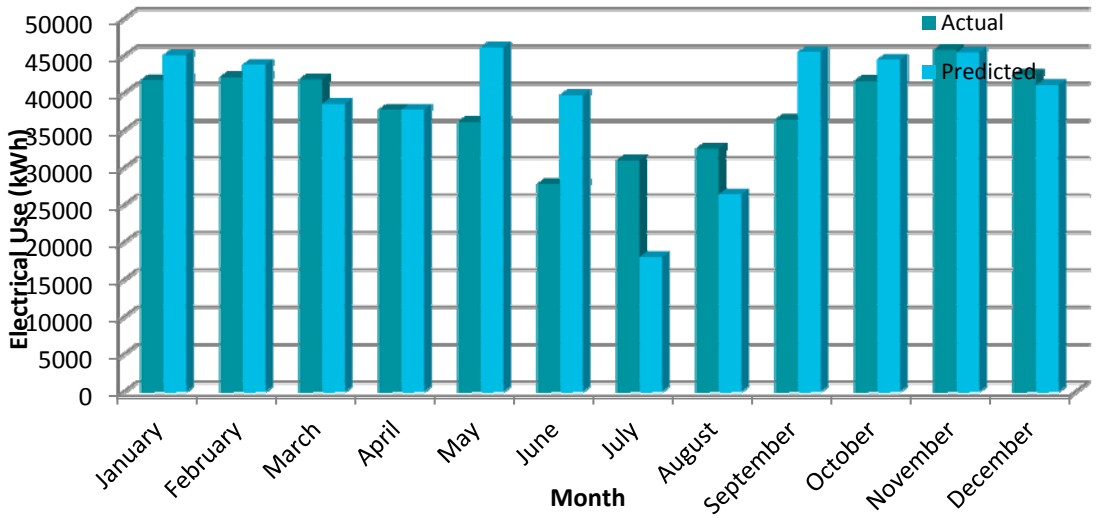


Public School #12 Natural Gas Usage

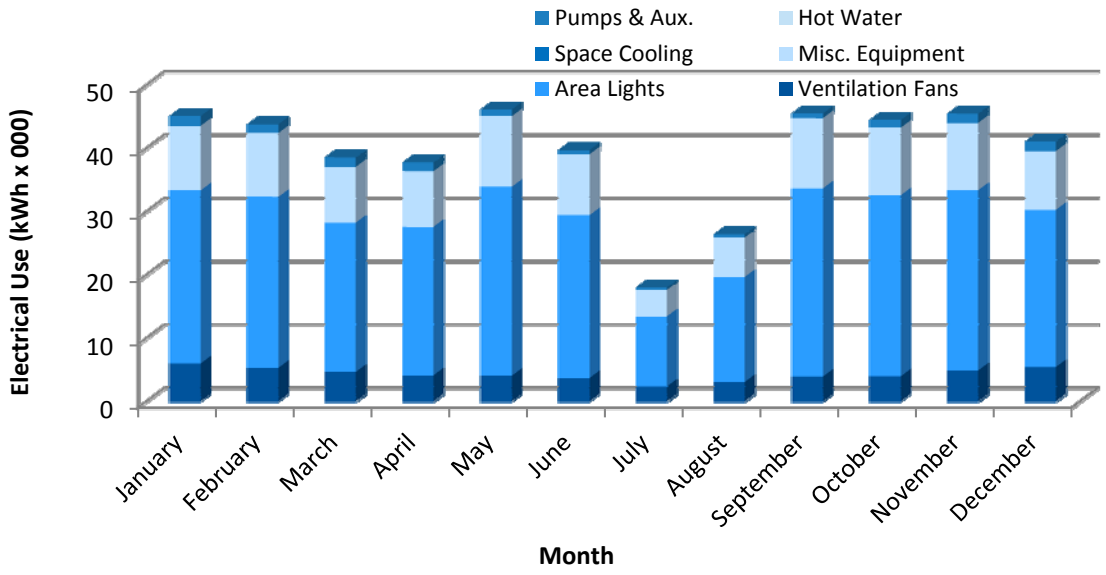


Public School #14

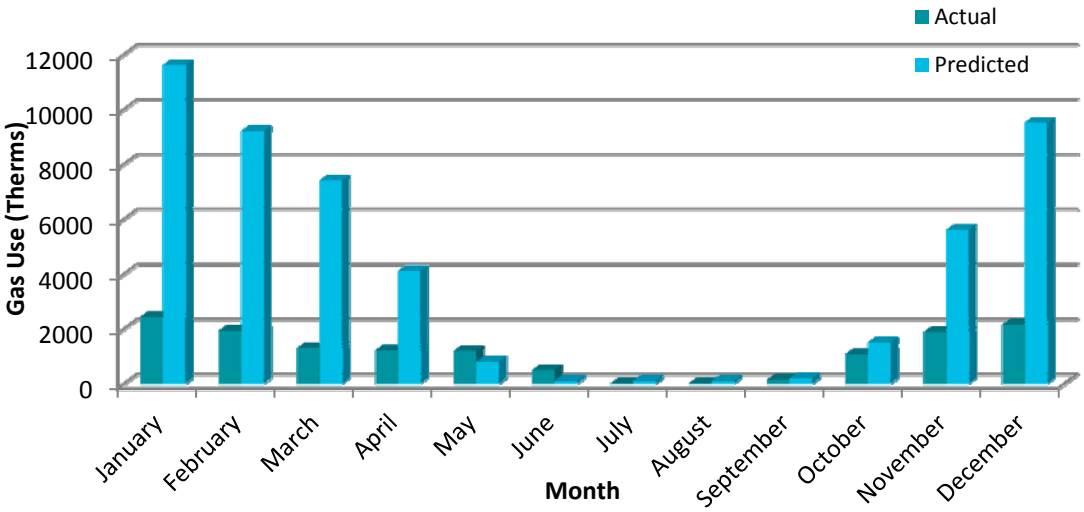
Public School #14 Electricity Usage



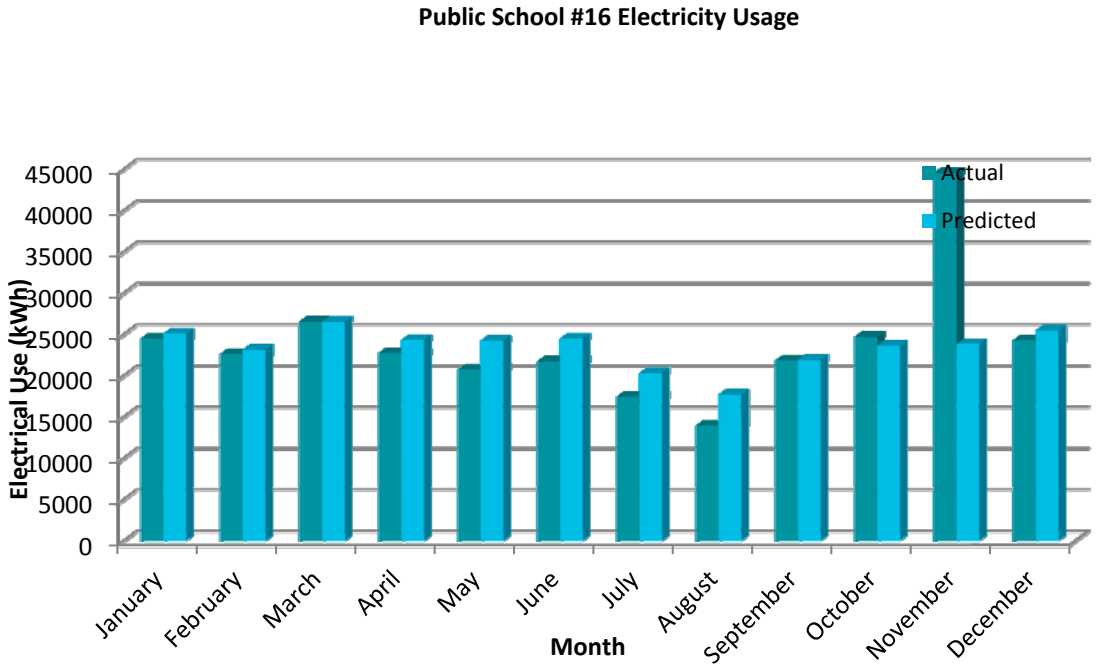
Public School #14 Electricity Usage Breakdown

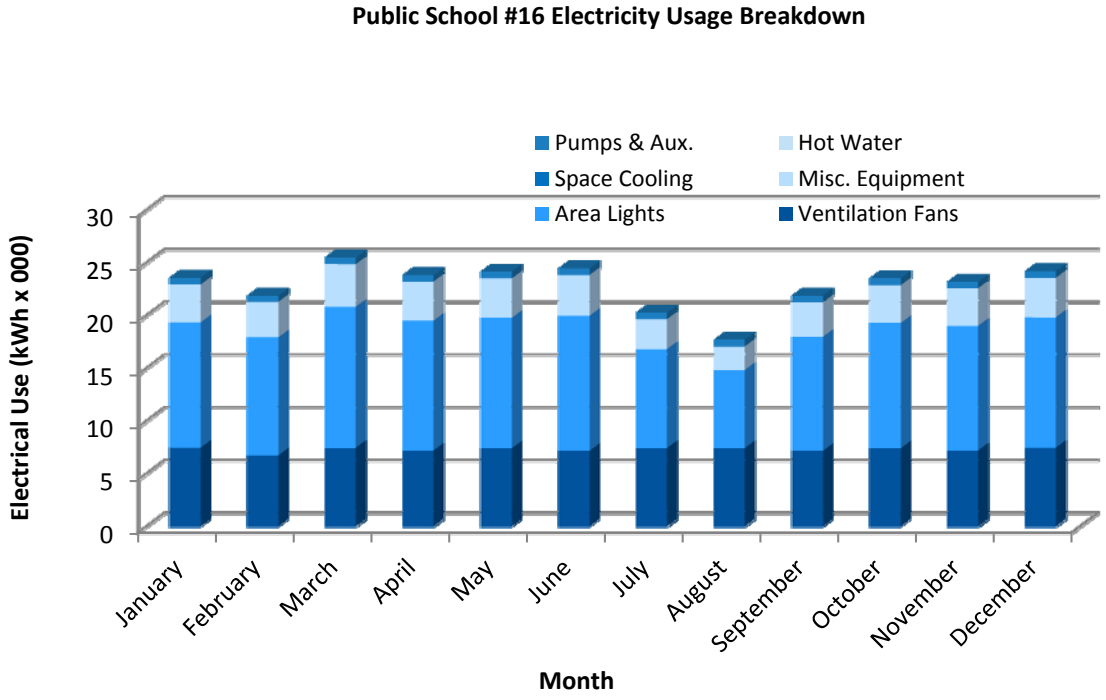


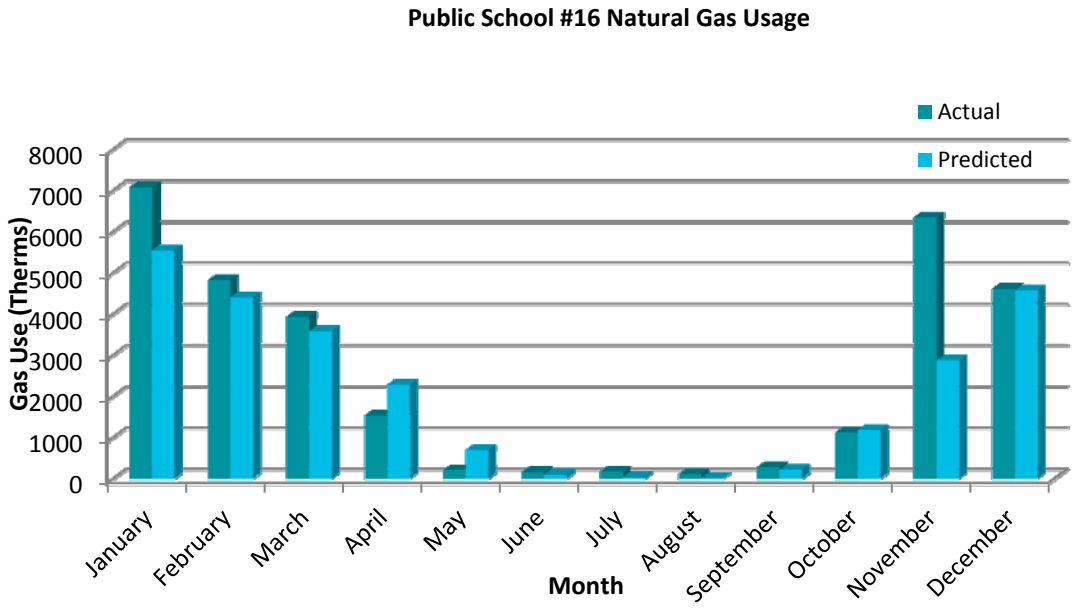
Public School #14 Natural Gas Usage



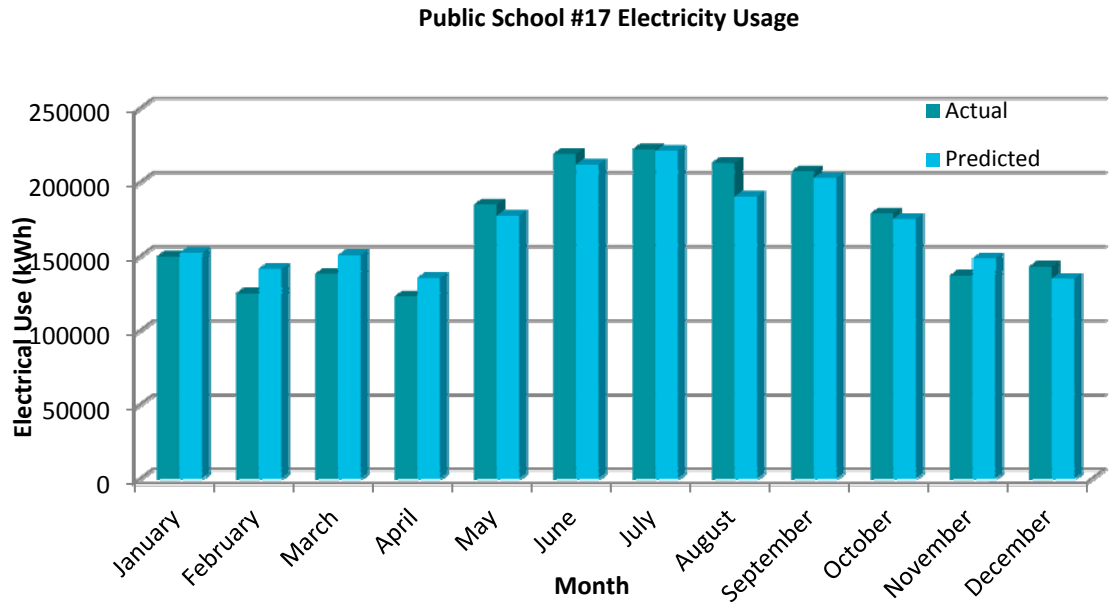
Public School #16



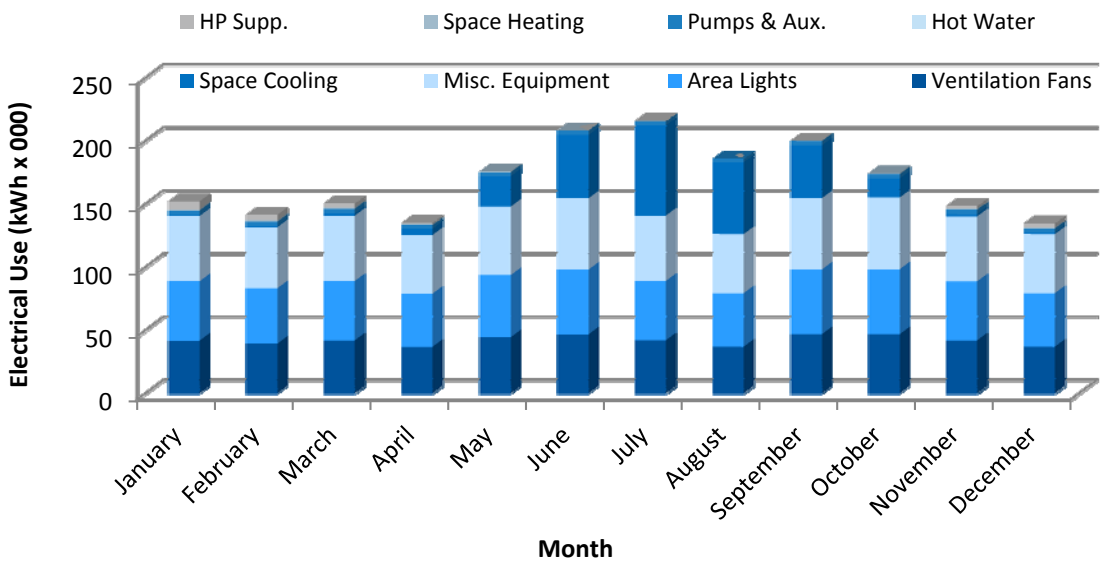




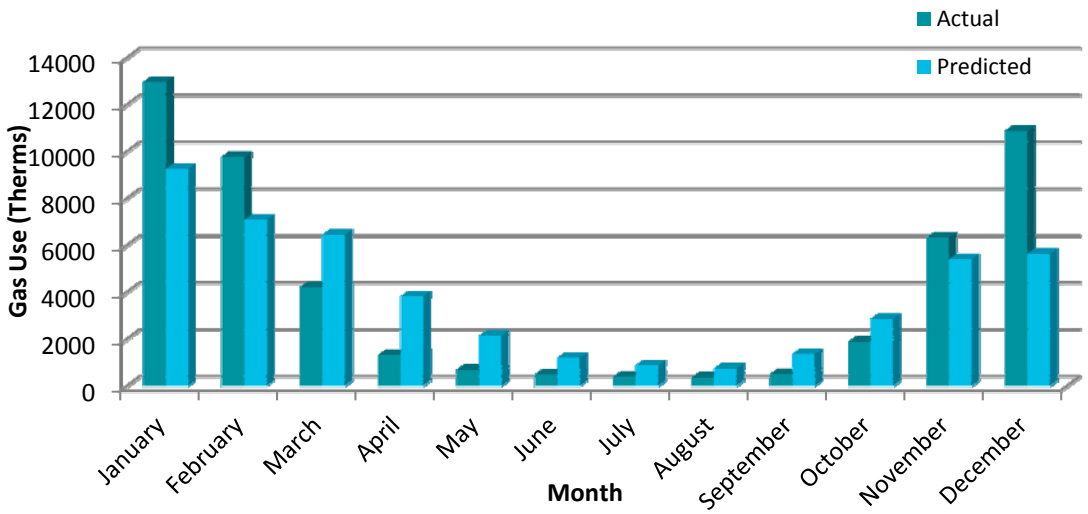
Public School #17



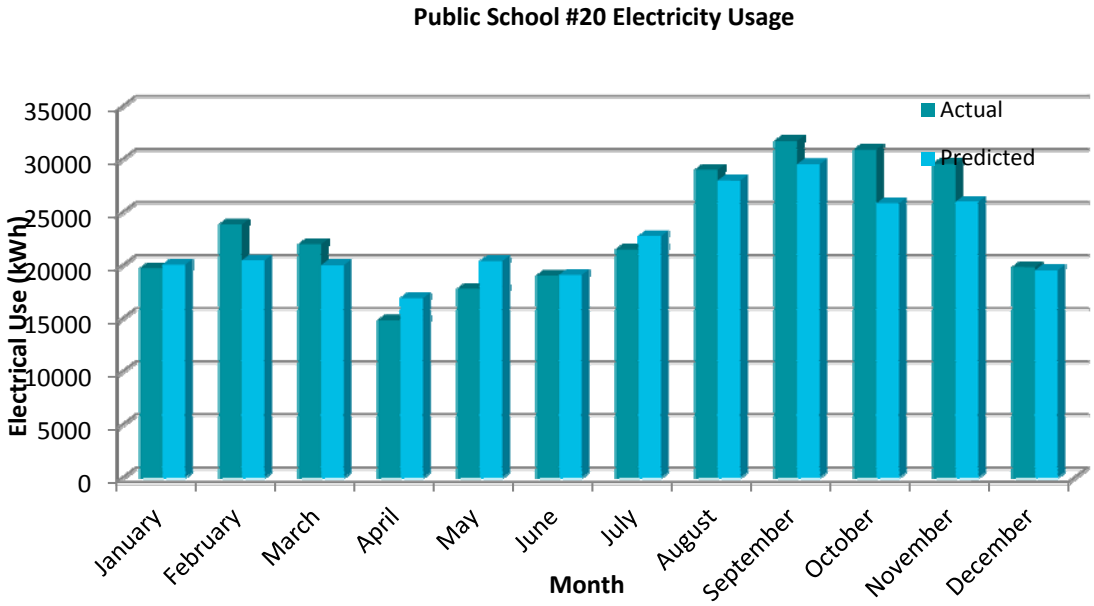
Public School #17 Electricity Usage Breakdown

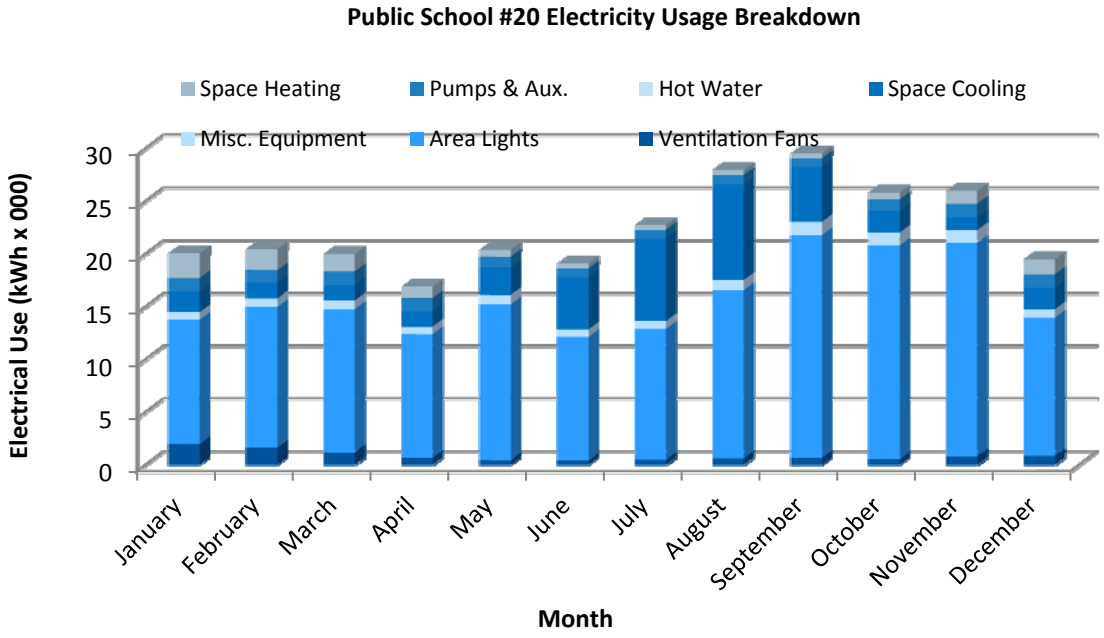


Public School #17 Natural Gas Usage

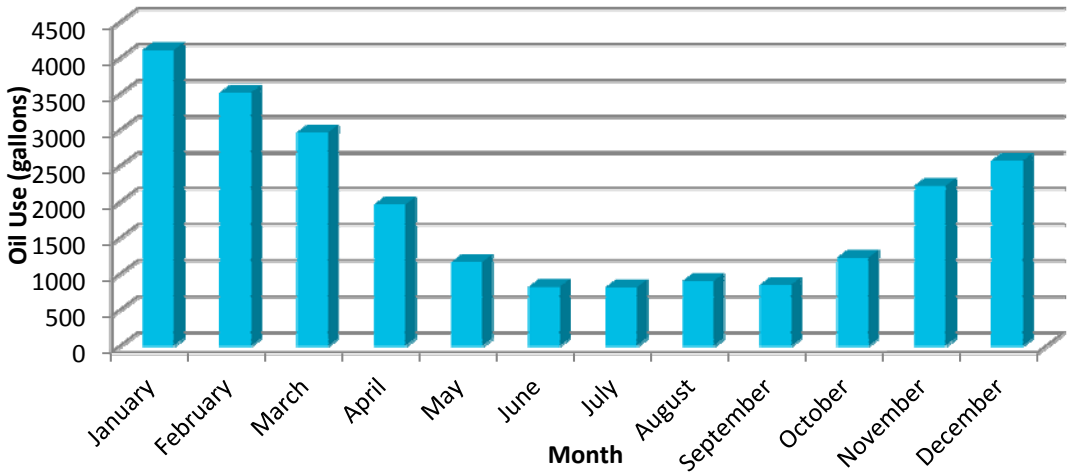


Public School #20



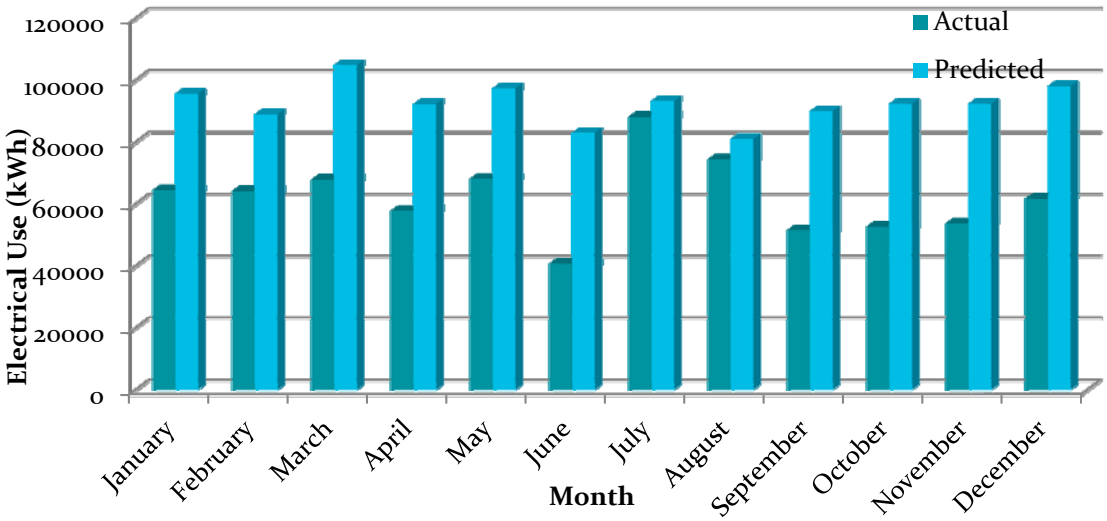


Public School #20 Oil Usage

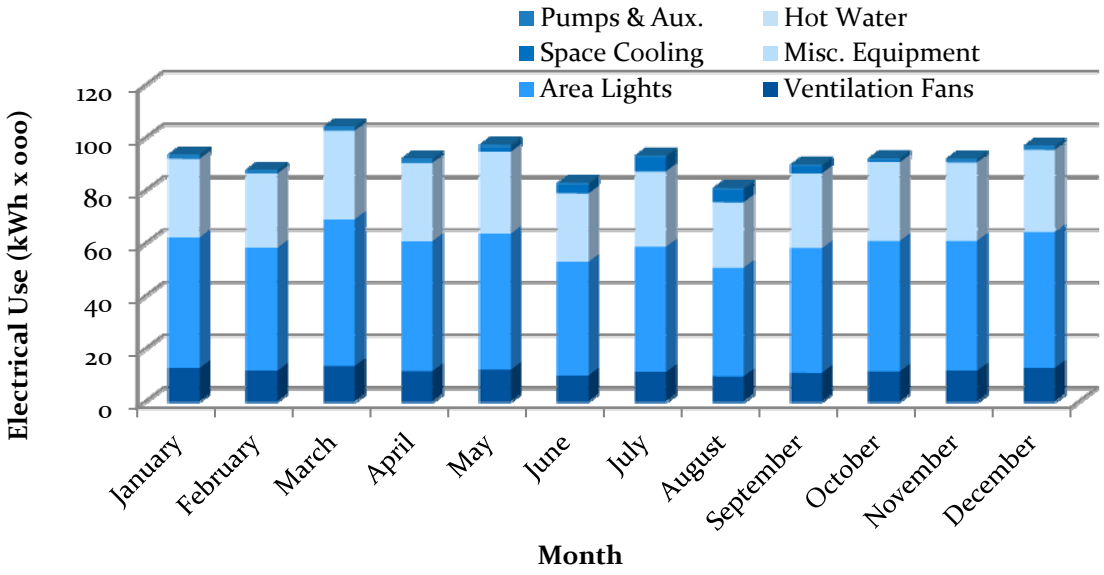


Public School #23

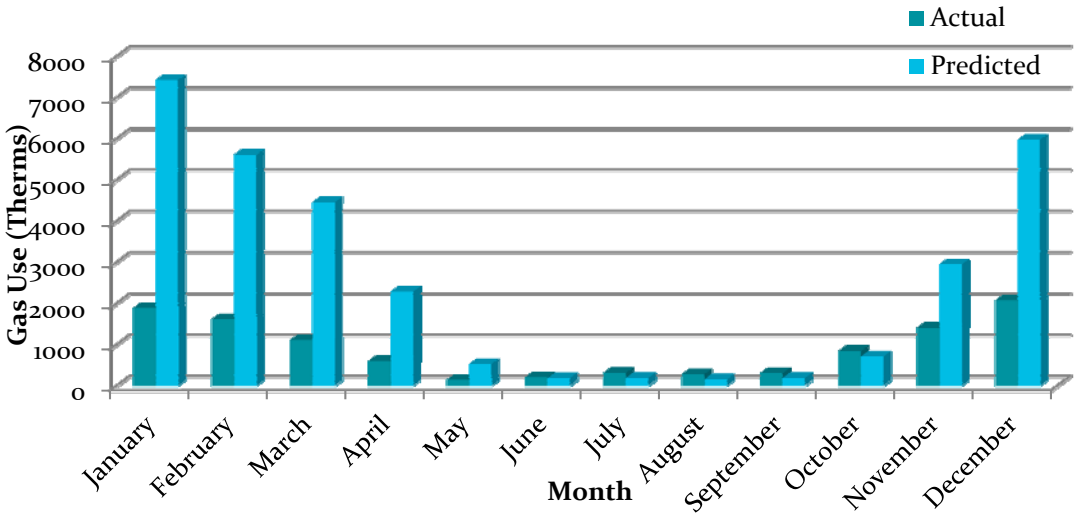
Public School #23 Electricity Usage



Public School #23 Electricity Usage Breakdown

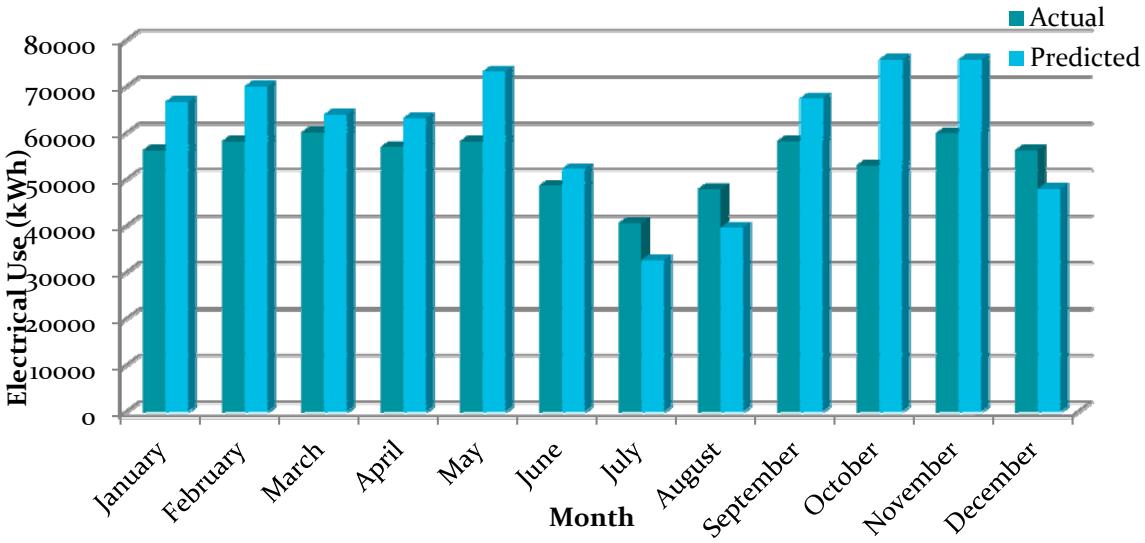


Public School #23 Natural Gas Usage

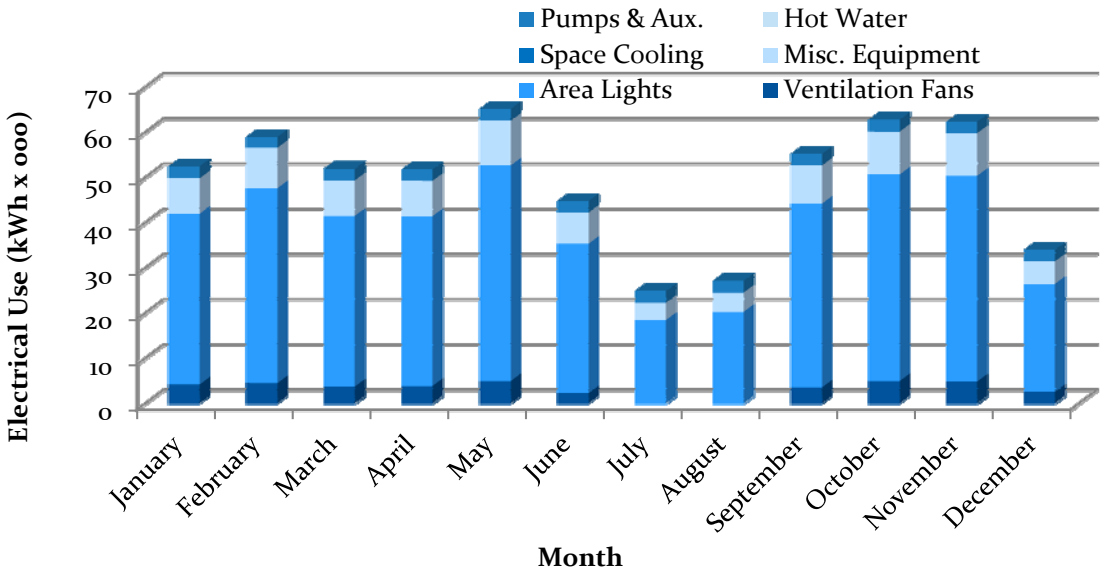


Public School #24

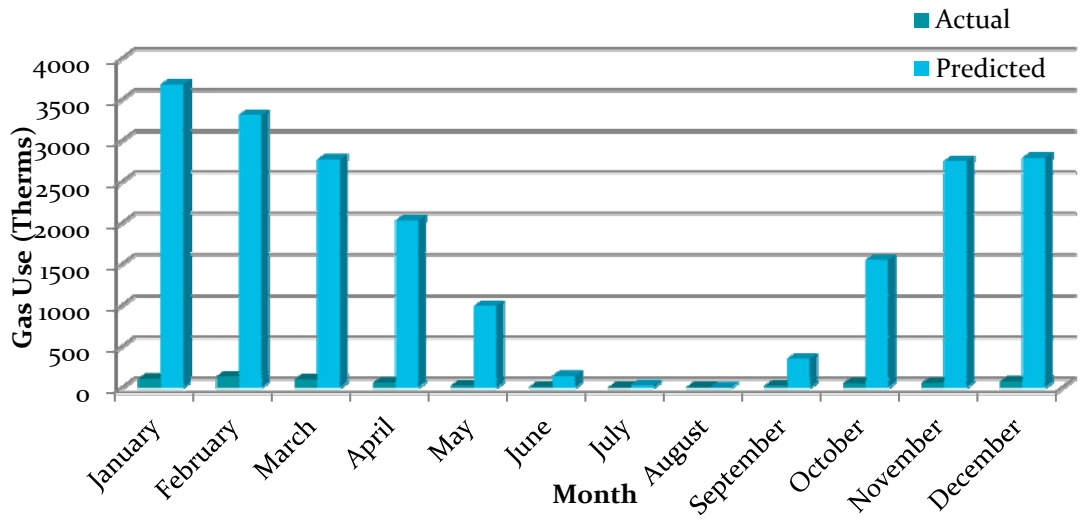
Public School #24 Electricity Usage



Public School #24 Electricity Usage Breakdown

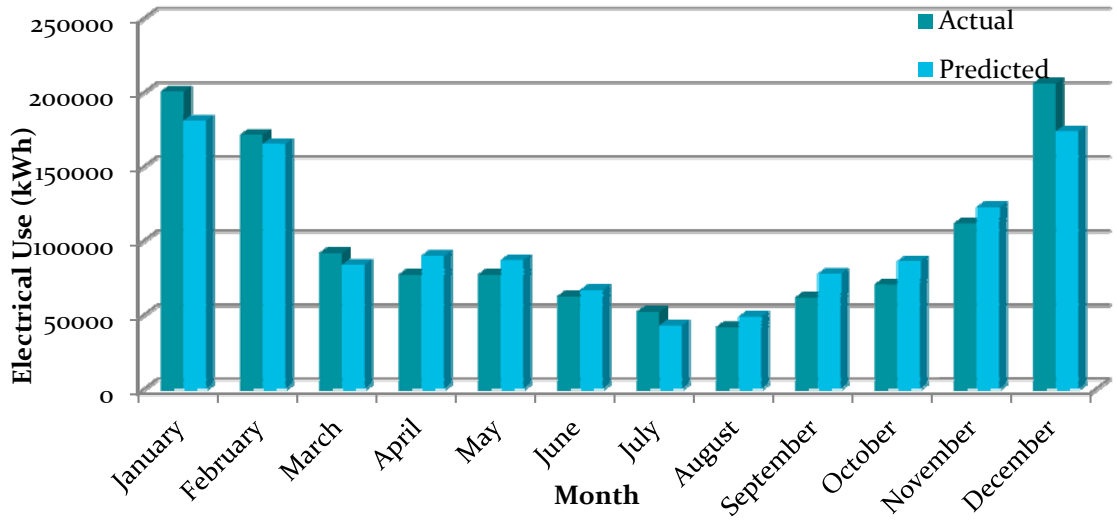


Public School #24 Natural Gas Usage

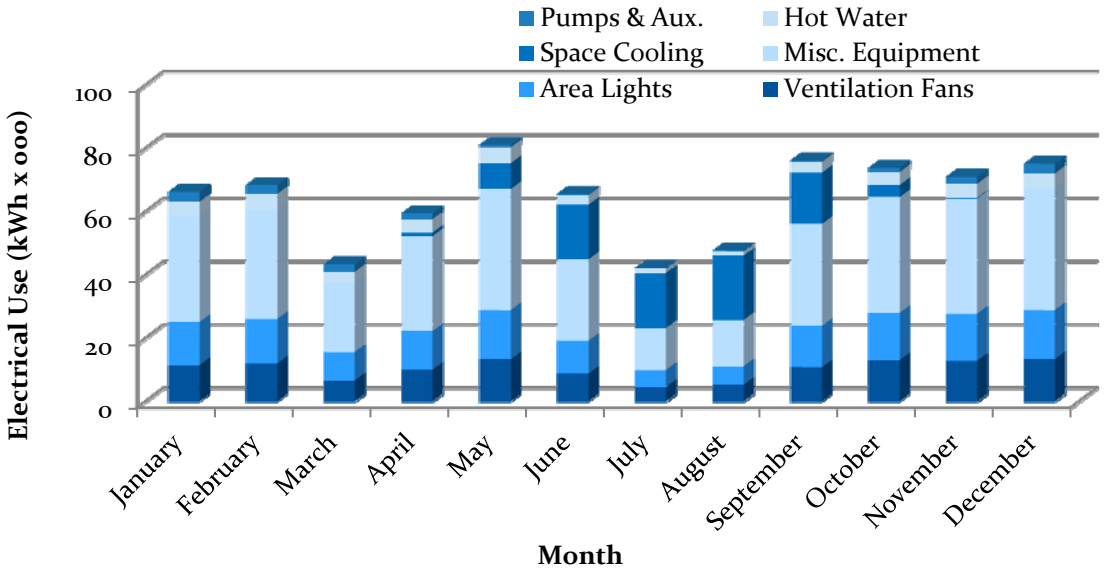


Public School #25

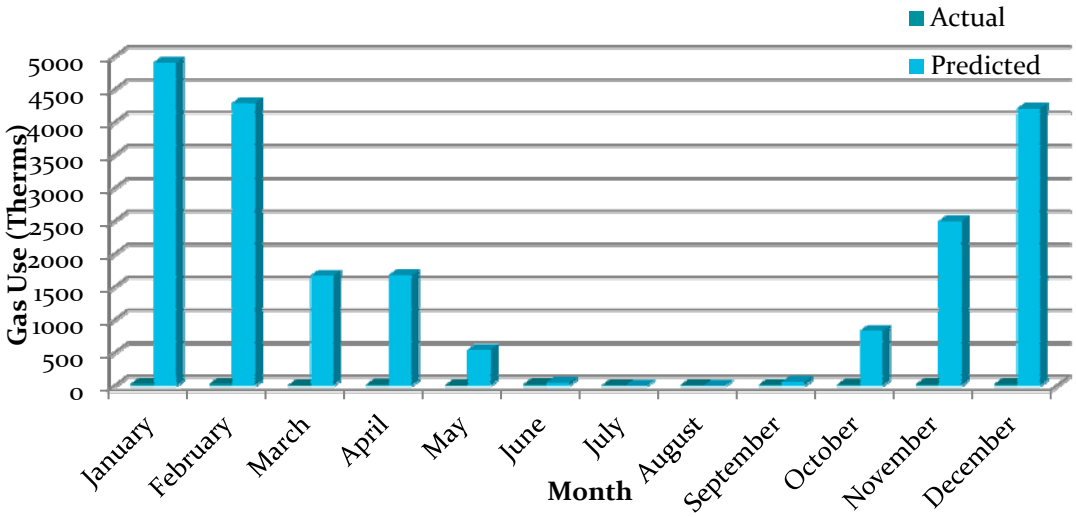
Public School #25 Electricity Usage



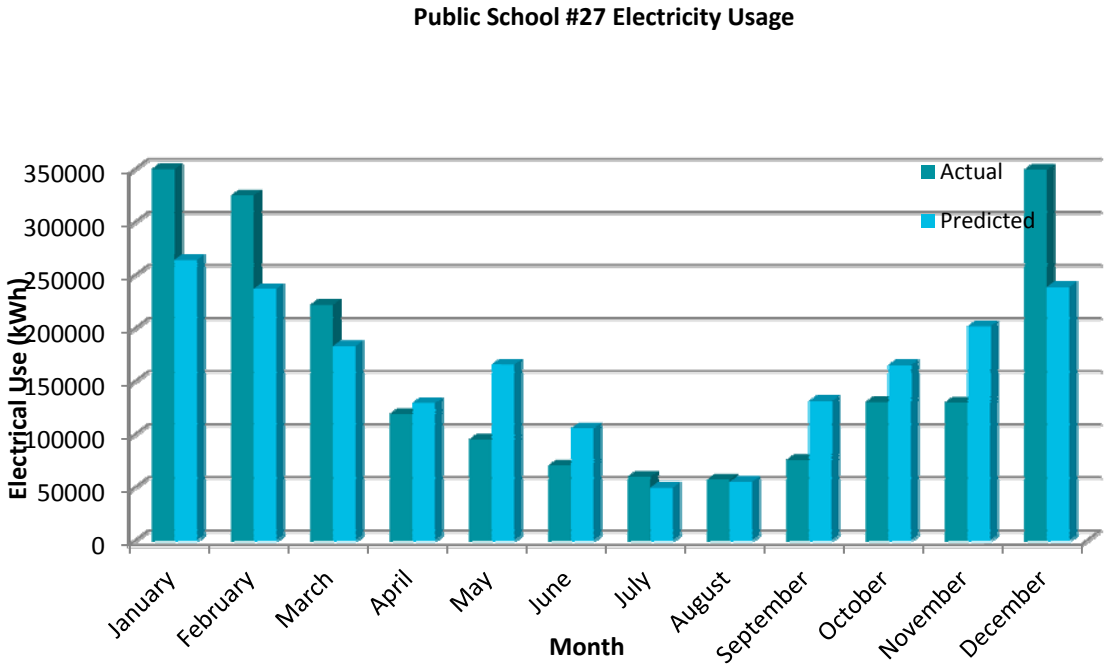
Public School #25 Electricity Usage Breakdown

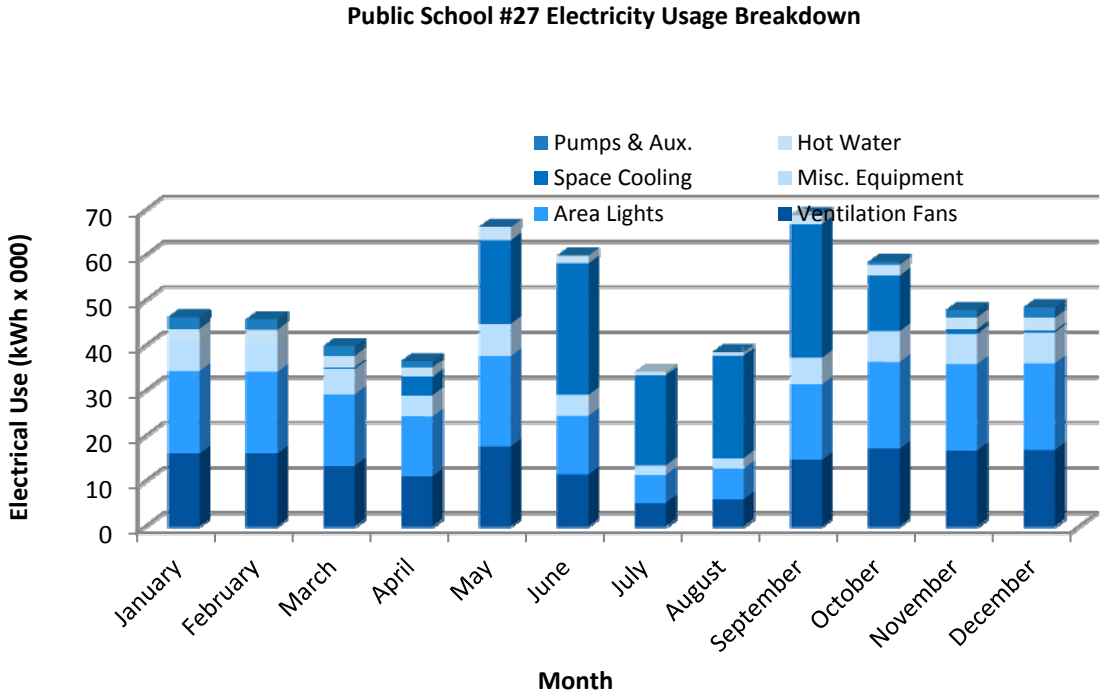


Public School #25 Natural Gas Usage



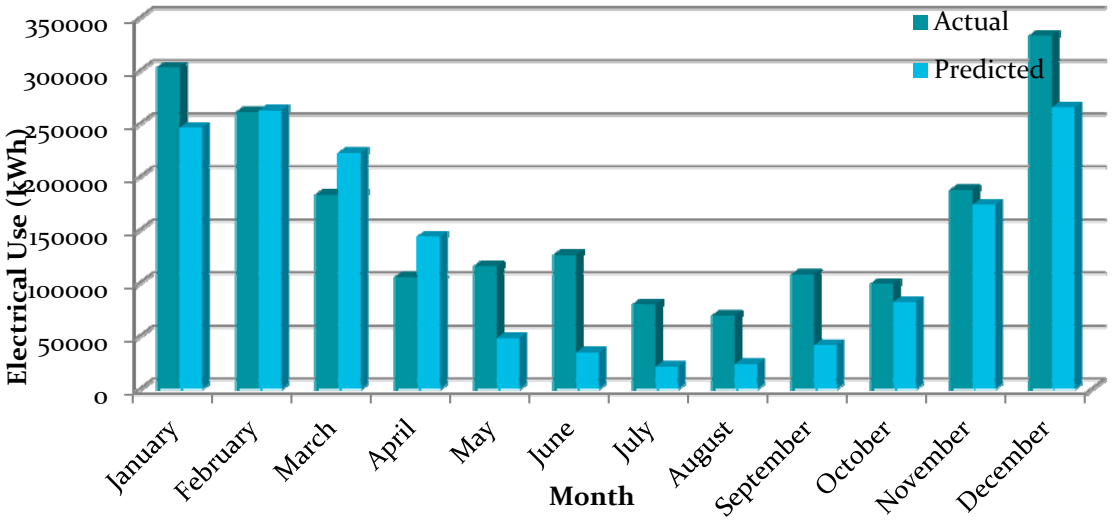
Public School #27



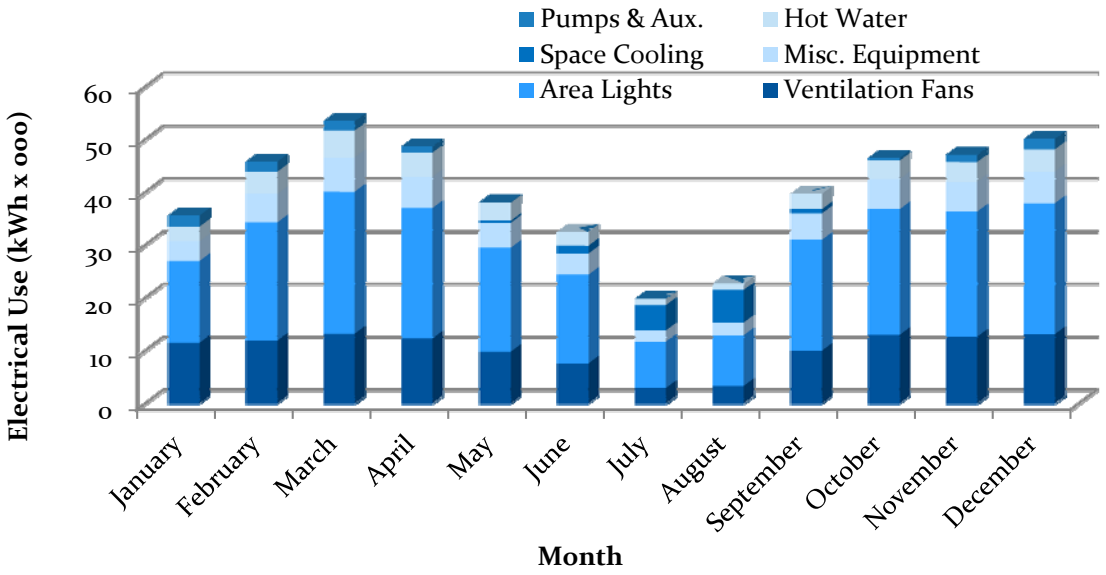


Public School #28

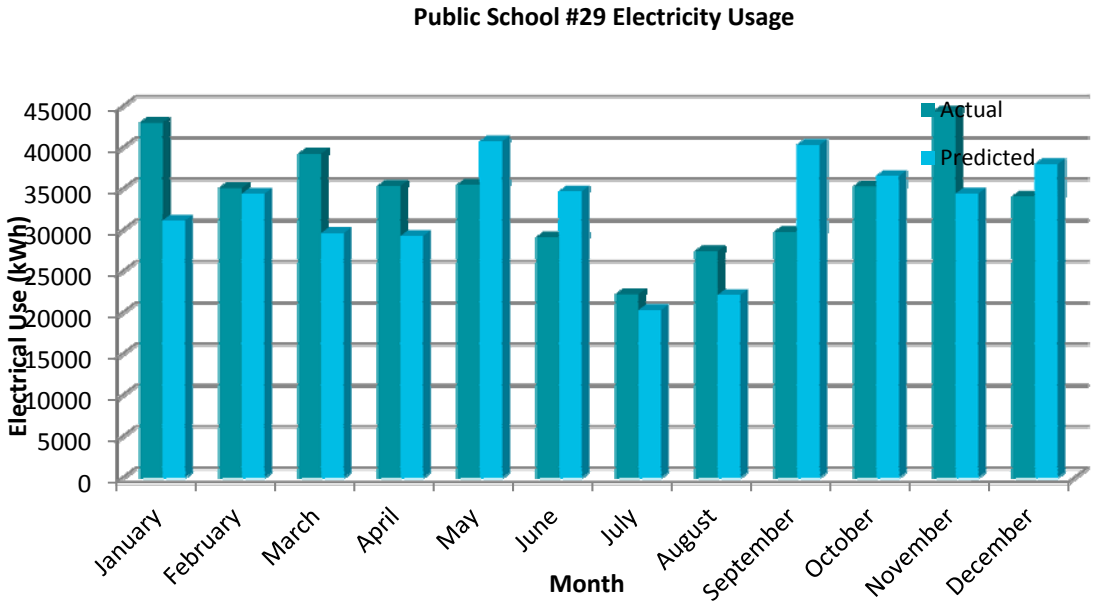
Public School #28 Electricity Usage

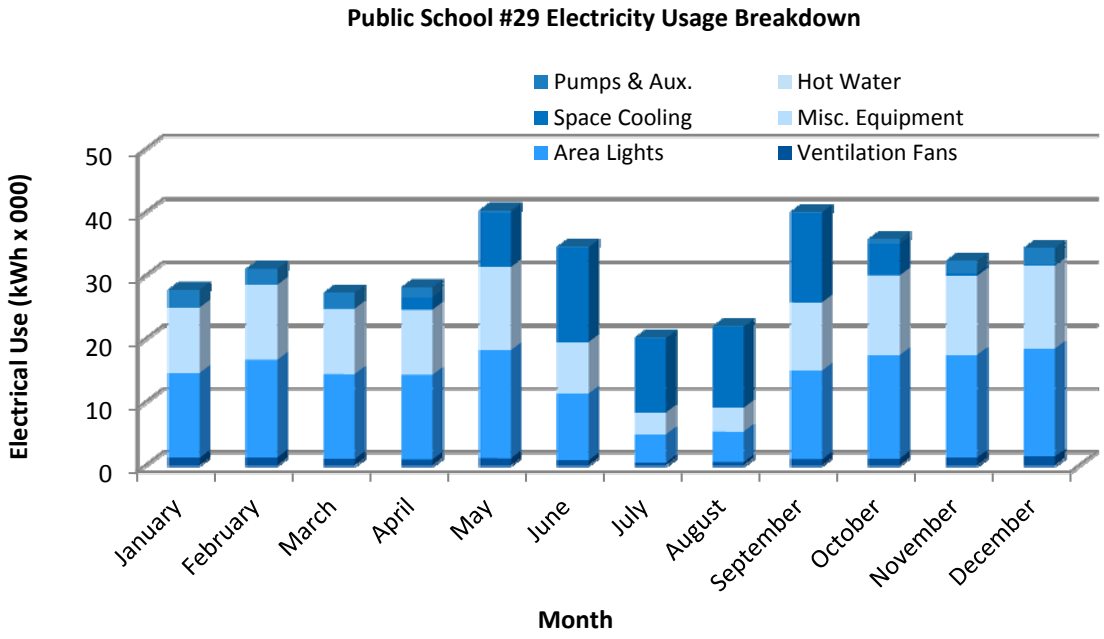


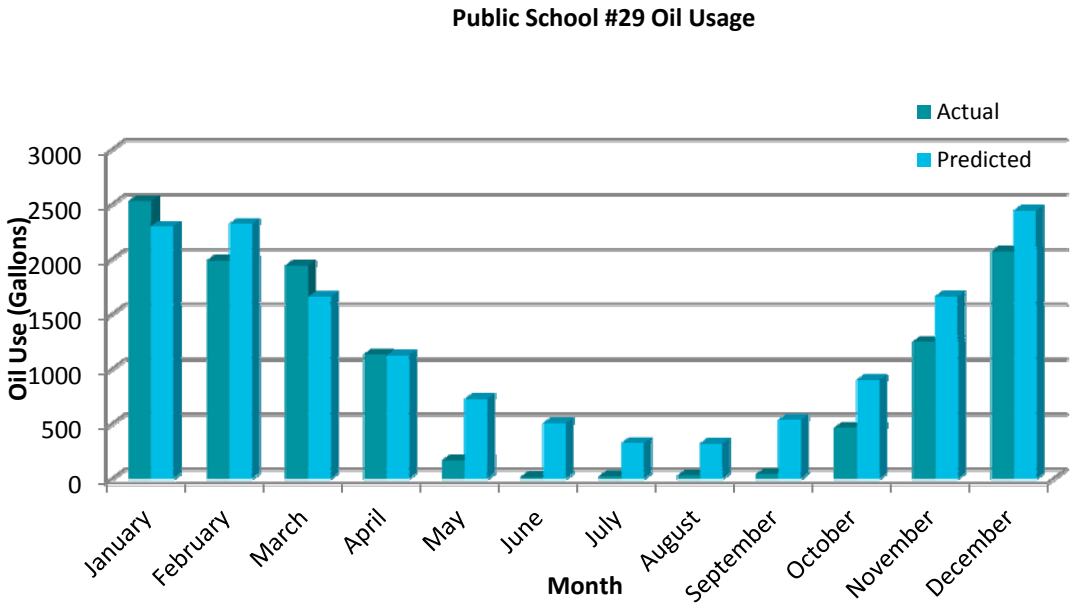
Public School #28 Electricity Usage Breakdown



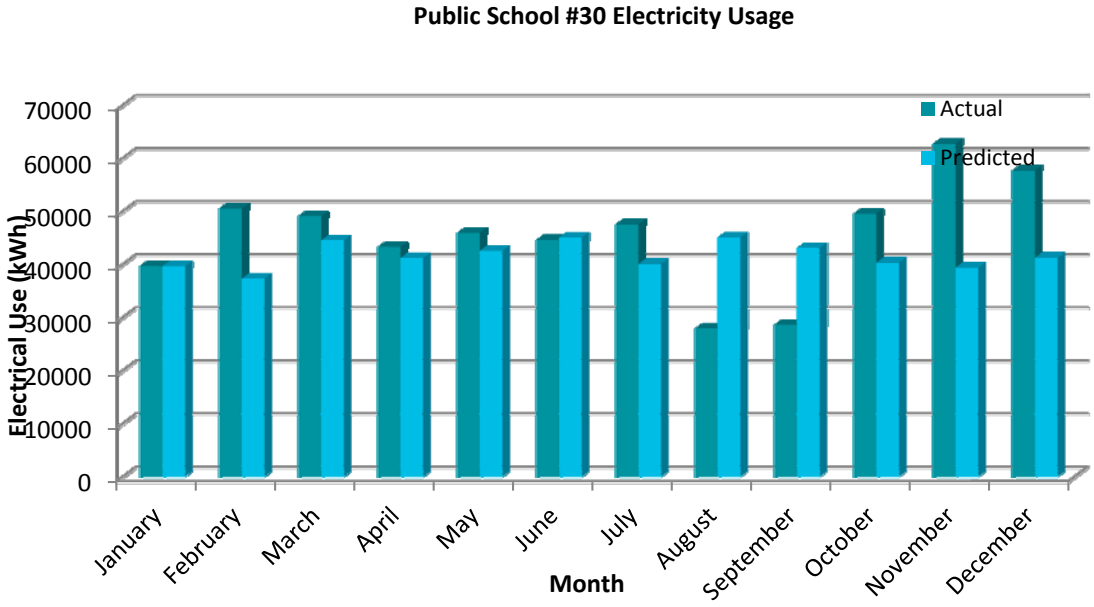
Public School #29

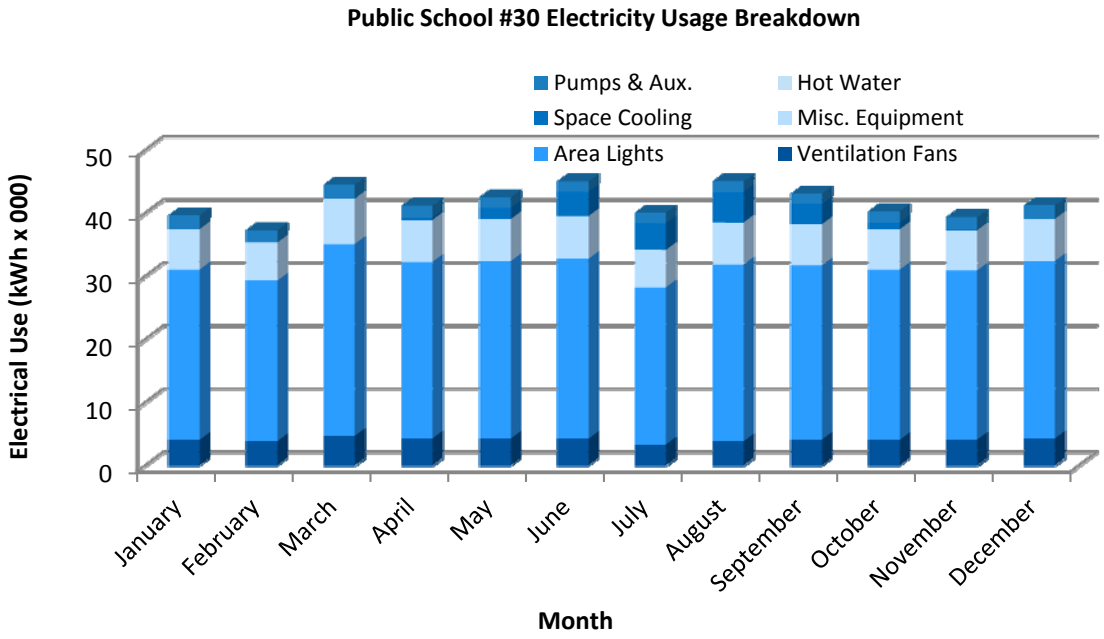


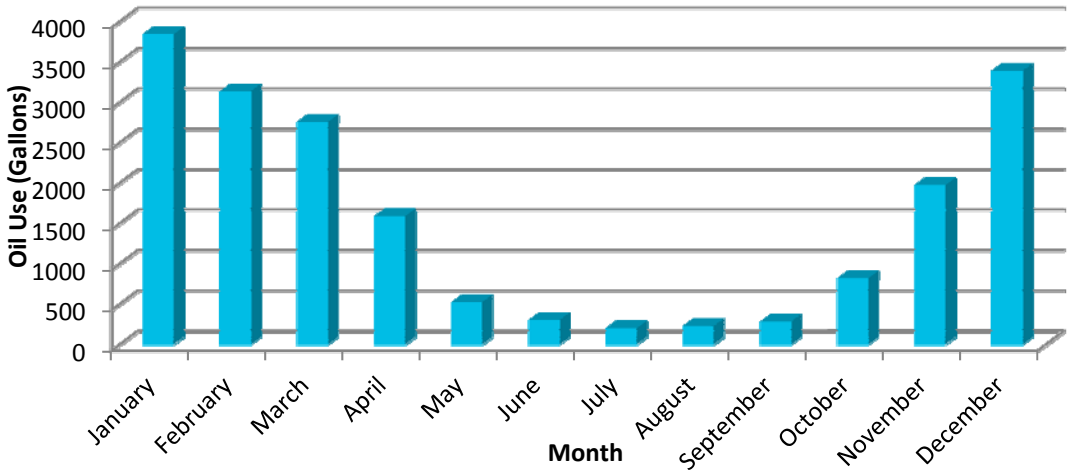




Public School #30

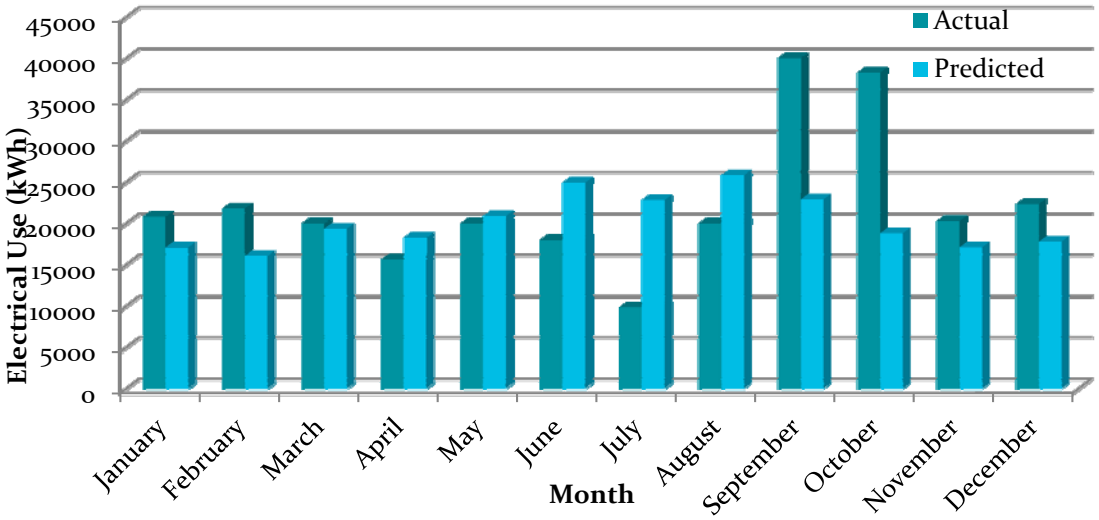



Public School #30 Electricity Usage Breakdown
Pumps & Aux.
Hot Water
Space Cooling
Misc. Equipment
Area Lights
Ventilation Fans
Electrical Use (kWh x 000)
50
40
30
20
10
0
January
February
March
April
May
June
July
August
September
October
November
December
Month

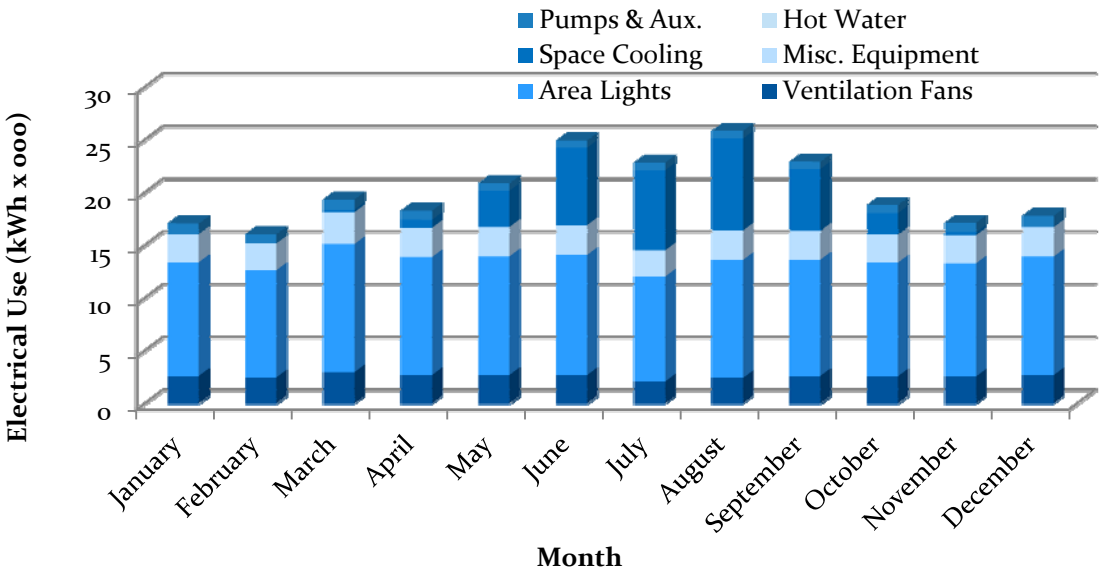

Public School #30 Oil Usage
Oil Use (Gallons)
4000
3500
3000
2500
2000
1500
1000
500
0
January
February
March
April
May
June
July
August
September
October
November
December
Month

Public School #31

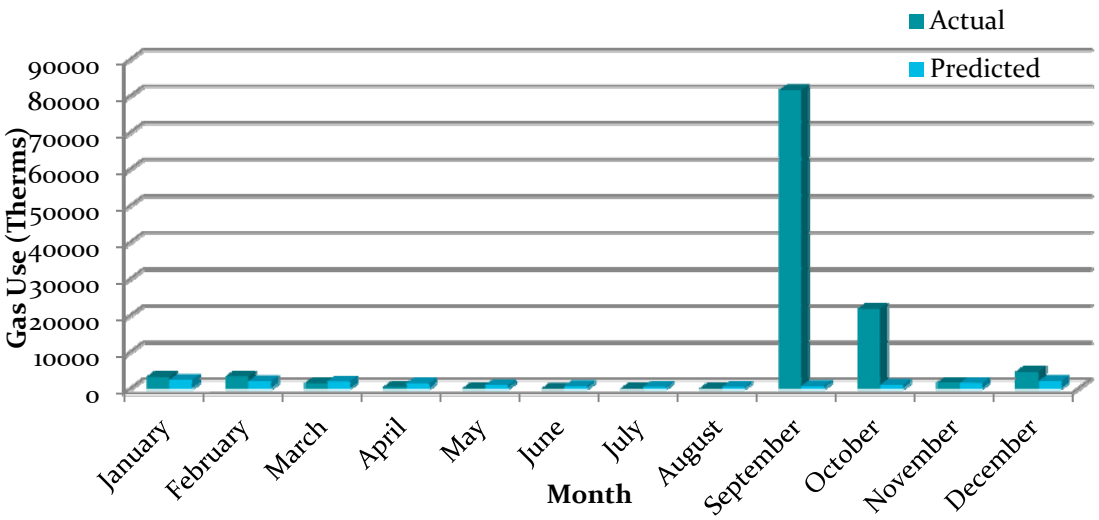
Public School #31 Electricity Usage



Public School #31 Electricity Usage Breakdown



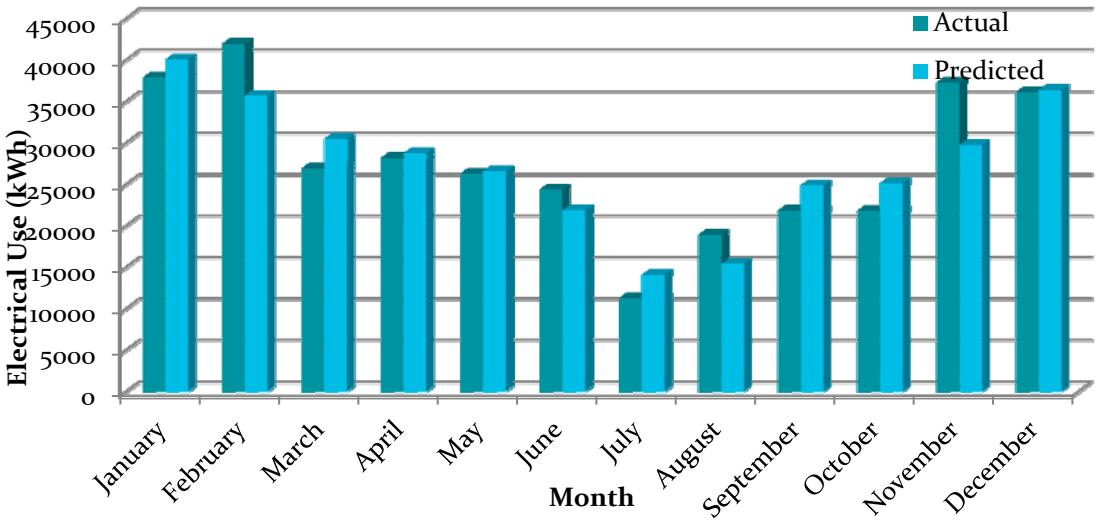
Public School #31 Natural Gas Usage



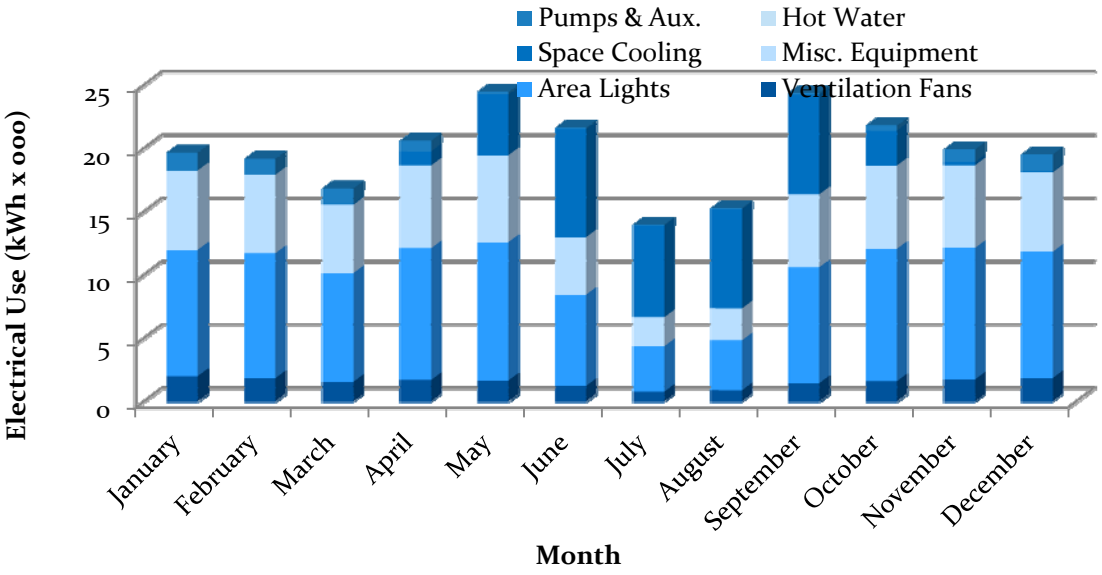
Gas usage actual usage

Public School #33

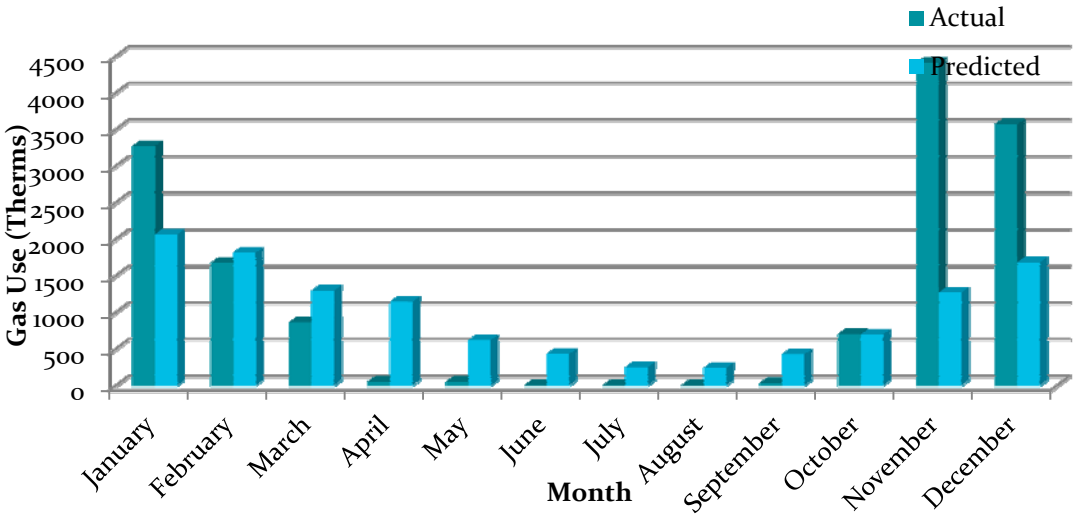
Public School #33 Electricity Usage



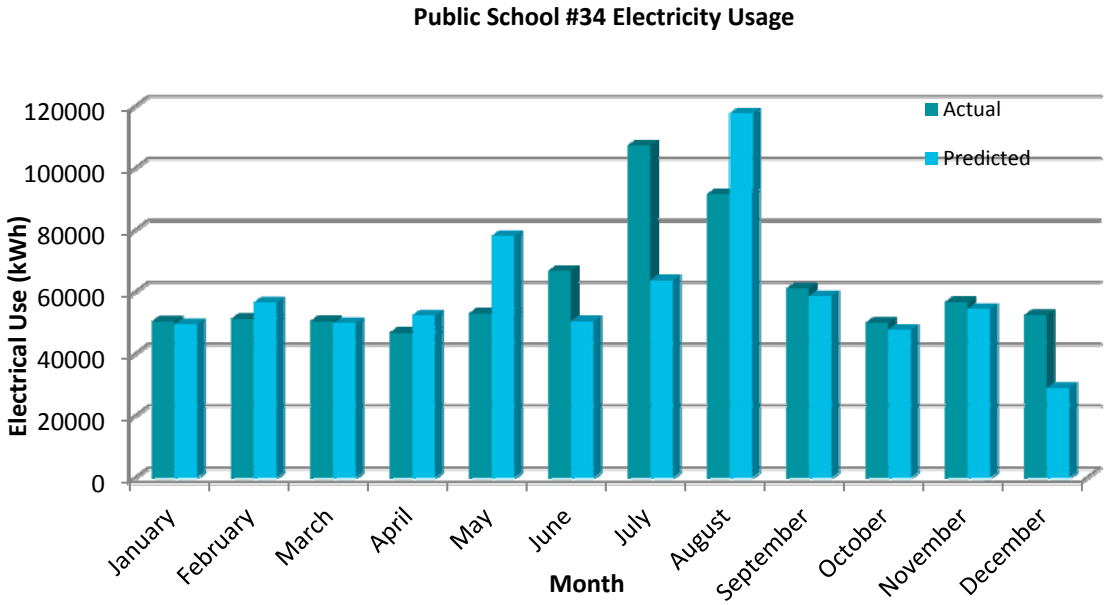
Public School #33 Electricity Usage Breakdown

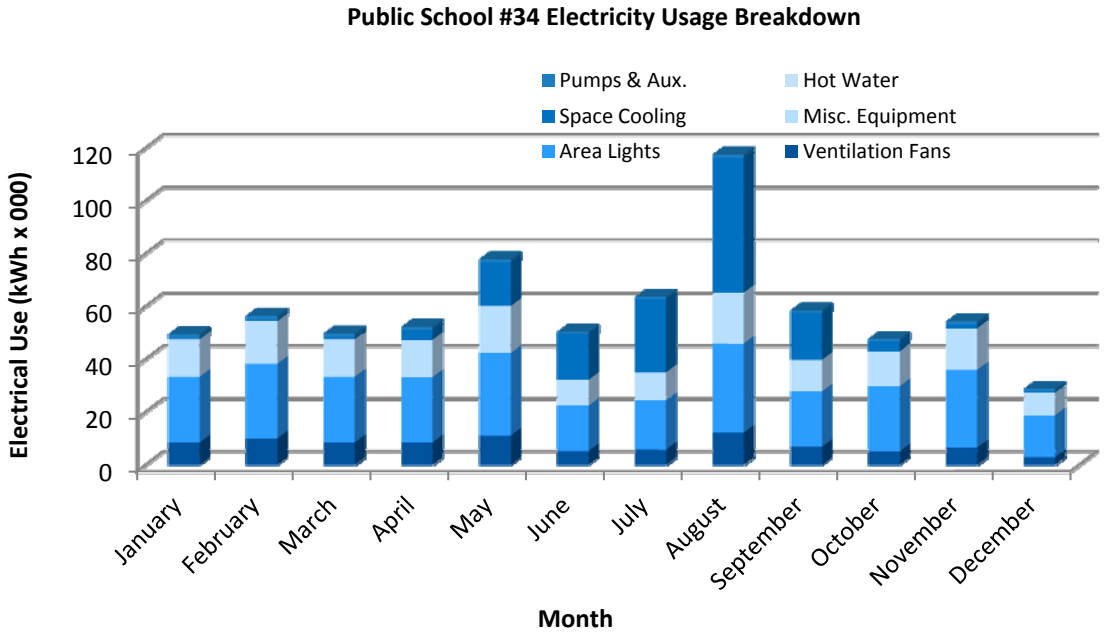


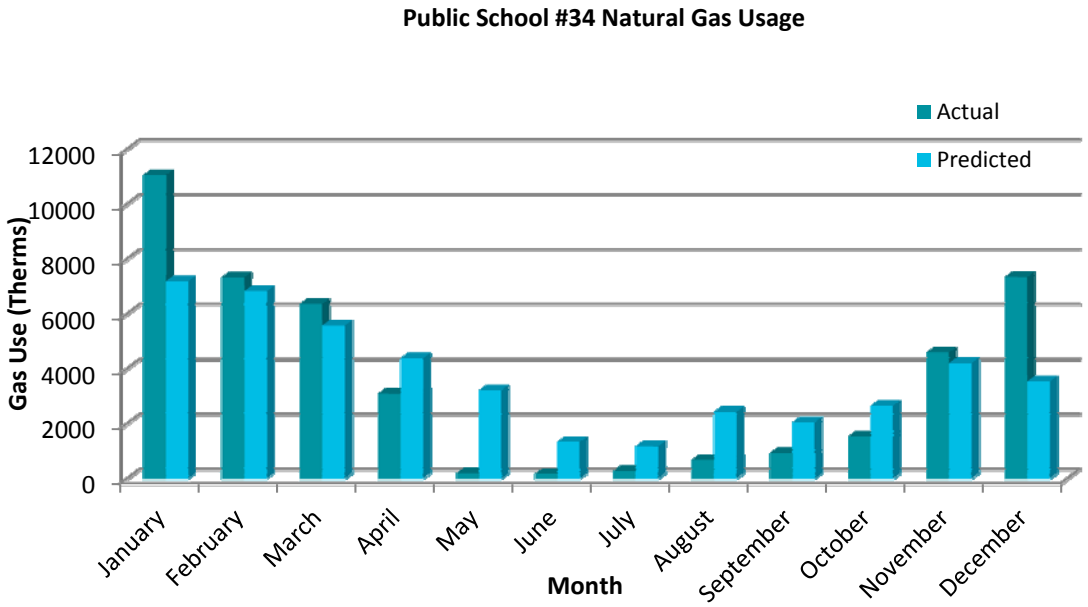
Public School #33 Natural Gas Usage



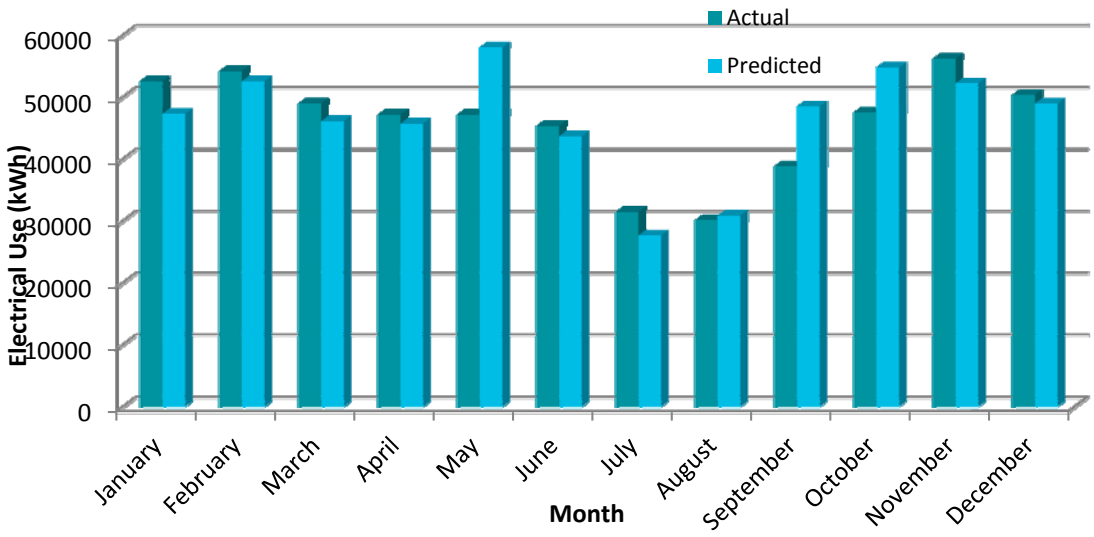
Public School #34



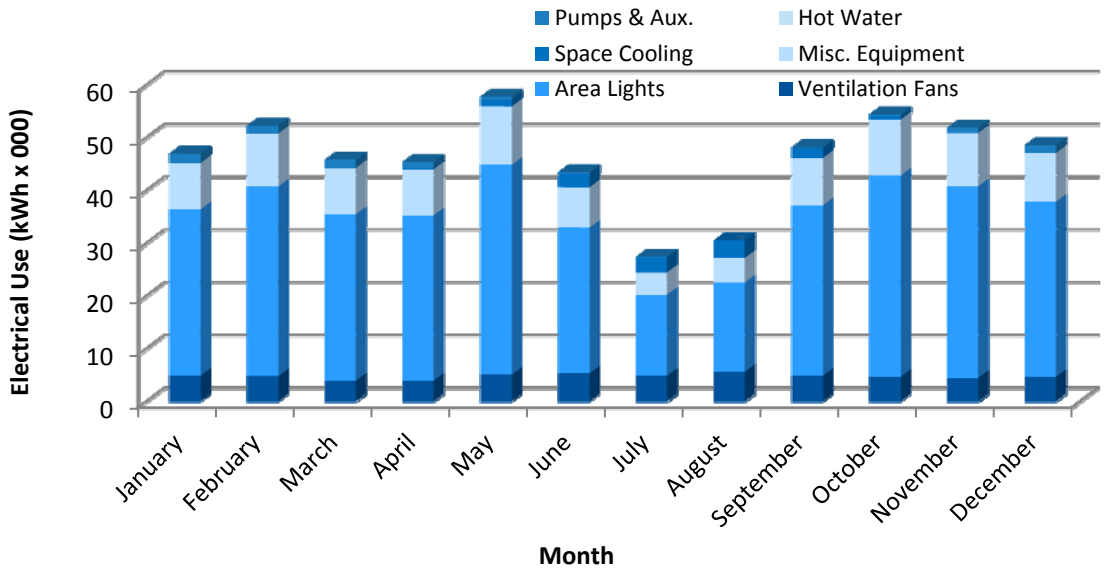




Public School #37

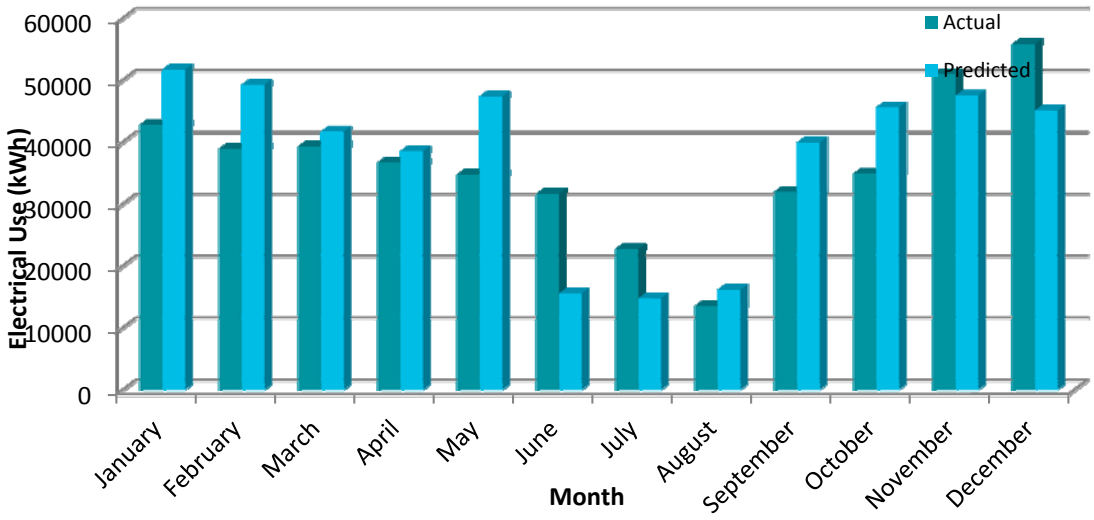


Public School #37 Electricity Usage Breakdown

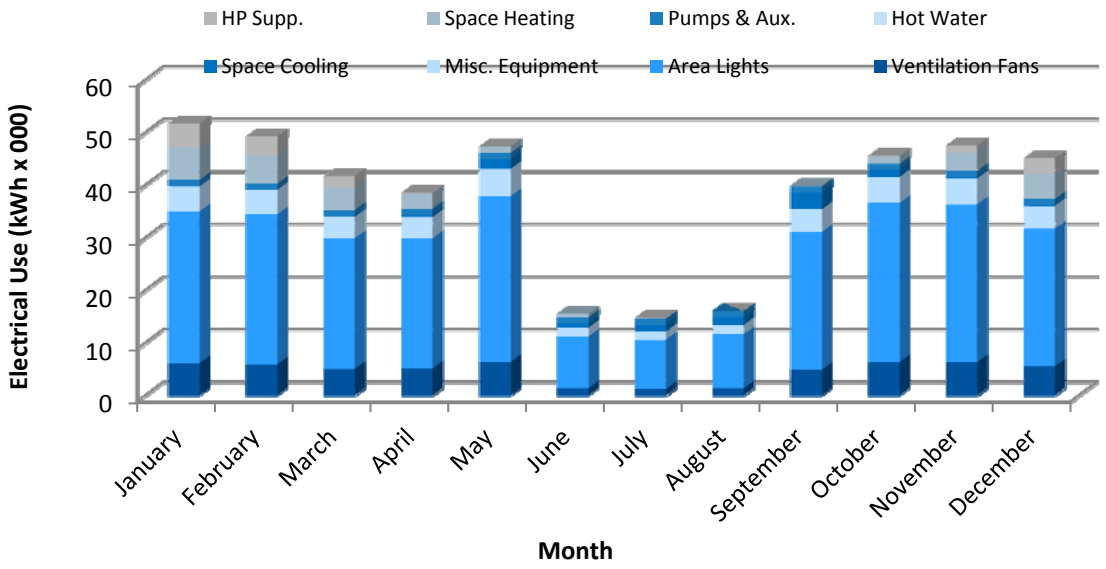


Public School #38

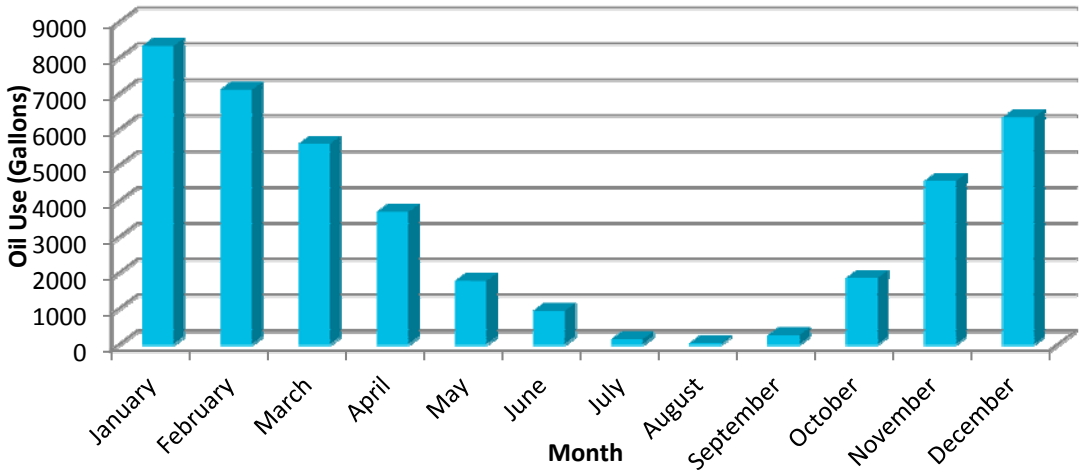
Public School #38 Electricity Usage



Public School #38 Electricity Usage Breakdown

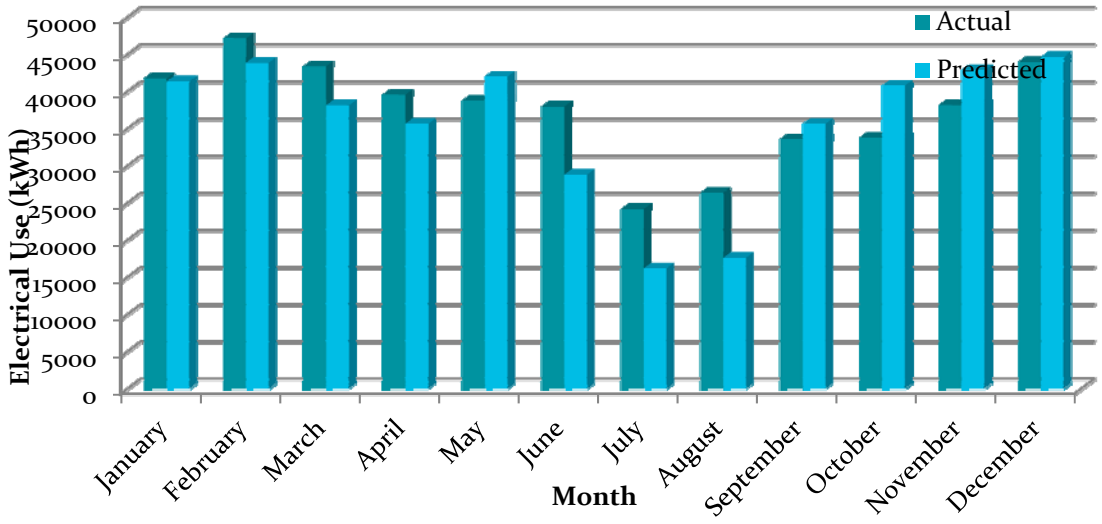


Public School #38 Oil Usage

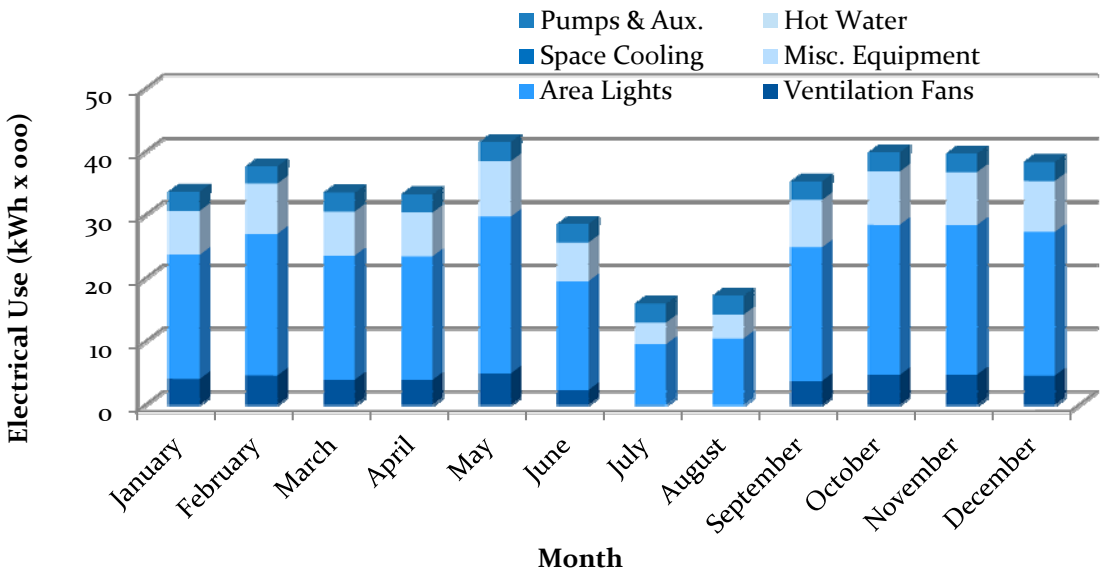


Public School #39

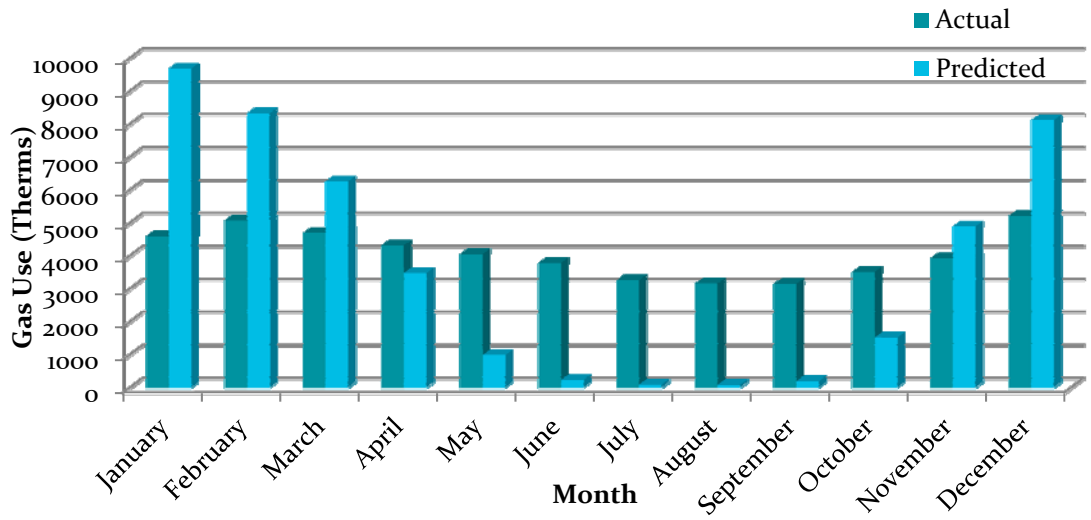
Public School #39 Electricity Usage



Public School #39 Electricity Usage Breakdown



Public School #39 Natural Gas Usage



Appendix O

Building	Description [Tag ID]	Unit Location	Service Location	Manufacturer	Model	Estimated Efficiency	Estimated Age (Years)	ASHRAE Expected Life (Years)	Notes
Ferris High School	Fan Coil Unit	Classrooms	Throughout Building	AO Smith	316p758	Unknown	>20	25	
Ferris High School	Boiler, Cast Iron	Engine Room	Entire Building	Cleaver Brooks	CB 200X200HP	75%	6	35	
Ferris High School	Boiler, Cast Iron	Engine Room	Entire Building	Cleaver Brooks	CB 200X200HP	75%	6	35	
Ferris High School	Boiler, Cast Iron	Engine Room	Entire Building	Cleaver Brooks	CB 200X200HP	75%	6	35	
Ferris High School	Boiler, Cast Iron	Engine Room	Entire Building	Cleaver Brooks	CB 200X200HP	75%	6	35	
Ferris High School	Chiller	Engine Room	Entire Building	York	YK DHDHV7CKFR134A	EER 9-10	6	23	
Ferris High School	Chiller	Engine Room	Entire Building	York	YK DHDHV7CKFR134A	EER 9-10	6	23	
Lincon High School	RT-1 (AHU)	Building 1 RTU	Building 1	Trane	TCD360A40M2B5BH1A80D00HJK0M000	N/A	7	25	
Lincon High School	RT-3 (AHU)	Building 1 RTU	Building 1	Trane	TCD211C40CCA	N/A	7	25	
Lincon High School	RT-5 (AHU)	Building 1 RTU	Building 1	Trane	TSC072A4R0A17G0C1A1B2A204	N/A	7	25	
Lincon High School	RT-8 (AHU)	Building 1 RTU	Building 1	Trane	THC120A4R0A1FG0C1A1B20004	N/A	7	25	
Lincon High School	RT-7F (AHU)	Building 1 RTU	Building 1	Trane	TCD241C40RCA	N/A	7	25	
Lincon High School	RT-2F (AHU)	Building 1 RTU	Building 1	Trane	TCD241C40RCA	N/A	7	25	
Lincon High School	RT-4 (AHU)	Building 1 RTU	Building 1	Trane	TCD300B40AHB	N/A	7	25	
Lincon High School	RT-6(AHU)	Building 1 RTU	Building 1	Trane	THC120A4R0A1FG0C1A1B20004	N/A	7	25	
Lincon High School	AHU	Gym	Gym	McQuay	LSL 122DV	N/A	Unknown	28	
Lincon High School	Boiler -1	Boiler room	Campus	AO Smith	BVF 284 TTDP 8009 ACL	75%	2	35	
Lincon High School	Boiler-2	Boiler room	Campus	AO Smith	BVF 284 TTDP 8009 ACL	75%	2	35	
McNair High School	RAC -1	ROOF	GYM	Trane	PCCC023F3A00A0AVA30	N/A	Unknown	25	
McNair High School	AHU - Caf	Cafeteria	Cafeteria	TRANE	MCC1012GAN0ABA00F0ED A00COA0000AC000	N/A	5	25	
McNair High School	AC-5	Art Room	Art Room	TRANE	MCCA006BBG0CO	N/A	Unknown	25	
McNair High School	AHU 7-A	DHW Mechanical Room	Unknown	TRANE	MCCA012BAGOCO	N/A	Unknown	25	
McNair High School	AHU	Engine Room	Unknown	TRANE	MCCA010GANOAAA000	N/A	14	25	
McNair High School	BOILER 1	Engine Room	Entire Building	AO Smith	28A-18	75%	Unknown	35	
McNair High School	BOILER 2	Engine Room	Entire Building	AO Smith	28A-18	75%	Unknown	35	
PS #22	Air Handling Unit (AHU)	Cafeteria	Cafeteria	Unknown	Unknown	N/A	>20	25	
PS #22	Air Handling Unit (AHU)	Cafeteria	Cafeteria	Unknown	Unknown	N/A	>20	25	
PS #22	AHU – Auditorium	Auditorium	Auditorium	MAGIC Air	90/120-BMW	N/A	5	25	
PS #22	Chiller	Roof	Entire Building	York	YCAL0070EC46XCASDTXLTXRLXXX44SX1	EER 9-10	5	20	
PS #22	Boiler 1	Engine Room	Entire Building	AO Smith	28A-18	75%	6	35	
PS #22	Boiler 2	Engine Room	Entire Building	AO Smith	28A-18	75%	6	35	
Regional Day School	AHU 1	Roof	unknown	Carrier	39aks014--610	N/A	20	25	
Regional Day School	AHU - Gym	Gym	Gym	Carrier	39LB06KA-B4-10WA9	N/A	20	25	
Regional Day School	Air Cooled Condensing Unit (ACCU) - 1	Roof	unknown	Trane	thc043a4tga0uh0c000000	N/A	4	20	
Regional Day School	Air Cooled Condensing Unit (ACCU) - 2	Roof	unknown	Trane	WCC030F100BD	N/A	4	20	
Regional Day School	Air Cooled Condensing Unit (ACCU) - Gym	Roof	Gym	Carrier	38ckc036--611	N/A	4	20	
MS #4	AHU-2	Roof	NOT IN SERVICE for 2 YEARS, SERVES 2ND FLOOR CLASSROOM	McQuay	RAR802CLY	N/A	6	25	
MS #4	MAKE UP AIR UNIT MAU-2	Roof	Cafeteria	McQuay	IGX-109-H12-DB	N/A	6	10	
MS #4	MAKE UP AIR UNIT MAU-1	Roof	Cafeteria	McQuay	IGX-109-H12-DB	N/A	6	10	
MS #4	AHU-3	Roof	2ND FLOOR & MAIN OFFICE	McQuay	RAH047CLW	N/A	6	25	
MS #4	AHU-1	Roof	4TH & 3RD FLOOR FCU'S	McQuay	RAR802LLY	N/A	6	25	
MS #4	AHU-5	Roof	Unknown	McQuay	E762653050	N/A	6	25	
MS #4	AHU-4	Roof	Unknown	McQuay	E762493040	N/A	6	25	
MS #4	AHU-10	Roof	Unknown	McQuay	E762693020	N/A	6	25	
MS #4	AHU-6	Roof	AUDITORIUM	McQuay	E762693060	N/A	6	25	
MS #4	AHU9	Roof	AUX GYM	McQuay	RDS708BY	N/A	6	25	
MS #4	AHU7	Roof	GYM	McQuay	RSD8006LW	N/A	6	25	
MS #4	AHU8	Roof	GYM	McQuay	RSD800CLW	N/A	6	25	
MS #4	Chiller-2	Roof	Entire Building	McQuay	ALS218C27-ER11	EER 11	6	20	
MS #4	Chiller-1	Roof	Entire Building	McQuay	ALS174C27-ER11	EER 11	6	20	
MS #4	Chiller-3	Roof	Entire Building	McQuay	ALS218C27-ER11	EER 11	6	20	
MS #4	Boiler-3	Engine Room	Entire Building	AO Smith	Unknown	75%	6	35	
MS #4	Boiler-2	Engine Room	Entire Building	AO Smith	Unknown	75%	6	35	
MS #4	Boiler-1	Engine Room	Entire Building	AO Smith	Unknown	75%	6	35	
MS #7	AHU-7	Roof	Unknown	WEBCO	E-CUS-13-HW 643	N/A	6	25	
MS #7	AHU-8	Roof	Unknown	WEBCO	E-CUS-15-HW 758	N/A	6	25	
MS #7	AHU-6	CAFETERIA	CAFETERIA	Trane	K4V313B E	N/A	6	25	
MS #7	AHU-5	1st floor	1ST & 2ND FLR NORTH	Trane	K4V313B E	N/A	6	25	
MS #7	AHU-4	AUDITORIUM	AUDITORIUM	Trane	K4V313B E	N/A	6	25	
MS #7	AHU-3	Roof	OFFICE/MEDIA	Trane	K4V313B E	N/A	6	25	
MS #7	AHU-2	1st floor	1ST & 2ND FLR CLASSROOM	Trane	K4V313B E	N/A	6	25	
MS #7	AHU-1	3rd floor	3RD & 4TH FLOOR CLASSROOM	Trane	K4V313B E	N/A	6	25	
MS #7	CHILLER	Engine Room	Entire Building	YORK	YTK4C7FL-CSJ	EER 9-10	6	25	
MS #7	Boiler 1	Engine Room	Entire Building	AO Smith	LN1CS-6 30	75%	6	35	
MS #7	Boiler 2	Engine Room	Entire Building	AO Smith	LN1CS-6 30	75%	6	35	
PS #3	Boiler -1	Engine Room	Entire Building	SMITH	CS-G-20AHBS-8	75%	6	35	
PS #3	Boiler -2	Engine Room	Entire Building	SMITH	NJ091017-07H	75%	6	35	
PS #3	Boiler-3	Engine Room	Entire Building	SMITH	NJ091017-07H	75%	6	35	
PS #3	AHU-1	Roof	Unknown	McQuay	RAR802CLY	N/A	6	25	
PS #3	AHU-2	Roof	Unknown	McQuay	RAH077CLW	N/A	6	25	
PS #3	AHU3	Auditorium	Auditorium	McQuay	RSD802CLW	N/A	6	25	
PS #3	AHU4	Engine Room	Unknown	McQuay	RSD708BY	N/A	6	25	
PS #3	AHU-5	Engine Room	Unknown	McQuay	Unknown	N/A	6	25	
PS #3	AHU6	Gym	Gym	McQuay	CAH030FDAC	N/A	6	25	
PS #3	AHU7	Engine Room	Unknown	McQuay	CAH017FBAC	N/A	6	25	
PS #5	AHU - 1	Roof	Unknown	Trane	21812197	N/A	>20	25	
PS #5	AHU – Gym	Gym	Gym	Unknown	Unknown	N/A	>20	25	
PS #5	Boiler 1	Engine Room	Entire Building	Superior	3X1021	75%	19	35	
PS #5	Boiler 2	Engine Room	Entire Building	Superior	3X1021	65%	19	35	
PS #5	Boiler 3	Engine Room	Entire Building	Superior	3X1021	65%	19	35	
PS #12	Boiler 1	Engine Room	Entire Building	AO Smith	Unknown	75%	2	35	
PS #12	Boiler 2	Engine Room	Entire Building	AO Smith	Unknown	75%	2	35	
PS #14	Boiler - 1	Engine Room	Entire Building	AO SMITH	HR-MAWP15PSIJ SV 15PSIJ	75%	2	35	
PS #14	Boiler - 2	Engine Room	Entire Building	AO SMITH	HR-MAWP15PSIJ SV 15PSIJ	75%	2	35	
PS#16	Boiler, Cast Iron	Engine Room	Entire Building	KEWANEE	KPE 81	65%	>20	35	
PS #37	AHU1	3RD ROOF	2ND	TRANE	YCD090C3LABE	N/A	14	25	
PS #37	AHU2	3RD ROOF	2ND	TRANE	YCD102C3LAAB	N/A	14	10	
PS #37	Boiler 1	Engine Room	Entire Building	AO SMITH	PV112350G	75%	2	20	
PS #37	Boiler 2	Engine Room	Entire Building	AO SMITH	PV112350G	75%	2	35	
Academy #1	Electric Heating element-Unit vent	Each Classroom	Each Classroom	Nesbitt	TEC000A, no AC	NA	NA	10	
Academy #1	Port AC Unit	Office	Office	Everstar	MPM-08CR-BB4	9.3 EER	NA	10	
Academy #1	Heating Ceiling Fan Coils	Cafeteria	Cafeteria	Nesbitt	NA	NA	NA	10	
Academy #1	EUH	Boys & Girls locker rooms	Boys & Girls locker rooms	Chromolux	NA	NA	NA	10	
Academy #1	Air Source Heat Pump	G 10	G 10	Q Tec	QH241-BO9X PXAXX	10 EER	NA	15	

Building	Description [Tag ID]	Unit Location	Service Location	Manufacturer	Model	Estimated Efficiency	Estimated Age (Years)	ASHRAE Expected Life (Years)	Notes
Academy #1	Air-Source Heat Pump	G-16	G-16	Q-Tec	Serial # L001525717	16 EER	NA	15	
Academy #1	Condensing Unit	Outside	Media Center	Carrier	38AK5008-501	NA	NA	15	
Academy #1					Serial # 1500G0016				
Administration Building					090E064600				
Administration Building	Condenser	Roof	8th Floor Mechanical Room	Carrier	Serial #: P697428	NA	25	20	
Administration Building					090E064600				
Administration Building	Condenser	Roof	7th Floor Mechanical Room	Carrier	Serial #: P697415	NA	25	20	
Administration Building					090E064600				
Administration Building	Condenser	Roof	6th Floor Mechanical Room	Carrier	Serial #: P697418	NA	25	20	
Administration Building					090E064600				
Administration Building	Condenser	Roof	5th Floor Mechanical Room	Carrier	Serial #: P697407	NA	25	20	
Administration Building	Condenser	Roof	6th Floor Computer Room	Liebert	PFC067A-YL3	NA	9	20	
Administration Building					38CKC060300				
Administration Building	Condenser	Roof	Data Center on Roof	Carrier	Serial #: 3299E18992	NA	NA	20	
Administration Building					38HDR060-301				
Administration Building	Condenser	Roof	Data Center on Roof	Carrier	Serial #:2606X90330	NA	5	20	
Administration Building	Condenser	Roof	7th Floor Computer Room	Liebert	PFC027A-PL3	NA	9	20	
Administration Building	Condenser	Roof	NA	Liebert	PFH037A-YL3	NA	3	20	
Administration Building	Condenser	Roof	NA	Mitsubishi Electric	PU24EK3	NA	NA	20	
Administration Building					38AK5016-610				
Administration Building	Condenser	Roof	NA	Carrier	Serial #: 2599828974	NA	NA	20	
Administration Building	Packaged Cooling Unit	8th Floor Mech. Room	8th Floor	Carrier	50BK064600	NA	25	23	
Administration Building	Electric Unit Heater (EUH)	8th Floor Mech. Room	8th Floor Mech. Room	NA	NA	NA	NA	13	
Administration Building	Packaged Cooling Unit	7th Floor Mech. Room	7th Floor	Carrier	50BK064600	NA	26	23	
Administration Building	Packaged Cooling Unit	6th Floor Mech. Room	6th Floor	Carrier	50BK064600	NA	26	23	
Administration Building	Packaged Cooling Unit	5th Floor Mech. Room	5th Floor	Carrier	50BK064600	NA	26	23	
Administration Building	EUH	Basement	Basement	Qmark	MUH104	NA	NA	13	
Administration Building	EUH (x10)	Basement	Basement	Qmark	MUH007	NA	NA	13	
Administration Building	EUH	Basement	Basement	Qmark	MUH0571	NA	NA	13	
Administration Building	EUH (x5)	4th Floor	4th Floor	Qmark	MUH077	NA	NA	13	
Administration Building	EUH (x3)	4th Floor	4th Floor	Markel	G1G5107CAIL	NA	NA	13	
Administration Building	EUH (x4)	3rd Floor	3rd Floor	Qmark	MUH077	NA	NA	13	
Administration Building	Condenser (x2)	Outside	1st Floor	NA	NA	NA	NA	20	
Cunningham ECC	Gas fired AC Unit	Roof	Kitchen	Carrier	48HGF014A-501AR	NA	NA	15	
Cunningham ECC	Gas fired AC Unit	Roof	Below	Carrier	48HJD008-541HU	NA	NA	15	
Cunningham ECC	Gas fired AC Unit	Roof	Early Child Classroom	Carrier	48HGF014A- -501AR	NA	10	15	
Cunningham ECC	Gas fired AC Unit	Roof	Classrooms	Carrier, Weather Master Series	48HJD008 - - - 541H4	NA	NA	15	
Cunningham ECC					38 AN009120				
	Condenser	Roof	Admin	Carrier	Serial #: 3703410342	NA	NA	20	
Infinity School	Boiler- Cast Iron (2)	Boiler Room	Building	Weil Mclane	CP3054722	NA	24	35	
Infinity School	Burner	Boiler Room	Boiler	Power Flame	WCR3-G-20	NA	NA	21	
Infinity School	Burner	Boiler Room	Boiler	Power Flame	CRZ-6G-20B	NA	24	21	
Infinity School	Window AC	Basement Classrooms	Basement Classrooms	Emerson Quiet Kool	NA	NA	NA	10	
Infinity School	Steam Unit Heater	Basement Kitchen	Basement Kitchen	Trane	NA	NA	NA	20	
Infinity School	Window AC	Gym	Gym	Frigidaire	NA	NA	NA	10	
Infinity School	Electric Air Cleaner (3)	Auditorium	Auditorium	Master	NA	NA	NA	10	
Infinity School	Condenser	Courtyard	Cafeteria	NA	NA	NA	Old	20	
Infinity School	Recip. Chiller	Boiler Room	AHU	NA	6L85-406	NA	NA	20	
MS #40	AHU	Near Pool	Pool and Locker Rooms	Hartzell	35-28-F.3	NA	NA	15	
MS #40	Steam Unit heater	Storage (next to Custodial Room)	Pool and Locker Rooms	Nesbitt	NA	NA	NA	25	
MS #40	Gas Boiler	Boiler Room	For summer- hot water and pool	Smith	28A-S/W-6	NA	10	35	
MS #40	Burner	Boiler Room	Above Boiler	John Zink	R8.2-G-07	NA	10	21	
MS #40	Oil Boiler	Boiler Room	Building	Pacific Steel Heating Boilers	NA	NA	NA	25	
MS #40	Burner	Boiler Room	Above Boiler	York	000-176	NA	NA	21	
MS #40	Boiler	Boiler Room	Building	Smith	28A-18-080795	NA	NA	35	
MS #40	Gas Burner	Boiler Room	Above Boiler	John Zink	R10.2-G-50	NA	NA	21	
MS #40	Gas Boiler	Boiler Room	Building	Pacific	NA	NA	NA	25	
MS #40	Burner	Boiler Room	Above Boiler	John Zink	512-G-50	NA	10	21	
MS #40	Air cooled chiller	Courtyard	Auditorium	Carrier	30GTN060	NA	NA	23	
MS #40					MCCB021				
MS #40	AHU- heat & cool (2)	Mezzanine	Auditorium	Trane- M Series Climate Changer	UAOAOUA	NA	NA	15	
MS #41	Gas Boiler (2)	Boiler Room	Building	Continental	Serial #: F134B350LS-7505-5436A	NA	40	18	
MS #41	AHU	Basement	Basement	NA	NA	NA	NA	15	
MS #41	EUH	Library	Library	Payton	2YU70	NA	NA	13	
MS #41	HWUH	Janitor Closet 3rd Floor	Janitor Closet 3rd Floor	Trane	NA	NA	NA	20	
MS #41	Condenser	Roof	NA	Carrier- high efficiency	38EH030320	NA	25	20	
MS #41	Condenser	Roof	NA	Lenox	ITS29-042-15	NA	NA	20	
MS #41	Condenser (2)	NA	NA	NA	NA	NA	NA	20	
MS #41	AHU (2)	Gym- Mech., storage area	Gym	NA	NA	NA	NA	15	
MS #41	AHU (2)	Stage	Gym	Trane	Climate Changer	NA	NA	15	
MS #41	Indirect Air Heater AHU (2)	Roof	Pool	Ice	IMA-118HRS	NA	NA	15	
PS #17	Gas Boiler (2)	Boiler Room	Building	Superior	13-5-1250	NA	15	18	
PS #17	Burner (2)	Boiler Room	Boiler	Gordon-Piatt Energy Corp.	S14.1-G-75	NA	15	21	
PS #17	HWUH	Locker Room	Locker Room	Trane	NA	NA	NA	20	
PS #17	Packaged DX Cool Electric Heat Unit	Roof	Library	Trane Voyager	NA	NA	NA	13	
PS #17	Condenser	Roof	Kitchen Freezers	Heatcraft	SBB020 D28	NA	NA	20	
PS #17					HRU Series				
PS #17	Heat Reclaim Unit	Roof	Kitchen & Cafeteria	Gaylord	HRU-6-9230-50-DG	NA	NA	NA	
PS #17	AHU-1	Pump Room	Ind. Arts 04	Trane	NA	NA	NA	15	
PS #17	AHU-2	Ceiling in corridor by supply room	Basement corridor	Trane	NA	NA	NA	15	
PS #17	AHU-3	Gym storage room	Locker Rooms	Trane	NA	NA	NA	15	
PS #17	AHU-4	First floor storage room	Nursing and Teacher's lounge	Trane	NA	NA	NA	15	
PS #17	AHU-5	Double door storage room	Admin. Offices	Trane	NA	NA	NA	15	
PS #17	AHU-6	Ceiling of storage room 153	First floor corridor, east end	Trane	NA	NA	NA	15	
PS #17	AHU-7	Ceiling of Exit 3	First floor corridor, west end	Trane	NA	NA	NA	15	
PS #17	AHU-8	Ceiling of music room	Music Room	Trane	NA	NA	NA	15	
PS #17	AHU-9	Ceiling of kitchen	Cafeteria	Trane	NA	NA	NA	15	
PS #17	AHU-10	Room 199	Gym	Trane	NA	NA	NA	15	
PS #17	AHU-11	Ceiling of Room 209	Second floor corridor	Trane	NA	NA	NA	15	
PS #17	AHU-12	Ceiling of Room 224	Second floor corridor	Trane	NA	NA	NA	15	
PS #17	AHU-13	Ceiling of Room 311	Third floor corridor	Trane	NA	NA	NA	15	
PS #17	AHU-14	Ceiling of Room 325	Third floor corridor	Trane	NA	NA	NA	15	

Building	Description [Tag ID]	Unit Location	Service Location	Manufacturer	Model	Estimated Efficiency	Estimated Age (Years)	ASHRAE Expected Life (Years)	Notes
PS #17	AHU-15	West mezzanine of stage	Auditorium	Trane	NA	NA	NA	15	
PS #17	AHU-16	East mezzanine of stage	Auditorium	Trane	NA	NA	NA	15	
PS #17	AHU-17	Ceiling of Kitchen	Kitchen	Trane	NA	NA	NA	15	
PS #17	AHU	Roof	Library	Trane	NA	NA	NA	15	
PS #17					CGACDIZIRNN				
PS #17	Air cooled chiller (x3)	Roof	AHU	Trane	LL623DGW7B1	NA	NA	23	
PS #15	Packaged AC Unit (2)	Roof	Auditorium	Carrier	38AK 028 501	NA	NA	15	
PS #15	Packaged AC Unit	Roof	Offices	Unitary Products Group	DAPB-F02 4AB	NA	NA	15	
PS #15					ALR14ES42-ER10				
PS #15	Air Cooled Water Chiller Unit	Roof	Gym	McQuay	Serial #: STNU991200088	NA	NA	20	
PS #15					Motor: Baldor EM32187-8				
PS #15	Air Handling Unit	M1	Auditorium	NA	Other: Century 6322467-01	NA	NA	15	
PS #15	AHU	Cafeteria Mech. Room	Cafeteria Mech. Room	Nesbitt	Motor: Marathon CVN84TT027627AGL	NA	NA	15	
PS #15	HWUH	Cafeteria Mech. Room	Cafeteria Mech. Room	Nesbitt	NA	NA	NA	20	
PS #15	Boilers Gas HW	Boiler Room	Building	Cleaver Brooks	43760-200	NA	41	18	
PS #15					MIT008R8BAA0				
PS #15	HW Air Handler	Boiler Room	Pool	Aaon	MBJ101BB0000000	NA	NA	15	
PS #15	HWUH	Boiler Room	Boiler Room	Nesbitt	NA	NA	NA	20	
PS #20	Steam Boiler (2)	Boiler Room	Building	Pacific	NA	NA	30	24	
PS #20	Burner(2)	Boiler Room	NA	NA	JB2C-30-D20-M25-MA1	NA	NA	21	
PS #29	Steam Boiler	Boiler Room	Building	Federal Fire Tube	FMRA1822	NA	50	24	
PS #29	Steam Unit Heater (Not in Service)	Lunch Area	Lunch Area	Modine	NA	NA	NA	20	
PS #29	HV Unit	Basement	Basement	B.F. Sturtevant Co.	NA	NA	60	15	
PS #29	Steam Boiler	Boiler Room	Building	Titusville Fire Tube	33251	NA	NA	24	
PS #30	Fuel Steam Boiler #2 Oil (2)	Boiler Room	Building	Weil Mclain	Series 94	NA	3	18	
PS #30					CR4-OA				
PS #30	Burner #2 Oil (2)	Boiler Room	Boiler	Power Flame	Serial #: 050517220	NA	NA	21	
PS #30	Steam UH	Boiler Room	Boiler Room	NA	NA	NA	NA	20	
PS #30	HV AHU	Gym	NA	NA	NA	NA	NA	15	
PS #30	EUH	B4	B4	Dayton	NA	NA	NA	13	
PS #30	EUH (2)	Room 101	101	Dayton	NA	NA	NA	13	
PS #30	HVAC Unit								
PS #30	RTU 995	Roof	Below	Trane	YCD048C3L0BE	NA	14	20	
PS #30	Steam UH	Men's Bathroom	Men's Bathroom	Air Therm	NA	NA	NA	20	
PS #34	Steam Unit Heater	Custodian Office	Custodian Office	NA	NA	NA	NA	20	
PS #34	Boiler (2)	Boiler Room	Building	HB Smith Cast Iron	NA	NA	12	35	
PS #34	Burner (3)	Boiler Room	Boiler	John Zink Co.	RIC-2-GO-50	NA	4	21	
PS #34	Chiller	Sprinkler Valve Room	New Section	Carrier	30HL-060-A-600	NA	NA	20	
PS #34	Make up air unit AC	M4	Cafeteria, Ind. Arts, Basement	Carrier	39LH 15BA-JN-CNJ-19	NA	NA	15	
PS #38	Boiler	Boiler Room	Building	Weil Mclain	94 Series 3	NA	6	18	
PS #38	Oil Burner (2)	Boiler Room	Boiler Room	Power Flame	BJCR4-OB	NA	5	21	
PS #38	AHU (2)	Stage	Stage	NA	NA	NA	NA	15	
Snyder High School	Steam AC (DX)	Roof	Room 308	Trane	BAYLOAM429	NA	NA	15	
Snyder High School			Cafeteria,						
Snyder High School	Air cooled chiller	Roof	Fourth floor	York	YCAL0104EC46XCADBT	NA	NA	20	
Snyder High School			Cafeteria,						
Snyder High School	Air cooled chiller	Roof	Fourth floor	Carrier	30GT-090- - - 500	NA	NA	20	
Snyder High School	AHU	Roof	Cafeteria	Racan	A2D-89-96-MO	NA	12	15	
Snyder High School	Gas make-up air unit	Roof	Kitchen	Captive Aire Systems	NHMUA 2-12-15	NA	NA	15	
Snyder High School	Condenser	Roof	Kitchen	Fraser-Johnston	HAHB-T090AA	NA	21	15	
Snyder High School					A2D-50-54-MO				
Snyder High School	AHU	Roof	Fourth Floor	Racan	Serial #: 700848-0047-142	NA	12	15	
Snyder High School					A2D-95-102-MO				
Snyder High School	AHU	Roof	Fourth Floor	Racan	Serial #: 700843-003-3140	NA	12	15	
Snyder High School			Auditorium,		90/120 - BMW/BMX Blower				
Snyder High School	Fan coil unit	Auditorium	Second Floor	Magic Aire	Serial #:W020532794	NA	9	15	
Snyder High School			Auditorium,		90/120- BMGP				
Snyder High School	Room fan heater unit	Auditorium	Second Floor	Magic Aire	Serial #: W010790543	NA	10	15	
Snyder High School	ACCU	Courtyard Roof	Stage	Unitary Products Group	HDHB-T090AC	NA	NA	15	
Snyder High School	Air Handler A/C	Room next to stage	Stage	Unitary Products Group	KDBC-5090AA	NA	NA	15	
Snyder High School	Fan coil unit	First Floor Auditorium	First Floor Auditorium	Magic Aire	48/60-BMW/BMX	NA	9	15	
Snyder High School	Room fan heater unit	First Floor Auditorium	First Floor Auditorium	Magic Aire	NA	NA	NA	15	
Snyder High School	Air handling heat and A/C	Closet	Kitchen & cafeteria	Racan	A2D-86-94-MI	NA	12	15	
Snyder High School	Heat & Cool AHU	Locker Room	Men's Locker Room	Carrier	NA	NA	NA	15	
Snyder High School	Heat & Cool AHU	Locker Room	Women's Locker Room	Carrier	NA	NA	NA	15	
Snyder High School					RAUCC400IJ03D9				
Snyder High School	ACCU	Courtyard (2)	Library unit	Trane	Serial #:J94K67779	NA	NA	15	
Snyder High School	AHU	Closet	Library	Trane	NA	NA	NA	15	
Snyder High School	AHU (heat only)	Loft space	38 Gym	Carrier	NA	NA	NA	15	
Snyder High School	Ventilation Unit	Men's Locker Room	Men's Locker Room	McQuay	NA	NA	NA	15	
Snyder High School	Steam unit heater	Men's Locker Room	Men's Locker Room	Q Mark	MULT072	NA	NA	25	
Snyder High School	AHU (heat only)	Loft space	39 Gym	Carrier	Serial #: 2794T55690	NA	NA	15	
Snyder High School	Boiler	Boiler Room	Building	Burnham Commercial	3L.250.50.G0.GP	NA	NA	25	
Snyder High School	Burner	Boiler Room	Above Boiler	John Ziuk Company, LLC	F14-G-501077006	NA	4	21	
Snyder High School	Boiler (x2)	Boiler Room	Building	W.W.Farrier	NA	NA	89	25	
Snyder High School	Burner	Boiler Room	Building	Gordon-Piatt Energy Group	F14-0-50	NA	10	21	
Snyder High School	Burner	Boiler Room	Building	Gordon-Piatt Energy Group	F14-0-50	NA	12	21	
Snyder High School	ACCU	Outside	Cafeteria	Russel	DLD4L44	NA	NA	15	
Snyder High School	ACCU	Outside	Cafeteria	Carrier	38AF-014-500	NA	24	15	
Snyder High School	Packaged DX/Heat unit	Outside	Mechanical shop	Carrier	48TJE005-311GA	80	NA	15	
Dickinson High School	Unit Vent (4)	Cafeteria	Cafeteria	NA	NA	NA	30	15	
Dickinson High School	AC	Gym	Gym	NA	NA	NA	20	15	
Dickinson High School	Condenser	NA	NA	NA	NA	NA	15	20	
Dickinson High School	RTU 1-4	NA	NA	Carrier	NA	NA	15	25	
Dickinson High School	RTU-2	NA	NA	NA	NA	NA	15	25	
Dickinson High School	B-7 Window AC (6)	NA	NA	Carrier	NA	1 ton	15	10	
Dickinson High School	AC	NA	NA	Whirlpool	NA	2 ton	15	10	
Dickinson High School	Oil-fired Boiler Pump	Boiler Room	Boiler	AO Smith	COF 200-800	NA	3	20	
Dickinson High School	AC	Room 302	Room 302	Sharp	NA	2 ton	Old	10	
Dickinson High School	Window AC	Room 208	Computer Lab	NA	NA	2 ton	15	10	
Dickinson High School	Window AC	Room 207	Computer Lab	NA	NA	2 ton	15	10	
Dickinson High School	Window AC	Room 201	Computer Lab	NA	NA	2 ton	15	10	
Dickinson High School	Window AC	Room 238	Library	NA	NA	2 ton	15	10	
Dickinson High School	Window AC	Room 237	Library	NA	NA	2 ton	15	10	

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Dickinson High School	Window AC	Room 235	Computer Lab	NA	NA	2 ton	15	10	
Dickinson High School	Window AC	Room 229	Computer Lab	NA	NA	2 ton	15	10	
Dickinson High School	Window AC	Room 221	Computer Lab	Sharp	NA	2 ton	15	10	
Dickinson High School	Boiler (4)	Boiler Room	Building	Weil Mclain	Series 94 2294	83%	3	25	
Dickinson High School	Lab hood	Room 330	Lab	NA	NA	3	Old	15	
Dickinson High School	Refrigerator	Room 324	Lab	RCA	NA	NA	Old	15	
Dickinson High School	EF-1	Girl's Locker Room	Pool	NA	NA	NA	15	15	
Dickinson High School	MAU SF-1	Girl's Locker Room	Pool	NA	NA	NA	15	15	
Dickinson High School	EF-2	Men's Locker Room	Pool	NA	NA	NA	15	15	
Dickinson High School	SF-2	Men's Locker Room	Pool	NA	NA	NA	15	15	
Dickinson High School	Window AC (6)	Cafeteria	Cafeteria	Carrier	NA	3 ton	old	10	
Dickinson High School	Portable AC	403	403	Denso	MOVIN COOL 24HFU-1	9	15	10	
Dickinson High School	Portable AC	416A	416A	Denso	MOVIN COOL 24HFU-1	9	15	10	
Dickinson High School	Portable AC	416B	416B	Denso	MOVIN COOL 24HFU-1	9	15	10	
Dickinson High School	AC	115A	115A	Goldstar	GWHD5000	9.7	5	10	5,000 btuh
Dickinson High School	AC	115A	115A	Goldstar	GWHD5000	9.7	5	10	5,000 btuh
Dickinson High School	AC	112	Nurses Office	Not Visible	Not Visible	9.7	15	10	2 Ton window AC
Dickinson High School	AC	Principal Office	Principal Office	Frigidaire	Not Visible	9.7	5	10	2.5 Tons
Dickinson High School	AC	Night School Office	Night School Office	Montgomery Ward	Not Visible	9.7	20	10	2 tons
Dickinson High School	AC	Records	Records	Unknown	Not Visible	9.7	10	10	2 tons
Dickinson High School	AC	117B	117B	Maytag	M3T12F2AREVC	9.8	5	10	
Dickinson High School	AC	116	Computer Lab	Frigidaire	Not Visible	9.8	15	10	2 tons
Dickinson High School	AC	116	Computer Lab	Frigidaire	Not Visible	9.8	15	10	2 tons
Dickinson High School	AC	115	VP Office	Unknown	Not Visible	9.8	15	10	1 Ton
Dickinson High School	AC	B4	Computer Tech	Sharp	Not Visible	9.8	10	10	1 Ton
Dickinson High School	Generator	Generator Room	Emergency Power	Kohler	NA	N/A	560 Hours	25	100 kW, #2
PS #1	AC	MAIN OFFICE	MAIN OFFICE	CARRIER	Unknown	9.0 EER	~10	10	1 1/2TONS
PS #1	AC	VP OFFICE	VP OFFICE	Unknown	LOCKED	9.0 EER	10	10	
PS #1	UH	CAFÉ	CAFÉ	?	EUH03B34C	100	5	20	7500 WATTS X2
PS #1	UH	GYM	GYM	BURNHAM	STEAM UNIT HEATER	NA	20	20	OLD
PS #1	EF	BOYS	BOYS	Unknown	Unknown	Unknown	15	20	DUCT CUT BEFORE WONDOW
PS #1	BOILER 1	Boiler Room	Whole Building	TITUSVILLE	SOH121	70%	59	25	43-11 GPH #2
PS #1	BOILER 2	Boiler Room	Whole Building	TITUSVILLE	SOH121	70%	59	25	43-11 GPH #2
PS #1	UH	CAFÉ A	CAFÉ A	BURNHAM	Unknown	NA	20	20	STEAM
PS #1	UH	CAFÉ B	CAFÉ B	MODINE	Unknown	NA	20	20	STEAM
PS #6	UV606	Music Room	319	TRANE	TACB0483WC0B11010	9.0 EER	15	15	Music W/ Cooling
PS #6	UV607	Music Room	320	TRANE	TACB0483WC0B11010	9.0 EER	15	15	BAND W/COOLING
PS #6	UNIT VENT	Classrooms	Classrooms	AAF	LITTLE DATA	10	20	20	STEAM
PS #6	AC	TEACHERS	TEACHERS	FRIGIDAIRE	FRA156	10	NEW	10	
PS #6	AC	GUIDDANCE	GUIDDANCE	FEDDERS	A7D18E2A	10	5+	10	
PS #6	HV-7	2ND M	AUDITORIUM	AAF	HD14ALF	NA	15	20	
PS #6	HV-6	2ND M	AUDITORIUM	AAF	VCS10ALF	NA	15	20	
PS #6	HV-5	2ND M	AUDITORIUM	AAF	HD14ALF	NA	15	20	
PS #6	UV605	LIBRARY	LIBRARY	TRANE	TACB0303WCB011010	9.0 EER	15	20	
PS #6	UV	LIBRARY	LIBRARY	TRANE	IN LOCKED ROOM	9.0 EER	15	30	
PS #6	UV601	100	100	TRANE	TACB0243WC0B11010	9.0 EER	15	20	
PS #6	UV603	99	99	TRANE	TACB0243WC0B11010	9.0 EER	15	20	
PS #6	AC	VP OFFICE	VP OFFICE	FREIDRICH	Unknown	10	5+	10	5000 BTUH
PS #6	AC	1 OFFICE	1 OFFICE	CARRIER	Unknown	10	5+	10	5000 BTUH
PS #6	AC	1 OFFICE	MAIN OFF	FREIDRICH	Unknown	10	5	10	18000 BTUH
PS #6	AC	PRINCIPAL OFFICE	PRINCIPAL OFFICE	FEDDERS	A7D18E2A	10	5	10	18000 BTUH
PS #6	AC	PRINCIPALS SECRETARY	PRINCIPALS SECRETARY	FEDDERS	A7D18E2A	10	5	10	18000 BTUH
PS #6	AC	NURSE	NURSE	SUNBEAM	Unknown	10	5	10	18000 BTUH
PS #6	AC	CAFETERIA	CAFETERIA	NO NAME	Unknown	10.0 EER	8	10	18000 BTUH
PS #6	AC	CAFETERIA	CAFETERIA	NO NAME	Unknown	10.0 EER	8	10	18000 BTUH
PS #6	SF-2	Pool Area	Pool Area	NO NAME	STEAM HEAT	NA	20	20	5 HP
PS #6	EF	SUPPLY CLOSET/CAFETERIA	SUPPLY CLOSET/CAFETERIA	PENN	Z-10	24A115V	20	20	
PS #6	HV-9	GIRLS	BATHROOM	AAF	Unknown	NA	15	20	AND LOCKER ROOM
PS #6	HEAT RECOVERY UNIT	Locker Room	Pool	Z PACK	MZP-400D	NA	15	20	3000 CFM
PS #6	HV-8	BOYS	LOCKER	AAF	HCS06ALF	~90%	15	20	GAS
PS #6	BOILER 4	PUMP	NEW WING	WEIL	778	~80%	15	17	938 MBH GAS
PS #6	BOILER 3	PUMP	NEW WING	WEIL	778	~80%	15	17	GAS
PS #6	BOILER 1	BOILER	OLD BUILDING	SMITH	28A	~80%	7	25	1466-5862 MBH GAS
PS #6	BOILER 2	BOILER	OLD BUILDING	SMITH	28A	~80%	7	25	13.6-40.8 GPH #2 Oil
PS #6	RTU	ROOF	TEACHER/COPY ROOM	TRANE	YCD103B3LLADD	9	15	15	15000 BTUH GAS HEAT INPUT
PS #6	RTU	ROOF	ART ROOM	TRANE	YCD121BCLADD	9	15	15	121500 OUTPUT
PS #6	Pump-1A & 1B	BOILER	OLD BUILDING	Unknown	Unknown	NA	20	17	2 HP
PS #6	Pump-1A & 1B	BOILER	OLD BUILDING	Unknown	Unknown	NA	20	17	3 HP
PS #6 Trailer	UH	Trailer	Trailer Classroom	BARD	MAC 30A-A10	9	15	20	
PS #6 Trailer	UH	Trailer	Trailer Classroom	BARD	MAC 30A-A10	9	15	20	
PS #6	Compressor	Pump Room	Controls	Furnas	8DG5C	N/A	15	20	1 HP
PS #8	EF	CAFETERIA	CAFETERIA	Unknown	Unknown	N/A	5	20	1/2 HP
PS #8	EF	KITCHEN	KITCHEN	Unknown	Unknown	N/A	5	20	1/2 HP
PS #8	UNIT VENT	CAFETERIA	CAFETERIA	TRANE	Unknown	N/A	10	20	STEAM X3
PS #8	UNIT HEATER	CAFETERIA	CAFETERIA	TRANE	Unknown	N/A	10	20	
PS #8	UNIT HEATER	LIBRARY	LIBRARY	STERLING	Unknown	N/A	5	20	STEAM
PS #8	AC	LIBRARY	LIBRARY	FEDDERS	Unknown	1 TON	10+	15	X3
PS #8	AC	LIBRARY	LIBRARY	CARRIER	CHILLER RECIP	10.8	15	15	
PS #8	CHWP	Mech Room	Addition Cooling	NO NAME	CHILLER PUMP	N/A	15	17	5 HP
PS #8	AC	MAIN OFFICE	MAIN OFFICE	FREIDRICH	Not Visible	1 TON	5	15	
PS #8	AC	COMPUTER LAB	COMPUTER LAB	FEDDERS	A6K32E7A-E	11	5	15	32000 BTU/HR
PS #8	AC	180	180	FEDDERS	Unknown	11	5	15	WINDOW AC
PS #8	AC	188	188	CARRIER	Unknown	10.8	8	15	GUESS
PS #8	BOILER 1	BOILER ROOM	HEATING SYSTEM	KEWANNE	Unknown	75%	51	25	#2 OIL STEAM
PS #8	BURNER 1	BOILER ROOM	HEATING SYSTEM	GORDON PIATT	F 14-0-50/073032	N/A	4	25	18.8 - 75 GPH AIRATOMIZED
PS #8	BOILER 2	BOILER ROOM	HEATING SYSTEM	KEWANEE	Unknown	75%	51	25	#2 OIL STEAM
PS #8	BURNER 2	BOILER ROOM	HEATING SYSTEM	GORDON PIATT	F 14-0-50/073031	N/A	4	25	18.8-75 GPH
PS #8	UNIT VENT	NEW BUILDING	Classrooms	Unknown	Unknown	N/A	15	20	1/4 HP HOT WATER
PS #8	AC	23Y	TEACHERS ROOM	SHARP	TAG HALF COVERED	10.0 EER	5+	15	~ 1 TON
PS #8	AC	24B	COMPUTER LAB	FEDDERS	TAG HALF COVERED	10.0 EER	5+	15	~ 1 TON
PS #8	ROOF	ROOF	BATHROOM	Unknown	EXHAUST FANS	N/A	20	20	
PS #8		ROOF	KITCHEN	CAPTIVE AIR	CNU165 RG	N/A	5	20	1 1/2 HP
PS #8	MAU-1	ROOF VENT	GYM	STURTEVANT	38 SAR435	N/A	30+	20	SIZE 10000 STEAM HEAT ONLY
PS #8	MAU-2	ROOF VENT	GYM	STURTEVANT	38 SAR435	N/A	30+	20	

Building	Description [Tag ID]	Unit Location	Service Location	Manufacturer	Model	Estimated Efficiency	Estimated Age (Years)	ASHRAE Expected Life (Years)	Notes
PS #11	UH	MAIN OFFICE	MAIN OFFICE	STERLING	HS-036	N/A	NEW	20	550 CFM 28100 BTUH
PS #11	AC	MAIN OFFICE	MAIN OFFICE	CARRIER	Unknown	10 EA	10	15	12000 CFM
PS #11	AC	MAIN OFFICE	MAIN OFFICE	CARRIER	Unknown	10 EA	10	15	12000 CFM
PS #11	AC	MAIN OFFICE	MAIN OFFICE	FREIDRICH	Unknown	10 EA	10	15	12000 CFM
PS #11	AC	NURSES OFFICE	NURSES OFFICE	CARRIER	Unknown	10 EA	10	15	12000 CFM
PS #11	AC-3 ACCU	ROOF	GYM	SNYDER	ALP0410	10.0 EER	12+	15	3 CELL
PS #11	CONDENSER	ROOF	107	Unknown	ATL0300100A0	N/A	19	15	INSULATE REFRIGERANT LINES
PS #11	CONDENSER	ROOF	107	Unknown	ATL0300100A0	N/A	19	15	INSULATE REFRIGERANT LINES
PS #11	AC-3 ACCU	ROOF	GYM	SNYDER	ALP032C	10.0 EER	12	15	INSULATE REFRIGERANT LINES
PS #11	CONDENSER	ROOF	BASEMENT CLASSROOM	Unknown	HAMC-F0245A	N/A	19	15	INSULATE REFRIGERANT LINES
PS #11	CONDENSER	ROOF	BASEMENT CLASSROOM	Unknown	HAMC-F0245A	N/A	19	15	INSULATE REFRIGERANT LINES
PS #11	CONDENSER	LOW ROOF	BASEMENT CLASSROOM	CARRIER	Unknown	N/A	19	15	INSULATE REFRIGERANT LINES
PS #11	AC-2	~ MECH FK2	GYM	MCQUAY	HEATING + COOLING	10.0 EER	20	15	DX 3 WAY HW
PS #11	AC-3	FR-1	GYM	MCQUAY	HEATING + COOLING	10.0 EER	20	15	DX 3 WAY HW
PS #11	BOILER 1	BOILER ROOM	Building Heat	WEIL MCLAIN	94 ABC-1394 WE	75%	50	30	30 GPH OIL 4200 MBH GAS
PS #11	BOILER 1	BOILER ROOM	Building Heat	WEIL MCLAIN	94 ABC-1394 WE	75%	50	30	
PS #11	HHWP-1	BOILER ROOM	Building Heat	ARMSTRONG	139359	N/A	20	17	10 HP
PS #11	HHWP-2	BOILER ROOM	Building Heat	ARMSTRONG	139359	N/A	20	17	10HP
PS #11	AC	B106	B106	CARRIER	1 TON AC	10.0 EER	6+	15	LIBRARY MEDIA CENTER
PS #11	AC	B CUST OFFICE	B CUST OFFICE	CARRIER	1 TON AC	10.0 EER	6+	15	
PS #23	AHU	ROOF	FOR AUDITORIUM	CENTRAL AIRE	1820F2	N/A	15	15	HEAT ONLY
PS #23	AHU	ROOF	FOR GYM	CENTRAL AIRE	1820F2	N/A	15	15	HEAT ONLY
PS #23	CONDENSER	ROOF	ESL SUI	CARRIER	50DJ008610	N/A	15	15	COOLING FAILED
PS #23	Unit Ventilator	CLASSROOMS	CLASSROOMS	MSI	TOS2100011B2BPD	N/A	20	10	UNIT VENT 1/12HP
PS #23	AC	3RD VP	OFFICE	FRIGIDAIRE	FA5156NA12	10.7	8	10	18000 BTUH
PS #23	AC	ASST PRINCIPAL OFFICE	ASST PRINCIPAL OFFICE	FRIGIDAIRE	FA5156NA12	10.7	8	10	18000 BTUH
PS #23	AC	TEACHERS ROOM	TEACHERS ROOM	FRIGIDAIRE	FA5156NA12	10.7	8	10	1415 COOLING WATTS
PS #23	HV	B GIRLS	B GIRLS	Trane	Unknown	NA	30	20	
PS #23	EF	B GIRLS	B GIRLS	Trane	Unknown	NA	30	20	
PS #23	UH	B GIRLS	B GIRLS	Trane	Unknown	NA	10	20	STEAM
PS #23	AC	CAFÉ	CAFÉ	FRIGIDAIRE	Unknown	10.0 EER	5	10	18000 BTUH X6 X3
PS #23	HV	GYM	GYM	CENTRAL AIRE	585UP3	10.0 EER	15	20	
PS #23	UH	DRESSING ROOM	DRESSING ROOM	Unknown	Painted over	N/A	15	20	STEAM
PS #23	EF	SHOWER	SHOWER	Unknown	Painted over	N/A	15	20	
PS #23	UH	SHOWER	SHOWER	Unknown	Painted over	N/A	15	20	STEAM
PS #23	EF	POOL	POOL	Unknown	Painted over	N/A	15	20	
PS #23	HV	SHOWER	POOL	Z PACK	MZ-3070	30A48OV	15	20	3000 CFM
PS #23	HV	B BOYS	POOL	Unknown	Painted over	N/A	15	20	
PS #23	ELECTRIC WATER HEATER	POOL HEATER	POOL HEATER	COATES	34857PH5	100%	5	20	57 KW
PS #23	AC	LIBRARY	LIBRARY	FRIGIDAIRE	FA5156N1A2	5	10	10	15100 BTUH X2
PS #23	HV	LIBRARY	LIBRARY	Unknown	Painted over	N/A	15	20	
PS #23	HV	LIBRARY	ED TECH	Unknown	Painted over	N/A	15	20	
PS #23	RF	LIBRARY	ED TECH	LOREN COOK	18"X18"	N/A	15	20	
PS #23	BOILER 1	BOILER ROOM	HEAT	CLEAVER BROOKE	CB655-150	75%	20	30	42 GPH
PS #23	BOILER 1	BOILER ROOM	HEAT	CLEAVER BROOKE	CB655-150	75%	20	30	42 GPH
PS #23	AHU	CAFÉ	HEAT	CENTRAL AIRE	1218F2	N/A	15	20	
PS #23	AC	MAIN OFFICE	MAIN OFFICE	SHARP	AFM1909Y	10.8	7	10	18000 BTUH X2
PS #23	AC	PRINCIPAL	PRINCIPAL	SHARP	AFM1909Y	10.8	7	10	18000 BTUH X2
PS #23	AC	PRINCIPAL	PRINCIPAL	Frigididare	FAS156N1A	10.7 EER	8	10	1-1/2 Tons
PS #23	AC	PRINCIPAL	PRINCIPAL	Kelvinator	Kelvinator	8.5	30	10	1-1/2 Tons
PS #23	AC	PRINCIPAL	PRINCIPAL	Frigidaire	FAS156N1A	10.7 EER	8	10	15,100 btuh
PS #23 Annex	BOILER 1	BOILER ROOM	HEATING SYSTEM	Hydrotherm	Multitemp MR-750C-PV	78	12	25	Nat Gas, 750MBH input
PS #23 Annex	AHU	Roof	CLASSROOMS	Addison	DFC-144M-3F-04	N/A	12	20	
PS #23 Annex	AHU	Roof	CLASSROOMS	Addison	DFC-194M-3F-04	N/A	12	20	
PS #23 Annex	AHU	Roof	CLASSROOMS	Addison	DCF-054M-3F-02	N/A	12	20	
PS #24	AC	302A	302A	FREIDRICH	1 TON	10.7	5+	10	
PS #24	AC	301A	301A	SHARP	AF-580FS	10.8	5	10	8000 BTUH
PS #24	AC	316A	316A	PANASONIC	Unknown	10.7	10	10	
PS #24	AC	311A	311A	FREIDRICH	OP12C10	10.8	10	10	118000 BTUH
PS #24	AC	TEACHERS ROOM	TEACHERS ROOM	CARRIER	XCB153D	10.2	16	10	18000
PS #24	AC	202A	202A	FREIDRICH	CP12C10	10.8	10	10	118000 BTUH
PS #24	AC	205A	205A	FREIDRICH	CP12C10	10.8	10	10	118000 BTUH
PS #24	AC	204A	204A	FREIDRICH	CP12C10	10.8	10	10	118000 BTUH
PS #24	AC	200	200	FREIDRICH	CP12C10	10.8	10	10	118000 BTUH
PS #24	AC	NURSES OFFICE	NURSES OFFICE	HAMPTON BAY	HBT12OA	9.8	10	10	12000 BTUH
PS #24	AC	NURSES OFFICE	NURSES OFFICE	PENN	Z-10	N/A	15	10	
PS #24	AC	PRINCIPALS OFFICE	PRINCIPALS OFFICE	CARRIER	XCB153D	10.2	16	10	18000
PS #24	AC	107	107	FREIDRICH	CP12C10	10.8	10	10	118000 BTUH
PS #24	AC	108A	108A	FREIDRICH	CP12C10	10.8	10	10	118000 BTUH
PS #24	AC	111A	111A	CARRIER	XCB153D	10.2	16	10	18000
PS #24	AC	TEACHERS ROOM	TEACHERS ROOM	FREIDRICH	CP12C10	10.8	10	10	118000 BTUH
PS #24	EF	BOYS LOCKER	CAFÉ/HALL	Unknown	MILLIECUBE	N/A	10	20	48X48 FAN
PS #24	SF	CAFÉ	CAFÉ	Unknown	Painted over	N/A	15	20	
PS #24	HV-3 SF	GYM	GYM	TREMTROL	DH21S	N/A	15	20	LIKE CAFÉ
PS #24	EF	GYM	GYM	Unknown	Unknown	N/A	15	20	24 X 24 DIS
PS #24	SF	CAFÉ	CAFÉ	Unknown	Unknown	N/A	15	10	
PS #24	AHU	LIBRARY	LIBRARY	CARRIER	39C1061AB1026-R	N/A	10	15	
PS #24	HV-1	TECHNOLOGY	COMP	TREMTROL	DH213	N/A	15	20	HOT WATER
PS #24	AH-7	TECHNOLOGY	COMP	TREMTROL	DH213	N/A	15	20	HOT WATER
PS #24	AH-5	TECHNOLOGY	COMP	TREMTROL	DH213	N/A	15	20	HOT WATER
PS #24	B-1	BOILER	HEAT	UNKNOWN	STILL HAS TUBE LEAKS	65%	50	35	70 GPH #4
PS #24	B-2	BOILER	HEAT	UNKNOWN	WONT HOLD PRESSURE	65%	50	35	70 GPH #4
PS #24	RTU	ROOF	214, 215	TRANE	YCD086C3LABE	10.5	15	15	120MBH in, 97MBH out
PS #24	Condenser	Outdoor	Library	CARRIER	38AK008560	N/A	10	15	
PS #25	B-1	BOILER	HEAT	CLEAVER BROOKE	CB-800-100	75%	23	25	30 GPH OIL
PS #25	B-2	ROOM	HEAT	CLEAVER BROOKE	CB-800-100	75%	23	25	30 GPH OIL
PS #25	UH	BOYS ROOM	BOYS ROOM	TRANE	TRANE	N/A	8	20	STEAM
PS #25	EF	BOYS ROOM	BOYS ROOM	UNKNOWN	UNKNOWN	N/A	10	20	
PS #25	UNIT VENT	CAFETERIA	CAFETERIA	UNKNOWN	UNKNOWN	10+	8	20	
PS #25	UNIT VENT	CAFETERIA	CAFETERIA	UNKNOWN	UNKNOWN	10+	8	20	
PS #25	EF	CAFETERIA	CAFETERIA	UNKNOWN	UNKNOWN	10+	10	20	
PS #25	EF	CAFETERIA	CAFETERIA	UNKNOWN	UNKNOWN	10+	10	20	
PS #25	AC	CAFETERIA	CAFETERIA	FREIDRICH	CP BF30	10.7	1	10	
PS #25	AC	CAFETERIA	CAFETERIA	FREIDRICH	CP BF30	10.7	1	10	

Building	Description [Tag ID]	Unit Location	Service Location	Manufacturer	Model	Estimated Efficiency	Estimated Age (Years)	ASHRAE Expected Life (Years)	Notes
PS #25	FAN	FAN ROOM	Ventilation	BIG OLD FAN	BIG OLD FAN	N/A	80	20	Not In use
PS #25	UH	GIRLS ROOM	GIRLS ROOM	TRANE	TRANE	100%	8	20	
PS #25	EF	GIRLS ROOM	GIRLS ROOM	UNKNOWN	UNKNOWN	N/A	10	20	
PS #25	UNIT VENT	CAFETERIA	CAFETERIA	TRANE	UNKNOWN	N/A	8	20	
PS #25	VENT FAN	ELEC ROOM	ELEC ROOM	POWER LINE	B2IBBFW	N/A	10	20	1 HP
PS #25	LIBRARY	LIBRARY	LIBRARY	FREIDRICH	ZQ10A10B	9.8 EER	5	15	10000 BTUH X3
PS #25	TEACHERS LOUNGE	TEACHERS LOUNGE	TEACHERS LOUNGE	FREIDRICH	ZQ10A10B	9.8 EER	5	15	10000 BTUH
PS #25	226	COMPUTER LAB	COMPUTER LAB	FREIDRICH	ZQ10A10B	9.8 EER	5	15	10000 BTUH X2
PS #25	320	IT	IT	FREIDRICH	ZQ10A10B	9.8 EER	5	15	10000 BTUH
PS #25	ROOF	GYM	GYM	MCQUAY	RAH8000YE	8	10	20	439 MBH ELEC
PS #25	ROOF	GYM	GYM	MCQUAY	RAH04Y1YE	8	10	20	
PS #25	312 EF	EF	(TYPICAL)	UNKNOWN	UNKNOWN	N/A	30	20	
PS #25	205	AC	LOUNGE	FRIGIDAIRE	1 TON	10 EER	10+	10	WINDOW AC
PS #25	111A	111A	111A	FRIGIDAIRE	CP18F30	10.7 EER	>1	10	18000 BTUH
PS #25	111B	111B	111B	FREIDRICH	CP18F30	10.7 EER	>1	10	18000 BTUH
PS #25	VP OFFICE	VP OFFICE	VP OFFICE	FREIDRICH	CP18F30	10.7 EER	>1	10	18000 BTUH
PS #25	NURSES OFFICE	NURSES OFFICE	NURSES OFFICE	FREIDRICH	CP18F30	10.7 EER	>1	10	18000 BTUH
PS #27	UNIT VENT	CLASS	CLASS	NESBITT	NA	N/A	OLD	10	
PS #27	AC	101B	101B	MAGIC AIR	24BHHX-3-A	N/A	18	20	AHU
PS #27	Duct Heater	101B	101B	INBEECO	GUA	N/A	18	20	8 KW DUCt HEATER
PS #27	102	102	102	QMARK	MUH077	N/A	2	20	7 KW
PS #27	109	109	109	DAYTON	UNIT HEATER	N/A	2	20	7 KW
PS #27	107	TEACHERS LOUNGE	TEACHERS LOUNGE	MAYTAG	1 TON	N/A	10+	10	TAG COVERED
PS #27	105	105	105	CARRIER	1 TON AC	10	10	10	
PS #27	CF-2	STAGE MEZZ	GYM	NESBITT	NA	1 HP FAN	30+	20	ELEC HEAT OA RA
PS #27	CF-1	STAGE MEZZ	GYM	NESBITT	NA	1 HP FAN	30+	20	ELEC HEAT OA RA
PS #27	20	TEACHERS LOUNGE	TEACHERS LOUNGE	FREIDRICH	1 TON	N/A	10	10	
PS #27	30	TEACHERS LOUNGE	TEACHERS LOUNGE	ELECTROLUX	1 TON AC	N/A	5+	10	
PS #27	EF-1	ROOF	BATHROOM	GREENHECK	CBF-1	N/A	20	20	SN241137
PS #27	EF-2	ROOF	BATHROOM	GREENHECK	CBF 14-1	N/A	20	20	SN241138
PS #27	EF-3	ROOF	BATHROOM	GREENHECK	CBE-48-SC	N/A	20	20	
PS #27	EF-4	ROOF	BATHROOM	GREENHECK	CBI-24-6	N/A	20	20	
PS #27	ELEVATOR	ELEVATOR	ELEVATOR	UNKNOWN	UNKNOWN	UNKNOWN	30+	17	30 HP MOTOR
PS #27	Unit Heater	LIBRARY	LIBRARY	DAYTON	2 YU70	10 KW	NEW	20	ELECTRIC UNIT HEATER
PS #27	AC	LIBRARY	LIBRARY	GE	AEM10APH1	10.8 EER	NEW	10	10000 BTUH X2
PS #27	ELECTRIC UNIT HEATER	Basement	Class Room	DAYTON	2YU70	10 KW	NEW	20	ELECTRIC UNIT HEATER
PS #27	ELECTRIC UNIT HEATER	B-4	CAFÉ	AMERICAN	300-226	N/A	30	15	1 1/2 HP BALDOR
PS #27	ELECTRIC UNIT HEATER	B-4	CAFÉ	AMERICAN	ELEC HEAT AHU	N/A	30	20	2 HP OLD
PS #27	POOL	POOL-M	POOL	Rusted	MAKE UP AHU	N/A	30	20	RUSTED THROUGH
PS #27	ELEC POOL HEATER	Pool Mech Room	POOL	Rusted	ELEC POOL HEATER	N/A	30	15	RUSTED THROUGH
PS #27	ELECTRIC UNIT HEATER	BOYS LOCKER	POOL	DAYTON	2YU7O	N/A	2	20	LOCAL TSTAT
PS #27	ELECTRIC UNIT HEATER	GIRLS LOCKER	POOL	DAYTON	2YU70	N/A	2	20	WILL SOON RUST
PS #28	DISH WASHER	CAFETERIA	CAFETERIA	HOBART	CRS66A	N/A	22	12	
PS #28	HVAC-11	PUMP ROOM	CAFÉ	AMERICAN	BWV240B4	N/A	22	20	ELECTRIC HEAT
PS #28	HVAC-12	PUMP ROOM	KITCHEN	TRANE	HVAC UNIT	N/A	22	20	
PS #28	HVAC-10A	MAIN OFFICE	MAIN OFFICE	COMPUAIR	CASW-434	N/A	22	20	
PS #28	PTAC	PRINCIPAL OFFICE	PRINCIPAL OFFICE	MCQUAY	Not Visible	N/A	22	15	
PS #28	HVAC-112	TEACHERS LOUNGE	TEACHERS LOUNGE	COMPUAIRE	CASA-434	N/A	22	20	
PS #28	AC	CLASS	CLASS	COMPUAIRE	CASH-434	10.5	22	20	
PS #28	AC	110	110	COMPUAIRE	22 COL	10.5	22	20	NEW UNIT LOCAL
PS #28	AC	214	214	SHARP	2 TON HP	10.5	22	10	PORTABLE AC
PS #28	CONDENSER	Roof	Unknown	CARRIER	38AKS008	10.5	22	15	X3
PS #28	CONDENSER	Roof	Unknown	CARRIER	38AKS008	10.5	22	15	
PS #28	CONDENSER	Roof	Unknown	CARRIER	38AKS008	10.5	22	15	
PS #28	RTU	AUDITORIUM ROOF	Auditorium	LENNOX	LCA240H2BJIG	10.5	22	15	7.5 HP FAN
PS #28	RTU	ROOF	BASEMENT HALL	Tag Gone	Tag Gone	10.5	22	15	HEAT ONLY
PS #28	RTU	ROOF	MUSIC ROOM	TRANE	NO TAGS 10 TON	10.5	22	15	
PS #28	RTU	ROOF	NURSE OFFICE	TRANE	NO TAGS 10 TON	10.5	22	15	NOT OPERATIONAL
PS #28	RTU	ROOF	GYM	Tag Gone	Tag Gone	10.5	22	15	HEAT ONLY
PS #28	RTU	ROOF	LIBRARY	TRANE	HEAT PUMP	10.5	22	15	
PS #28	FLUID COOLER	ROOF	OFFICE AND 120, 121 UNITS	BOHN	3 CELL FLUID CODER	1 1/2 HP PER FAN	20	15	FOR OFFICE AND 120, 121 UNITS
PS #28	RTU	ROOF	SCIENCE	A AON	RM-010-3-0-AA0	10.5	5	15	
PS #28	EF	25	FANS	CENTRAL AIRE	Tag Worn Out	N/A	22	20	
PS #31	AC	36A	36A	DAEWOO	DWC-121C	10.1 BTU/W	5	10	12,000 BTUH
PS #31	AC	36	36	GE	AGNOSFDMI	10	10	10	8,000 BTUH
PS #31	AC	AUD	AUD	COMFORT AIR	2 TON	10	8	10	X4
PS #31	AC	GUIDANCE OFFICE	GUIDANCE OFFICE	MAYTAG	UNKNOWN	9.8	5	10	5000 BTUH
PS #31	AC	17	ADMIIN	CARRIER	1 1/2 TON	9.8	5	10	
PS #31	AC	HEALTH OFFICE	HEALTH OFFICE	CARRIER	1 1/2 TON	9.8	5	10	
PS #31	AC	NURSE OFFICE	NURSE OFFICE	CARRIER	1 TON	9.8	5	10	407 MBH MIN
PS #31	BOILER	BOILER	HEAT	HB SMITH	350 MILLS	NATURAL GAS	40+	25	1220 MBH MAX
PS #31	BOILER	BOILER	HEAT	HB SMITH	28A-8	NATURAL GAS	21	25	833 TO 2499 MBH
PS #33	AC	3RD MULTI PURPOSE	3RD MULTI PURPOSE	FREIDRICH	CP15F10	1370W	1	10	1470 BTUH
PS #33	AC	3RD MULTI PURPOSE	3RD MULTI PURPOSE	FREIDRICH	CP15F10	9. 8	1	10	1470 BTUH
PS #33	AC	3RD MULTI PURPOSE	3RD MULTI PURPOSE	SUNBEAM	SAW08CR	9. 8	3	10	8000 X2
PS #33	AC	3RD MULTI PURPOSE	3RD MULTI PURPOSE	UNKNOWN	UNKNOWN	9. 8	5	10	^1 1/2 TON
PS #33	AC	TEACHERS ROOM	TEACHERS ROOM	GE	AGV10ABGI	9 .8	12	10	
PS #33	AC	10A	10A	SUNBEAM	SAW08CR	9 .8	5	10	8000 X2
PS #33	AC	9A	9A	SUNBEAM	SAW08CR	9 .8	5	10	8000 X2
PS #33	AC	GUIDANCE	GUIDANCE	SUNBEAM	SAW08CR	9 .8	5	10	8000 X2
PS #33	AC	PRINCIPAL	PRINCIPAL	FREIDRICH	CP15F10	9.8	5	10	
PS #33	AC	MAIN OFFICE	MAIN OFFICE	GE	SMALL	9	3	10	8000 BTUH
PS #33	AC	8A	8A	SUNBEAM	SMALL	9	3	10	
PS #33	AC	7A	7A	SUNBEAM	SMALL	9	3	10	
PS #33	A3	3A	3A	SUNBEAM	SMALL	9	3	10	
PS #33	AC	NURSE	NURSE	GE	SMALL	9	3	10	
PS #33	AC	1A	1A	GE	AEW12ANW1	10.8	NEW	10	12000 BTUH
PS #33	UH	1A	1A	NUTONE	Not Visible	N/A	OLD	20	1500W
PS #33	BOILER 1	BOILER ROOM	HEAT	HB SMITH	350 MILLS STEAM NOT GAS	75	71?	25	4340 MBH HIGH
PS #33	BOILER 1	BOILER ROOM	Heat	HB SMITH	350 MILLS STEAM NOT GAS	75	71?	25	4340 MBH HIGH
PS #33	HVAC	TRAILER	TRAILER	BARD	VARIOUS	9.6	10	10	ELEC HEAT/ AC X10
PS #33	PTAC	TRAILER	TRAILER	MCQUAY	VARIOUS	9.6	10	15	1.5 TON X6
PS #39	AC	TEACHERS	316	MAYTAG	Not Visible	9.0 EER	~10	10	
PS #39	UNIT VENT	Classrooms	Classrooms	NESBITT	Not Visible	NA	40	20	

Building	Description [Tag ID]	Unit Location	Service Location	Manufacturer	Model	Estimated Efficiency	Estimated Age (Years)	ASHRAE Expected Life (Years)	Notes
PS #39	AC	TEACHERS	216	MAYTAG	M3010F2A	10.8	5	10	
PS #39	UH	219	219	unknown	EUH05B3IT	NA	14	20	5000 W
PS #39	AC	219A	219A	MAYTAG	M7Q08F2AC	10.8	5	10	8000 BTU
PS #39	AC	112	112	CARRIER	XCB183D	9. 6	12	10	18000 BTUH
PS #39	AC	116	116	FREIDRICH	C912E10	10. 8	5	10	12000 BTUH
PS #39	AC	117	117	CARRIER	XCB183D	9. 6	12	10	18000 BTUH
PS #39	EF	B60	B60	PENN	40584	NA	5	20	
PS #39	AC	B28	B28	SHARP	AF	10.8	5	10	
PS #39	AC	CAFÉ	CAFÉ	FRIGIDAIRE	18000 BTUH	10.8	5	10	X6
PS #39	SUMP PUMP	B16	B16	BALDOR	Unknown	NA	5	10	3 HP EACH
PS #39	AHU	POOL	POOL	Z PACK	Unknown	NA	15	20	
PS #39	AHU	POOL	POOL	Z PACK	Unknown	NA	15	20	
PS #39	EF	POOL	POOL	NA	WALL FAN	NA	15	10	1/2 HP 24X24 WALL
PS #39	HEATER	POOL	POOL	HAYWARD	H400FDNASE	0.83	5	25	NATURAL GAS
PS #39	BOILER 1	BOILER ROOM	HEAT	KEWANEE	83-35	75	40	25	NO BURNER
PS #39	BOILER 2	BOILER ROOM	HEAT	KEWANEE	88-100	75	40	25	#2 ONLY
PS #39	BOILER 3	BOILER ROOM	HEAT	KEWANEE	88-100	75	40	25	NAT OR #2
PS #39	EF	AUD ROOF	EF	2	NA	NA	20+	20	
PS #39	EF	LOW ROOF	EF	2	NA	NA	20+	20	
PS #39	EF MAIN	ROOF	EF	12	NA	NA	20+	20	
PS #39	EF	GYM ROOF	GYM	3	NA	NA	20+	20	
LIBERTY	B-1	BOILER ROOM	HEAT	TITUS	GORDON BURNER	70%	60+	25	13-38 GPH OIL
LIBERTY	B-2	BOILER ROOM	HEAT	TITUS	GORDON BURNER	70%	60+	25	13-38 GPH OIL
LIBERTY	AC	Custodian Office	CUSTODIAL	NO TAG	NO TAG	9	1 1/2 TON	10	
LIBERTY	UNIT HEAT	B-2	B-2	STERLING	NO TAG	9	20	30	
LIBERTY	AC	B-2	B-2	GIBSON	1/2 TON	9	20	10	
LIBERTY	UNIT HEAT	B-3	B-3	STERLING	NO TAG	9	20	30	
LIBERTY	AC	B-3	B-3	?	1 TON	9	20	10	
LIBERTY	AC	109	109	CARRIER	XCB183D	9.3	14	10	21000 BTUH
LIBERTY	AC	101	101	CARRIER	XCB183D	9.3	14	10	21000 BTUH
LIBERTY	AC	104	104	CARRIER	XCB183D	9.3	14	10	21000 BTUH
LIBERTY	AC	106	109	CARRIER	XCB183D	9.3	14	10	21000 BTUH
LIBERTY	AC	105	105	UNKNOWN	1/2 TON	9	10	10	6000 BTUH
LIBERTY	AC	107	107	UNKNOWN	1/2 TON	9	10	10	6000 BTUH
LIBERTY	AC	200	PRINCIPAL	GIBSON	GAA082P7A1	9.8	5	10	8000 BTUH
LIBERTY	AC	201	201	FRIGIDAIRE	FAS185P2A1	10.7	5	10	18500 BTUH
LIBERTY	AC	209	209	FRIGIDAIRE	FAS185P2A1	10.7	5	10	18500 BTUH
LIBERTY	AC	206	206	FRIGIDAIRE	FAS185P2A1	10.7	5	10	18500 BTUH
LIBERTY	AC	204	204	FRIGIDAIRE	FAS185P2A1	10.7	5	10	18500 BTUH
LIBERTY	AC	203	203	UNKNOWN	1/2 TON	9	15	10	6000 BTUH
LIBERTY	AC	305	MPR	FRIGIDAIRE	FAS185P2A1	10.7	5	10	18500 BTUH
LIBERTY	AC	305B	COMP LAB	GIBSON	GAA082P7A1	9.8	5	10	8000 BTUH
LIBERTY	AC	305A	305A	FRIGIDAIRE	FAS185P2A1	10.7	5	10	18500 BTUH
LIBERTY	AC	308	308	NOT ACCESSIBLE	NOT ACCESSIBLE	9	15	10	6000 BTUH
LIBERTY	AC	309	309	FRIGIDAIRE	FAS185P2A1	10.7	5	10	18500 BTUH
LIBERTY	AC	301	301	UNKNOWN	NA	9	21	10	
LIBERTY	AC	300	300	CARRIER	NA	9.3	21	10	
LIBERTY	AC	302	302	GIBSON	GAA082P7A1	9.8	5	10	8000 BTUH

Domestic Water Heater Inventory							
Building	**Unit Location**	**Manufacturer**	**Model**	**Storage Capacity (Gallons)**	**Type**	**Heating Capacity**	**Observed Condition**
Ferris High School	Engine Room	Lochinvar	PFN100PM		Gas fired hot water boiler	Unknown	Aging
Ferris High School	Engine Room	Lochinvar	PFN100PM		Gas fired hot water boiler	Unknown	Aging
Lincoln High School	No Domestic Water Heaters - DHW is from Heater Exchanger on HHW						
McNair High School	Basement	Lochinvar	CWN500PM	200	Electric	Unknown	Good
PS #22	Engine Room	RBI	HW 1160		Gas fired hot water boiler	Unknown	Aging
Regional Day School	DHW - 1	A.O. SMITH	DVE 120916	119	Electric	Unknown	Good
Regional Day School	DHW – 2	A.O. SMITH	DVE 120916	119	Electric	Unknown	Good
Regional Day School	DHW - 3	A.O. SMITH	DVE 120916	119	Electric	Unknown	Good
MS #4	No Domestic Water Heaters - DHW is from Heater Exchanger on HHW						
MS #7	DHW1	A.O. SMITH	BTP 300-600,000	300	Gas fired hot water boiler	Unknown	Good
MS #7	DHW2	A.O. SMITH	BTP 300-600,000	300	Gas fired hot water boiler	Unknown	Good
MS #7	DHW3	A.O. SMITH	BTP 300-600,000 159529-1	300	Gas fired hot water boiler	Unknown	Good
PS #3	Penthouse	PVI turbopower	2000P 1250A-TP	1250	Gas fired hot water boiler	Unknown	Good
PS #5	No Domestic Water Heaters - DHW is from Heater Exchanger on HHW						
PS #12	Boiler 3	PK Thermific	N1500-MFD		Gas fired hot water boiler	Unknown	Good
PS #12	Boiler 4	PK Thermific	N1500-MFD		Gas fired hot water boiler	Unknown	Good
PS #14	3 DHW BOILER	PK Thermific	N1500 MFD		Gas fired hot water boiler	Unknown	Good
PS #14	4 DHW BOILER	PK Thermific	N1500 MFD		Gas fired hot water boiler	Unknown	Good
PS #16	No Domestic Water Heaters - DHW is from Heater Exchanger on HHW						
PS #37	No Domestic Water Heaters - DHW is from Heater Exchanger on HHW						
Academy #1	Boiler Room	Patterson Kelley Co.	NA	PKW-200	Electric	Input:200 kw	Poor
Administration Building	Basement	American Water Heaters	30	E61-30H-045-DV	Electric	3380/4500 Watts	Good
Administration Building	7th Floor Custodian Room	American Water Heaters	28	E61-50R-045-DV	Electric	3375/4500 Watts	Good
Administration Building	5th Floor Custodian Room	American Water Heaters	40	E62-40R-045-DV	Electric	3380/4500 Watts	Good
Administration Building	1R	Rudd	40	120700	Electric	4500W	Fair
Infinity School	Boiler Room	Richmond	40	6G40-36F1 RHLN 1205 104786	Gas	360,000 BTUH	Good
Infinity School	Basement Storage Area	Rheem	75	22VR75-70-N	Gas	70,000 BTUH	Good
MS #41	Boiler Room	Weil Mclain	~200 each tank	688	Indirect Gas	1,703 MBH	Good
PS #17	Boiler Room	A.O. Smith	~300	No tag	Indirect-Gas	Input: 1,188,000	Fair
PS #15	Boiler Room	PIC Compact Series 400	~200	208226	Gas	NA	Old
PS #20	Upstairs, B Room	Rheem	6	81UP6S	Electric	2000 Total	
PS #20	Boiler Room	Rheem	40	NA	Gas	38,000 input	Good
PS #29	Basement	Rheem	30	2103015	Gas	32,000 BTUH	New
PS #30	Boiler Room	A.O. Smith	NA	HW300100	Gas	300,000 BTUH	Good
PS #34	Boiler Room	Reliance	40	640DORT	Electric	4,500 Watts	New
PS #34	Boiler Room	A.O. Smith	60	BTH120966	Gas	125,000 In: 420,000 BTU/hr	
PS #38	Boiler Room	A.O. Smith	~100	HW-420 100	Gas	Out: 344,400 BTU/hr	
Snyder HS	Boiler Room	A.O. Smith	NA	No tag	Gas	NA	Fair