CITY OF SOMERVILLE, MASSACHUSETTS
MAYOR'S OFFICE OF STRATEGIC PLANNING & COMMUNITY DEVELOPMENT
KATJANA BALLANTYNE
MAYOR

GEORGE J. PROAKIS
EXECUTIVE DIRECTOR

January 28th, 2022

Somerville Living, LLC
c/o Paul DiBiase, Manager, DiBiase Homes
P.O. Box 780
Lynnfield, MA 01940

Dear Mr. DiBiase,

This letter is the Preliminary Decision of the Director of Mobility ('the Director') for the Mobility Management Plan ('MMP') submitted by Somerville Living, LLC c/o Paul DiBiase, Manager, DiBiase Homes, (the 'Applicant') for 16-20 Medford Street as required by §11.4 Mobility Management of the Somerville Zoning Ordinance (SZO). The decision is an **Approval with Conditions**. This letter details the conditions necessary for the successful implementation of your plan.

Background & Applicability

The Applicant proposes to redevelop approximately 0.39 acres of vacant land along Medford Street, South Street, Warren Street, and Bedford Street to construct a mixed-use development in the MR4 zoning district consisting of one 66,807 square foot (sf) building with a 3,876 sf retail space, 36,233 sf or residential space (41 units), 43 on site vehicle parking spaces (11 surface level, 32 below-grade), 41 long-term bicycle parking spaces, and 9 short-term bicycle parking spaces.

The proposed building will meet the twenty (20) or more total dwelling unit threshold to trigger MMP requirements of the property owner.

Plan Commitments

Programs and Services Required by the Somerville Zoning Ordinance (SZO)

The SZO requires the Applicant to make the following commitments in relation to the mode share commitment requirements for all mobility management plans:

- To making reasonable efforts to control the percentage of trips made by automobile at fifty percent (50%) or less and to implement additional mobility management programs and services if annual monitoring and reporting identifies a shortfall in meeting this goal.

The SZO requires the Applicant to make the following commitments in relation to the programs and services required for the property owner of a residential building with 20 or more dwelling units:

- To post and distribute mobility management information, including information pertaining to pedestrian, cycling and transit access to the Project Site.
- To un-bundle the rental or lease of parking spaces from the rental or lease of floor space.
- To provide on-site parking spaces at no cost for car-sharing vehicles

Additional Commitments

The Applicant has also committed to the following additional programs & services:

- To make reasonable efforts made to control the percentage of trips made by automobile at 37.5% or less by 2030 and at 25% or less by 2040 to meet the city's SomerVision 2040 goals.
- To host an Annual Mobility Education Meeting – all residents in the building will be invited to attend a Mobility Education meeting to learn about options annually.
- To post TDM program information on the Project's websites, in related media, in annual emails or newsletters.
- To sell or lease parking spaces at market rate and to provide standard purchase or lease agreement language for unbundled and market rate parking for approval by the Director of Mobility prior to the issuance of any Certificate of Occupancy. The owner will provide either a copy of executed purchase or lease agreements or an affidavit signed by the property owner and tenant(s) verifying this language was included and agreed to in the purchase or lease agreement.

Mobility Division Comments & Approval Conditions

The Mobility Division is concerned with a parking ratio of 1.05 space per unit but acknowledges that the Applicant is constrained by the existing parking minimums in the SZO. The Mobility Division strongly encourages the applicant to consider whether the Shared Parking provisions of the SZO allow for a reduction in the minimum number of parking spaces required and, if so, reduce the number parking spaces provided. National and local research has demonstrated that excessive motor vehicle parking in new development reduces mass transit ridership and undermines public investment in mass transit infrastructure.[1] Ideally, the SZO would be amended to require fewer parking spaces in development of this type and location, or the Applicant would seek a variance to construct fewer parking spaces than currently required. Absent that, especially strong Transportation Demand Management (TDM)

[1] Millard-Ball, A., West, J., Rezaei, N., & Desai, G. (2021). What do residential lotteries show us about transportation choices? Urban Studies. https://doi.org/10.1177/0042098021995139

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measures, transit amenities and connections, and additional supportive infrastructure to encourage the use of non-vehicle transportation modes are integral components of Mobility Management planning for this site.

- **CONDITION #1:** *The Applicant will charge no less than the demonstrated market rate for all parking spaces for a similar time period within a reasonable market radius. This condition does not apply to car share vehicle parking spaces. Standard lease agreement language and/or standard for-sale agreement language for unbundled and market rate parking must be approved by the Director prior to the issuance of any Certificate of Occupancy. To verify ongoing conformance, the property owner must provide either a copy of executed lease agreements, executed for-sale agreements, or an affidavit signed by the property owner and tenant(s) verifying that this language was included and agreed to in the lease, for-sale, or other agreement.*

- **CONDITION #2:** *Posted and distributed mobility management information must be reviewed and approved by the Director of Mobility prior to the issuance of any Certificate of Occupancy for the building.*

- **CONDITION #3:** *At least 2 vehicle parking spaces must be signed, designated, reserved, and made available for car share vehicles at no cost to a car share service provider. Spaces may be brought online at the discretion of the car share service provider. Notification of available spaces to car share service providers must be documented prior to the issuance of any Certificate of Occupancy and in annual reporting. Applicant may choose instead to provide their own vehicles and reservation system for on-site car sharing spaces.*

- ***CONDITION #4:*** *At least 25% of the vehicle parking spaces, rounded to the nearest whole number (11 spaces if parking count is 43) must be equipped with* Level 2 Chargers when the garage opens for occupancy. *The remaining 75% of garage vehicle parking spaces, must be EV Ready spaces. EV Ready spaces must be equipped with Level 2 chargers (or then current technology) as demand warrants. Documentation of EV readiness must be submitted to the Mobility Division prior to the issuance of any building permit for the site, including provisions for raceway to each parking space, adequate space in the electrical panel, and space for additional transformer capacity to accommodate the future installations.*

- **CONDITION #5:** *On-site real time transit information is required, consisting of connected two (2) TransitScreen displays (or equivalent service). One (1) shall be located inside the residential building lobby or common area near the principal entrance. One (1) shall be located inside the retail space or incorporated into the building facade, so that it is facing and visible to the adjacent public sidewalk on Medford St. Details on the locations of all real time transit information screens will be submitted to the Director for approval prior to the issuance of a building permit for any portion of the Project.*

- **CONDITION #6:** *The Applicant will provide a stored value MBTA Charlie Card, with the value of a combined bus/subway pass (currently set at $90 but subject to MBTA fare increases) to each adult member of a new household during the first month of initial occupancy of a new household. Up to two Charlie Cards total per household are required. This requirement renews each time a new household moves in to incentivize new households to use public transportation.*

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- **CONDITION #7:** *The Applicant will provide a one-month bikeshare membership (currently set at $20 but subject to bikeshare fare increases) to each adult member of a new household during the first month of initial occupancy of a new household. Up to two one-month bikeshare memberships total per household are required. This requirement renews each time a new household moves in to incentivize new households to use the bikeshare system.*

- **CONDITION #8:** *Rather than 50%, the Applicant's initial vehicle mode share commitment will be 36.2% so that it is consistent with the existing commuting characteristics in Census Tract 3515. The Applicant will implement additional mobility management programs and services if annual monitoring and reporting identifies a shortfall in meeting this goal.*

- **CONDITION #9:** *The Applicant will make reasonable efforts to control the percentage of resident trips made by vehicle at 25% or less by 2040 in order to meet the city's SomerVision 2040 goals. The Applicant will implement additional mobility management programs and services if annual monitoring and reporting identifies a shortfall in meeting this goal.*

- **CONDITION #10:** *The Applicant will sponsor, fund the purchase of, and identify an on-site and off-street location for, a city owned 19-dock BlueBikes bike share station to be located on the Applicant's property or a city approved location on the adjacent public sidewalk. Unless otherwise approved by the Director, the location must be identified prior to the issuance of any building permit for the site. Station must be installed and operational prior to issuance of any Certificate of Occupancy for the site. If the Director determines that an appropriate site cannot be found on or adjacent to the development site, the sponsorship payment must be made prior to issuance of any Certificate of Occupancy for the site and the city may place the sponsored station at another location at their sole direction.*

Monitoring and Reporting

The property owner has committed to Annual Reporting to track, assess, and report on the implementation of the Mobility Management, including:

- An annual statistically valid travel survey of residents.
- Biennial (every other year) 24 hour counts of motor vehicles entering & exiting the parking facility and counts of vehicle and bicycle parking utilization.
- A status update on the implementation of Mobility Management programs & services

All monitoring must be conducted at the same time each year, as determined by the Certificate of Occupancy for each building. If the Certificate of Occupancy for a building is issued between September 1 and February 29, the monitoring shall take place during the months of September or October and be reported to the Mobility Division no later than November 30. If the Certificate of Occupancy for a building is issued between March 1 and August 31, monitoring shall take place during the months of April or May and be reported to the Mobility Division no later than June 30. This will ensure that the monitoring captures a realistic assessment of the performance of the project, while giving time to compile the results and report them to the City.

It is important to note that while approved Mobility Management Plans are transferable by and among private parties, this transfer is contingent upon the new owner agreeing to continue to operate in

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accordance with the previously approved Mobility Management plan, as conditioned. Should the property owner elect to transfer some portion or all of the development subject to this Mobility Management Plan, commitment to the previously approved Mobility Management Plan is required by the new property owner.

I look forward to working with you in the future as you implement this plan. If you have any questions, please feel free to contact me at (617) 625-6600 or brawson@somervillema.gov.

Sincerely,

Brad Rawson
Director of Mobility
Mayor's Office of Strategic Planning & Community Development
City of Somerville, Massachusetts

I certify that I have read and agree to implement the Mobility Management Plan in the form approved by the Director of Mobility. I understand that failure to implement the approved plan may result in enforcement actions taken by the City of Somerville.

Agreed and accepted,

DocuSigned by:
Paul DiBiase
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Manager
Somerville Living LLC
1/31/2022

Paul DiBiase, Manager, DiBiase Homes on behalf of Somerville Living, LLC

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Mobility Management Plan
The Onyx
16-20 Medford Street
Somerville, Massachusetts

PREPARED FOR:

Somerville Living, LLC
P.O. Box 780
Lynnfield, MA 01940

PREPARED BY:

a division of GM2
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120 Middlesex Avenue
Suite 20
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In association with:

Khalsa Design, Inc.

October 2021

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Project Information

Contact Information

Site Address and Project Name:
The Onyx
16-20 Medford Street, Somerville, MA

Company Name:
Somerville Living, LLC

Company Address:
P.O. Box 780, Lynnfield, MA 01940

Company Telephone Number:
781-334-9899

Company Designated Contact:
Paul DiBiase, Manager

Company Email Address:
info@dibiasehomes.com

Project Description

In accordance with Section 11.4.2 of the Somerville Zoning Ordinance (the "SZO"), Somerville Living, LLC (the "Proponent"), respectfully submits this Mobility Management Plan to the City of Somerville for review and approval.

As background, 16 Medford Street was the former Somerville Gas & Service Station, and 20 Medford Street was the former Cubby Oil headquarters. 16 Medford Street gas station provided four (4) gasoline pumping stations, and autobody repair shop, and a Massachusetts Vehicle Inspection location. 20 Medford Street housed the corporate office to Cubby Oil, all its crude oil tankers/trucks, repair trucks, and other heating and cooling equipment.

The Proponent proposes to redevelop these two (2) lots that total approximately 16,909 square feet (0.39 acres) along Medford Street, South Street, Warren Street, and Bedford Street with an approximate 66,807 gross square foot (sf) mixed-use development. The Project will have one (1) building, containing roughly 3,867 square feet of first floor retail/commercial usage and 41 residential, home ownership units on three (3) floors above. There will also be a total of 43 on-site parking spaces. The Proponent will create a short-term pick-up/drop off area along South Street. The pick-up/drop-off area will be used for short-term rideshare pick-up/drop-off, on-demand food deliveries (Uber, Lyft, Postmates, etc.), parcel delivery, and move-in/move-out processes. The short-term area could also potentially be used for trash services. This short-term pick-up/drop-off area was created by the Proponent after thoughtful consideration of the surrounding neighbors' comments and concerns.

Project Programming

The Project consists of one (1) building that will be constructed on-site. A summary of the proposed development is shown in Table 1. Specific unit mix, height, massing, and other details are shown in the Development Review Application Architectural Plan Set.

Table 1: Program Table[1]

	Proposed Building
Gross Square Feet	66,807
Height (feet)	49' - 4"
Number of Stories	4
On-Site Parking Spaces	43
Secure Parking Square Feet	15,042
Retail Square Feet	3,876
Residential Square Feet	36,233
Residential Units	41
Floor-to-Area Ratio (FAR)	3.95

[1]Data was gathered from the Schematic Design Plan Set produced by Khalsa Design, Inc. dated September 24, 2021
The remainder of the square footage of the building is comprised of common space and unsecured garage

Project Schedule/Phasing

The Proponent is processing demolition authorization form which may trigger a review from the Historical Preservation Commission (HPC). Once a determination has been made, the Proponent will be able to demolish the structures on-site. Concurrently, the Proponent is proceeding with, and applying for, Site Plan Approval and Special Permit Approval as required by the City of Somerville. The Proponent expects to receive a Certificate of Zoning Compliance (CZC) with a target date during the first Quarter 2022 from the Planning and Zoning Division for a compliant development.

Vehicle and Bicycle Parking

The following section summarizes the proposed vehicle and bicycle parking supply for the site. A plan for the bicycle parking can be found in the Comprehensive Site Plan.

Vehicle Parking

The Project will provide 43 on-site, off-street parking spaces. There will be 11 surface-level, covered parking spaces and 32 below-grade parking spaces, accessed via a curb cut along Bedford Street. The total on-site parking count is based on the parameters set forth in the SZO for a project located in a Mid Rise 4 (MR4) zone. Based on the current design, Table 4.2.15 of the SZO states that 41 vehicle parking spaces are required for the 41 residential units, and vehicle parking spaces as may be required for the various permitted commercial usages (commercial usages dictates vehicle parking requirements). The Proponent feels that 43 on-site vehicle parking spaces is appropriate given the Project Site's proximity to MBTA bus routes and rapid transit (0.6 miles from Lechmere Station), bicycle facilities, and the future MBTA Green Line station (Union Square Station) being constructed approximately 0.6 miles from the site. Refer to the Existing Condition section for a summary of nearby transit services.

Service and Delivery/Rideshare Pick-up/Drop-off Areas

The Project will utilize South Street and Bedford Street as vehicle access points. The sidewalks will be reconstructed along Medford Street, South Street, Warren Street, and part of Bedford Street to allow for a continuous pedestrian pathway along the site frontage. The Project will also close curb cuts along Warren Street, Medford Street, and South Street. The short-term pick-up/drop-off area along South Street will be able to accommodate two (2) passenger vehicles at the same time to avoid any double parking. Along Bedford Street, a curb cut will provide on-site access to an at-grade, unsecured parking area and a below-grade, secured parking area.

Bicycle Parking

The Project will provide long-term bicycle parking storage areas that meet the requirements for bicycle parking as stated in the Somerville Zoning Ordinance. Based on the current design in the MR4 district, Table 4.2.15 of the SZO states that a minimum of 51 bicycle parking spaces are required on-site, including a minimum of 42 long-term bicycle parking spaces and at least nine (9) short-term bicycle parking spaces.

Local Transportation

There are multiple public transportation options provided by the Massachusetts Bay Transportation Authority (MBTA) within the vicinity of the Project site. A summary of the existing public transportation options is provided in the subsequent section.

Existing Conditions

Within an approximate 1/4-mile radius of the Project site, the MBTA services the area with four (4) separate bus routes: 69, 80, 87, and 88. Table 2 summarizes boarding and alighting information for each of the closest stops for each of the bus routes. Table 3 summarizes the headways for each of the bus routes and Tables 4 and 5 summarize the walking distance and time to each of the closest bus stops, as well as the average wait time. Detailed schedules and maps are attached in the Appendix.

Table 2: Boarding and Alighting Summary*

Bus Route	Origin/Destination	Bus Stop	Time Period	Total Passengers Boarding	Total Passengers Alighting
69 (Inbound)	Harvard Square to Lechmere Station	Cambridge Street @ Max Avenue	AM Peak	12	12
			PM Peak	6	22
			Weekday Daily	41	93
			Saturday	27	62
69 (Outbound)	Lechmere Station to Harvard Square	Cambridge Street @ Lambert Street	AM Peak	24	7
			PM Peak	22	14
			Weekday Daily	115	49
			Saturday	81	27
80 (Inbound)	Arlington Center to Lechmere Station	McGrath Highway @ Medford Street	AM Peak	3	7
			PM Peak	3	3
			Weekday Daily	19	26
			Saturday	12	18
80 (Outbound)	Lechmere Station to Arlington Center	McGrath Highway @ Poplar Street	AM Peak	3	0
			PM Peak	4	3
			Weekday Daily	20	12
			Saturday	15	9
87 (Inbound)	Clarendon Hill/Arlington Center to Lechmere Station	McGrath Highway @ Medford Street	AM Peak	9	4
			PM Peak	4	2
			Weekday Daily	31	18
			Saturday	22	3
87 (Outbound)	Lechmere Station to Clarendon Hill/Arlington Center	McGrath Highway @ Poplar Street	AM Peak	1	3
			PM Peak	4	6
			Weekday Daily	14	19
			Saturday	10	14
88 (Inbound)	Clarendon Hill to Lechmere Station	McGrath Highway @ Medford Street	AM Peak	11	5
			PM Peak	5	6
			Weekday Daily	32	36
			Saturday	21	29
88 (Outbound)	Lechmere Station to Clarendon Hill	McGrath Highway @ Poplar Street	AM Peak	2	2
			PM Peak	8	11
			Weekday Daily	29	36
			Saturday	27	23

Bus Route Data based on MBTA Bus Ridership by Time Period, Season, Route/Line and Stop
*Based on Fall 2019 data – most recent data available via the MBTA website

Table 3: Schedules and Headways

Bus Route	**Origin/Destination**	**Time Period**	**Inbound Headways (minutes)**	**Outbound Headways (minutes)**
69	Avon Street/Central Street to Kendall Square Station	AM Peak	10-15	10-15
		PM Peak	20	20
		Saturday	22	22
80	Arlington Center to Lechmere Station	AM Peak	25	25
		PM Peak	25	25-30
		Saturday	35	35
87	Clarendon Hill/Arlington Center to Lechmere Station	AM Peak	15-20	15-20
		PM Peak	20	20
		Saturday	25	25
88	Clarendon Hill to Lechmere Station	AM Peak	15-20	15-20
		PM Peak	20-25	20
		Saturday	25	25

Table 4: Transit Analysis Summary - Inbound

	MBTA Bus Routes (Inbound)	
	69	80, 87, & 88
Distance to Closest Stop (Miles)	0.2	0.3
Walk Travel Time to Closest Stop (Minutes)	5	7
Average Wait Time (Minutes)	6.25 (AM Peak) 10 (PM Peak) 11 (Saturday)	9 to 12.5 (AM) 10 to 22.5 (PM) 12.5 to 17.5 (Saturday)

Table 5: Transit Analysis Summary - Outbound

	MBTA Bus Routes (Outbound)	
	69	80, 87, & 88
Distance to Closest Stop (Miles)	0.2	0.2
Walk Travel Time to Closest Stop (Minutes)	5	5
Average Wait Time (Minutes)	6.25 (AM Peak) 10 (PM Peak) 11 (Saturday)	9 to 12.5 (AM Peak) 10 to 14 (PM Peak) 12.5 to 17.5 (Saturday)

Bicycle Network

There are existing bicycle lanes on Medford Street connecting to Somerville Avenue. There are newly constructed separated bicycle lanes in both directions along Somerville Avenue, which connect to bicycle facilities west of Union Square and along Prospect Street and Medford Street. Local roads south of Medford Street connect to Cambridge Street, which has bicycle lanes striped in both directions. In the spring of 2021, this section of Medford Street was repaved and restriped. A 5-foot bicycle lane and a 2-foot painted buffer with flexible posts was striped in each direction. Green painted advisory bicycle lanes were stripped across unsignalized intersection approaches. Green painted bicycle lanes will match the existing striping at the intersection of Medford Street and Somerville Avenue. The future plans for South Street, as shown on the plans provided by the City of Somerville, show designated bicycle lanes in each direction connecting Medford Street and Windsor Street. Additionally, there is a BlueBikes station located approximately 0.2 miles from the Project site along Berkshire Street where it intersects with Cambridge Street. A map showing the location of the bicycle accommodations in Somerville near the Project site (shown in Red) is shown in Figure 1.

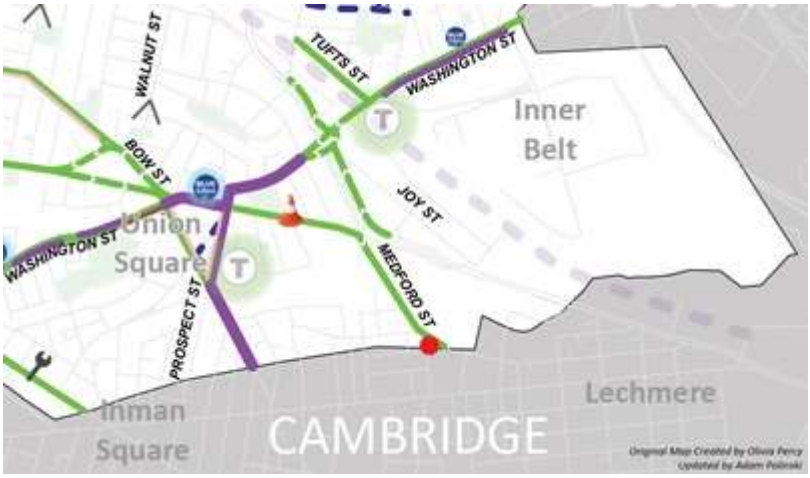


Figure 1: Somerville Bicycle Network Map

Sidewalks

Pedestrian connectivity in the area is facilitated by existing sidewalks and crosswalks. As part of the existing conditions analysis, an inventory of the existing sidewalks and crosswalks was taken. There are sidewalks on both sides of Medford Street, South Street, and Warren Street along their entire length. Medford Street connects to the sidewalks along Somerville Avenue to the north which provide a route to Union Square and MBTA Bus Routes at the Medford Street at McGrath Highway stop (Routes 80, 87, and 88). Warren Street sidewalks provide a route to the Route 69 bus stops along Cambridge Street. Medford Street (which turns into Gore Street at the City of Cambridge line) sidewalks provide a route to the future relocated Lechmere Station along the Green Line Extension. New pedestrian facilities were constructed along Somerville Avenue in 2021 and along Medford Street in the fall of 2020. There are marked crosswalks across each approach at the major intersections. A midblock crosswalk was striped across Medford Street at Ward Street and a combination of a painted bump out and concrete rumble apron on the north side of the crosswalk across the South Street departure at Medford Street.

Transportation Assumptions

Trip Generation

Land Use Codes (LUC) 221 – Multifamily Housing (Mid-Rise) and LUC 932 – High-Turnover (Sit-Down) Restaurant were used for this Project which is comprised of 41 residential dwelling units and 3,876 square feet of first floor retail. The *Trip Generation Manual, 10th Edition*, published by the Institute of Transportation Engineers (ITE) in 2017 provides unadjusted vehicle-trip estimates for Weekday AM peak hour, Weekday PM peak hour, Weekdays, and Saturday Midday peak hour.

Table 6: Residential Trip Generation Calculations (Per ITE)

Land Use Code: 221	Multifamily Housing (Mid-Rise)			
	Weekday AM Peak Hour	Weekday PM Peak Hour	Weekday Daily	Sat. Midday Peak Hour
Size per # of Dwelling Units (X)	41	41	41	41
Fitted Curve Equation (per ITE)	Ln(T) = 0.98* Ln(X) - 0.98	Ln(T) = 0.96* Ln(X) - 0.63	T = 5.45(X) - 1.75	T = 0.42(X) + 6.73
Total Trips (T)	**14**	**19**	**222**	**23**
Entering%	26%	61%	50%	49%
Exiting%	74%	39%	50%	51%
Entering Trips	4	12	111	11
Exiting Trips	10	7	111	12

As shown in Table 6, the proposed dwelling units are expected to generate approximately 14 trips during the Weekday AM peak hour, 19 trips during the `Weekday PM peak hour, 222 trips during a typical weekday, and 23 trips during the Saturday Midday peak hour.

Table 7: Retail Trip Generation Calculations (Per ITE)

Land Use Code: 932	High-Turnover (Sit-Down) Restaurant			
	Weekday AM Peak Hour	Weekday PM Peak Hour	Weekday Daily	Sat. Midday Peak Hour
Size per 1,000 Square Feet	3.876	3.876	3.876	3.876
Average Trip Rate	9.94	9.77	112.18	11.19
Total Trips	**39**	**38**	**434**	**43**
Entering%	55%	62%	50%	51%
Exiting%	45%	38%	50%	49%
Entering Trips	21	24	217	22
Exiting Trips	18	14	217	21

As shown in Table 7, the proposed retail space is expected to generate approximately 39 trips during the Weekday AM peak hour, 38 trips during the Weekday PM peak hour, 434 trips during a typical weekday, and 43 trips during the Saturday Midday peak hour. To account for location-specific travel mode trends, non-vehicular trips will be deducted in the subsequent section.

Travel Mode Shares

Trip Generation rates set forth by the ITE are typically based on data from suburban developments with no nearby transit service and no appreciable share of people walking or bicycling to or from the site. If a project is in an area with transit service or a substantial share of trips made by bicycle or on foot, these non-vehicle trips should be estimated and deducted to get the predicted vehicle volume. The proposed Project is located within Census Tract 3515 in Somerville. Commuting characteristics were analyzed from the 2015-2019 American Community Survey 5-Year Estimates for this census tract. Based on the collected data, approximately 37.4% of residents use a vehicle, 26.2% of residents use public transportation, 12.7% of residents bike, 14.1% of residents bike, 7.6% of residents worked from home, and 2.1% of residents commute via other means to work.

Table 8 shows the US Census mode share data used for this Project. Adjustments were made in accordance with the trip generation requirements set forth by the City of Somerville.

Table 8: Mode Split Percentages

MEANS OF TRANSPORTATION TO WORK	Census Tract 3515	**Percentage (Used for Residential)**	**Percentage (Used for Retail)**
Car, truck, or van	37.4%	**38.2%**	**41.4%**
Drove alone	29.0%	**29.6%**	**32.1%**
Carpooled:	8.4%	**8.6%**	**9.3%**
In 2-person carpool	8.4%	**8.6%**	**9.3%**
In 3-person carpool	0.0%	**0.0%**	**0.0%**
In 4 person carpool	0.0%	**0.0%**	**0.0%**
Public transportation	26.2%	**26.8%**	**0.0%**
Bicycle	12.7%	**13.0%**	**14.0%**
Walked	14.1%	**14.4%**	**44.6%**
Worked from home	7.6%	**7.6%**	**0.0%**
Other means	2.1%	**0.0%**	**0.0%**

Adjusted Trips

As described above, adjustments were made to the base trips taking into account the US Census Tract data. The *ITE Trip Generation Handbook, 3rd Edition* includes an Average Vehicle Occupancy (AVO) of 1.1 for residential buildings. Based on the average modal split data above, an AVO rate of 1.225 persons per vehicle was calculated for the residential units. The number of trips were adjusted using the AVO and census tract modal split data. By applying the non-vehicular mode split to the Trip Generation calculations, the amount of expected vehicle traffic associated with the Project is reduced. Means of transportation to work by other means were proportionally distributed to other modes besides worked from home for residential trips. Worked from home was proportionally distributed to other modes and public transportation trips were attributed to walked for retail trips. The resulting adjusted vehicular traffic on the surrounding roadways was estimated and are summarized in Table 9. The US Census Journey-to-Work data is attached in the Appendix.

Table 9: Adjusted Site Trips

Mixed-Use Development	Weekday AM Peak Hour	Weekday PM Peak Hour	Weekday Daily	Sat. Midday Peak Hour
Base Trips (per ITE)	53	57	655	66
Total Person-Trips	54	59	677	68
Total Person-Vehicle-Trips	22	24	272	27
Total Vehicle-Trips	**18**	**19**	**222**	**22**
Entering Vehicle-Trips	8	12	111	11
Exiting Vehicle-Trips	10	7	111	11
Total Non-Vehicular Trips	32	35	405	41

As shown in Table 9, the Project is expected to generate **18 vehicle-trips** during the Weekday AM peak hour, **19 vehicle-trips** during the Weekday PM peak hour, **222 vehicle-trips** during a typical weekday, and **22 vehicle-trips** during the Saturday Midday peak hour. This equates to approximately one (1) vehicle-trip every three (3) minutes during the Weekday AM peak hour, Weekday PM peak hour, and Saturday Midday peak hour. The number of vehicle-trips are expected to decrease in the future with the opening of the Green Line Extension providing rapid rail transit access from Lechmere Station to Somerville and Medford.

Existing Trip Generation

Table 10: Existing Site Vehicle-Trips

Land Use Code: 944	Fueling Station			
	Weekday AM Peak Hour	Weekday PM Peak Hour	Weekday Daily	Sat. Midday Peak Hour
Number of Fueling Station	4.000	4.000	4.000	4.000
Average Trip Rate	10.28	14.03	172.01	12.77
Total Trips	**42**	**56**	**688**	**52**
Entering%	50%	50%	50%	50%
Exiting%	50%	50%	50%	50%
Entering Trips	21	28	344	26
Exiting Trips	21	28	344	26

Per Section 2.3.1 of the Somerville TIS Standards, proposed projects may take credit for existing land uses if they have been closed for less than a year with Mobility approval. The site was previously occupied by the Somerville Gas & Service Station and the Cubby Oil headquarters, which suspended operation in April 2021. While the estimated existing trips were not deducted from expected new trips, they were calculated to serve as a comparison. As shown in Table 10, it is estimated that the previous site generated **42 vehicle-trips** during the Weekday AM peak hour, **56 vehicle-trips** during the Weekday PM peak hour, **688 vehicle-trips** during a typical weekday, and **52 vehicle-trips** during the Saturday Midday peak hour. Therefore, it is estimated that the Project will generate **24 fewer vehicle-trips** during the Weekday AM peak hour, **37 fewer vehicle-trips** during the Weekday PM peak hour, **466 fewer vehicle-trips** during a typical weekday, and **30 fewer vehicle-trips** during the Saturday Midday peak hour. Additionally, the site had 5-10 office staff on-site commuting mostly by motor vehicle. The site also produced a high number of heavy vehicle trips. Overall, the proposed Project should generate significantly less vehicle activity than the former land uses.

Trip Distribution

Trip distribution patterns were estimated for site-generated trips both to and from the Project site. The majority of vehicle trips will enter/exit from the site via the curb cut on Bedford Street which will pride access to the parking areas. Pedestrian and bicycle trips will originate along either Medford Street or South Street. Public transportation trips were included in pedestrian trip distribution.

Through discussions with the City of Somerville Mobility Department, it was determined that South Street, currently a one-way roadway in the westbound direction away from Medford Street, will change orientation in the future to an eastbound direction. The roadway will continue to operate as one-way. The Mobility Department has advised DCI-GM2 to incorporate this orientation into any proposed trip distribution.

The 2011-2015 5-year ACS Commuting Flows for Somerville were used to determine the vehicle trip distribution percentages. Commuting flows are defined as travel from a city/town of residence to a city/town of work. The total number of commuters in each commuting flow was reported. Commuters with Somerville residence were isolated from the data set and percentages of workers traveling to each city/town for their place of work were calculated. Regional trips to surrounding municipalities in Massachusetts and bordering states were classified by trips to the north, south, and west. Trips to Boston, Cambridge, and within Somerville represented the largest commuting flow percentages and were classified as their own commuting flows.

The projected entering vehicle-trip distribution is shown in Figure C-102 and the projected exiting vehicle-trip distribution is shown in Figure C-103. Figures C-102 and C-103 show the vehicle-trips originating and ending along Bedford Street for graphic purposes only. As mentioned, the short-term pick-up/drop-off area along South Street will be used for many vehicle-trips, including move-in and move-out processes, Amazon and FedEx deliveries (and the like), and potentially trash services.

Pedestrian trip percentages were based on local walking destinations, MBTA bus and rapid transit stop locations, and predicted trip distribution percentages due to proximity of the Project site to the planned East Somerville Station Green Line Extension MBTA stop and are shown in Figure C-104. Bicycle trip percentages were based on commuting flow percentages to and from Somerville, Cambridge and Boston. Bicycle distributions were assumed to travel along roadways with robust bicycle facilities where possible. Bicycle trip distribution percentages are shown in Figure C-105.

Mobility Management Commitments

The 16-20 Medford Street Project is committed to achieving the City's goal of having the percentage of trips made to the site by automobile be 50% or less, which is consistent with SomerVision. There will also be reasonable efforts made to control the percentage of trips made by automobile at 37.5% or less by 2030 and at 25% or less by 2040 to meet the city's SomerVision 2040 goals. To that end, the Project is recommending several programs and services to reduce single-occupancy vehicle use.

The SomerVision plan outlines a priority on non-auto transit. The City is supporting this goal by creating additional bicycle, pedestrian, and transit facilities throughout Somerville. For those accessing this area of Somerville, the multimodal infrastructure provides alternatives to the personal vehicle. The Project team has developed the Mobility Management Plan and will work with the City to implement these measures. These programs and services include:

- Marketing & Education
- On-Site Services
- Monitoring and Annual Reporting

Marketing and Education

A key element of all Transportation Demand Management (TDM) programs is letting potential users know that they exist. While the specific programs have yet to be determined, the Project team intends to provide information through channels such as:

- Annual Mobility Education Meeting – all residents in the building will be invited to attend a Mobility Education meeting to learn about options annually.
- TDM Program information on the Project's websites and related media
- Posted Transportation Information, such as maps, schedules, locations of nearby car-sharing stations, BlueBike stations, the availability of carpool/vanpool opportunities, and other information relevant to commuting options in the building lobbies.
- Posted mobility management information (to be submitted to the Director of Mobility for review and approval).
- Distributed mobility management information (to be submitted to the Director of Mobility for review and approval).
- The mobility management information that will be posted (and approved by the Director of Mobility), will also be provided to residents when they move in. The information will also be provided to residents:
    - Via yearly emails or newsletters.
      When there are notable changes to public transportation schedules, bicycle/pedestrian infrastructure, or the availability of ride-share, car-share, or bike-share services in the area.

On-Site Services

The larger Somerville area offers transit service, bicycle infrastructure, and sidewalk coverage. However, there are additional services that the Project development proposes to offer, including:

- Secure Bicycle Parking: There will be a minimum of 42 long-term bicycle parking spaces located on-site. Provisions for the final bicycle parking design to encourage its use are:
    - Clear wayfinding to bicycle parking,
    - 24-hour access,
    - Secure bicycle racks that meet Somerville-specific or national standards,
    - Location close to entrances
- Vehicular Parking: All vehicle parking will be unbundled per the SZO. The parking spaces will be sold or leased at market rate. Standard purchase or lease agreement language for unbundled and market rate parking will be approved by the Director of Mobility prior to the issuance of any Certificate of Occupancy. The owner will provide either a copy of executed purchase or lease agreements or an affidavit signed by the property owner and tenant(s) verifying this language was included and agreed to in the purchase or lease agreement.

Monitoring and Annual Reporting

Annual Travel Surveys

The Proponent will conduct annual travel surveys of the residents of the property. These surveys will be developed through consultation with the City of Somerville to determine the number of residents utilizing public transportation and those using car-sharing services.

Following the opening of the site, the Proponent will conduct biennial counts of vehicle and bike parking occupancy. This will be done through a field inventory to be conducted during a representative weekday during the overnight period when it can reasonably be assumed that the peak parking demand for all residents and visitors would occur. A continuous 24-hour count of both the site driveway and bicycle parking areas will be conducted to capture the volume of entering and exiting traffic. As part of the summary report to be provided to the City, a status summary of the Mobility Management Plan will also be provided.

Status Update

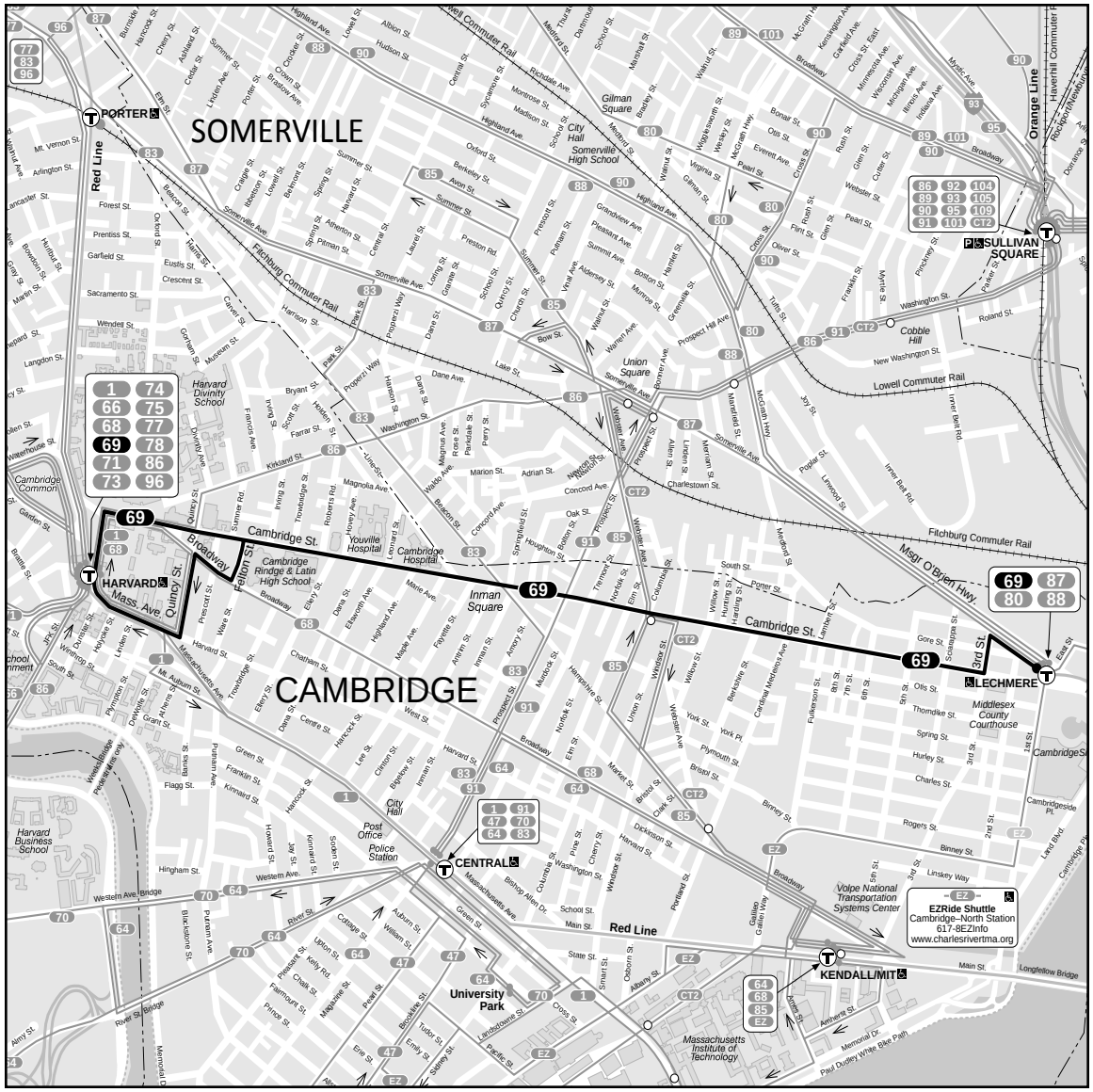
Based on the findings from the survey and the most recent set of biennial counts, the development will submit a Mobility Status update annually to the City of Somerville. The update will follow any guidelines provided by the City of Somerville and will include:

- Survey results
- Peak vehicle and bicycle parking occupancy counts
- Digital files as required
- Comparison with and review of previous trends as data is available

APPENDIX

PUBLIC TRANSPORTATION
TRIP GENERATION
TRIP DISTRIBUTION
COMPREHENSIVE SITE PLAN AND CORRESPONDING TRAFFIC FIGURES

PUBLIC TRANSPORTATION



⚠ Information in this timetable is subject to change without notice. Traffic conditions and weather can affect running time.

Effective **Aug 29, 2021**

69

Harvard Square - Lechmere Station

mbta.com
617-222-3200
617-222-5146 (TTY)

Lost & Found
617-222-5560

69 Weekday

Inbound			Outbound		
Leave Harvard/ Holyoke Street	Arrive Inman Square	Arrive Lechmere Station	Leave Lechmere Station	Arrive Inman Square	Arrive Harvard/ Holyoke Street
5:25A	5:29A	5:38A	5:45A	5:51A	5:58A
6:05	6:09	6:21	6:25	6:31	6:38
6:41	6:45	6:57	6:45	6:51	6:58
6:55	6:59	7:11	7:00	7:06	7:15
7:07	7:13	7:25	7:15	7:21	7:30
7:20	7:26	7:38	7:30	7:38	7:47
7:35	7:41	7:53	7:40	7:48	7:57
7:50	7:56	8:08	7:52	8:00	8:09
Every	*10 Mins.*	*Until*	8:04	8:12	8:21
9:05	9:11	9:23	8:16	8:24	8:33
9:30	9:36	9:48	8:28	8:36	8:45
9:55	10:01	10:13	8:40	8:48	8:57
10:20	10:26	10:38	8:55	9:03	9:12
10:45	10:51	11:03	9:12	9:20	9:29
11:10	11:16	11:28	9:30	9:38	9:47
11:35	11:41	11:53	9:55	10:03	10:12
			10:20	10:28	10:37
12:00P	**12:06P**	**12:18P**	10:45	10:53	11:02
12:25	**12:31**	**12:43**	11:10	11:18	11:27
12:50	**12:56**	**1:08**	11:35	11:43	11:52
1:15	**1:21**	**1:33**			
1:40	**1:46**	**1:58**	**12:00P**	**12:08P**	**12:17P**
2:01	**2:07**	**2:21**	**12:25**	**12:33**	**12:42**
2:17	**2:23**	**2:37**	**12:50**	**12:58**	**1:07**
2:34	**2:40**	**2:54**	**1:15**	**1:23**	**1:32**
2:51	**2:57**	**3:11**	**1:40**	**1:48**	**1:57**
3:08	**3:14**	**3:28**	**1:55**	**2:03**	**2:12**
fs 3:10	**3:37**	**3:41**	**2:10**	**2:18**	**2:27**
3:28	**3:34**	**3:48**	**2:25**	**2:33**	**2:42**
3:48	**3:54**	**4:08**	**2:40**	**2:48**	**2:57**
4:08	**4:14**	**4:28**	**3:00**	**3:08**	**3:17**
4:28	**4:34**	**4:48**	***Every***	***20 Mins.***	***Until***
4:48	**4:54**	**5:08**	**5:40**	**5:48**	**5:57**
5:08	**5:14**	**5:28**	**6:00**	**6:08**	**6:17**
5:28	**5:34**	**5:48**	**6:20**	**6:28**	**6:37**
5:48	**5:54**	**6:08**	**6:40**	**6:46**	**6:55**
6:08	**6:14**	**6:28**	**7:00**	**7:06**	**7:15**
6:28	**6:34**	**6:46**	**7:40**	**7:46**	**7:55**
6:48	**6:54**	**7:06**	**8:20**	**8:26**	**8:33**
7:19	**7:25**	**7:37**	**9:00**	**9:06**	**9:13**
7:59	**8:05**	**8:17**	**9:40**	**9:46**	**9:53**
8:40	**8:44**	**8:54**	**10:20**	**10:25**	**10:32**
9:20	**9:24**	**9:34**	**11:00**	**11:05**	**11:12**
10:00	**10:04**	**10:13**	**11:35**	**11:40**	**11:47**
10:40	**10:44**	**10:53**	12:10A	12:15A	12:22A
11:15	**11:19**	**11:28**	12:45	12:50	12:57
11:50	**11:54**	12:03A	w 1:20	1:25	1:32
12:25A	12:29A	12:38			
1:00	1:04	1:13			

69 Saturday

Inbound			Outbound		
Leave Harvard/ Holyoke Street	Arrive Inman Square	Arrive Lechmere Station	Leave Lechmere Station	Arrive Inman Square	Arrive Harvard/ Holyoke Street
5:15A	5:17A	5:25A	5:30A	5:34A	5:40A
5:45	5:47	5:55	6:00	6:04	6:10
6:15	6:17	6:25	6:30	6:34	6:40
6:45	6:47	6:55	7:00	7:04	7:10
7:17	7:19	7:27	7:30	7:34	7:40
7:47	7:49	7:57	8:00	8:07	8:14
8:17	8:20	8:30	8:35	8:42	8:49
8:52	8:55	9:05	9:10	9:17	9:24
9:27	9:30	9:41	9:45	9:53	10:01
10:02	10:05	10:18	10:22	10:30	10:38
10:42	10:45	10:58	10:47	10:56	11:04
11:09	11:13	11:26	11:09	11:18	11:26
11:31	11:35	11:48	11:31	11:40	11:48
11:53	11:57	**12:10P**	11:53	**12:02P**	**12:10P**
12:15P	**12:19P**	**12:32P**	**12:15P**	**12:24P**	**12:32P**
Every	***22 Mins.***	***Until***	***Every***	***22 Mins.***	***Until***
3:11	**3:15**	**3:29**	**3:33**	**3:42**	**3:50**
3:33	**3:37**	**3:51**	**3:55**	**4:04**	**4:12**
3:55	**3:59**	**4:13**	**4:17**	**4:26**	**4:34**
4:17	**4:21**	**4:35**	**4:39**	**4:48**	**4:56**
4:39	**4:43**	**4:57**	**5:01**	**5:10**	**5:18**
5:01	**5:05**	**5:19**	**5:23**	**5:32**	**5:40**
5:23	**5:27**	**5:40**	**5:45**	**5:54**	**6:02**
5:45	**5:48**	**6:01**	**6:07**	**6:16**	**6:24**
6:07	**6:10**	**6:23**	**6:29**	**6:38**	**6:46**
6:29	**6:32**	**6:45**	**6:51**	**7:00**	**7:08**
6:51	**6:54**	**7:07**	**7:09**	**7:16**	**7:24**
7:26	**7:29**	**7:42**	**7:44**	**7:51**	**7:59**
8:01	**8:04**	**8:17**	**8:19**	**8:25**	**8:32**
8:36	**8:39**	**8:52**	**8:54**	**9:00**	**9:07**
9:11	**9:14**	**9:25**	**9:29**	**9:35**	**9:42**
9:46	**9:49**	**10:00**	**10:04**	**10:10**	**10:17**
10:21	**10:24**	**10:35**	**10:39**	**10:44**	**10:50**
10:56	**10:59**	**11:10**	**11:14**	**11:19**	**11:25**
11:29	**11:32**	**11:43**	**11:47**	**11:51**	**11:57**
12:00M	12:03A	12:14A	12:20A	12:24A	12:30A
12:35A	12:38	12:45	12:50	12:54	1:00
1:05	1:08	1:15	w 1:20	1:24	1:30

w - Waits for last trolley to arrive at Lechmere Station.
f - Leaves from Cambridge Street at Felton Street
s - Does NOT run during school vacation

All buses are accessible to persons with disabilities

Saturday
Christmas Eve; NY Eve; MLK Day; President's Day

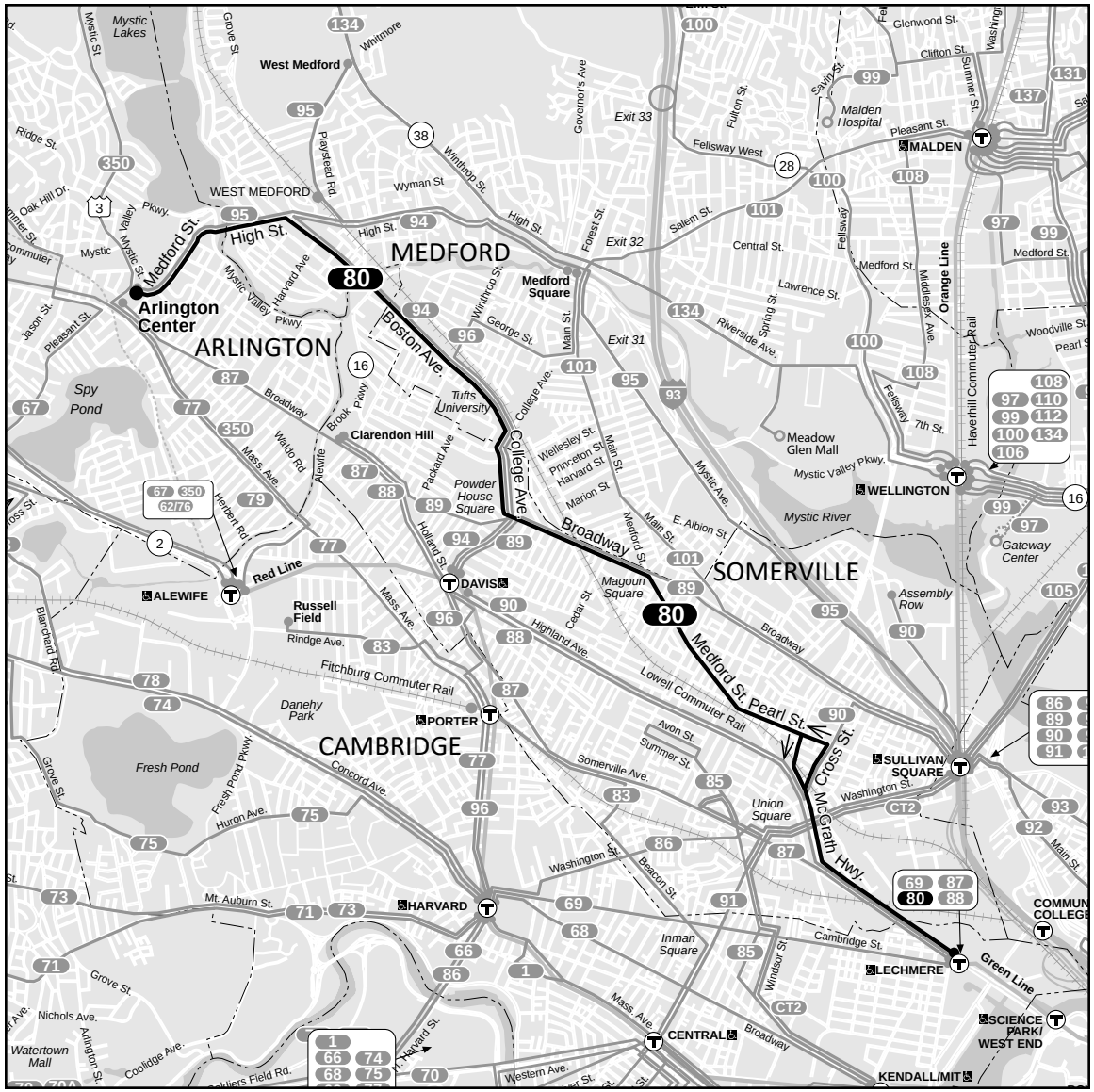
Sunday
Labor Day; Thanksgiving; Christmas Day; NY Day

69 Sunday

Inbound			Outbound		
Leave Harvard/ Holyoke Street	Arrive Inman Square	Arrive Lechmere Station	Leave Lechmere Station	Arrive Inman Square	Arrive Harvard/ Holyoke Street
6:20A	6:23A	6:31A	6:05A	6:11A	6:15A
7:20	7:23	7:31	7:05	7:11	7:15
8:20	8:24	8:32	8:05	8:11	8:16
9:20	9:24	9:32	9:05	9:11	9:16
9:53	9:57	10:05	9:36	9:42	9:47
10:30	10:34	10:42	10:10	10:17	10:23
11:10	11:15	11:24	10:50	10:57	11:03
11:50	11:56	**12:05P**	11:30	11:37	11:43
12:30P	**12:36P**	**12:45P**	**12:10P**	**12:17P**	**12:23P**
1:10	**1:16**	**1:25**	**12:50**	**12:59**	**1:05**
1:50	**1:56**	**2:05**	**1:30**	**1:38**	**1:44**
2:30	**2:36**	**2:45**	**2:10**	**2:18**	**2:24**
3:10	**3:16**	**3:25**	**2:50**	**2:58**	**3:04**
3:50	**3:56**	**4:05**	**3:30**	**3:38**	**3:44**
4:30	**4:36**	**4:44**	**4:10**	**4:18**	**4:24**
5:10	**5:16**	**5:24**	**4:50**	**4:58**	**5:04**
5:50	**5:56**	**6:04**	**5:30**	**5:38**	**5:44**
6:30	**6:36**	**6:44**	**6:10**	**6:18**	**6:24**
7:08	**7:14**	**7:22**	**6:50**	**6:57**	**7:02**
7:45	**7:50**	**7:57**	**7:28**	**7:35**	**7:40**
8:15	**8:20**	**8:27**	**8:00**	**8:06**	**8:11**
8:50	**8:55**	**9:02**	**8:35**	**8:41**	**8:46**
9:25	**9:30**	**9:37**	**9:10**	**9:16**	**9:21**
10:00	**10:05**	**10:12**	**9:45**	**9:51**	**9:56**
10:35	**10:40**	**10:47**	**10:20**	**10:26**	**10:31**
11:10	**11:15**	**11:22**	**10:55**	**11:00**	**11:05**
11:45	**11:49**	**11:56**	**11:30**	**11:35**	**11:40**
12:20A	12:24A	12:31A	12:05A	12:10A	12:15A
12:55	12:59	1:06	12:40	12:45	12:50
			w 1:18	1:22	1:27

Fare	Local Bus	Bus + Bus	Subway	Bus + Subway
CharlieCard	$1.70	$1.70	$2.40	$2.40
CharlieTicket	$1.70	$1.70	$2.40	$4.10*
Cash-on-Board	$1.70	$3.40	$2.40	$4.10
Student/Youth**	$0.85	$0.85	$1.10	$1.10
Senior/TAP***	$0.85	$0.85	$1.10	$1.10

FREE FARES: Children 11 and under ride free when accompanied by a paying customer; Blind Access CharlieCard holders ride free and if using a guide, the guide rides free.
* Transfers Subway to Silver Line SL4 or SL5 pay $2.40
** Requires Student CharlieCard or Youth CharlieCard. Student CharlieCards available to students through participating middle and high schools. Youth CharlieCards available through community partners across Greater Boston.
*** Requires Senior/TAP CharlieCard, available to Medicare cardholders, seniors 65+, and persons with disabilities.



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Effective **Aug 29, 2021**

80

Arlington Center - Lechmere Station

mbta.com
617-222-3200
617-222-5146 (TTY)

Lost & Found
617-222-5560

80 Weekday

Inbound			Outbound		
Leave Arlington Center	Arrive Magoun Square	Arrive Lechmere Station	Leave Lechmere Station	Arrive Magoun Square	Arrive Arlington Center
5:00A	5:11A	5:24A	5:28A	5:38A	5:56A
5:25	5:36	5:49	5:54	6:04	6:22
6:00	6:11	6:24	6:30	6:40	6:58
6:25	6:36	6:49	6:55	7:05	7:25
6:45	6:56	7:09	7:15	7:25	7:45
7:05	7:17	7:34	7:40	7:51	8:11
7:30	7:44	8:01	8:05	8:16	8:36
7:55	8:09	8:26	8:30	8:41	9:01
8:20	8:34	8:51	8:55	9:06	9:26
8:45	8:59	9:16	9:20	9:31	9:51
9:10	9:24	9:41	9:50	10:01	10:21
9:35	9:48	10:04	10:15	10:26	10:46
10:00	10:13	10:29	10:40	10:51	11:11
10:25	10:38	10:54	11:05	11:16	11:36
10:50	11:03	11:19	11:30	11:41	**12:01P**
11:15	11:28	11:44	11:55	**12:06P**	**12:26**
11:40	11:53	**12:09P**			
			12:20P	**12:32**	**12:53**
12:05P	**12:18P**	**12:34P**	**12:45**	**12:57**	**1:18**
12:35	**12:48**	**1:04**	**1:10**	**1:22**	**1:43**
1:00	**1:13**	**1:29**	**1:35**	**1:47**	**2:08**
1:25	**1:38**	**1:54**	**2:00**	**2:12**	**2:33**
1:50	**2:03**	**2:19**	**2:25**	**2:37**	**2:58**
2:15	**2:28**	**2:44**	**2:50**	**3:03**	**3:25**
2:40	**2:53**	**3:09**	**3:15**	**3:28**	**3:50**
3:05	**3:18**	**3:34**	**3:40**	**3:53**	**4:15**
3:30	**3:43**	**3:59**	**4:05**	**4:19**	**4:41**
3:55	**4:08**	**4:24**	**4:30**	**4:44**	**5:06**
4:20	**4:33**	**4:49**	**4:55**	**5:09**	**5:31**
4:46	**4:59**	**5:15**	**5:20**	**5:34**	**5:56**
5:15	**5:28**	**5:44**	**5:50**	**6:03**	**6:23**
5:40	**5:53**	**6:09**	**6:15**	**6:28**	**6:48**
6:05	**6:18**	**6:34**	**6:40**	**6:53**	**7:11**
6:30	**6:43**	**6:59**	**7:05**	**7:16**	**7:33**
6:55	**7:08**	**7:24**	**7:30**	**7:41**	**7:58**
7:20	**7:33**	**7:49**	**7:55**	**8:06**	**8:23**
7:45	**7:56**	**8:12**	**8:20**	**8:31**	**8:48**
8:40	**8:51**	**9:04**	**9:10**	**9:21**	**9:38**
9:41	**9:51**	**10:03**	**10:10**	**10:19**	**10:36**
10:40	**10:49**	**11:01**	**11:10**	**11:19**	**11:33**
11:40	**11:49**	12:01A	12:10A	12:19A	12:33A
12:40A	12:49A	1:01	w 1:10	1:19	1:33

80 Saturday

Inbound			Outbound		
Leave Arlington Center	Arrive Magoun Square	Arrive Lechmere Station	Leave Lechmere Station	Arrive Magoun Square	Arrive Arlington Center
5:05A	5:13A	5:25A	5:30A	5:40A	5:56A
6:00	6:10	6:23	6:30	6:40	6:56
6:30	6:40	6:53	7:00	7:10	7:26
7:00	7:10	7:23	7:30	7:40	7:56
7:30	7:40	7:53	8:00	8:10	8:26
8:00	8:12	8:26	8:30	8:40	8:58
8:30	8:42	8:56	9:00	9:10	9:28
9:01	9:14	9:28	9:30	9:40	9:58
9:31	9:44	9:58	10:00	10:10	10:28
10:01	10:14	10:28	10:35	10:48	11:07
10:36	10:49	11:03	11:10	11:23	11:42
11:11	11:24	11:40	11:45	11:58	**12:17P**
11:46	11:59	**12:15P**			
			12:20P	**12:33P**	**12:52**
12:21P	**12:34P**	**12:50**	**12:55**	**1:08**	**1:27**
12:56	**1:09**	**1:25**	**1:30**	**1:43**	**2:02**
1:31	**1:44**	**2:00**	**2:05**	**2:18**	**2:37**
2:06	**2:19**	**2:35**	**2:40**	**2:53**	**3:12**
2:41	**2:54**	**3:10**	**3:15**	**3:28**	**3:47**
3:16	**3:29**	**3:45**	**3:50**	**4:03**	**4:22**
3:51	**4:04**	**4:20**	**4:25**	**4:38**	**4:57**
4:26	**4:39**	**4:55**	**5:00**	**5:13**	**5:32**
5:01	**5:14**	**5:30**	**5:35**	**5:47**	**6:04**
5:36	**5:49**	**6:05**	**6:15**	**6:27**	**6:44**
6:11	**6:24**	**6:40**	**7:21**	**7:33**	**7:50**
6:50	**7:03**	**7:19**	**8:21**	**8:33**	**8:50**
7:55	**8:06**	**8:19**	**9:23**	**9:33**	**9:48**
8:55	**9:06**	**9:19**	**10:23**	**10:32**	**10:47**
9:55	**10:05**	**10:17**	**11:23**	**11:32**	**11:47**
10:55	**11:05**	**11:17**	12:23A	12:31A	12:44A
11:55	12:05A	12:17A	w 1:18	1:26	1:39
12:50A	1:00	1:12			

80 Sunday

Inbound			Outbound		
Leave Arlington Center	Arrive Magoun Square	Arrive Lechmere Station	Leave Lechmere Station	Arrive Magoun Square	Arrive Arlington Center
6:30A	6:41A	6:53A	7:00A	7:09A	7:23A
7:30	7:41	7:53	8:00	8:09	8:23
8:30	8:41	8:53	9:00	9:10	9:25
9:30	9:42	9:55	10:00	10:10	10:27
10:35	10:48	11:01	11:10	11:22	11:40
11:45	11:59	**12:13P**			
			12:20P	**12:32P**	**12:50P**
12:55P	**1:09P**	**1:23**	**1:30**	**1:42**	**2:00**
2:05	**2:19**	**2:33**	**2:40**	**2:52**	**3:10**
3:15	**3:29**	**3:43**	**3:50**	**4:01**	**4:19**
4:25	**4:39**	**4:53**	**5:00**	**5:11**	**5:29**
5:35	**5:48**	**6:00**	**6:10**	**6:21**	**6:38**
6:45	**6:57**	**7:09**	**7:20**	**7:31**	**7:47**
7:55	**8:07**	**8:19**	**8:30**	**8:40**	**8:55**
9:05	**9:17**	**9:29**	**9:40**	**9:50**	**10:05**
10:15	**10:27**	**10:39**	**10:50**	**10:59**	**11:13**
11:25	**11:36**	**11:48**	12:00M	12:08A	12:20A

w- Waits for last trolley to arrive at Lechmere Station.

Route 80
Arlington Center - Lechmere Station

All buses are accessible to persons with disabilities

Fare	Local Bus	Bus + Bus	Subway	Bus + Subway
CharlieCard	$1.70	$1.70	$2.40	$2.40
CharlieTicket	$1.70	$1.70	$2.40	$4.10*
Cash-on-Board	$1.70	$3.40	$2.40	$4.10
Student/Youth**	$0.85	$0.85	$1.10	$1.10
Senior/TAP***	$0.85	$0.85	$1.10	$1.10

FREE FARES: Children 11 and under ride free when accompanied by a paying customer; Blind Access CharlieCard holders ride free and if using a guide, the guide rides free.

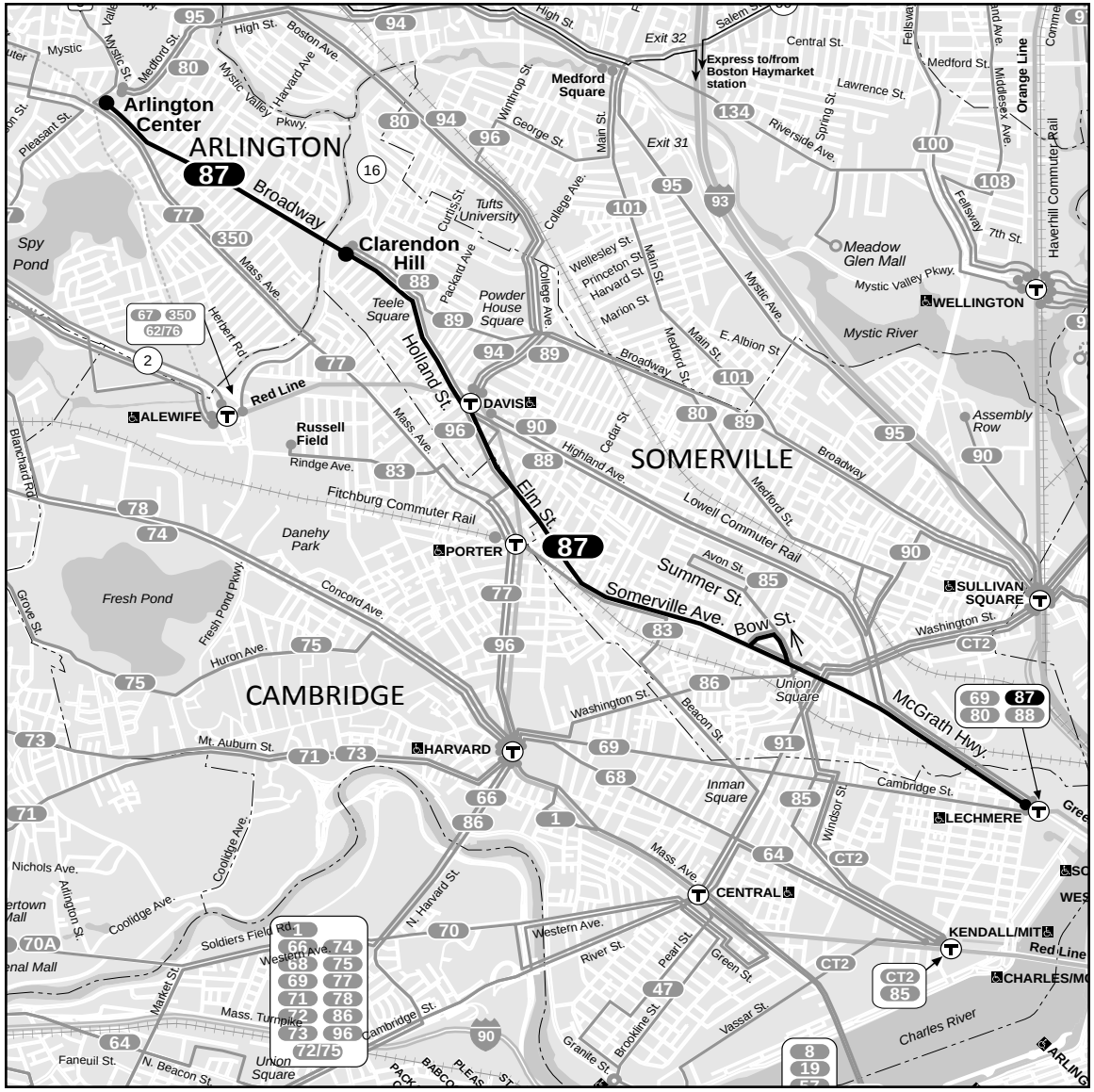
* Transfers Subway to Silver Line SL4 or SL5 pay $2.40

** Requires Student CharlieCard or Youth CharlieCard. Student CharlieCards available to students through participating middle and high schools. Youth CharlieCards available through community partners across Greater Boston.

*** Requires Senior/TAP CharlieCard, available to Medicare cardholders, seniors 65+, and persons with disabilities.

Saturday
Christmas Eve; NY Eve; MLK Day; President's Day

Sunday
Labor Day; Thanksgiving; Christmas Day; NY Day



Information in this timetable is subject to change without notice. Traffic conditions and weather can affect running time.

Effective **Aug 29, 2021**

Schedule Change

87

Arlington Ctr or Clarendon Hill - Lechmere Sta

mbta.com
617-222-3200
617-222-5146 (TTY)

Lost & Found
617-222-5560

87 Weekday

Inbound				Outbound			
Leave Arlington Center	Lv/Arrive Clarendon Hill	Arrive Davis Station	Arrive Lechmere Station	Leave Lechmere Station	Arrive Davis Station	Arrive Clarendon Hill	Arrive Arlington Center
.....	5:05A	5:08A	5:26A	5:29A	5:42A	5:48A	.....
.....	5:25	5:28	5:46	5:50	6:03	6:09	6:13A
.....	5:50	5:53	6:14	6:14	6:27	6:33	6:37
.....	6:08	6:12	6:34	6:34	6:47	6:53	6:57
6:19A	6:24	6:27	6:49	6:54	7:09	7:15	7:21
6:35	6:40	6:43	7:05	7:14	7:30	7:36	7:42
6:51	6:56	6:59	7:21	7:29	7:45	7:51	7:57
7:07	7:12	7:15	7:38	7:47	8:04	8:13	8:19
7:23	7:28	7:33	8:02	8:06	8:23	8:32	8:38
7:39	7:44	7:49	8:19	8:27	8:44	8:53	8:59
7:56	8:02	8:07	8:40	8:49	9:06	9:15	9:21
8:14	8:20	8:25	8:58	9:11	9:28	9:37	9:43
8:32	8:38	8:43	9:11	9:33	9:50	9:59	10:05
8:52	8:58	9:01	9:25	9:55	10:12	10:21	10:27
9:13	9:18	9:21	9:45	10:20	10:37	10:46	10:52
9:35	9:40	9:43	10:07	10:45	11:02	11:12	11:17
9:57	10:02	10:05	10:29	11:10	11:28	11:38	11:43
10:19	10:24	10:27	10:51	11:35	11:53	**12:03P**	**12:08P**
10:41	10:46	10:49	11:15				
11:06	11:11	11:14	11:41	**12:00N**	**12:18P**	**12:28**	**12:33**
11:31	11:36	11:39	**12:06P**	**12:25**	**12:43**	**12:53**	**12:58**
11:56	**12:01P**	**12:04P**	**12:31**	**12:50**	**1:08**	**1:18**	**1:23**
				1:15	**1:33**	**1:43**	**1:48**
12:21P	**12:26**	**12:29**	**12:56**	**1:39**	**1:57**	**2:07**	**2:12**
12:48	**12:53**	**12:56**	**1:23**	**2:05**	**2:23**	**2:33**	**2:38**
1:13	**1:18**	**1:21**	**1:48**	**2:29**	**2:47**	**2:57**	**3:02**
1:37	**1:42**	**1:45**	**2:12**	**2:50**	**3:08**	**3:18**	**3:23**
1:57	**2:02**	**2:05**	**2:32**	**3:10**	**3:28**	**3:38**	**3:43**
2:17	**2:22**	**2:25**	**2:54**	**3:30**	**3:48**	**3:58**	**4:03**
2:37	**2:42**	**2:45**	**3:14**	**3:50**	**4:08**	**4:18**	**4:23**
2:55	**3:00**	**3:03**	**3:32**	**4:10**	**4:28**	**4:39**	**4:46**
3:15	**3:20**	**3:23**	**3:52**	**4:30**	**4:49**	**5:01**	**5:08**
3:35	**3:40**	**3:43**	**4:12**	**4:50**	**5:09**	**5:21**	**5:28**
3:55	**4:00**	**4:03**	**4:32**	**5:10**	**5:29**	**5:41**	**5:48**
4:15	**4:20**	**4:23**	**4:52**	**5:30**	**5:49**	**6:01**	**6:05**
4:36	**4:41**	**4:44**	**5:14**	**5:50**	**6:09**	**6:21**	**6:25**
4:57	**5:02**	**5:05**	**5:35**	**6:10**	**6:28**	**6:37**	**6:41**
5:17	**5:22**	**5:25**	**5:55**	**6:30**	**6:46**	**6:54**	**6:58**
5:37	**5:42**	**5:45**	**6:15**	**6:50**	**7:06**	**7:14**	**7:18**
5:57	**6:02**	**6:05**	**6:34**	**7:10**	**7:26**	**7:34**	**7:38**
6:17	**6:22**	**6:25**	**6:51**	**7:30**	**7:46**	**7:54**	**7:58**
6:37	**6:42**	**6:45**	**7:09**	**7:55**	**8:11**	**8:19**	**.....**
7:03	**7:07**	**7:10**	**7:30**	**8:25**	**8:38**	**8:44**	**.....**
7:23	**7:27**	**7:30**	**7:50**	**8:55**	**9:08**	**9:14**	**.....**
7:50	**7:54**	**7:57**	**8:15**	**9:25**	**9:38**	**9:44**	**.....**
.....	**8:25**	**8:28**	**8:46**	**9:50**	**10:03**	**10:09**	**.....**
.....	**8:55**	**8:58**	**9:16**	**10:20**	**10:33**	**10:39**	**.....**
.....	**9:25**	**9:28**	**9:46**	**10:50**	**11:03**	**11:09**	**.....**
.....	**9:55**	**9:58**	**10:14**	**11:20**	**11:33**	**11:39**	**.....**
.....	**10:25**	**10:28**	**10:44**	**11:55**	12:07A	12:13A	.....
.....	**10:55**	**10:58**	**11:13**	12:25A	12:37	12:43	.....
.....	**11:25**	**11:28**	**11:43**	12:55	1:07	1:13	.....
.....	12:00M	12:03A	12:17A	w1:22	1:34	1:40	.....
.....	12:30	12:33	12:47				
.....	1:00	1:03	1:17				

87 Saturday

Inbound				Outbound			
Leave Arlington Center	Lv/Arrive Clarendon Hill	Arrive Davis Station	Arrive Lechmere Station	Leave Lechmere Station	Arrive Davis Station	Arrive Clarendon Hill	Arrive Arlington Center
.....	5:15A	5:18A	5:31A	5:38A	5:50A	5:55A	6:00A
.....	5:45	5:48	6:02	6:10	6:22	6:27	6:32
6:10A	6:15	6:18	6:34	6:40	6:52	6:57	7:02
6:40	6:45	6:48	7:04	7:10	7:23	7:28	7:33
7:10	7:15	7:18	7:34	7:40	7:53	7:58	8:03
7:40	7:45	7:48	8:05	8:10	8:23	8:28	8:33
8:10	8:15	8:18	8:35	8:40	8:56	9:02	9:07
8:40	8:45	8:48	9:05	9:10	9:26	9:32	9:37
9:13	9:19	9:22	9:39	9:35	9:51	9:57	10:02
9:43	9:49	9:52	10:15	10:02	10:18	10:24	10:29
10:10	10:16	10:20	10:43	10:20	10:38	10:44	10:50
10:35	10:41	10:45	11:08	10:47	11:06	11:12	11:18
11:07	11:13	11:17	11:43	11:15	11:34	11:40	11:46
11:35	11:41	11:45	**12:11P**	11:40	11:59	**12:05P**	**12:11P**
12:00N	**12:06P**	**12:10P**	**12:36**	**12:05P**	**12:24P**	**12:30**	**12:36**
12:25	**12:31**	**12:35**	**1:01**	**12:30**	**12:49**	**12:55**	**1:01**
12:50	**12:56**	**1:00**	**1:24**	**12:55**	**1:14**	**1:20**	**1:26**
1:15	**1:21**	**1:25**	**1:49**	**1:20**	**1:39**	**1:45**	**1:51**
1:41	**1:47**	**1:51**	**2:15**	**1:45**	**2:04**	**2:10**	**2:16**
2:06	**2:12**	**2:16**	**2:40**	**2:10**	**2:29**	**2:35**	**2:41**
2:31	**2:37**	**2:41**	**3:05**	**2:35**	**2:54**	**3:00**	**3:06**
2:56	**3:02**	**3:06**	**3:30**	**3:00**	**3:19**	**3:25**	**3:31**
3:21	**3:27**	**3:31**	**3:55**	**3:25**	**3:44**	**3:50**	**3:56**
3:46	**3:52**	**3:56**	**4:19**	**3:50**	**4:09**	**4:15**	**4:21**
4:11	**4:17**	**4:21**	**4:44**	**4:15**	**4:34**	**4:40**	**4:46**
4:36	**4:42**	**4:46**	**5:09**	**4:40**	**4:58**	**5:04**	**5:10**
5:01	**5:07**	**5:11**	**5:34**	**5:05**	**5:23**	**5:29**	**5:35**
5:26	**5:32**	**5:36**	**5:59**	**5:30**	**5:48**	**5:54**	**6:00**
5:51	**5:57**	**6:01**	**6:24**	**5:55**	**6:13**	**6:19**	**6:25**
6:16	**6:22**	**6:26**	**6:49**	**6:20**	**6:36**	**6:42**	**6:48**
6:45	**6:51**	**6:55**	**7:14**	**6:50**	**7:05**	**7:11**	**7:17**
7:25	**7:30**	**7:33**	**7:51**	**7:25**	**7:40**	**7:46**	**7:52**
8:00	**8:05**	**8:08**	**8:24**	**8:05**	**8:20**	**8:26**	**.....**
.....	**8:40**	**8:43**	**8:59**	**8:50**	**9:05**	**9:11**	**.....**
.....	**9:20**	**9:23**	**9:39**	**9:30**	**9:45**	**9:51**	**.....**
.....	**9:57**	**10:00**	**10:16**	**10:05**	**10:20**	**10:25**	**.....**
.....	**10:32**	**10:35**	**10:51**	**10:40**	**10:55**	**11:00**	**.....**
.....	**11:07**	**11:10**	**11:26**	**11:15**	**11:30**	**11:33**	**.....**
.....	**11:40**	**11:43**	**11:59**	**11:50**	12:04A	12:07A	.....
.....	12:20A	12:23A	12:37A	12:30A	12:44	12:47	.....
.....	12:55	12:58	1:12	w1:20	1:33	1:36	.....

87 Sunday

Inbound			Outbound		
Leave Clarendon Hill	Arrive Davis Station	Arrive Lechmere Station	Leave Lechmere Station	Arrive Davis Station	Arrive Clarendon Hill
6:00A	6:03A	6:18A	6:38A	6:52A	6:58A
7:00	7:03	7:18	7:38	7:52	7:58
8:00	8:03	8:18	8:38	8:52	8:58
8:55	8:58	9:13	9:35	9:50	9:57
9:30	9:33	9:48	10:15	10:30	10:38
10:05	10:08	10:26	10:55	11:13	11:21
10:45	10:48	11:07	11:35	11:53	**12:01P**
11:25	11:29	11:50			
			12:15P	**12:33P**	**12:41**
12:05P	**12:09P**	**12:30P**	**12:55**	**1:13**	**1:21**
12:45	**12:49**	**1:10**	**1:35**	**1:53**	**2:01**
1:25	**1:29**	**1:50**	**2:15**	**2:33**	**2:41**
2:05	**2:09**	**2:30**	**2:55**	**3:13**	**3:21**
2:45	**2:49**	**3:10**	**3:35**	**3:53**	**4:01**
3:25	**3:29**	**3:50**	**4:15**	**4:33**	**4:41**
4:05	**4:09**	**4:30**	**4:55**	**5:13**	**5:21**
4:45	**4:49**	**5:10**	**5:35**	**5:53**	**6:01**
5:25	**5:29**	**5:50**	**6:15**	**6:33**	**6:41**
6:05	**6:09**	**6:27**	**6:55**	**7:13**	**7:21**
6:45	**6:49**	**7:07**	**7:35**	**7:53**	**8:01**
7:25	**7:28**	**7:45**	**8:15**	**8:31**	**8:38**
8:05	**8:08**	**8:24**	**8:55**	**9:10**	**9:16**
8:45	**8:48**	**9:04**	**9:35**	**9:48**	**9:54**
9:25	**9:28**	**9:44**	**10:15**	**10:28**	**10:34**
10:05	**10:08**	**10:24**	**10:50**	**11:03**	**11:09**
10:45	**10:48**	**11:04**	**11:30**	**11:43**	**11:49**
11:20	**11:23**	**11:39**	12:00M	12:13A	12:19A
11:55	**11:58**	12:11A	12:35	12:46	12:52
12:25A	12:28A	12:41	w 1:18	1:29	1:35
12:55	12:58	1:11			

w- Waits for last trolley to arrive at Lechmere Station.

All buses are accessible to persons with disabilities

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CharlieTicket	$1.70	$1.70	$2.40	$4.10*
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Student/Youth**	$0.85	$0.85	$1.10	$1.10
Senior/TAP***	$0.85	$0.85	$1.10	$1.10

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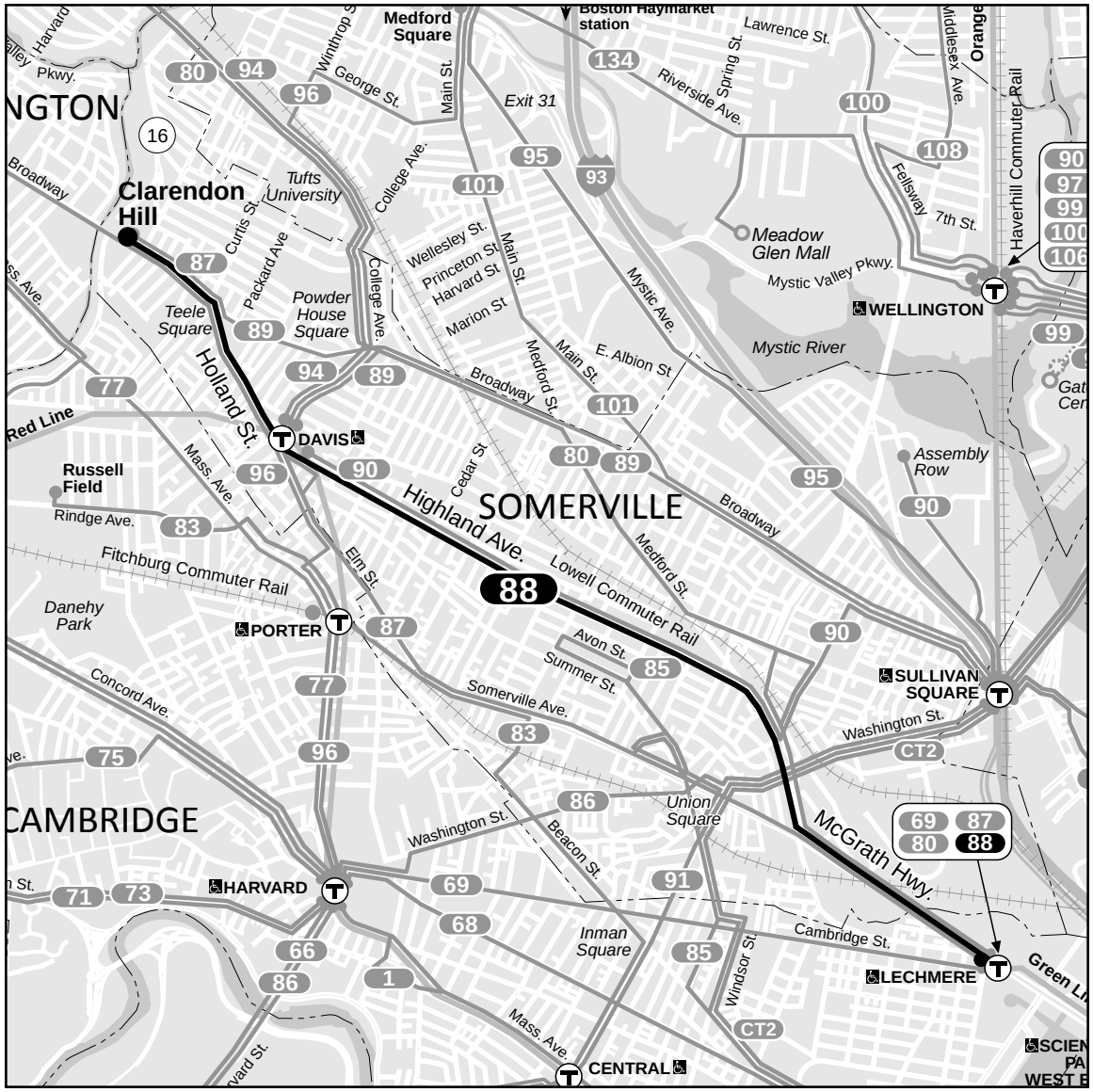
*** Requires Senior/TAP CharlieCard, available to Medicare cardholders, seniors 65+, and persons with disabilities.

Saturday
Christmas Eve; NY Eve; MLK Day; President's Day

Sunday
Labor Day; Thanksgiving; Christmas Day; NY Day



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Effective **Aug 29, 2021**

Schedule Change

88

Clarendon Hill - Lechmere Station

mbta.com
617-222-3200
617-222-5146 (TTY)

Lost & Found
617-222-5560

88 Weekday

Inbound				Outbound			
Leave Clarendon Hill	Arrive Davis Square	Arrive Somerville High School	Arrive Lechmere Station	Leave Lechmere Station	Arrive Somerville High School	Arrive Davis Square	Arrive Clarendon Hill
5:15A	5:18A	5:23A	5:33A	5:37A	5:43A	5:49A	5:55A
5:40	5:43	5:48	5:58	6:04	6:10	6:16	6:22
6:00	6:03	6:12	6:26	6:24	6:30	6:36	6:42
6:16	6:19	6:28	6:42	6:44	6:50	6:56	7:02
6:32	6:35	6:44	6:58	7:04	7:11	7:19	7:25
6:48	6:51	7:00	7:14	7:21	7:28	7:36	7:42
7:04	7:07	7:16	7:30	7:38	7:45	7:53	7:59
7:20	7:23	7:32	7:48	7:56	8:04	8:14	8:23
7:36	7:41	7:51	8:07	8:16	8:24	8:34	8:43
7:53	7:58	8:10	8:26	8:38	8:46	8:56	9:05
8:11	8:16	8:28	8:44	9:00	9:07	9:15	9:24
8:29	8:34	8:46	9:02	9:22	9:29	9:37	9:46
8:48	8:53	9:04	9:18	9:44	9:51	9:59	10:08
9:08	9:11	9:22	9:36	10:08	10:15	10:23	10:32
9:29	9:32	9:43	9:57	10:33	10:40	10:48	10:57
9:51	9:54	10:05	10:19	10:58	11:06	11:14	11:24
10:13	10:16	10:27	10:41	11:23	11:31	11:39	11:49
10:36	10:39	10:50	11:05	11:48	11:56	**12:04P**	**12:14P**
11:00	11:03	11:13	11:27				
11:26	11:29	11:39	11:53	**12:13P**	**12:21P**	**12:29**	**12:39**
11:51	11:54	**12:04P**	**12:18P**	**12:38**	**12:46**	**12:54**	**1:04**
				1:04	**1:12**	**1:20**	**1:30**
12:16P	**12:19P**	**12:29**	**12:43**	**1:30**	**1:38**	**1:46**	**1:56**
12:41	**12:44**	**12:54**	**1:08**	**1:55**	**2:03**	**2:11**	**2:21**
1:06	**1:09**	**1:19**	**1:33**	**2:18**	**2:26**	**2:34**	**2:44**
1:33	**1:36**	**1:46**	**2:00**	**.....**	**s 2:35**	**2:43**	**2:53**
1:52	**1:55**	**2:05**	**2:19**	**.....**	**s 2:40**	**2:48**	**2:58**
2:12	**2:15**	**2:25**	**2:39**	**2:40**	**2:48**	**2:56**	**3:06**
2:32	**2:35**	**2:45**	**2:59**	**.....**	**s 2:50**	**2:58**	**3:08**
2:52	**2:55**	**3:05**	**3:19**	**3:00**	**3:08**	**3:16**	**3:26**
3:12	**3:15**	**3:25**	**3:39**	**3:20**	**3:28**	**3:36**	**3:46**
3:32	**3:35**	**3:45**	**3:59**	**3:40**	**3:48**	**3:56**	**4:06**
3:52	**3:55**	**4:05**	**4:19**	**4:00**	**4:08**	**4:16**	**4:26**
4:10	**4:13**	**4:23**	**4:37**	**4:20**	**4:28**	**4:38**	**4:50**
4:30	**4:33**	**4:43**	**4:57**	**4:40**	**4:49**	**4:59**	**5:11**
4:54	**4:57**	**5:07**	**5:23**	**5:00**	**5:09**	**5:19**	**5:31**
5:14	**5:17**	**5:27**	**5:43**	**5:20**	**5:29**	**5:39**	**5:51**
5:34	**5:37**	**5:47**	**6:03**	**5:40**	**5:49**	**5:59**	**6:11**
5:54	**5:57**	**6:07**	**6:23**	**6:00**	**6:09**	**6:19**	**6:31**
6:14	**6:17**	**6:27**	**6:41**	**6:20**	**6:29**	**6:37**	**6:45**
6:34	**6:37**	**6:46**	**6:59**	**6:40**	**6:47**	**6:55**	**7:03**
6:55	**6:58**	**7:05**	**7:15**	**7:00**	**7:07**	**7:15**	**7:23**
7:15	**7:18**	**7:25**	**7:35**	**7:20**	**7:27**	**7:35**	**7:43**
7:39	**7:42**	**7:49**	**7:59**	**7:40**	**7:47**	**7:55**	**8:03**
8:10	**8:13**	**8:20**	**8:30**	**8:10**	**8:17**	**8:25**	**8:32**
8:40	**8:43**	**8:50**	**9:00**	**8:40**	**8:46**	**8:52**	**8:58**
9:10	**9:13**	**9:20**	**9:30**	**9:10**	**9:16**	**9:22**	**9:28**
9:40	**9:43**	**9:50**	**10:00**	**9:40**	**9:46**	**9:52**	**9:58**
10:10	**10:13**	**10:20**	**10:30**	**10:05**	**10:11**	**10:17**	**10:23**
10:40	**10:43**	**10:50**	**11:00**	**10:35**	**10:41**	**10:47**	**10:53**
11:10	**11:13**	**11:20**	**11:30**	**11:05**	**11:11**	**11:17**	**11:23**
11:45	**11:48**	**11:55**	12:05A	**11:35**	**11:41**	**11:47**	**11:53**
12:15A	12:18A	12:23A	12:33	12:10A	12:16A	12:21A	12:27A
12:50	12:53	12:58	1:08	12:40	12:46	12:51	12:57
				w1:22	1:28	1:33	1:39

88 Saturday

Inbound				Outbound			
Leave Clarendon Hill	Arrive Davis Square	Arrive Somerville High School	Arrive Lechmere Station	Leave Lechmere Station	Arrive Somerville High School	Arrive Davis Square	Arrive Clarendon Hill
5:30A	5:33A	5:38A	5:47A	5:55A	6:01A	6:07A	6:12A
6:00	6:03	6:08	6:18	6:25	6:31	6:37	6:42
6:30	6:33	6:38	6:48	6:55	7:01	7:07	7:12
7:00	7:03	7:08	7:18	7:25	7:31	7:37	7:42
7:30	7:33	7:38	7:48	7:55	8:01	8:07	8:12
8:00	8:03	8:10	8:20	8:25	8:31	8:39	8:45
8:30	8:33	8:40	8:50	8:55	9:01	9:09	9:15
9:02	9:05	9:13	9:24	9:25	9:31	9:39	9:45
9:33	9:36	9:44	9:55	9:55	10:02	10:11	10:17
10:00	10:04	10:13	10:26	10:30	10:37	10:46	10:52
10:30	10:34	10:43	10:56	11:05	11:12	11:21	11:27
11:00	11:04	11:13	11:26	11:30	11:37	11:46	11:52
11:31	11:35	11:44	11:57	11:55	**12:02P**	**12:11P**	**12:17P**
11:56	**12:00N**	**12:09P**	**12:22P**				
				12:20P	**12:27**	**12:36**	**12:42**
12:21P	**12:25**	**12:34**	**12:47**	**12:45**	**12:52**	**1:01**	**1:07**
12:46	**12:50**	**12:59**	**1:11**	**1:10**	**1:17**	**1:26**	**1:32**
1:11	**1:15**	**1:24**	**1:36**	**1:35**	**1:42**	**1:51**	**1:57**
1:36	**1:40**	**1:49**	**2:01**	**2:00**	**2:07**	**2:16**	**2:22**
2:01	**2:05**	**2:14**	**2:26**	**2:25**	**2:32**	**2:41**	**2:47**
2:26	**2:30**	**2:39**	**2:51**	**2:50**	**2:57**	**3:06**	**3:12**
2:51	**2:55**	**3:04**	**3:16**	**3:15**	**3:22**	**3:30**	**3:36**
3:16	**3:20**	**3:29**	**3:41**	**3:40**	**3:47**	**3:55**	**4:01**
3:41	**3:45**	**3:54**	**4:06**	**4:05**	**4:12**	**4:20**	**4:26**
4:06	**4:10**	**4:19**	**4:31**	**4:30**	**4:37**	**4:45**	**4:51**
4:31	**4:35**	**4:44**	**4:56**	**4:55**	**5:02**	**5:10**	**5:16**
4:56	**5:00**	**5:09**	**5:21**	**5:20**	**5:27**	**5:35**	**5:41**
5:21	**5:25**	**5:34**	**5:46**	**5:45**	**5:52**	**6:00**	**6:06**
5:48	**5:52**	**6:01**	**6:13**	**6:10**	**6:17**	**6:25**	**6:31**
6:13	**6:17**	**6:26**	**6:38**	**6:35**	**6:42**	**6:50**	**6:56**
6:36	**6:39**	**6:48**	**7:00**	**7:05**	**7:12**	**7:20**	**7:26**
7:08	**7:11**	**7:20**	**7:32**	**7:45**	**7:51**	**7:59**	**8:05**
7:40	**7:43**	**7:52**	**8:02**	**8:30**	**8:36**	**8:43**	**8:49**
8:20	**8:23**	**8:32**	**8:42**	**9:10**	**9:16**	**9:23**	**9:29**
9:00	**9:03**	**9:11**	**9:21**	**9:50**	**9:56**	**10:03**	**10:08**
9:40	**9:43**	**9:51**	**10:01**	**10:25**	**10:31**	**10:38**	**10:43**
10:15	**10:18**	**10:26**	**10:36**	**11:00**	**11:06**	**11:13**	**11:18**
10:50	**10:53**	**11:01**	**11:11**	**11:35**	**11:41**	**11:48**	**11:51**
11:23	**11:26**	**11:32**	**11:42**	12:10A	12:16A	12:23A	12:26A
12:00M	12:03A	12:09A	12:19A	12:45	12:50	12:57	1:00
12:40	12:43	12:49	12:59	w1:20	1:25	1:32	1:35

88 Sunday

Inbound				Outbound			
Leave Clarendon Hill	Arrive Davis Square	Arrive Somerville High School	Arrive Lechmere Station	Leave Lechmere Station	Arrive Somerville High School	Arrive Davis Square	Arrive Clarendon Hill
6:40A	6:43A	6:49A	6:58A	6:20A	6:26A	6:32A	6:38A
7:40	7:43	7:49	7:58	7:20	7:26	7:32	7:38
8:40	8:43	8:49	8:58	8:20	8:26	8:32	8:38
9:10	9:13	9:19	9:29	9:15	9:22	9:28	9:35
9:45	9:48	9:54	10:05	9:57	10:04	10:10	10:17
10:25	10:28	10:35	10:46	10:37	10:44	10:51	10:59
11:05	11:09	11:17	11:29	11:17	11:24	11:32	11:40
11:45	11:49	11:57	**12:09P**	11:57	**12:04P**	**12:12P**	**12:20P**
12:25P	**12:29P**	**12:37P**	**12:49**	**12:37P**	**12:44**	**12:52**	**1:00**
1:05	**1:09**	**1:17**	**1:29**	**1:17**	**1:24**	**1:32**	**1:40**
1:45	**1:49**	**1:57**	**2:09**	**1:57**	**2:04**	**2:12**	**2:20**
2:25	**2:29**	**2:37**	**2:49**	**2:37**	**2:44**	**2:52**	**3:00**
3:05	**3:09**	**3:17**	**3:29**	**3:17**	**3:24**	**3:32**	**3:40**
3:45	**3:49**	**3:57**	**4:09**	**3:57**	**4:04**	**4:12**	**4:20**
4:25	**4:29**	**4:37**	**4:49**	**4:37**	**4:44**	**4:52**	**5:00**
5:05	**5:09**	**5:17**	**5:29**	**5:17**	**5:24**	**5:32**	**5:40**
5:45	**5:49**	**5:57**	**6:09**	**5:57**	**6:04**	**6:12**	**6:20**
6:25	**6:29**	**6:37**	**6:49**	**6:37**	**6:44**	**6:52**	**7:00**
7:05	**7:08**	**7:15**	**7:25**	**7:17**	**7:24**	**7:32**	**7:40**
7:45	**7:48**	**7:55**	**8:05**	**7:57**	**8:04**	**8:11**	**8:18**
8:25	**8:28**	**8:35**	**8:45**	**8:35**	**8:42**	**8:49**	**8:56**
9:05	**9:08**	**9:15**	**9:25**	**9:15**	**9:22**	**9:27**	**9:33**
9:45	**9:48**	**9:55**	**10:05**	**9:55**	**10:02**	**10:07**	**10:13**
10:25	**10:28**	**10:33**	**10:43**	**10:35**	**10:42**	**10:47**	**10:53**
11:00	**11:03**	**11:08**	**11:18**	**11:10**	**11:17**	**11:22**	**11:28**
11:35	**11:38**	**11:43**	**11:53**	**11:45**	**11:52**	**11:57**	12:03A
12:10A	12:13A	12:18A	12:28A	12:20A	12:27A	12:32A	12:38
12:45	12:48	12:53	1:03	12:50	12:54	12:59	1:05
				w1:18	1:22	1:27	1:33

s - Does NOT run during school vacation

w- Waits for last trolley to arrive at Lechmere Station.

All buses are accessible to persons with disabilities

Fare	Local Bus	Bus + Bus	Subway	Bus + Subway
CharlieCard	$1.70	$1.70	$2.40	$2.40
CharlieTicket	$1.70	$1.70	$2.40	$4.10*
Cash-on-Board	$1.70	$3.40	$2.40	$4.10
Student/Youth**	$0.85	$0.85	$1.10	$1.10
Senior/TAP***	$0.85	$0.85	$1.10	$1.10

FREE FARES: Children 11 and under ride free when accompanied by a paying customer; Blind Access CharlieCard holders ride free and if using a guide, the guide rides free.

* Transfers Subway to Silver Line SL4 or SL5 pay $2.40

** Requires Student CharlieCard or Youth CharlieCard. Student CharlieCards available to students through participating middle and high schools. Youth CharlieCards available through community partners across Greater Boston.

*** Requires Senior/TAP CharlieCard, available to Medicare cardholders, seniors 65+, and persons with disabilities.

Saturday
Christmas Eve; NY Eve; MLK Day; President's Day

Sunday
Labor Day; Thanksgiving; Christmas Day; NY Day

Fares

PRICE PER TRIP	Local Bus	Bus + Bus	Rapid Transit	Bus + Rapid Transit
CharlieCard	$1.70	$1.70	$2.40	$2.40
CharlieTicket	$2.00	$2.00	$2.90	$4.90***
Cash-on-Board	$2.00	$4.00	$2.90	$4.90***
Student/Youth*	$0.85	$0.85	$1.10	$1.10
Senior/TAP**	$0.85	$0.85	$1.10	$1.10
UNLIMITED TRIP PASSES				
1-Day	$12.75	$12.75	$12.75	$12.75
7-Day	$22.50	$22.50	$22.50	$22.50
Monthly	$55.00	$55.00	$90.00	$90.00
Senior/TAP Monthly	$30.00/month for unlimited travel on Local Bus and Rapid Transit			

VALID PASSES: LinkPass ($84.50/mo.); Student /Youth LinkPass* ($30/mo.) ; Senior/TAP LinkPass* ($30/mo.); and express bus, commuter rail, and boat passes.

FREE FARES: Children 11 and under ride free when accompanied by an adult;

Blind Access CharlieCard holders ride free: if using a guide, the guide rides free

* Requires Student CharlieCard or Youth CharlieCard. Student CharlieCards are available to students through participating middle schools and high schools. Youth CharlieCards are available through community partners in the Boston metro area. Visit www.mbta.com/youthpass for details.

** Requires Senior/TAP CharlieCard, available to Medicare cardholders, seniors 65+, and persons with disabilities.

*** For Silver Line SL4 or SL5 pay $2.75. Also see "transfers."

TRANSFERS

If paying with a CharlieTicket or CharlieCard, discounted transfers that are available are automatic — just use the same ticket or card throughout your trip. If paying with cash onboard a vehicle, free transfers are only allowed between rapid transit lines and inside paid platform areas at gated stations.

SCHEDULES

Schedules are available at the following stations: Park Street, Airport, Malden, Harvard, Haymarket (Green Line Level), Back Bay and Downtown Crossing (Orange Line Level) or see station personnel. Schedules also available at the Transportation Building (10 Park Plaza), 45 High St, and online at mbta.com.

For real-time subway and bus tracking, download the Transit app on any smartphone.

Schedule Change

Rapid Transit

Effective March 15, 2020

Massachusetts Bay Transportation Authority

massDOT Massachusetts Department of Transportation

Information 617-222-3200 • 1-800-392-6100
(TTY) 617-222-5146 • www.mbta.com

Rapid Transit Line	Weekday							Saturday						Sunday					
	First Trip	AM Peak	Midday	PM Peak	Evening	Late Night	Last Trip	First Trip	AM Peak	PM Peak	Evening	Late Night	Last Trip	First Trip	AM Peak	PM Peak	Evening	Late Night	Last Trip
Red Line																			
Alewife	5:24AM	9 min	14 min	9 min	12 min	12 min	12:20AM	5:24AM	14 min	14 min	14 min	14 min	12:20AM	6:08AM	15 min	15 min	15 min	15 min	12:20AM
Braintree	5:08AM	9 min	14 min	9 min	12 min	12 min	12:17AM	5:09AM	14 min	14 min	14 min	14 min	12:17AM	6:00AM	15 min	15 min	15 min	15 min	12:17AM
Alewife	5:16AM	9 min	14 min	9 min	12 min	12 min	w 12:27AM	5:16AM	14 min	14 min	14 min	14 min	w 12:27AM	6:00AM	15 min	15 min	15 min	15 min	w 12:27AM
Ashmont	5:16AM	9 min	14 min	9 min	12 min	12 min	w 12:30AM	5:16AM	14 min	14 min	14 min	14 min	w 12:30AM	6:00AM	15 min	15 min	15 min	15 min	w 12:30AM
"M" Ashmont	5:17AM	5 min	8 min	5 min	12 min	12 min	w 1:05AM	5:15AM	26 min	12 min	12 min	26 min	w 1:05AM	6:03AM	26 min	12 min	12 min	26 min	w 1:05AM
Mattapan	5:05AM	5 min	8 min	5 min	12 min	12 min	12:53AM	5:05AM	26 min	12 min	12 min	26 min	12:53AM	5:51AM	26 min	12 min	12 min	26 min	12:53AM
Blue Line																			
Wonderland	5:13AM	5 min	9 min	5 min	9 min	9 min	12:28AM	5:25AM	9 min	9 min	9 min	13 min	12:28AM	5:58AM	13 min	9 min	9 min	13 min	12:28AM
Orient Heights	5:14AM	5 min	9 min	5 min	9 min	9 min	12:33AM	5:13AM	9 min	9 min	9 min	13 min	12:33AM	6:03AM	13 min	9 min	9 min	13 min	12:33AM
Bowdoin	5:30AM	5 min	9 min	5 min	9 min	9 min	w 1:00AM	5:29AM	9 min	9 min	9 min	13 min	w 1:00AM	6:21AM	13 min	9 min	9 min	13 min	w 1:00AM
Orange Line																			
Oak Grove	5:16AM	6 min	8 min	6 min	9 min	9 min	w 12:30AM	5:16AM	10 min	9 min	11 min	11 min	w 12:30AM	6:00AM	13 min	11 min	11 min	11 min	w 12:30AM
Forest Hills	5:16AM	6 min	8 min	6 min	9 min	9 min	w 12:28AM	5:16AM	10 min	9 min	11 min	11 min	w 12:28AM	6:00AM	13 min	11 min	11 min	11 min	w 12:28AM
Green Line																			
B Boston College	5:01AM	6 min	8 min	6 min	7 min	9 min	12:10AM	4:45AM[2]	11 min	7 min	7 min	11 min	12:09AM	5:20AM[2]	12 min	9 min	7 min	10 min	12:10AM
Park Street	5:45AM	6 min	8 min	6 min	7 min	9 min	w 12:52AM	5:40AM	11 min	7 min	7 min	11 min	w 12:52AM	6:12AM	12 min	9 min	7 min	10 min	w 12:52AM
C Cleveland Circle	4:57AM[1]	6 min	9 min	7 min	7 min	10 min	12:07AM	4:50AM[2]	10 min	9 min	8 min	10 min	12:10AM	5:30AM[2]	12 min	11 min	9 min	12 min	12:10AM
North Station	5:48AM	6 min	9 min	7 min	7 min	10 min	w 12:46AM	5:30AM	10 min	9 min	8 min	10 min	w 12:46AM	6:06AM	12 min	11 min	9 min	12 min	w 12:46AM
D Riverside[4]	4:56AM	6 min	8 min	6 min	8 min	11 min	12:05AM	4:55AM	13 min	9 min	8 min	10 min	12:02AM	5:25AM	13 min	11 min	11 min	11 min	12:05AM
Government Ctr.	5:45AM	6 min	8 min	6 min	8 min	11 min	w 12:49AM	5:38AM	13 min	9 min	8 min	10 min	w 12:49AM	6:10AM	13 min	11 min	11 min	11 min	w 12:49AM
E Lechmere	5:00AM[5]	6 min	8 min	7 min	9 min	9 min	12:30AM	5:01AM	11 min	9 min	11 min	11 min	12:30AM	5:35AM	12 min	12 min	12 min	12 min	12:30AM
Heath Street	5:45AM	6 min	8 min	7 min	9 min	9 min	12:47AM[3]	5:39AM	11 min	9 min	11 min	11 min	12:47AM[3]	6:15AM	12 min	12 min	12 min	12 min	12:47AM[3]
Silver Line																			
SL1 Logan Airport	5:38AM	10 min	10 min	10 min	9 min	13 min	f 1:03AM	5:48AM	10 min	11 min	11 min	11 min	f 1:15AM	5:50AM	12 min	8 min	8 min	8 min	f 1:12AM
South Station	5:40AM	10 min	10 min	10 min	9 min	13 min	w 1:02AM	5:45AM	10 min	11 min	11 min	11 min	w 12:59AM	6:12AM	12 min	8 min	8 min	8 min	w 1:00AM
SL2 Design Center	6:07AM	5 min	12 min	5 min	8 min	15 min	12:37AM	6:03AM	15 min	15 min	15 min	15 min	12:35AM	6:51AM	15 min	15 min	15 min	15 min	12:51AM
South Station	5:44AM	5 min	12 min	5 min	8 min	15 min	12:50AM	5:47AM	15 min	15 min	15 min	15 min	12:45AM	6:35AM	15 min	15 min	15 min	15 min	12:36AM
SL3 Chelsea Station	4:55AM	13 min	15 min	14 min	12 min	14 min	f 1:26AM	5:30AM	10 min	11 min	12 min	12 min	f 1:22AM	6:26AM	13 min	15 min	15 min	15 min	f 1:25AM
South Station	4:20AM	13 min	15 min	14 min	12 min	14 min	w 12:35AM	4:56AM	10 min	11 min	12 min	12 min	w 12:55AM	5:53AM	13 min	15 min	15 min	15 min	w 12:55AM
SL4 Dudley Station	5:20AM	14 min	14 min	11 min	11 min	20 min	12:20AM	5:23AM	15 min	17 min	16 min	20 min	12:20AM	6:02AM	15 min	16 min	15 min	20 min	12:20AM
South Station	5:38AM	14 min	14 min	11 min	11 min	20 min	12:37AM	5:40AM	15 min	17 min	16 min	20 min	12:40AM	6:20AM	15 min	16 min	15 min	20 min	12:40AM
SL5 Dudley Station	5:15AM	8 min	10 min	8 min	8 min	18 min	12:51AM	5:19AM	8 min	8 min	9 min	10 min	12:43AM	6:00AM	10 min	9 min	9 min	9 min	12:25AM
Downtown Xing	5:32AM	8 min	10 min	8 min	8 min	18 min	w 1:07AM	5:34AM	8 min	8 min	9 min	10 min	w 1:00AM	6:16AM	10 min	9 min	9 min	9 min	w 12:47AM

Schedule Periods (approximate):

AM Rush Hour:	6:30 AM - 9:00 AM
Midday:	9:00 AM - 3:30 PM
PM Rush Hour:	3:30 PM - 6:30 PM
Evening:	6:30 PM - 8:00 PM
Late Night:	8:00 PM - CLOSE

Green Line Notes:

1 - The first two C train AM northbound trips run through to Lechmere Station on weekdays.

2 - The first B and second C train AM northbound trips run through to Lechmere Station on weekends.

3 - On weekdays the 12:27 AM trip (weekends the 12:32 AM trip) from Heath St is the last connecting train to other lines downtown. The 12:37AM and 12:47AM trips (weekends the 12:47AM trip) from Heath St. runs in service to Lechmere with no guaranteed connections.

4 - Due to two major infrastructure projects on the D Line, shuttles will replace trolley service on some weeknights and weekends through 2020. Shuttle schedules are subject to change. Shuttles may add up to 15 minutes to your travel time. Please visit mbta.com to plan your trip on the D Line, or sign up for T-Alerts for shuttle notices.

5 - Early morning service from Lechmere to Riverside departs Lechmere at 5:00 AM.

f - After exiting Ted Williams Tunnel bus will only service World Trade Center and South Station stops.

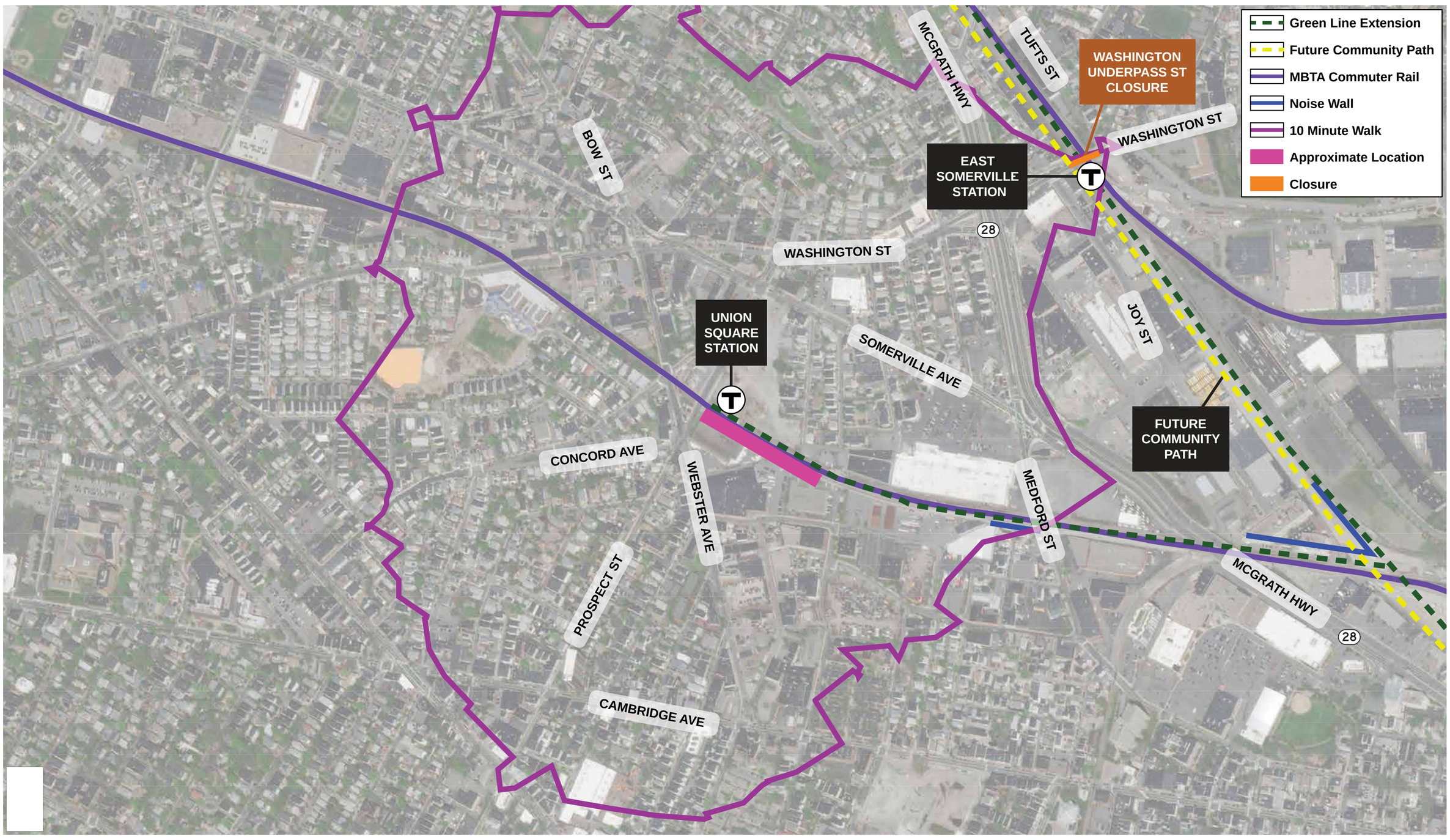
w - Last trips wait at some stations, primarily in the Downtown area, for connecting service. Departure times are approximate.

Spring & Summer 2020 Holidays

4/20: see Weekday; 5/25: see Sunday

7/3: see Saturday; 7/4: see Sunday

Union Square Station



STATION AREA LOOKING WEST

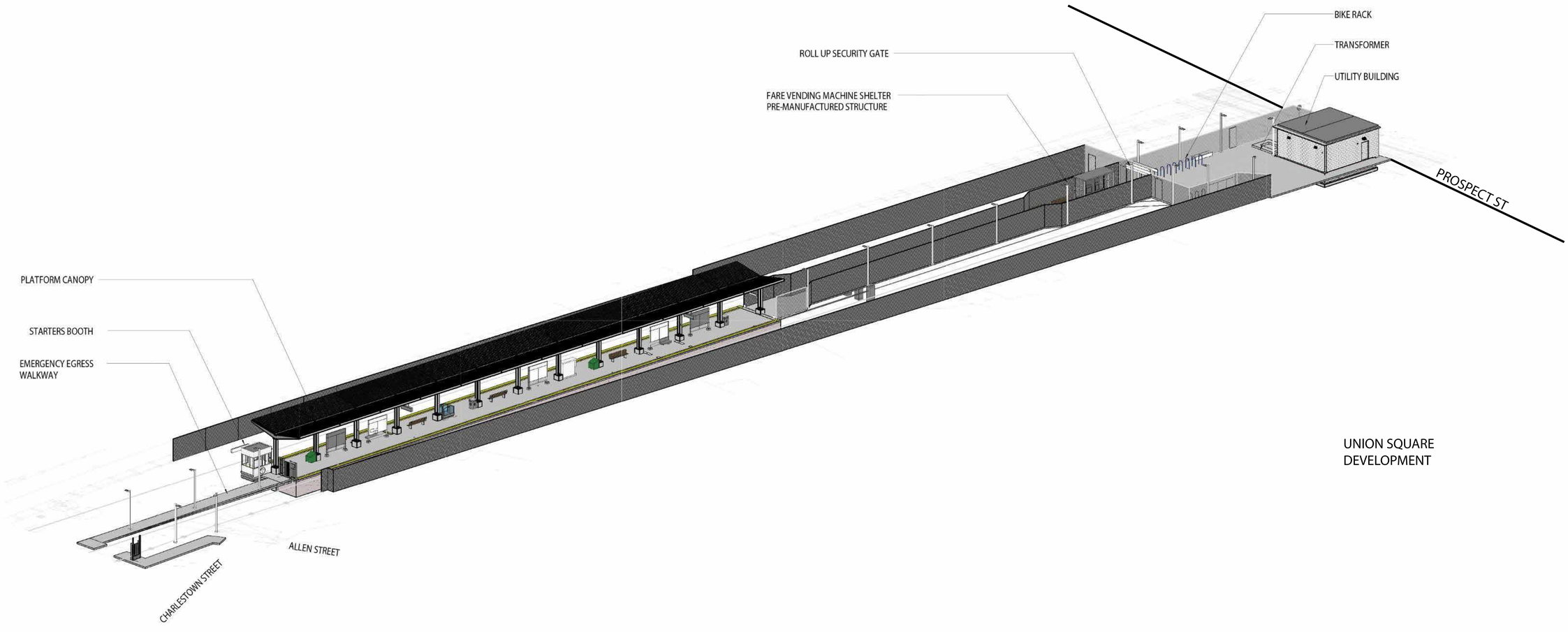
- **Design: 24% complete (as of Dec. 2018)**
- At grade entrance off Prospect Street/Bennett Court
- Additive canopy over station platform
- Emergency egress pathway to Allen Street
- Two Customer Assistance Areas on the station platform, featuring an emergency call box.
- Two transformers at the station may emit a light hum to passersby.
- Pedestrian and bicycle access coordinated with developer
- Nearby buses include: 91, 85, CT2, 87, 86
- Sidewalk is 10+ feet in width
- Station will be a catalyst for residential and business growth in this revitalized area
- Walking distance to Lincoln Park, Argenziano School, Market Basket, Target

Number of Benches	Bike Storage Covered	Bike Storage Uncovered	Width/Length of Platform	Three Sided Shelter	Pick-up/Drop-off
5	86 (Provided by US2)	34	20’x225’	X	X

Union Square Station

AXONOMETRIC

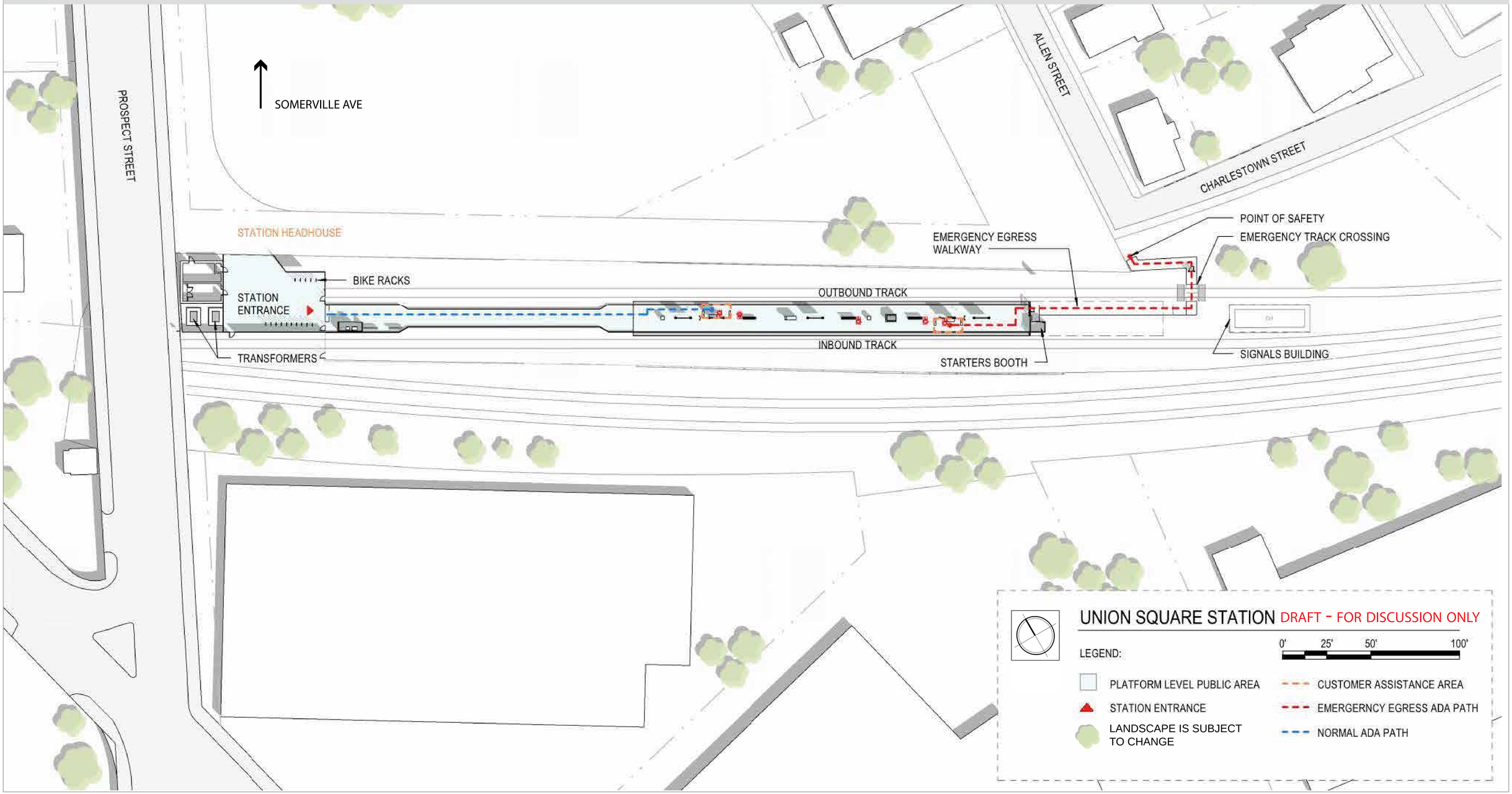
DRAFT - FOR DISCUSSION ONLY



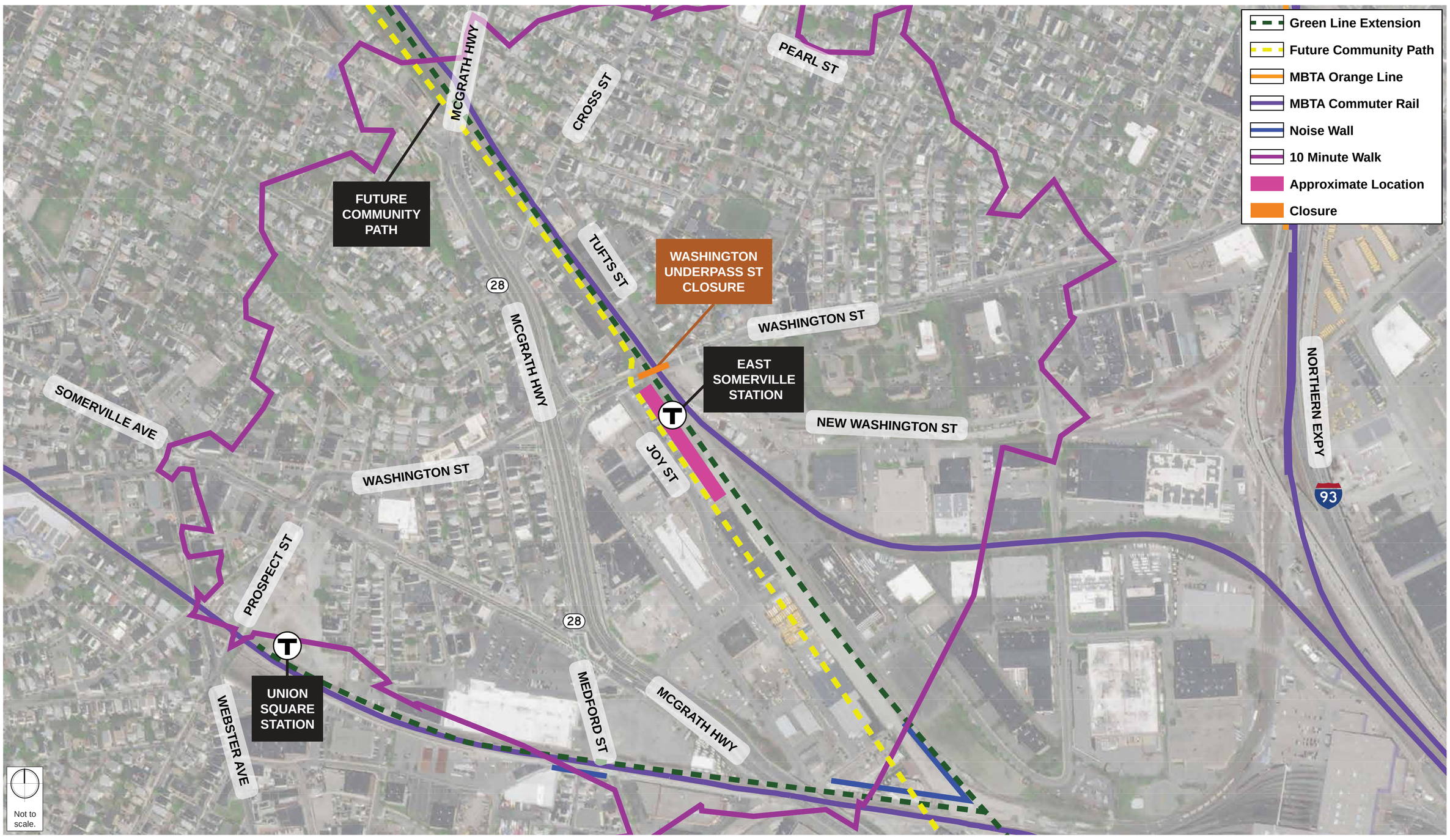
UNION SQUARE
DEVELOPMENT

Union Square Station

SITE PLAN



East Somerville Station



STATION AREA LOOKING NORTHWEST FROM INNER BELT ROAD

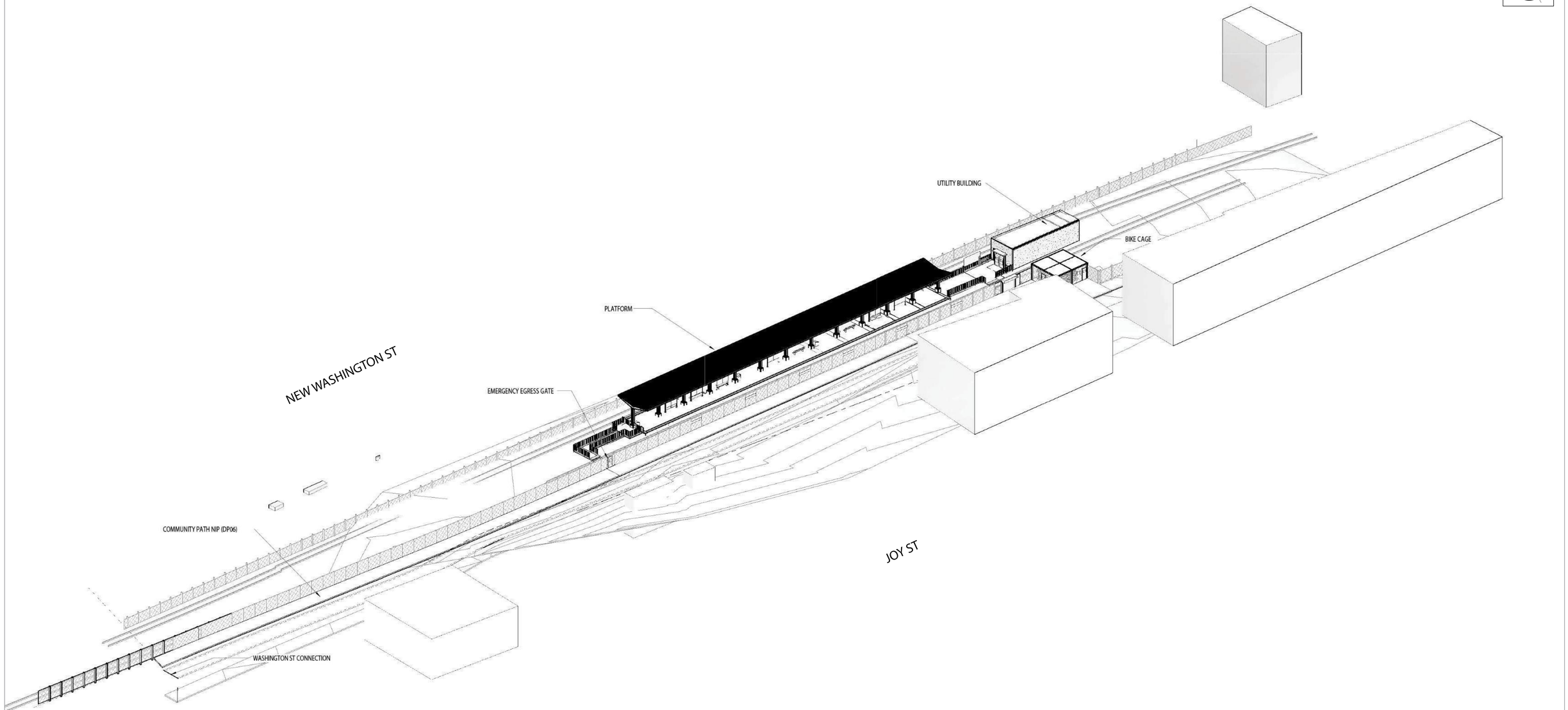
- **Design: 23% complete (as of Dec. 2018)**
- Station entrance is accessed from Washington Street Access Path adjacent to the Community Path
- Station entrance features two fare vending machines.
- Additive canopy over station platform
- Emergency egress walkway to emergency track crossing to community path.
- Two Customer Assistance Areas on the station platform, featuring an emergency call box.
- Access path is 10 feet in width
- Nearby buses include: 86, 91, CT-2
- Station services extremely active business and residential hub.
- Walking distance to Cobble Hill Apartments, Capuano Early Childhood Center, Target
- Dedicated bicycle lanes on Washington Street

Number of Benches	Bike Storage Covered	Bike Storage Uncovered	Width/Length of Platform	Three Sided Shelter	Pick-up/Drop-off
5	52	20	20’x225’	X	X

East Somerville Station

AXONOMETRIC

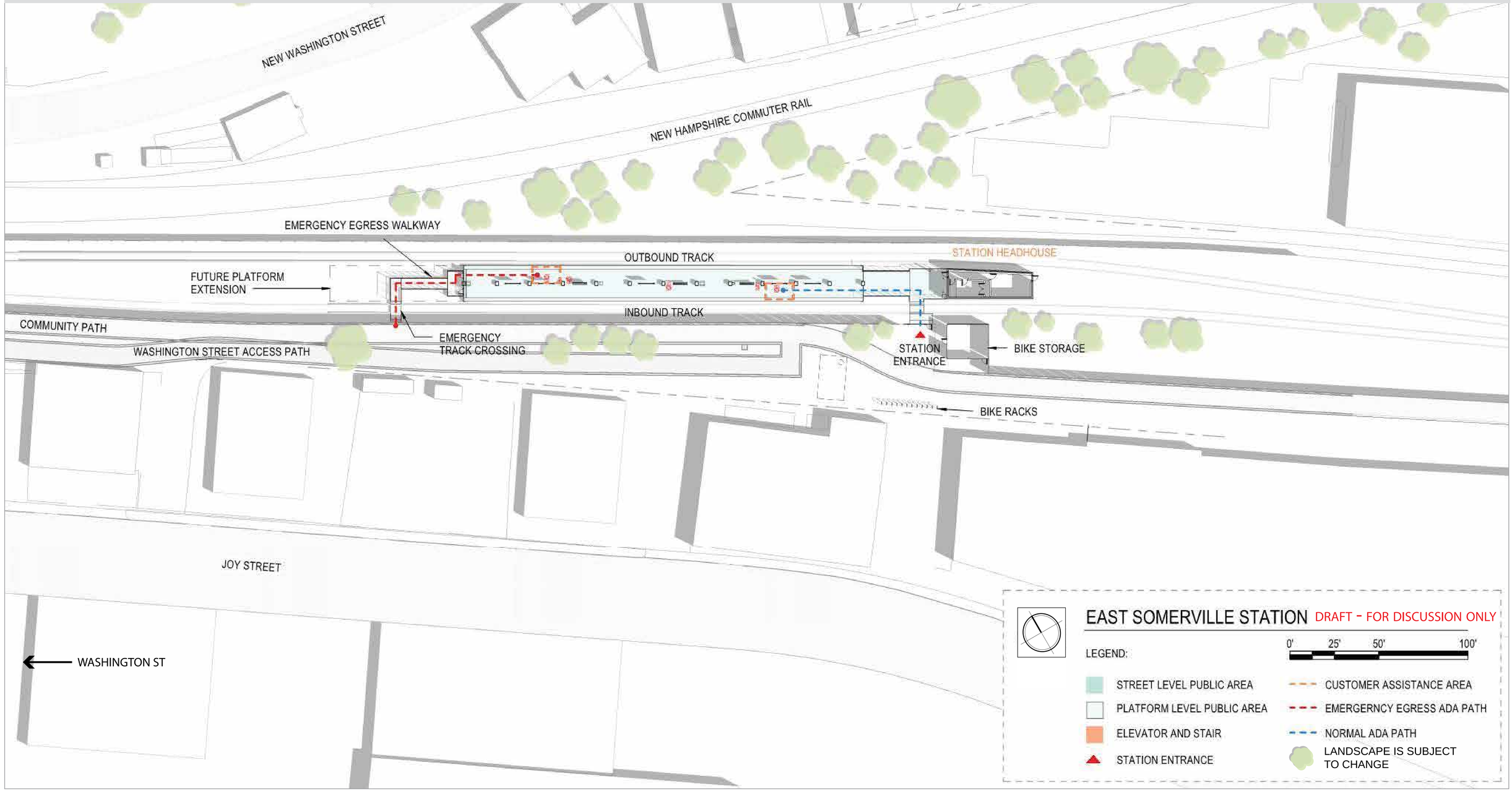
DRAFT - FOR DISCUSSION ONLY



East Somerville Station

GLX CONSTRUCTORS

SITE PLAN



TRIP GENERATION

Land Use: 221
Multifamily Housing (Mid-Rise)

Description

Mid-rise multifamily housing includes apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and that have between three and 10 levels (floors). Multifamily housing (low-rise) (Land Use 220), multifamily housing (high-rise) (Land Use 222), off-campus student apartment (Land Use 225), and mid-rise residential with 1st-floor commercial (Land Use 231) are related land uses.

Additional Data

In prior editions of *Trip Generation Manual*, the mid-rise multifamily housing sites were further divided into rental and condominium categories. An investigation of vehicle trip data found no clear differences in trip making patterns between the rental and condominium sites within the ITE database. As more data are compiled for future editions, this land use classification can be reinvestigated.

For the six sites for which both the number of residents and the number of occupied dwelling units were available, there were an average of 2.46 residents per occupied dwelling unit.

For the five sites for which the numbers of both total dwelling units and occupied dwelling units were available, an average of 95.7 percent of the total dwelling units were occupied.

Time-of-day distribution data for this land use are presented in Appendix A. For the eight general urban/suburban sites with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 7:00 and 8:00 a.m. and 4:45 and 5:45 p.m., respectively.

For the four dense multi-use urban sites with 24-hour count data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 7:15 and 8:15 a.m. and 4:15 and 5:15 p.m., respectively. For the three center city core sites with 24-hour count data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 6:45 and 7:45 a.m. and 5:00 and 6:00 p.m., respectively.

For the six sites for which data were provided for both occupied dwelling units and residents, there was an average of 2.46 residents per occupied dwelling unit.

For the five sites for which data were provided for both occupied dwelling units and total dwelling units, an average of 95.7 percent of the units were occupied.

The average numbers of person trips per vehicle trip at the five center city core sites at which both person trip and vehicle trip data were collected were as follows:

- 1.84 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 7 and 9 a.m.
- 1.94 during Weekday, AM Peak Hour of Generator
- 2.07 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.
- 2.59 during Weekday, PM Peak Hour of Generator

The average numbers of person trips per vehicle trip at the 32 dense multi-use urban sites at which both person trip and vehicle trip data were collected were as follows:

- 1.90 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 7 and 9 a.m.
- 1.90 during Weekday, AM Peak Hour of Generator
- 2.00 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.
- 2.08 during Weekday, PM Peak Hour of Generator

The average numbers of person trips per vehicle trip at the 13 general urban/suburban sites at which both person trip and vehicle trip data were collected were as follows:

- 1.56 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 7 and 9 a.m.
- 1.88 during Weekday, AM Peak Hour of Generator
- 1.70 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.
- 2.07 during Weekday, PM Peak Hour of Generator

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), British Columbia (CAN), California, Delaware, District of Columbia, Florida, Georgia, Illinois, Maryland, Massachusetts, Minnesota, New Hampshire, New Jersey, Ontario, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Utah, Virginia, and Wisconsin.

Source Numbers

168, 188, 204, 305, 306, 321, 357, 390, 436, 525, 530, 579, 638, 818, 857, 866, 901, 904, 910, 912, 918, 934, 936, 939, 944, 947, 948, 949, 959, 963, 964, 966, 967, 969, 970

Multifamily Housing (Mid-Rise)
(221)

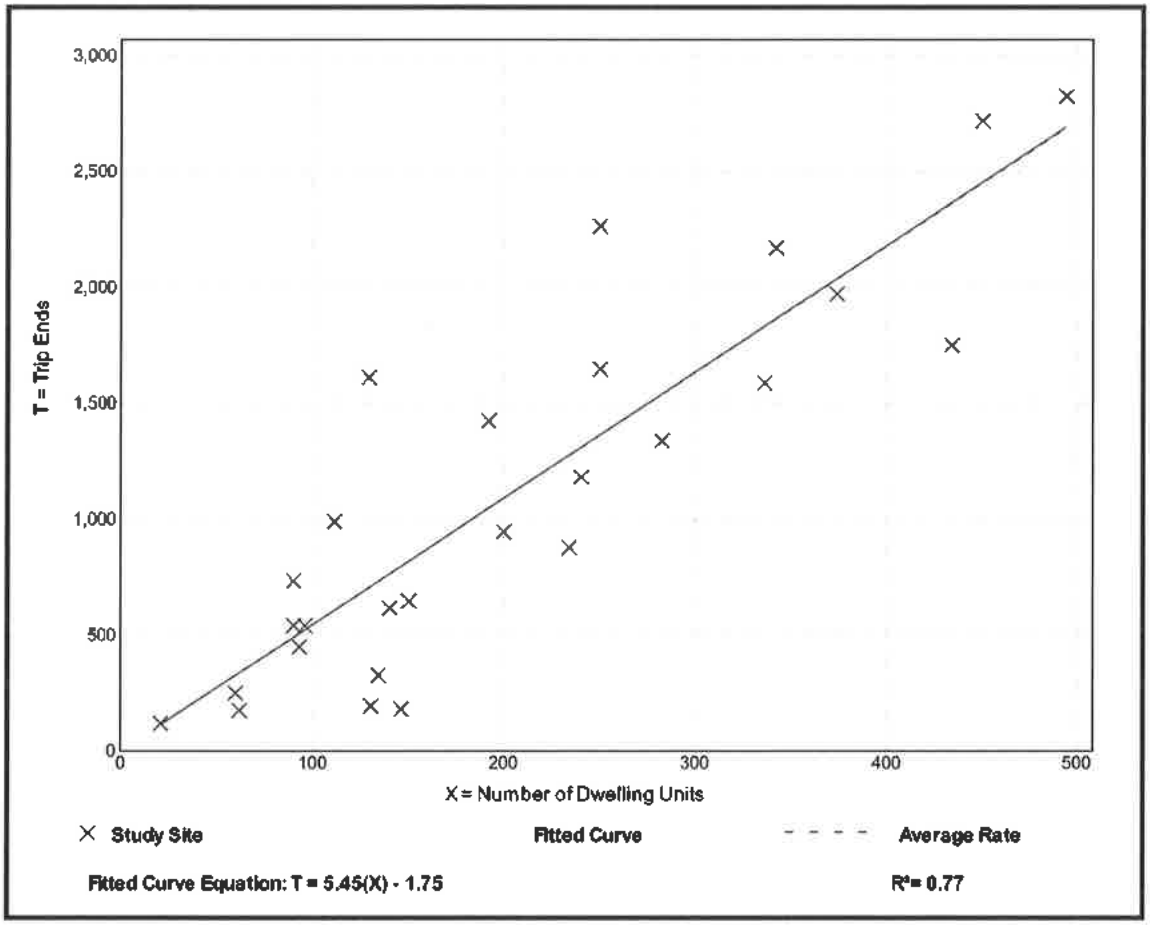
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 27
Avg. Num. of Dwelling Units: 205
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
5.44	1.27 - 12.50	2.03

Data Plot and Equation



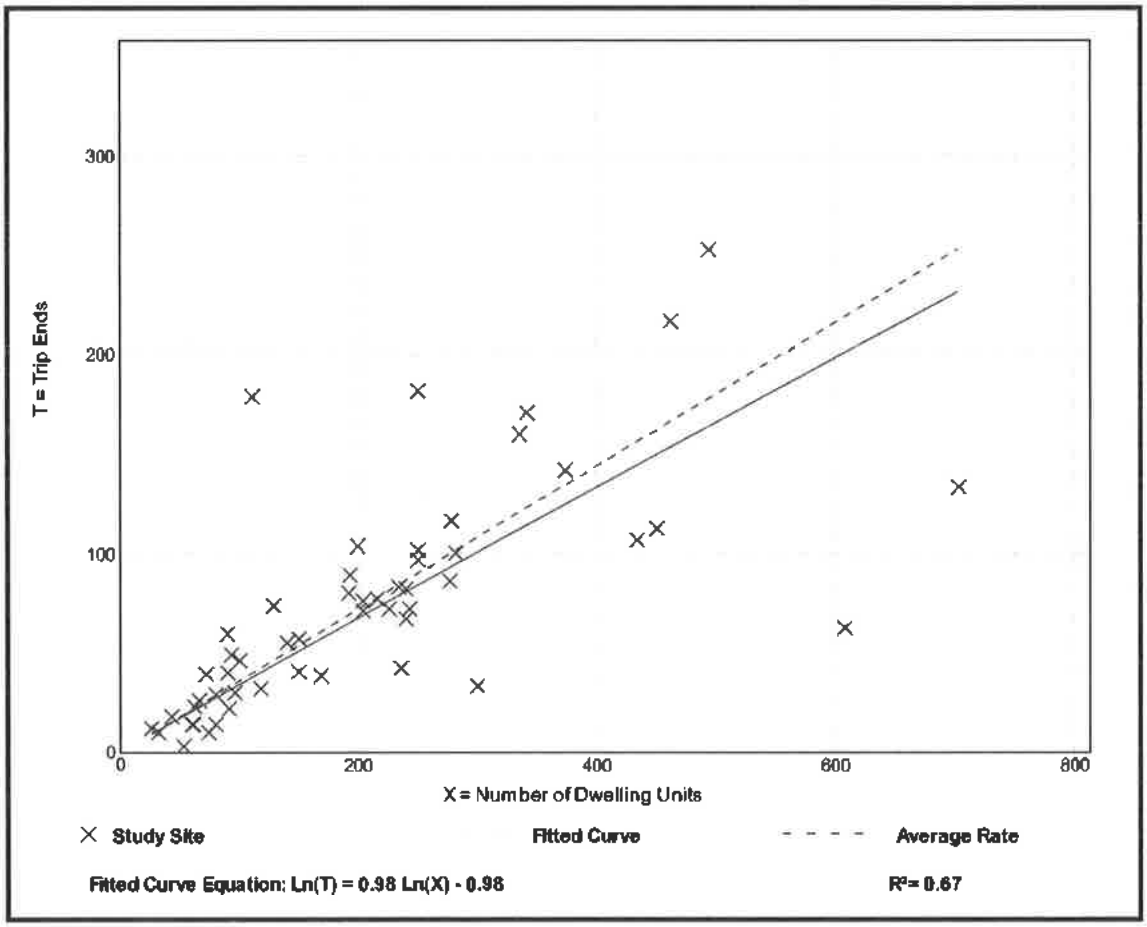
Multifamily Housing (Mid-Rise)
(221)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 53
Avg. Num. of Dwelling Units: 207
Directional Distribution: 26% entering, 74% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.36	0.06 - 1.61	0.19

Data Plot and Equation



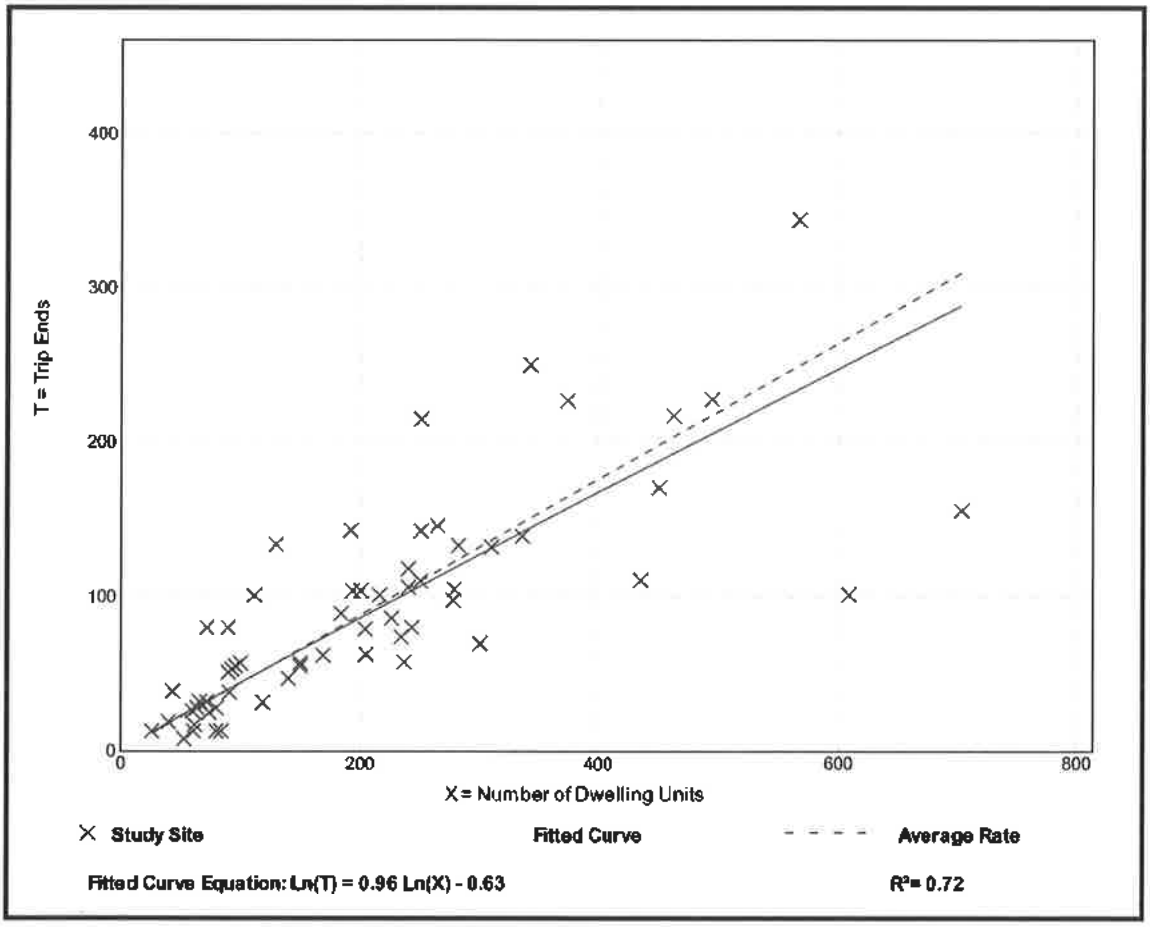
Multifamily Housing (Mid-Rise)
(221)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 60
Avg. Num. of Dwelling Units: 208
Directional Distribution: 61% entering, 39% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.44	0.15 - 1.11	0.19

Data Plot and Equation



Multifamily Housing (Mid-Rise)
(221)

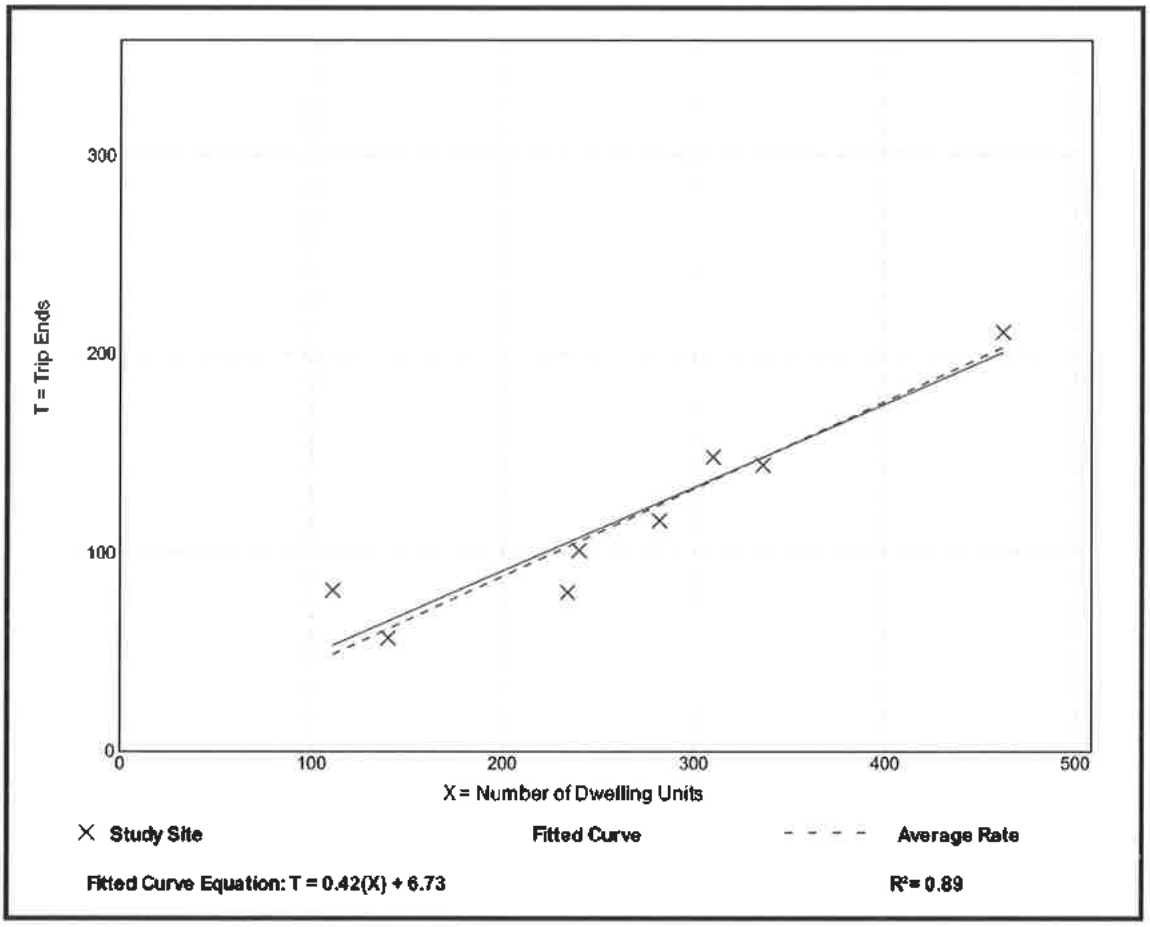
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Saturday, Peak Hour of Generator**

Setting/Location: **General Urban/Suburban**
Number of Studies: 8
Avg. Num. of Dwelling Units: 264
Directional Distribution: 49% entering, 51% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.44	0.34 - 0.73	0.08

Data Plot and Equation



Land Use: 932
High-Turnover (Sit-Down) Restaurant

Description

This land use consists of sit-down, full-service eating establishments with typical duration of stay of approximately one hour. This type of restaurant is usually moderately priced and frequently belongs to a restaurant chain. Generally, these restaurants serve lunch and dinner; they may also be open for breakfast and are sometimes open 24 hours a day. These restaurants typically do not take reservations. Patrons commonly wait to be seated, are served by a waiter/waitress, order from menus and pay for their meal after they eat. Some facilities contained within this land use may also contain a bar area for serving food and alcoholic drinks. Fast casual restaurant (Land Use 930), quality restaurant (Land Use 931), fast-food restaurant without drive-through window (Land Use 933), fast-food restaurant with drive-through window (Land Use 934), and fast-food restaurant with drive-through window and no indoor seating (Land Use 935) are related uses.

Additional Data

sers should exercise caution when applying statistics during the AM peak periods, as the sites contained in the database for this land use may or may not be open for breakfast. In cases where it was confirmed that the sites were not open for breakfast, data for the AM peak hour of the adjacent street traffic were removed from the database.

The outdoor seating area is not included in the overall gross floor area. Therefore, the number of seats may be a more reliable independent variable on which to establish trip generation rates for facilities having significant outdoor seating.

Time-of-day distribution data for this land use for a weekday, Saturday, and Sunday are presented in Appendix A. For the 38 general urban/suburban sites with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 11:45 a.m. and 12:45 p.m. and 12:00 and 1:00 p.m., respectively.

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), California, Florida, Georgia, Indiana, Kentucky, Massachusetts, Minnesota, New Hampshire, New Jersey, New York, Ohio, Oklahoma, Oregon, Pennsylvania, South Dakota, Texas, Vermont, and Wisconsin.

Source Numbers

126, 269, 275, 280, 300, 301, 305, 338, 340, 341, 358, 384, 424, 432, 437, 438, 444, 507, 555, 577, 589, 617, 618, 728, 868, 884, 885, 903, 927, 944, 961, 962, 977

High-Turnover (Sit-Down) Restaurant
(932)

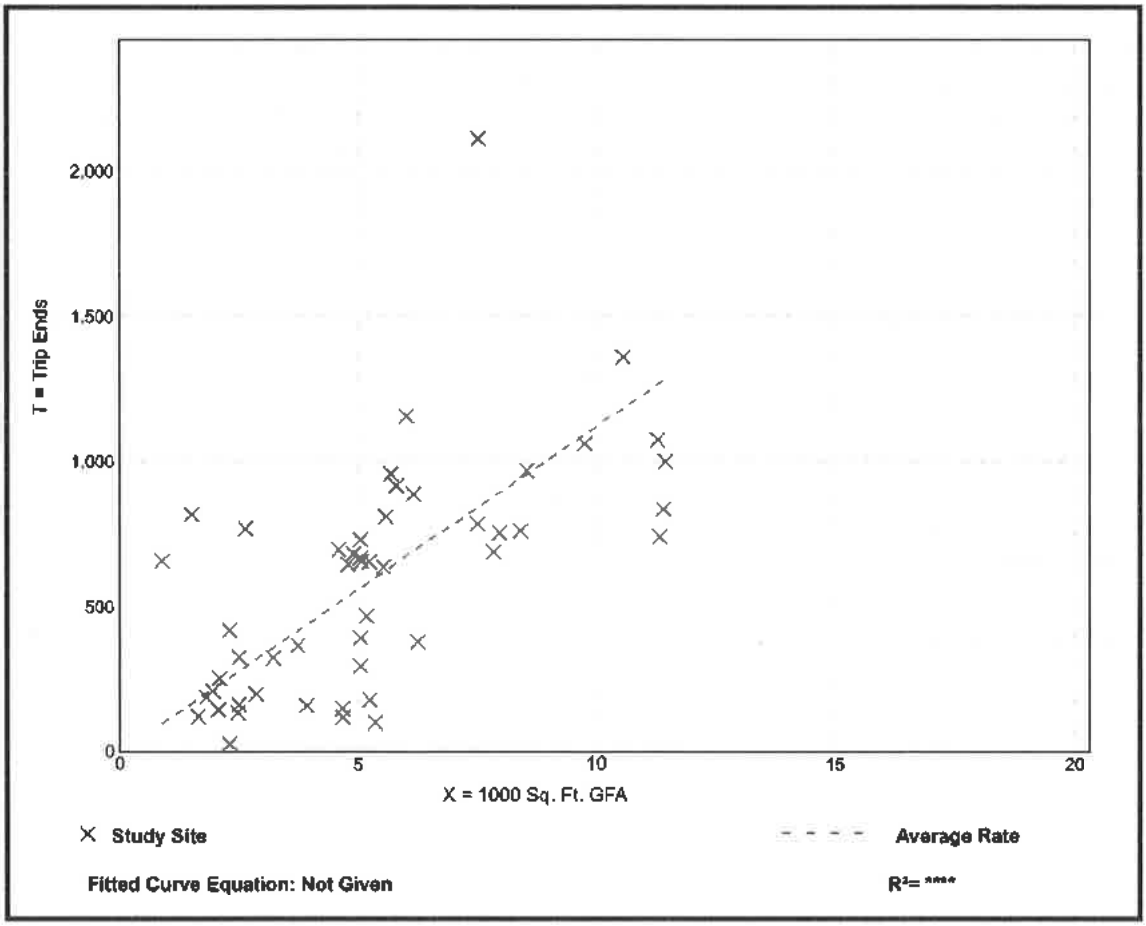
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 50
1000 Sq. Ft. GFA: 5
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
112.18	13.04 - 742.41	72.51

Data Plot and Equation



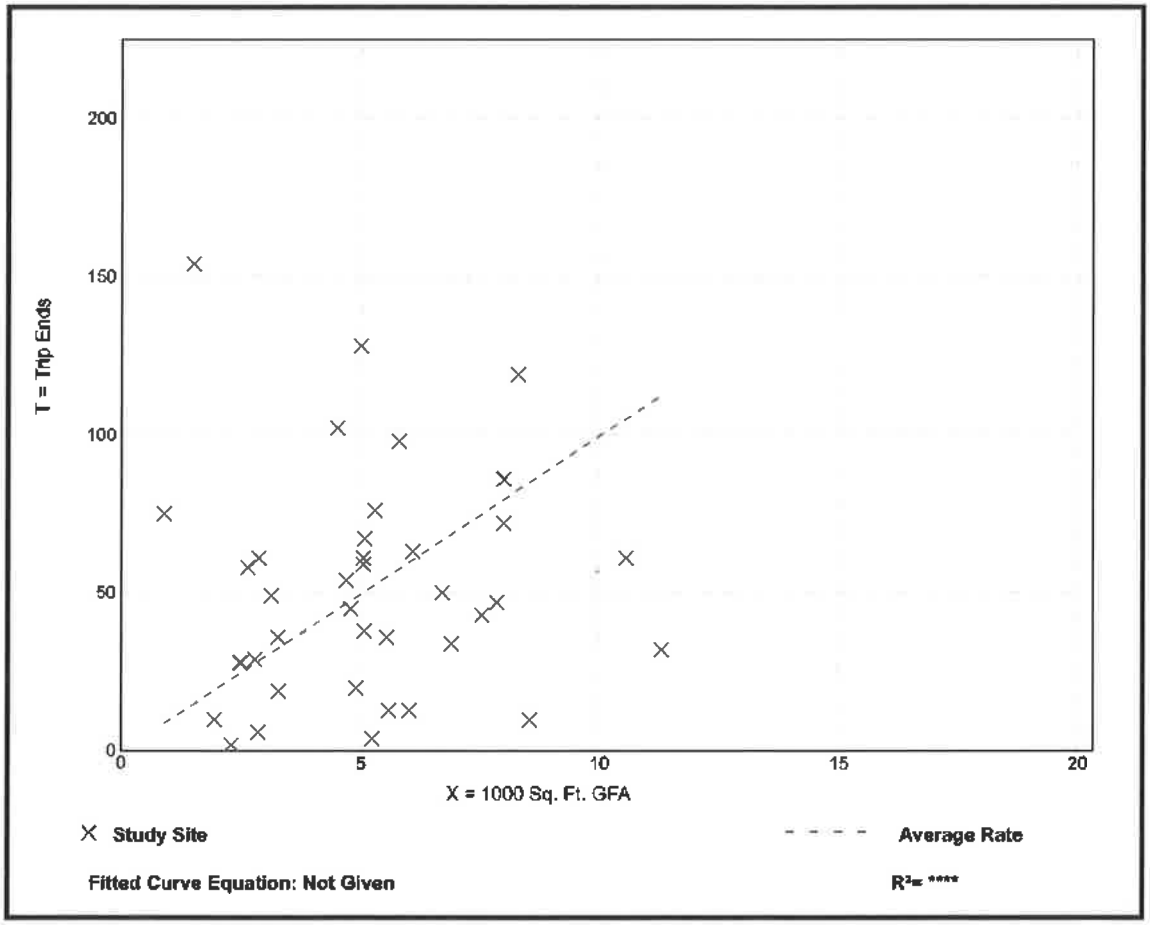
High-Turnover (Sit-Down) Restaurant
(932)

Vehicle Trip Ends vs:	**1000 Sq. Ft. GFA**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 7 and 9 a.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	39
1000 Sq. Ft. GFA:	5
Directional Distribution:	55% entering, 45% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
9.94	0.76 - 102.39	11.33

Data Plot and Equation



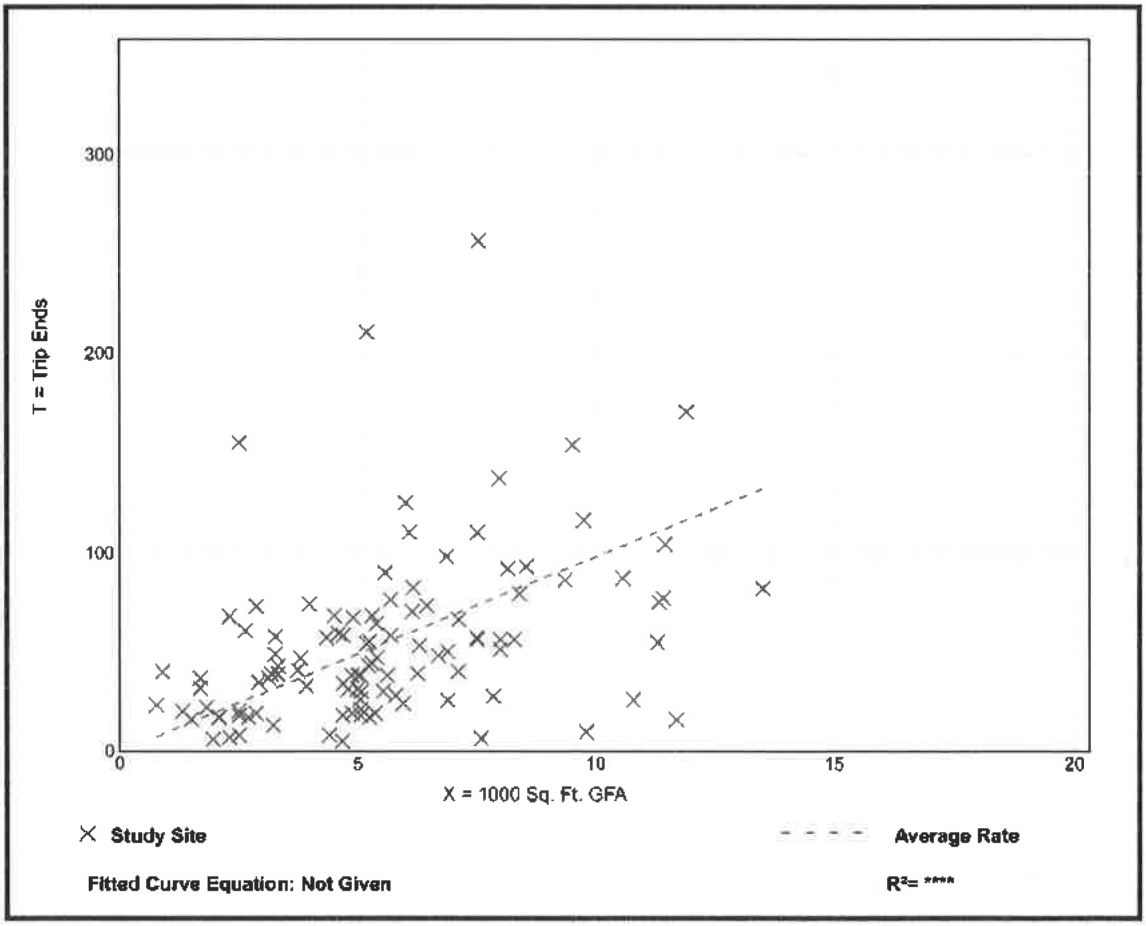
High-Turnover (Sit-Down) Restaurant
(932)

Vehicle Trip Ends vs:	**1000 Sq. Ft. GFA**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 4 and 6 p.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	107
1000 Sq. Ft. GFA:	6
Directional Distribution:	62% entering, 38% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
9.77	0.92 - 62.00	7.37

Data Plot and Equation



High-Turnover (Sit-Down) Restaurant
(932)

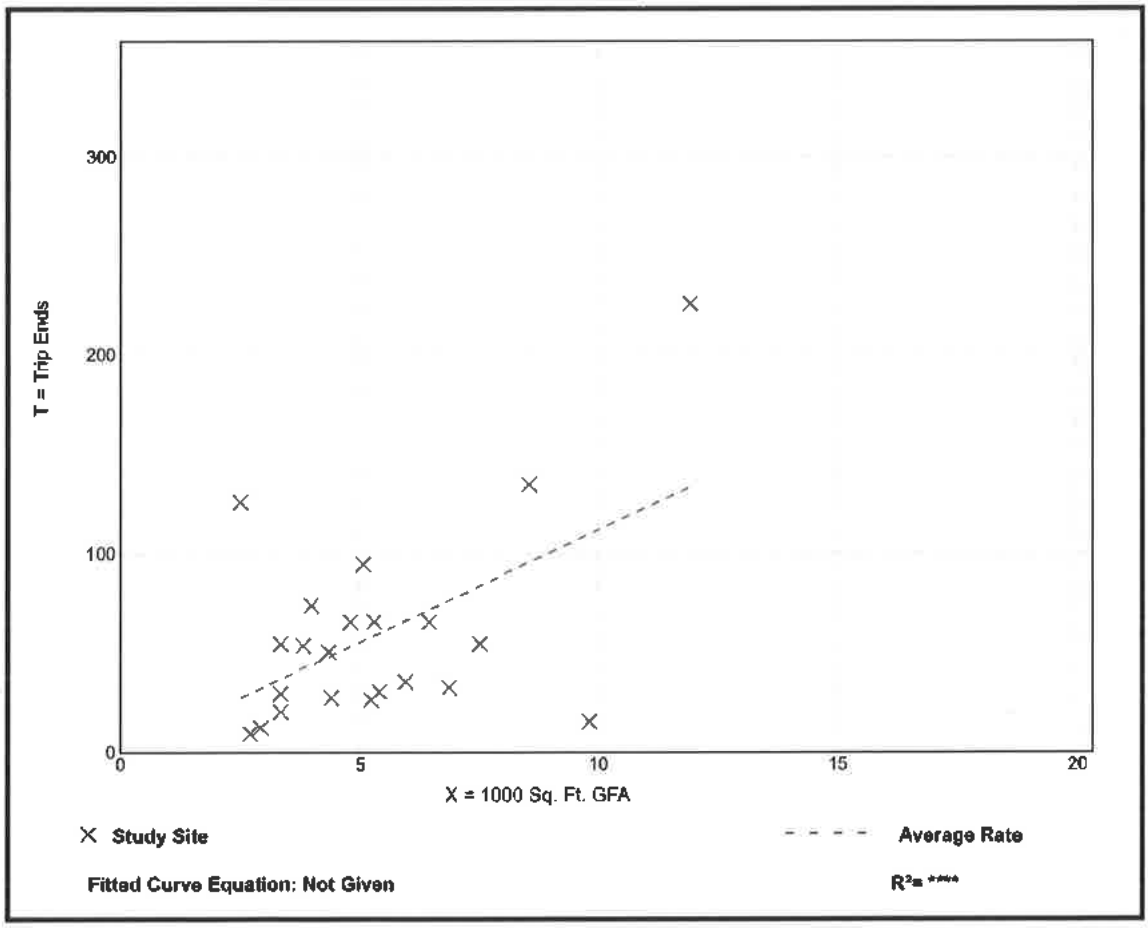
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Saturday, Peak Hour of Generator**

Setting/Location: **General Urban/Suburban**
Number of Studies: 22
1000 Sq. Ft. GFA: 5
Directional Distribution: 51% entering, 49% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
11.19	1.63 - 50.40	8.30

Data Plot and Equation



Land Use: 944
Gasoline/Service Station

Description

This land use includes gasoline/service stations where the primary business is the fueling of motor vehicles. The sites included generally have a small building (less than 2,000 gross square feet) that houses a cashier and limited space for motor vehicle maintenance supplies and general convenience products. A gasoline/service station may also have ancillary facilities for servicing and repairing motor vehicles and may have a car wash. Convenience market with gasoline pumps (Land Use 853), gasoline/service station with convenience market (Land Use 945), and truck stop (Land Use 950) are related uses.

Additional Data

The independent variable—vehicle fueling positions—is defined as the maximum number of vehicles that can be fueled simultaneously.

Gasoline/service stations in this land use include "pay-at-the-pump" and traditional fueling stations.

Time-of-day distribution data for this land use for a weekday, Saturday, and Sunday are presented in Appendix A. For the 16 general urban/suburban sites with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 11:45 a.m. and 12:45 p.m. and 5:45 and 6:45 p.m., respectively. For the one center city core site with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 10:30 a.m. and 11:30 p.m. and 5:00 and 6:00 p.m., respectively.

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), California, Florida, Kentucky, Maryland, Massachusetts, Minnesota, New Hampshire, New Jersey, Ontario (CAN), Oregon, South Dakota, Texas, and Washington.

Specialized Land Use Data

A 2006 study provided data on four private fuel facilities in Florida (source 721). These facilities provide self-fuel service, but are not open for use by the general public. To use the services offered at the facility, a pre-established membership account is required. The trip generation characteristics of this site differed from sites included in this land use; therefore, trip generation information for this site is presented here and was excluded from the data plots. The sites had an average of nine vehicle fueling positions. An average of 12 vehicle trips were counted during the weekday, AM peak hour of adjacent traffic and seven were counted during the weekday, PM peak hour of adjacent street traffic.

Source Numbers

221, 274, 278, 288, 340, 350, 351, 355, 359, 366, 440, 583, 617, 618, 631, 721, 867, 882, 883, 888, 954, 977

Gasoline/Service Station
(944)

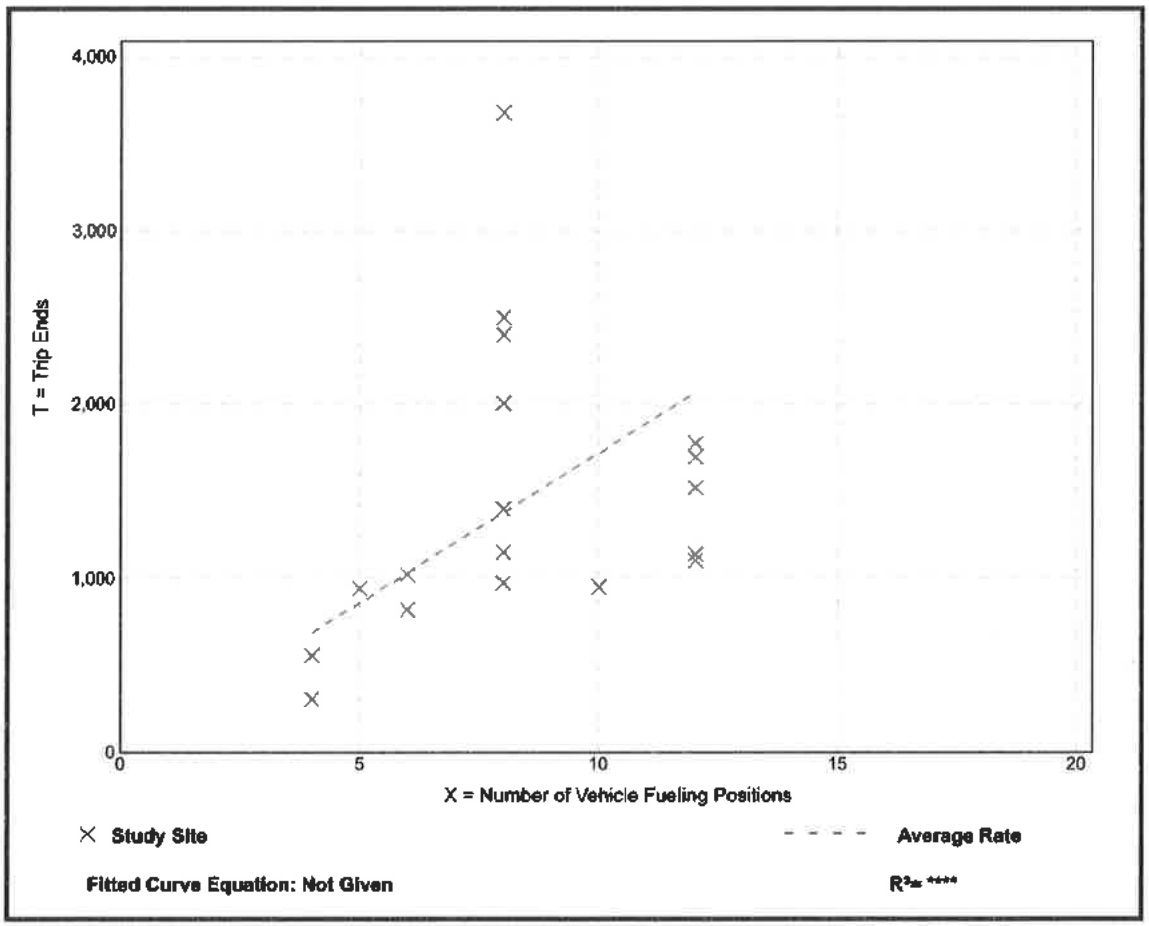
Vehicle Trip Ends vs: Vehicle Fueling Positions
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 18
Avg. Num. of Vehicle Fueling Positions: 8
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
172.01	77.00 - 460.00	96.45

Data Plot and Equation



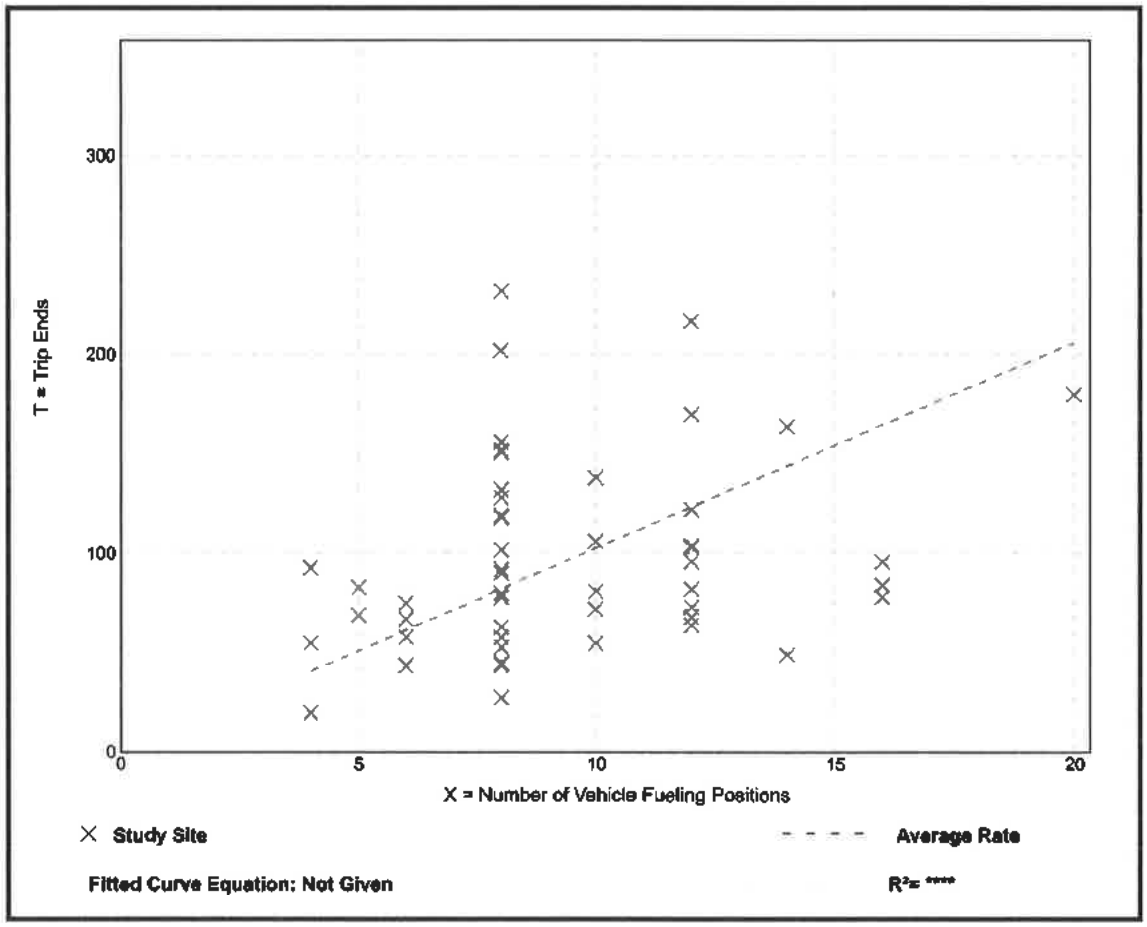
Gasoline/Service Station
(944)

Vehicle Trip Ends vs: **Vehicle Fueling Positions**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 53
Avg. Num. of Vehicle Fueling Positions: 9
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
10.28	3.50 - 29.00	5.36

Data Plot and Equation



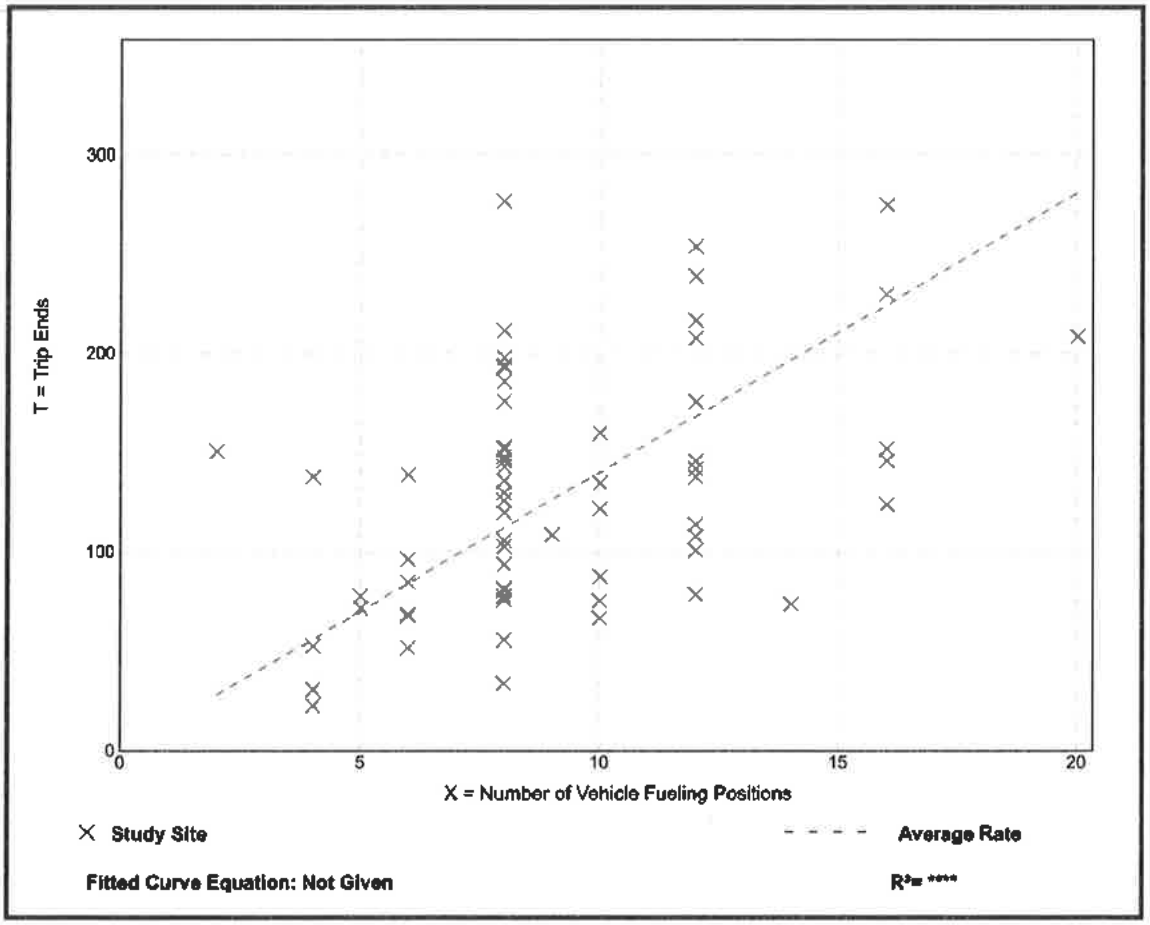
Gasoline/Service Station
(944)

Vehicle Trip Ends vs: **Vehicle Fueling Positions**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 66
Avg. Num. of Vehicle Fueling Positions: 9
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
14.03	4.25 - 75.50	6.96

Data Plot and Equation



Gasoline/Service Station
(944)

Vehicle Trip Ends vs: **Vehicle Fueling Positions**
On a: **Saturday, Peak Hour of Generator**

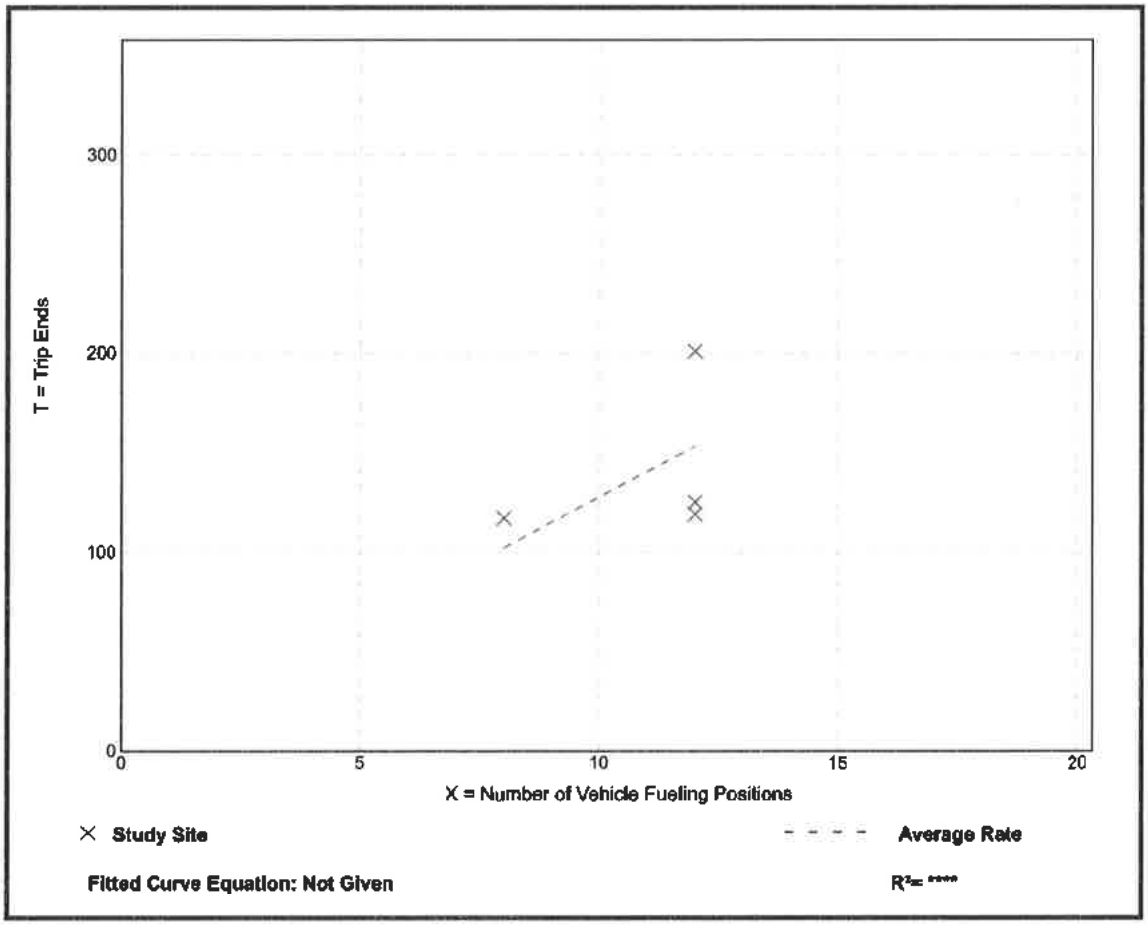
Setting/Location: **General Urban/Suburban**
Number of Studies: 4
Avg. Num. of Vehicle Fueling Positions: 11
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
12.77	9.92 - 16.75	3.40

Data Plot and Equation

Caution – Small Sample Size



MEANS OF TRANSPORTATION TO WORK	Census Tract 3515	**Percentage (Used for Residential)**	**Percentage (Used for Retail)**
Car, truck, or van	37.4%	**38.2%**	**41.4%**
Drove alone	29.0%	**29.6%**	**32.1%**
Carpooled:	8.4%	**8.6%**	**9.3%**
In 2-person carpool	8.4%	**8.6%**	**9.3%**
In 3-person carpool	0.0%	**0.0%**	**0.0%**
In 4 person carpool	0.0%	**0.0%**	**0.0%**
Public transportation	26.2%	**26.8%**	**0.0%**
Bicycle	12.7%	**13.0%**	**14.0%**
Walked	14.1%	**14.4%**	**44.6%**
Worked from home	7.6%	**7.6%**	**0.0%**
Other means	2.1%	**0.0%**	**0.0%**

Average Vehicle Occupancy (AVO)			
# Occupants	Weight	Occupants	Product
Drove Alone	0.321	1	0.321
Carpool (2)	0.093	2	0.186
Carpool (3)	0.000	3	0.000
Carpool (4)	0.000	4	0.000
Sums	*0.414*		*0.507*
AVO (Sum of Products/Sum of Weights)			***1.225***

MODE SPLIT

	AM	PM	Daily	Satuday
Vehicle	38.2%	38.2%	38.2%	38.2%
Transit	26.8%	26.8%	26.8%	26.8%
Walked	14.4%	14.4%	14.4%	14.4%
Bicycle	13.0%	13.0%	13.0%	13.0%
WFH	7.6%	7.6%	7.6%	7.6%
Other	0.0%	0.0%	0.0%	0.0%
	AM	PM	Daily	Daily
Enter %	26%	61%	50%	50%
Exit %	74%	39%	50%	50%

Residential Units	Weekday AM Peak Hour	Weekday PM Peak Hour	Weekday Daily	Weekday Daily
Base Trips (per ITE)	14	19	221	23
Total Person-Trips	15	21	243	25
Total Person-Vehicle-Trips	6	8	93	10
Total Vehicle-Trips	**5**	**7**	**76**	**8**
Entering Vehicle-Trips	1	4	38	4
Exiting Vehicle-Trips	4	3	38	4
Total Public Transportation Trips	4	6	65	7
Total Walking Trips	2	3	35	4
Total Bicycle Trips	2	3	32	3
Worked From Home	1	2	18	2

MODE SPLIT

	AM	PM	Daily	Sat.
Vehicle	41.4%	41.4%	41.4%	41.4%
Non-Vehicu	58.6%	58.6%	58.6%	58.6%
	AM	PM	Daily	Sat.
Enter %	55%	62%	50%	51%
Exit %	45%	38%	50%	49%

Retail Space	Weekday AM Peak Hour	Weekday PM Peak Hour	Weekday Daily	Sat. Midday Peak Hour
Base Trips (per ITE)	39	38	434	43
Total Person-Trips	39	38	434	43
Total Person-Vehicle-Trips	16	16	180	18
Total Vehicle-Trips	**13**	**13**	**146**	**14**
Entering Vehicle-Trips	7	8	73	7
Exiting Vehicle-Trips	6	5	73	7
Total Non-Vehicular Trips	23	22	254	25

Mixed-Use Development	Weekday AM Peak Hour	Weekday PM Peak Hour	Weekday Daily	Sat. Midday Peak Hour
Base Trips (per ITE)	53	57	655	66
Total Person-Trips	54	59	677	68
Total Person-Vehicle-Trips	22	24	272	27
Total Vehicle-Trips	**18**	**19**	**222**	**22**
Entering Vehicle-Trips	8	12	111	11
Exiting Vehicle-Trips	10	7	111	11
Total Non-Vehicular Trips	32	35	405	41

TRIP DISTRIBUTION

Residence						Place of Work						Commuting Flow		
State FIPS Code	County FIPS Code	Minor Civil Division FIPS Code	State Name	County Name	Minor Civil Division Name	State FIPS Code	County FIPS Code	Minor Civil Division FIPS Code	State Name	County Name	Minor Civil Division Name	Workers in Commuting Flow	Margin of Error	% of Workers
25	017	62535	Massachusetts	Middlesex County	Somerville city	006	037		California	Los Angeles County		23	37	0.05%
25	017	62535	Massachusetts	Middlesex County	Somerville city	006	073		California	San Diego County		11	17	0.02%
25	017	62535	Massachusetts	Middlesex County	Somerville city	009	001	73070	Connecticut	Fairfield County	Stamford town	24	28	0.05%
25	017	62535	Massachusetts	Middlesex County	Somerville city	009	003	68940	Connecticut	Hartford County	Simsbury town	46	65	0.09%
25	017	62535	Massachusetts	Middlesex County	Somerville city	009	013	44910	Connecticut	Tolland County	Mansfield town	53	66	0.11%
25	017	62535	Massachusetts	Middlesex County	Somerville city	023	005	24495	Maine	Cumberland County	Falmouth town	13	22	0.03%
25	017	62535	Massachusetts	Middlesex County	Somerville city	023	005	28240	Maine	Cumberland County	Gorham town	7	12	0.01%
25	017	62535	Massachusetts	Middlesex County	Somerville city	023	009	23200	Maine	Hancock County	Ellsworth city	9	14	0.02%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	001	03690	Massachusetts	Barnstable County	Barnstable Town city	22	33	0.04%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	005	02690	Massachusetts	Bristol County	Attleboro city	16	29	0.03%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	005	23000	Massachusetts	Bristol County	Fall River city	13	22	0.03%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	005	38225	Massachusetts	Bristol County	Mansfield town	13	19	0.03%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	005	49970	Massachusetts	Bristol County	Norton town	20	32	0.04%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	005	56060	Massachusetts	Bristol County	Raynham town	7	13	0.01%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	005	62430	Massachusetts	Bristol County	Somerset town	18	27	0.04%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	009	01465	Massachusetts	Essex County	Andover town	221	105	0.45%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	009	05595	Massachusetts	Essex County	Beverly city	68	50	0.14%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	009	07420	Massachusetts	Essex County	Boxford town	11	19	0.02%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	009	16250	Massachusetts	Essex County	Danvers town	144	125	0.29%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	009	25625	Massachusetts	Essex County	Georgetown town	24	37	0.05%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	009	29405	Massachusetts	Essex County	Haverhill city	7	10	0.01%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	009	32310	Massachusetts	Essex County	Ipswich town	15	18	0.03%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	009	34550	Massachusetts	Essex County	Lawrence city	132	97	0.27%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	009	37490	Massachusetts	Essex County	Lynn city	55	49	0.11%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	009	37560	Massachusetts	Essex County	Lynnfield town	17	28	0.03%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	009	38400	Massachusetts	Essex County	Marblehead town	22	36	0.04%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	009	40710	Massachusetts	Essex County	Methuen Town city	11	21	0.02%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	009	41095	Massachusetts	Essex County	Middleton town	20	21	0.04%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	009	46365	Massachusetts	Essex County	North Andover town	68	44	0.14%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	009	52490	Massachusetts	Essex County	Peabody city	76	76	0.16%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	009	57880	Massachusetts	Essex County	Rockport town	29	46	0.06%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	009	58405	Massachusetts	Essex County	Rowley town	12	21	0.02%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	009	59105	Massachusetts	Essex County	Salem city	156	82	0.32%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	009	60015	Massachusetts	Essex County	Saugus town	126	76	0.26%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	009	68645	Massachusetts	Essex County	Swampscott town	23	32	0.05%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	015	01325	Massachusetts	Hampshire County	Amherst town	7	11	0.01%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	00380	Massachusetts	Middlesex County	Acton town	98	67	0.20%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	01605	Massachusetts	Middlesex County	Arlington town	462	167	0.94%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	04615	Massachusetts	Middlesex County	Bedford town	236	131	0.48%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	05070	Massachusetts	Middlesex County	Belmont town	264	118	0.54%

25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	05805	Massachusetts	Middlesex County	Billerica town	215	76	0.44%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	07350	Massachusetts	Middlesex County	Boxborough town	63	39	0.13%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	09840	Massachusetts	Middlesex County	Burlington town	796	227	1.63%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	11000	Massachusetts	Middlesex County	Cambridge city	10,123	702	20.70%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	13135	Massachusetts	Middlesex County	Chelmsford town	154	86	0.31%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	15060	Massachusetts	Middlesex County	Concord town	312	111	0.64%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	17475	Massachusetts	Middlesex County	Dracut town	69	64	0.14%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	21990	Massachusetts	Middlesex County	Everett city	240	133	0.49%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	24925	Massachusetts	Middlesex County	Framingham town	423	222	0.86%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	27480	Massachusetts	Middlesex County	Groton town	9	16	0.02%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	30700	Massachusetts	Middlesex County	Holliston town	48	53	0.10%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	31085	Massachusetts	Middlesex County	Hopkinton town	26	33	0.05%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	31540	Massachusetts	Middlesex County	Hudson town	46	32	0.09%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	35215	Massachusetts	Middlesex County	Lexington town	656	161	1.34%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	35425	Massachusetts	Middlesex County	Lincoln town	58	50	0.12%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	35950	Massachusetts	Middlesex County	Littleton town	88	71	0.18%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	37000	Massachusetts	Middlesex County	Lowell city	281	110	0.57%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	37875	Massachusetts	Middlesex County	Malden city	286	106	0.58%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	38715	Massachusetts	Middlesex County	Marlborough city	300	148	0.61%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	39625	Massachusetts	Middlesex County	Maynard town	11	12	0.02%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	39835	Massachusetts	Middlesex County	Medford city	1,419	342	2.90%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	40115	Massachusetts	Middlesex County	Melrose city	77	42	0.16%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	43895	Massachusetts	Middlesex County	Natick town	342	177	0.70%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	45560	Massachusetts	Middlesex County	Newton city	1,032	256	2.11%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	48955	Massachusetts	Middlesex County	North Reading town	107	78	0.22%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	56130	Massachusetts	Middlesex County	Reading town	89	69	0.18%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	62535	Massachusetts	Middlesex County	Somerville city	7,391	742	15.11%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	67665	Massachusetts	Middlesex County	Stoneham town	188	95	0.38%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	68050	Massachusetts	Middlesex County	Stow town	35	39	0.07%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	68260	Massachusetts	Middlesex County	Sudbury town	47	41	0.10%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	69415	Massachusetts	Middlesex County	Tewksbury town	73	74	0.15%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	71025	Massachusetts	Middlesex County	Tyngsborough town	14	23	0.03%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	72215	Massachusetts	Middlesex County	Wakefield town	125	61	0.26%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	72600	Massachusetts	Middlesex County	Waltham city	1,158	228	2.37%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	73440	Massachusetts	Middlesex County	Watertown Town city	691	194	1.41%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	73790	Massachusetts	Middlesex County	Wayland town	57	42	0.12%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	76135	Massachusetts	Middlesex County	Westford town	170	108	0.35%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	77255	Massachusetts	Middlesex County	Weston town	84	54	0.17%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	80230	Massachusetts	Middlesex County	Wilmington town	309	96	0.63%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	80510	Massachusetts	Middlesex County	Winchester town	195	120	0.40%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	81035	Massachusetts	Middlesex County	Woburn city	670	215	1.37%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	021	04930	Massachusetts	Norfolk County	Bellingham town	9	18	0.02%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	021	07740	Massachusetts	Norfolk County	Braintree Town city	47	53	0.10%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	021	09175	Massachusetts	Norfolk County	Brookline town	280	128	0.57%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	021	11315	Massachusetts	Norfolk County	Canton town	103	85	0.21%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	021	16495	Massachusetts	Norfolk County	Dedham town	54	50	0.11%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	021	24820	Massachusetts	Norfolk County	Foxborough town	6	11	0.01%

25	017	62535	Massachusetts	Middlesex County	Somerville city	025	021	25172	Massachusetts	Norfolk County	Franklin Town city	48	50	0.10%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	021	41515	Massachusetts	Norfolk County	Millis town	8	16	0.02%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	021	41690	Massachusetts	Norfolk County	Milton town	54	49	0.11%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	021	44105	Massachusetts	Norfolk County	Needham town	160	81	0.33%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	021	46050	Massachusetts	Norfolk County	Norfolk town	20	25	0.04%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	021	50250	Massachusetts	Norfolk County	Norwood town	58	40	0.12%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	021	55745	Massachusetts	Norfolk County	Quincy city	186	111	0.38%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	021	55955	Massachusetts	Norfolk County	Randolph town	33	49	0.07%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	021	60785	Massachusetts	Norfolk County	Sharon town	1	3	0.00%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	021	72495	Massachusetts	Norfolk County	Walpole town	17	27	0.03%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	021	74175	Massachusetts	Norfolk County	Wellesley town	195	92	0.40%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	021	78690	Massachusetts	Norfolk County	Westwood town	48	47	0.10%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	021	78972	Massachusetts	Norfolk County	Weymouth Town city	178	115	0.36%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	023	08085	Massachusetts	Plymouth County	Bridgewater town	18	27	0.04%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	023	09000	Massachusetts	Plymouth County	Brockton city	13	21	0.03%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	023	28285	Massachusetts	Plymouth County	Hanover town	52	65	0.11%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	023	28495	Massachusetts	Plymouth County	Hanson town	8	13	0.02%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	023	30210	Massachusetts	Plymouth County	Hingham town	15	21	0.03%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	023	31645	Massachusetts	Plymouth County	Hull town	25	39	0.05%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	023	33220	Massachusetts	Plymouth County	Kingston town	7	11	0.01%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	023	40850	Massachusetts	Plymouth County	Middleborough town	7	12	0.01%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	023	57775	Massachusetts	Plymouth County	Rockland town	60	63	0.12%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	025	07000	Massachusetts	Suffolk County	Boston city	15,041	905	30.75%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	025	13205	Massachusetts	Suffolk County	Chelsea city	312	151	0.64%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	025	56585	Massachusetts	Suffolk County	Revere city	26	26	0.05%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	025	81005	Massachusetts	Suffolk County	Winthrop Town city	49	50	0.10%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	027	23875	Massachusetts	Worcester County	Fitchburg city	7	12	0.01%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	027	25485	Massachusetts	Worcester County	Gardner city	17	20	0.03%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	027	28950	Massachusetts	Worcester County	Harvard town	12	19	0.02%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	027	34165	Massachusetts	Worcester County	Lancaster town	11	19	0.02%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	027	35075	Massachusetts	Worcester County	Leominster city	23	27	0.05%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	027	46820	Massachusetts	Worcester County	Northborough town	2	4	0.00%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	027	61800	Massachusetts	Worcester County	Shrewsbury town	45	54	0.09%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	027	63165	Massachusetts	Worcester County	Southborough town	25	30	0.05%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	027	73895	Massachusetts	Worcester County	Webster town	6	10	0.01%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	027	75015	Massachusetts	Worcester County	Westborough town	97	84	0.20%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	027	82000	Massachusetts	Worcester County	Worcester city	76	47	0.16%
25	017	62535	Massachusetts	Middlesex County	Somerville city	033	003	14660	New Hampshire	Carroll County	Conway town	50	81	0.10%
25	017	62535	Massachusetts	Middlesex County	Somerville city	033	003	58740	New Hampshire	Carroll County	Ossipee town	12	29	0.02%
25	017	62535	Massachusetts	Middlesex County	Somerville city	033	009	33860	New Hampshire	Grafton County	Hanover town	9	15	0.02%
25	017	62535	Massachusetts	Middlesex County	Somerville city	033	011	37140	New Hampshire	Hillsborough County	Hollis town	14	23	0.03%
25	017	62535	Massachusetts	Middlesex County	Somerville city	033	011	45140	New Hampshire	Hillsborough County	Manchester city	36	29	0.07%
25	017	62535	Massachusetts	Middlesex County	Somerville city	033	011	48020	New Hampshire	Hillsborough County	Milford town	20	34	0.04%
25	017	62535	Massachusetts	Middlesex County	Somerville city	033	011	50260	New Hampshire	Hillsborough County	Nashua city	18	22	0.04%
25	017	62535	Massachusetts	Middlesex County	Somerville city	033	015	09300	New Hampshire	Rockingham County	Candia town	20	31	0.04%
25	017	62535	Massachusetts	Middlesex County	Somerville city	033	015	17940	New Hampshire	Rockingham County	Derry town	42	57	0.09%
25	017	62535	Massachusetts	Middlesex County	Somerville city	033	015	33060	New Hampshire	Rockingham County	Hampton town	8	12	0.02%

25	017	62535	Massachusetts	Middlesex County	Somerville city	033	015	66660	New Hampshire	Rockingham County	Salem town	9	14	0.02%
25	017	62535	Massachusetts	Middlesex County	Somerville city	036	047	10022	New York	Kings County	Brooklyn borough	8	13	0.02%
25	017	62535	Massachusetts	Middlesex County	Somerville city	036	061	44919	New York	New York County	Manhattan borough	34	30	0.07%
25	017	62535	Massachusetts	Middlesex County	Somerville city	036	093	65508	New York	Schenectady County	Schenectady city	8	12	0.02%
25	017	62535	Massachusetts	Middlesex County	Somerville city	044	007	41500	Rhode Island	Providence County	Lincoln town	10	15	0.02%
25	017	62535	Massachusetts	Middlesex County	Somerville city	044	007	59000	Rhode Island	Providence County	Providence city	7	12	0.01%
25	017	62535	Massachusetts	Middlesex County	Somerville city	048	201		Texas	Harris County		12	19	0.02%
25	017	62535	Massachusetts	Middlesex County	Somerville city	051	059		Virginia	Fairfax County		18	27	0.04%
25	017	62535	Massachusetts	Middlesex County	Somerville city				Outside of the U.S.			42	46	0.09%
25	017	62535	Massachusetts	Middlesex County	Somerville city	025	017	62535	Massachusetts	Middlesex County	Somerville city	7,391	742	32.23%

COMPREHENSIVE SITE PLAN AND CORRESPONDING TRAFFIC FIGURES

SOUTH STREET

SHORT-TERM
PARKING AREA
(RIDESHARE, ON-DEMAND
FOOD DELIVERY)

60.1

40.6

LONG-TERM BICYCLE
PARKING IN GARAGE

BEDFORD STREET

MEDFORD STREET

WARREN STREET

LEGEND

N

PRINCIPAL BUILDING ENTRANCE

SECONDARY BUILDING ENTRANCE

BICYCLE PARKING AREAS

PROPOSED BUILDING

41 RESIDENTIAL DWELLING UNITS

3,876 SQUARE FEET RETAIL SPACE

42 LONG-TERM BICYCLE
PARKING SPACES

9 SHORT-TERM BICYCLE
PARKING SPACES

Design Consultants Inc.
Somerville - South Shore
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DEVELOPER:
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P.O. BOX 780
LYNNFIELD, MA 01940

PROJECT TEAM

THE ONYX MIXED-USE
20 MEDFORD STREET
SOMERVILLE, MA

SITE NAME/ADDRESS

Comprehensive Site Plan

SHEET NAME

Figure C-101

SHEET #

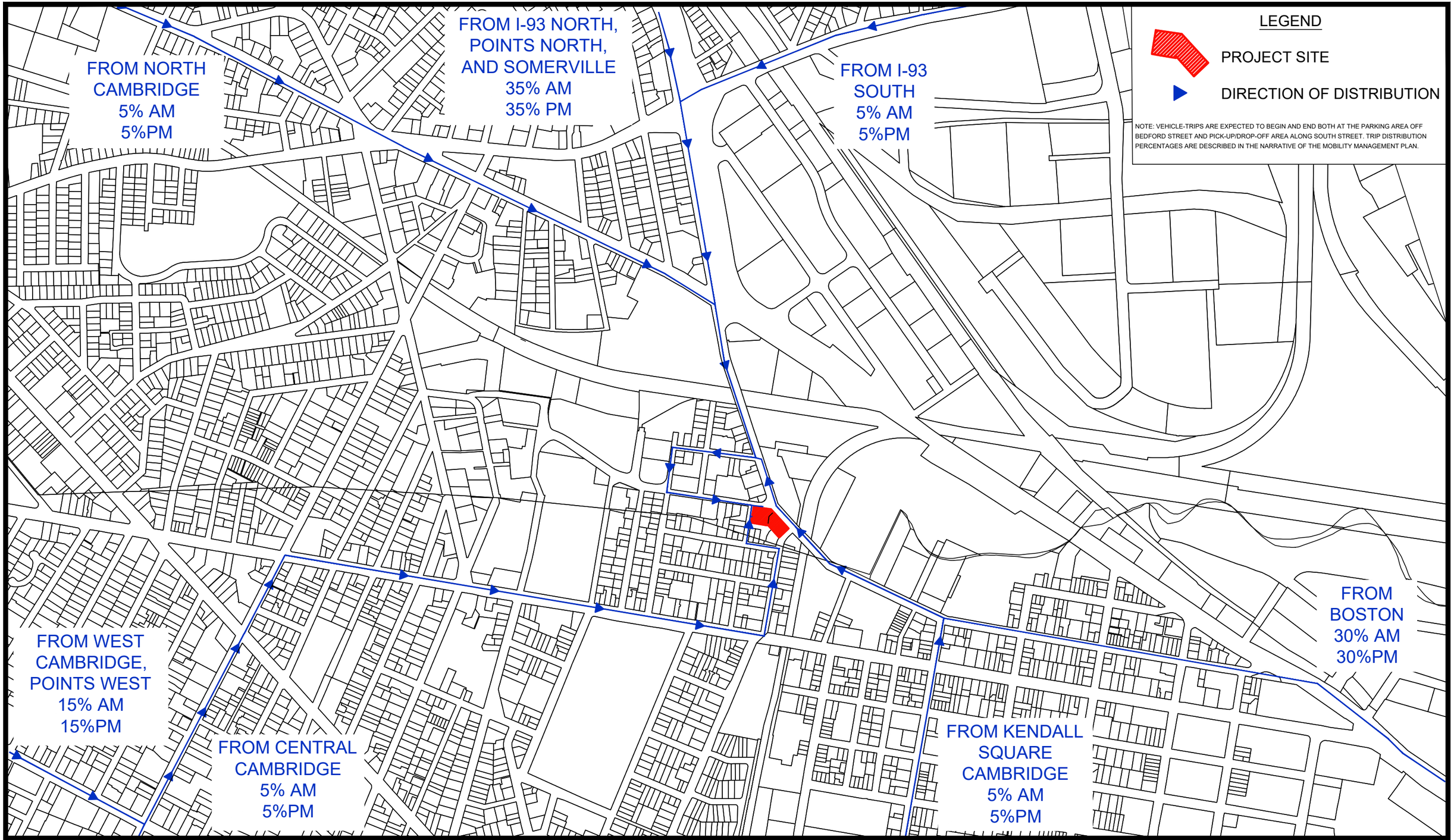
DR BY: LV/SGS

CHK BY: SGS

DCI PROJ NO.: 2021-24

DATE: OCTOBER 2021

SCALE: 1" = 20'



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PROJECT TEAM

THE ONYX MIXED-USE
20 MEDFORD STREET
SOMERVILLE, MA

SITE NAME/ADDRESS

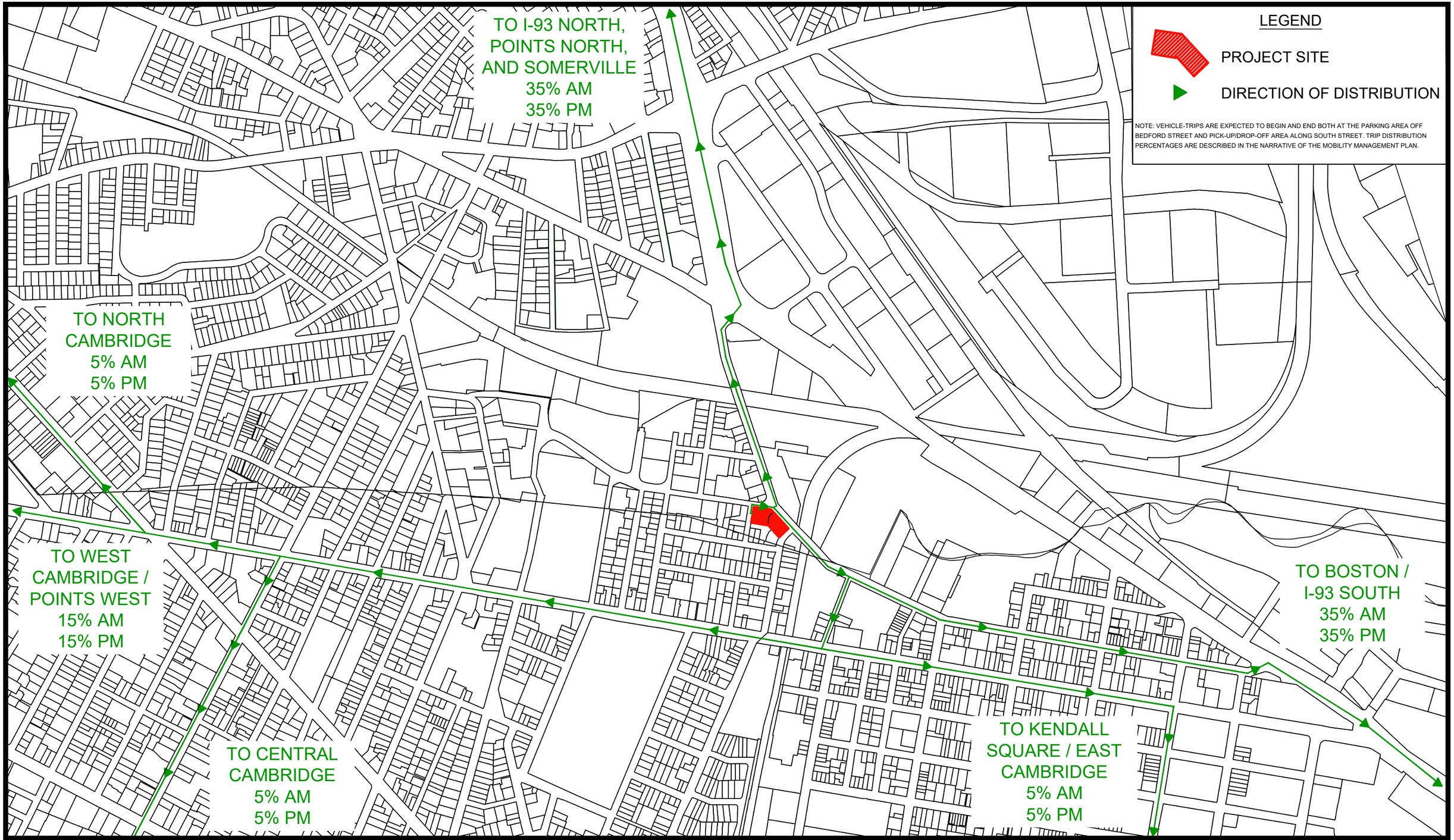
Vehicle Trip Distribution - Inbound

SHEET NAME

Figure C-102

SHEET #

DR BY: LV/SGS
CHK BY: SGS
DCI PROJ NO.: 2021-24
DATE: OCTOBER 2021
SCALE: 1" = 500'



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PROJECT TEAM

THE ONYX MIXED-USE
20 MEDFORD STREET
SOMERVILLE, MA

SITE NAME/ADDRESS

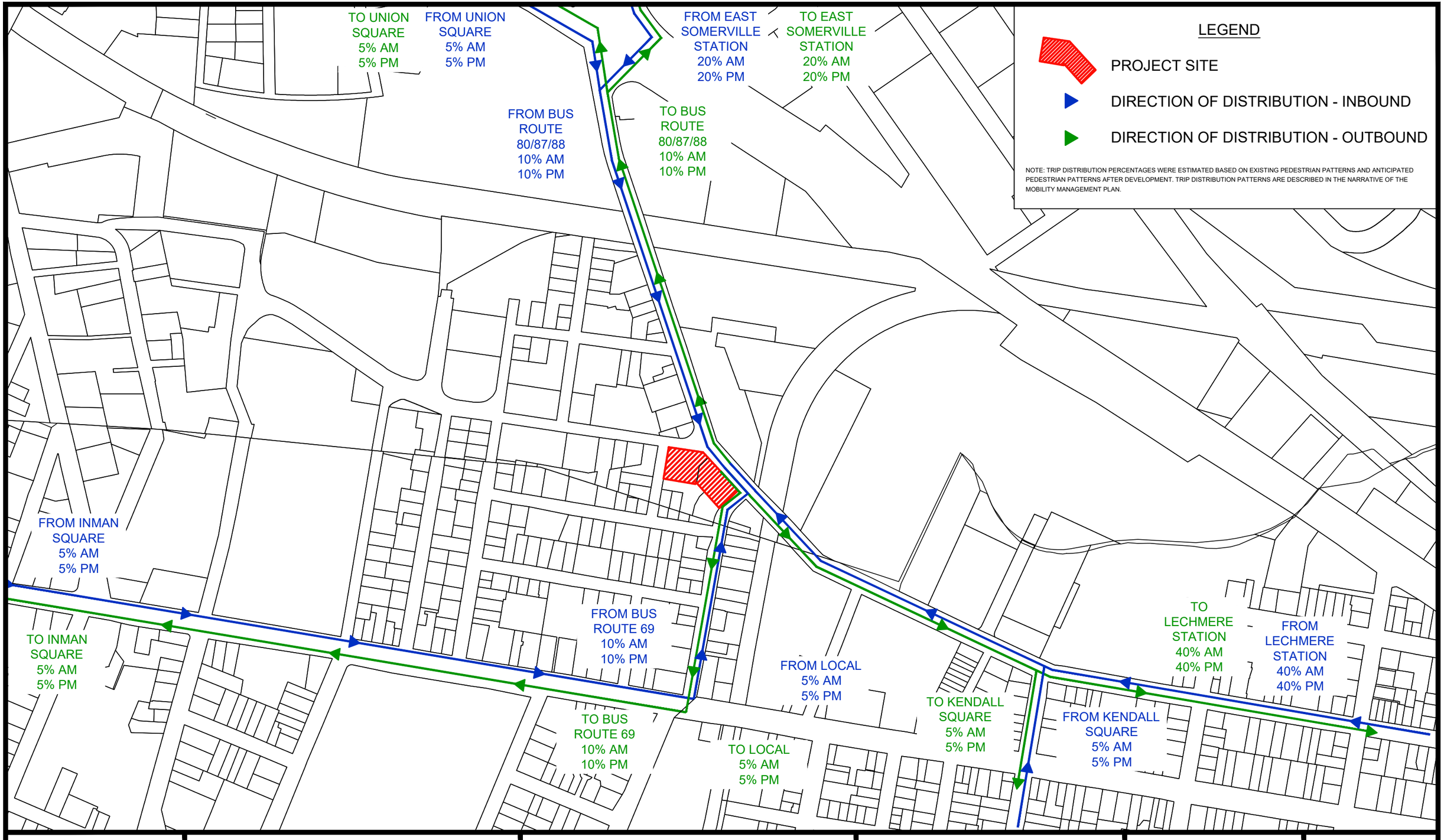
Vehicle Trip Distribution - Outbound

SHEET NAME

Figure C-103

SHEET #

DR BY: LV/SGS
CHK BY: SGS
DCI PROJ NO.: 2021-24
DATE: OCTOBER 2021
SCALE: 1" = 500'



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SITE NAME/ADDRESS

THE ONYX MIXED-USE
20 MEDFORD STREET
SOMERVILLE, MA

SHEET NAME

Pedestrian Trip Distribution

SHEET #

Figure C-104

DR BY: LV/SGS
CHK BY: SGS
DCI PROJ NO.: 2021-24
DATE: OCTOBER 2021
SCALE: 1" = 250'

FROM CENTRAL / WEST SOMERVILLE
20% AM
20% PM

TO CENTRAL / WEST SOMERVILLE
20% AM
20% PM

FROM EAST SOMERVILLE
5% AM
5% PM

TO EAST SOMERVILLE
5% AM
5% PM

FROM CAMBRIDGE
25% AM
25% PM

TO CAMBRIDGE
25% AM
25% PM

TO KENDALL SQUARE
5% AM
5% PM

FROM KENDALL SQUARE
5% AM
5% PM

TO BOSTON
45% AM
45% PM

FROM BOSTON
45% AM
45% PM

LEGEND

- PROJECT SITE
- DIRECTION OF DISTRIBUTION - INBOUND
- DIRECTION OF DISTRIBUTION - OUTBOUND

NOTE: TRIP DISTRIBUTION PERCENTAGES WERE ESTIMATED BASED ON EXISTING BICYCLE PATTERNS AND ANTICIPATED BICYCLE PATTERNS AFTER DEVELOPMENT, AS WELL AS THE BICYCLE INFRASTRUCTURE THAT IS CURRENTLY IN PLACE. TRIP DISTRIBUTION PATTERNS ARE DESCRIBED IN THE NARRATIVE OF THE MOBILITY MANAGEMENT PLAN.

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PROJECT TEAM

THE ONYX MIXED-USE
20 MEDFORD STREET
SOMERVILLE, MA
SITE NAME/ADDRESS

Bicycle Trip Distribution
SHEET NAME

Figure C-105
SHEET #

DR BY: LV/SGS
CHK BY: SGS
DCI PROJ NO.: 2021-24
DATE: OCTOBER 2021
SCALE: 1" = 250'