

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

THOMAS F. GALLIGANI, JR. EXECUTIVE DIRECTOR (ACTING)

September 28, 2022

Ted Silva Silva Realty 206 Holland Street Somerville, MA 02144

Dear Mr. Silva,

This letter is the Preliminary Decision of the Director of Mobility for the Mobility Management Plan ('MMP') submitted by Silva Realty (the 'Applicant') for 211-227 Holland Street (the 'Project') on 08/08/2022 as required by §11.4 Mobility Management of the Somerville Zoning Ordinance for a Development Review Application. 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 25,837 square feet (0.59 acres) of land along Holland Street in Somerville, Massachusetts ("Project"), located in an Urban Residence (UR) district. The Project will consist of one building - an approximate 76,718 square-foot (sf), pedestrian- and transit-oriented, residential development. In total, the building will be four (4) stories high with 87 residential dwelling units and ancillary, private uses in the basement. There will be zero (0) on-site vehicle parking spaces.

The development site is located within a transit area, as defined by the Somerville Zoning Ordinance, and there is no requirement for motor vehicle parking for residential uses within a transit area in the UR District. The proposed project is located less than ½ mile from the Davis Square Red Line Station and in proximity to three existing bus routes that run along Holland Street. The Project will provide 87 long-term bicycle parking spaces, as well as additional visitor / short-term bicycle parking.





The Proposed Project meets the twenty (20) or more total dwelling unit threshold to trigger Mobility Management Plan (MMP) requirements of the property owner.

#### Plan Commitments

Programs and Services Required by SZO

The Applicant has made the following commitments in relation to the mode share requirements for all mobility management plans:

 To making reasonable efforts to control the percentage of trips made by automobile to be at 33% or less, so it is consistent with the existing commuting characteristic in Census Tract 3505, and to implement additional mobility management programs and services if annual monitoring and reporting identifies a shortfall in meeting this goal.

The Applicant has made 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.

The SZO also requires the provision of car share vehicle spaces for residential property owners; however, the Applicant is not providing any vehicle parking related to the proposed development. Therefore, they do not need to comply with this requirement.

#### Additional Commitments

In addition to the above, the Applicant states that they could offer the following additional programs & services:

- To provide secure long-term bicycle parking (at least 87 spaces) located on-site with consideration for clear wayfinding, 24-hour access, secure bicycle racks, and locations close to entrances.
- To provide a bicycle repair area and tools for residents to be able to repair their bicycles on site.
- To provide wayfinding signage to guide pedestrians from the project site to the Davis Square MBTA station, nearby bus stops, and surrounding points of interest.
- To provide up to two (2) Charlie Cards with a stored value of a combined bus/subway
  pass to each adult member of a new household during the first year of initial occupancy
  of a new household. Renew each time a new household moves in, for the first 5 years.
- To provide up to two (2) one-month BlueBike memberships to each adult member of a new household during the first month of initial occupancy of a new household. Renew the BlueBike Passes each time a new household moves in, for the first 5 years.



5

 Provide real time transit information in the building common area/lobby, which shall consist of connected TransitScreen display (or equivalent service) with real time MBTA and bike share information.

#### **Approval Conditions**

**CONDITION #1:** The Applicant's initial vehicle mode share commitment will be 33% so that it is consistent with, and no more vehicle dependent than, the existing commuting characteristics in Census Tract 3505. The Applicant will implement additional mobility management programs and services if annual monitoring and reporting identifies a shortfall in meeting this goal.

**CONDITION #2:** In order to meet the City's SomerVision 2040 goals, the Applicant shall make reasonable efforts to control the percentage of trips made by automobile at 25% or fewer by 2040. The Applicant will implement additional mobility management programs and services if annual monitoring and reporting identifies a shortfall in meeting this goal.

**CONDITION #3:** The Applicant shall submit posted and distributed mobility management information to the Director of Mobility for review and approval. In addition to local transit maps and schedules, mobility management information must include the locations of nearby carsharing stations, Bluebikes stations, and the availability of carpool/vanpool opportunities. After approval by the Director of Mobility and prior to the issuance of any Certificate of Occupancy for the building, mobility management information must be posted in building lobbies, on the project website, and on related media.

**CONDITION #4:** Mobility management information must also be provided to residents when they move in. Yearly emails or newsletters with this information must also be sent to residents, with additional emails sent if 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.

**CONDITION #5:** The Applicant shall 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 year 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, for the first 5 turnovers on each unit.

**CONDITION #6:** The Applicant shall provide a one-month Bluebikes membership (currently set at \$20 but subject to Bluebikes 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 Bluebikes 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, for the first 5 turnovers on each unit.

**CONDITION #7:** At least one (1) bicycle repair facility must be provided for tenant and employees in a convenient location such as the bike storage room in the building.



3

**CONDITION #8:** The Applicant shall provide real time transit information in the building common area/lobby which shall consist of a connected TransitScreen display (or equivalent service) that displays real time MBTA and bike share information.

**CONDITION #9:** The Applicant will provide an on-site location and docking pad for, a City owned 19-dock Bluebikes bike share station to be located on the Applicant's property. Location must be identified on building plans and the docking pad plans must be reviewed and approved by City officials prior to the issuance of building permits. The Site Agreement with the operator of Blue Bikes ("Lyft") must be signed and the station operational prior to issuance of any Certificate of Occupancy.

#### Monitoring and Reporting

The property owner has committed to Annual Reporting to track, assess, and report on the implementation of the Mobility Management program as required by the Director's submittal requirements, which include:

- Annual travel surveys of tenants and employees of the property.
- Annual reporting of bicycle parking utilization
- Biennial (every other year) counts of automobile trips entering & exiting any parking facilities.
- Status update of Mobility Management program & service implementation.

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 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.





#### Page 5 of 5

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,

Ted Silva

Silva Realty



## Mobility Management Plan 211-227 Holland Street Somerville, Massachusetts

PREPARED FOR: SILVA REALTY, LLC 206 Holland Street Somerville, MA 02144

#### PREPARED BY:



10 Cabot Road Suite 101B Medford, MA 617.776.3350

*In association with:* 

Khalsa Design, Inc.

July 2022

### **Table of Contents**

Project Information	3
Contact Information	
Project Description	
Project Vision	
Project Programming	
Project Schedule/Phasing	
Vehicle and Bicycle Parking	
Local Transportation	
Existing Conditions	
Bicycle Network	
Sidewalks	
Transportation Assumptions	
Trip Generation	
Travel Mode Shares	
Adjusted Trips	
Trip Distribution	
Mobility Management Commitments	
Financial Incentives	
Marketing and Education	
On-Site Services	
Monitoring and Annual Reporting	
Annual Travel Surveys	
Status Update	



#### **Project Information**

#### **Contact Information**

#### Site Address and Project Name:

211-227 Holland Street, Somerville, MA

#### Company Name:

Silva Realty, LLC

#### Company Address:

206 Holland Street, Somerville, MA 02144

#### Company Telephone Number:

781-645-9641

#### **Company Designated Contact:**

Ted Silva

#### Company Email Address:

quicksilvated@gmail.com

#### **Project Description**

In accordance with Article 11.4.3 of the City of Somerville Zoning Ordinance (the "SZO"), GM2 Associates, Inc. respectfully submits this Mobility Management Plan to the City of Somerville (the "City") on behalf of Silva Realty, LLC (the "Proponent"), for review and approval.

The Proponent proposes to redevelop approximately 25,837 square feet (0.59 acres) of land along Holland Street in Somerville, Massachusetts ("Project"), located in an Urban Residence (UR) district. The Project will consist of one building - an approximate 76,718 square-foot (sf), pedestrian- and transit-oriented, residential development. In total, the building will be four (4) stories high with 87 residential dwelling units and ancillary, private uses in the basement. There will be zero (0) on-site vehicle parking spaces. First floor layout is shown on Figure C-101.

#### **Project Vision**

The Project will transform the Project Site into a residential development that will service the greater Davis Square area. The Project proposes new pedestrian facilities along the site frontage. The Project will enhance this section of Holland Street with an improved streetscape.

#### **Project Programming**

The Project will be constructed as four (4) stories over a full basement. The building program is summarized in Table 1.

The building will be constructed along Holland Street, with a frontage spanning from 211 Holland Street to 227 Holland Street. There will be four (4) stories with residential and ancillary, private uses in the basement and residential units on the basement level through the fourth floor. There will be long-term bicycle parking in the basement and emergency access to the east of the building accessed via an existing/expanded curb cut along Holland Street.



Table 1: Program Table<sup>1</sup>

	Proposed Building
Total Gross Square Feet	76,784
Number of Stories	4
Residential Dwelling Units	87
Bicycle Parking Spaces	87+ <sup>2</sup>

<sup>&</sup>lt;sup>1</sup>Data was provided by Khalsa Design, Inc.

#### Project Schedule/Phasing

Throughout the coming months, the Proponent expects to work diligently with the community and with the City to complete the review and approval processes.

Once the Project is approved, the Proponent will commence site preparation and utility work for the building. The schedule and phasing of the Project will be outlined further, at a later date, within a Construction Management Plan.

## Vehicle and Bicycle Parking Vehicle Parking and Access

The Project will provide zero (0) on-site parking spaces. As this site is in a UR zone within a Transit Area, zero (0) proposed vehicle parking spaces are permitted. There will be a fire lane for emergency access to the east of the proposed building utilizing an expanded curb cut, which currently is, and will continue to be, shared with 205 Holland Street. Figure C-102 in the Appendix shows the proposed fire lane and driveway.

The Proponent feels that zero (0) on-site vehicle parking spaces is appropriate given the Project's proximity to the nearby Davis MBTA Red Line station, as well as bus services along Holland Street, Broadway, and at Davis Station.

#### **Bicycle Parking**

The Project will provide short- and long-term bicycle parking to meet the SZO bicycle parking requirements. Based on the current design, the SZO requires that zero (0) bicycle parking spaces be provided. However, to encourage non-motorized trips to and from the site, the Project will provide 87 long-term bicycle parking spaces and short-term bicycle parking spaces. The location of the bicycle room is shown on Figure C-102.



<sup>&</sup>lt;sup>2</sup>Additional bicycle parking will likely be provided as visitor 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 paragraph, followed by a discussion of planned enhancements.

#### **Existing Conditions**

Within an approximate ½-mile radius of the Project site, the MBTA services the area with eight (8) separate bus routes: 77, 87, 88, 89, 90, 93, 94, and 96. Three (3) of the bus routes – 87, 88, and 89 - provide the most direct access to the Project site. Routes 87 and 88 are served by the Holland Street at Cameron Avenue and Holland Street opposite Cameron Avenue stops, both approximately 450 feet south of the Project site. Route 89 is served by the Broadway at Curtis Street stop (approximately 500 north of the Project site) and the Broadway at Weston Avenue stop (approximately 850 northwest of the Project site via Holland Street and Broadway). Additionally, Davis Station on the MBTA Red Line station is located within ½-mile of the Project site.

- Bus Route 87 runs between Arlington Center in Arlington and Lechmere Station in Cambridge
- Bus Route 88 runs between Clarendon Hill busway in Somerville and Lechmere Station
- Bus Route 89 runs between Clarendon Hill Busway or Davis, a stop on the MBTA Red Line and Sullivan Square Station.
- Davis Station, approximately 0.25 miles south of the Project site via Holland Street, is a hub
  for several bus routes through the area. Seven (7) of the eight (8) bus routes listed above
  stop at Davis Station. These routes provide access to Somerville as well as neighboring
  cities and towns including Cambridge, Boston, Brighton, Allston, Brookline, Medford,
  Malden, and Everett. The Red Line provides rapid transit connection from Alewife Station
  in Cambridge through Somerville, downtown Boston and neighborhoods south including
  Quincy and Braintree.

Peak period frequencies/headways for the MBTA bus and rapid transit services are summarized in Table 2. Table 3 provides distances and approximate walking times to each of the closest stops for each of the closest bus routes and Red Line and Table 4 provides service headways for the bus routes and Red Line.



Table 2: Project Area MBTA Ridership\*

Bus Route/Rapid	Origin/ Destination	MBTA Stop	Time Period	Total Passengers	_
Transit Line	Oligini, Destination	WIBTA Stop	mile i chou	Boarding	Alighting
87	Arlington Center to	Holland St at	AM Peak	6	3
(Inbound)	Lechmere Station	Cameron Ave	PM Peak	2	0
87	Lechmere Station to	Holland St opp.	AM Peak	0	4
(Outbound)	Arlington Center	Cameron Ave	PM Peak	2	7
88	Clarendon Hill Busway to	Holland St at	AM Peak	12	1
(Inbound)	Lechmere Station	Cameron Ave	PM Peak	4	0
88	Lechmere Station to	Holland St opp.	AM Peak	0	10
(Outbound)	Clarendon Hill Busway	Cameron Ave	PM Peak	1	6
89	Clarendon Hill Busway/Davis	Broadway at	AM Peak	5	0
(Inbound)	to Sullivan Square Station	Weston Avenue	PM Peak	3	0
89	Sullivan Square Station to	Broadway at	AM Peak	0	5
(Outbound)	Clarendon Hill Busway/Davis	Curtis Street	PM Peak	0	9
Red Line	Alewife to	Davis Station	AM Peak	4,841	42
(Inbound)	Braintree/Mattapan	Davis Station	PM Peak	1,236	265
Red Line	Braintree/Mattapan to	Davis Station	AM Peak	212	617
(Outbound)	Alewife	Davis Station	PM Peak	84	5,239

\*Fall 2019 data utilized, which is the most recent data available via the MBTA website Bus Route Data based on MBTA Bus Ridership by Time Period, Season, Route/Line and Stop Rail Data based on MBTA Rail Ridership by Time Period, Season, Route/Line and Stop

Table 3: Project Area MBTA Walk Distance and Time\*

	Inbound	Outbound	Outbound
	Routes 87, 88, and 89	Routes 87 and 88	Route 89
Walk Distance to Closest Stop (Miles)	0.09	0.09	0.16
Walk Travel Time to Closest Stop (Minutes)	2.5	2.5	4
Average Wait Time (Minutes)	5.5 to 10 (AM Peak) 10 to 12.5 (PM Peak)	7.5 to 11 (AM Peak) 10 (PM Peak)	2.5 to 7.5 (AM Peak) 4 to 10 (PM Peak)

<sup>\*</sup>Time is based on an average walking speed of 3.5 feet/second

Table 4: Project Area MBTA Service Headways

	<u> </u>		•	
Bus Route/Rapid	Origin/Destination	Origin/Destination Time Period		Outbound
Transit Line	Origin/ Destination	Time remou	(minutes)	Headways (minutes)
87	Arlington Center to	AM Peak	16-20	15-22
07	Lechmere Station	PM Peak	20	20
88	Clarendon Hill Busway	AM Peak	11-18	17-22
00	to Lechmere Station	PM Peak	20-24	20
89	Clarendon Hill/Davis to	AM Peak	15	5-15
09	Sullivan Square Station	PM Peak	25	8-20
Red Line	Alewife to	AM Peak	11	11
Red Line	Braintree/Mattapan	PM Peak	11	11



#### **Bicycle Network**

There are currently no designated bicycle facilities along Holland Street in either direction. However, there are designated bicycle lanes along Broadway between Teele Square and Central Broadway, and approximately 0.5 miles southwest, Holland Street connects to the Somerville Community Path. These bicycle facilities connect to others in Somerville and the surrounding communities. Figure 1 shows the bicycle network within Somerville near the Project site, which is shown in red.



Figure 1 – Somerville Bicycle Map Near Project Site

#### Sidewalks

Pedestrian connectivity in the area is facilitated by existing sidewalks along the roadways within the area. Many of the intersections surrounding the site have marked crosswalks for pedestrians as well as exclusive pedestrian phases to enhance safety. Midblock crosswalks are also provided across Holland Street intermittently. There is a sidewalk connection from the site to Davis Station.



#### **Transportation Assumptions**

#### **Trip Generation**

The Project will be fully residential with ancillary, private uses (fitness center, community room/lounge, and remote work room). The *Trip Generation Manual, 11<sup>th</sup> Edition*, published by the Institute of Transportation Engineers (ITE) in 2021, categorizes residential land uses and provides unadjusted vehicle-trip estimates for each use for Weekday AM peak hour, Weekday PM peak hour, and Weekdays. Land use code (LUC) 221 – Multifamily Housing (Mid-Rise) was used for the trip generation calculations. Table 5 shows the estimated number of trips for the residential units.

and Use Code: 221 Multifamily Housing (Mid-Rise) Weekday AM Weekday PM Weekday Peak Hour Peak Hour Daily Size (per # of Dwelling Units) 87 87 87 T = 4.77(X)Fitted Curve Equation (per T = 0.44(X)T = 0.39(X)ITE) - 11.61 +0.34- 46.46 27 34 368 Total Trips (T) Entering% 23% 61% 50% 77% 39% 50% Exiting% **Entering Trips** 6 21 184 13 **Exiting Trips** 21 184

Table 5: Residential Trip Generation Calculations (Per ITE)

The proposed site is expected to approximately generate the following number of trips:

- 27 trips during the Weekday AM Peak Hour
- 34 trips during the Weekday PM Peak Hour
- 368 trips during a typical Weekday

These represent vehicle-trips made in locations with little to no public transportation availability. To account for location-specific travel mode trends, non-vehicular will be deducted in the subsequent sections.

#### **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. Davis Station on the MBTA Red Line is approximately 0.25 miles from the Project site. Eight (8) separate bus routes also service the area. The estimated trips via transit service were deducted from the predicted vehicular traffic. Commuting characteristics were analyzed from the 2016-2020 American Community Survey 5-Year Estimates.



For the residential dwelling units, commuting characteristics for Census Tract 3505 (in which the Project is located), were analyzed. These percentages were adjusted to assign data listed as "other" proportionally to the other modes of transportation. Table 6 displays estimated mode splits for non-vehicle trips and the land use associated with each trip.

Table 6: Mode Split Percentages

	•	_	
MEANS OF TRANSPORTATION TO WORK	Census Tract 3505	Percentages	Adjusted Percentages
Car, truck, or van	329	26.1%	32.7%
Drove alone	315	25.0%	31.3%
Carpooled:	14	1.1%	1.4%
In 2-person carpool	14	1.1%	1.4%
In 3-person carpool	0	0.0%	0.0%
In 4+ person carpool	0	0.0%	0.0%
Public transportation	575	45.6%	57.2%
Bicycle	20	1.6%	2.0%
Walked	82	6.5%	8.2%
Other means/Telecommute	254	20.2%	0.0%

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 1.043 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. The resulting adjusted vehicular traffic on the surrounding roadways was estimated and are summarized in Table 7. The US Census Journey-to-Work data is attached in the Appendix.

#### **Adjusted Trips**

As described above, adjustments were made to the base trips taking into account the US Census Tract 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. The resulting adjusted vehicular traffic on the surrounding roadways is summarized in Table 7.



Table 7: Adjusted Site Trips

	Weekday AM	Weekday PM	Weekday
	Peak Hour	Peak Hour	Daily
Base Trips (per ITE)	27	34	368
Total Person-Trips	30	37	405
Total Person-Vehicle-Trips	10	12	132
Total Vehicle-Trips	9	12	126
Entering Vehicle-Trips	8	2	63
Exiting Vehicle-Trips	1	10	63
Total Public Transportation Trips	17	21	232
Total Bicycle Trips	1	1	8
Total Walking Trips	2	3	33

As shown in Table 7, the Project is expected to generate **nine (9) vehicle-trips** during the Weekday AM peak hour, **12 vehicle-trips** during the Weekday PM peak hour, and **126 vehicle-trips** during a typical Weekday.

#### **Trip Distribution**

Trip distribution percentages for vehicles, pedestrians, and bicycles were estimated based existing traffic patterns (vehicles) and anticipated travel patterns for pedestrians and bicycles after development. Vehicular trip distributions are shown on Figures C-103 and C-104, pedestrian trip distributions are shown on Figure C-105, and bicycle trip distributions are shown on Figure C-106.



#### **Mobility Management Commitments**

The 211-227 Holland Street development project is committed to achieving the City's goal of having the percentage of initial trips made to the site by automobile be 33% or less, so it is consistent with the existing commuting characteristic in Census Tract 3505. 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, If the annual trips shortfall in meeting SomerVision by 2040, the applicant can implement additional mobility management programs and service to meet the goal. The UR district within a transit area, of which this site will be a part of, has been designed to form a walkable, bikeable, transit-oriented node in Somerville. This includes:

• Pedestrian accommodations and site through-connectivity, which prioritizes pedestrian pathways and makes walking the most convenient choice for access.

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 will provide 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:

- Financial Incentives
- On-Site Vehicle Parking Services
- Marketing & Education
- On-Site Services
- Monitoring and Annual Reporting

#### Financial Incentives

**Transportation Fringe Benefits:** To the extent possible, the owner will provide all future residents with qualified transportation fringe benefits.

MBTA Passes: Provide up to two (2) Charlie Cards with a stored value of a combined bus/subway pass (Currently set to \$90) to each adult member of a new household during the first year of initial occupancy of a new household. Renew each time a new household moves in, for the first 5 years.

BlueBike Passes: Provide up to two (2), one-month BlueBike memberships (Currently set a \$20) to each adult member of a new household during the first month of initial occupancy of a new household. Renew the BlueBike Passes each time a new household moves in, for the first 5 years.

#### Marketing and Education

A key element of all transportation demand management 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 tenants/employees 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, and other information relevant to commuting options in the building lobby.
- Provide real time transit information in the building common area/lobby, which shall consist of connected TransitScreen display (or equivalent service) with real time MBTA and bike share information.
- 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 tenants and their employees when they move in. The information will also be provided:
  - o Via yearly emails or newsletters
  - o 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.
- Provide wayfinding signs to guide pedestrians from the site to the MBTA Red Line Station, MBTA bus stops, and surrounding points of interest.

#### **On-Site Services**

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

- **Secure Bicycle Parking:** There will be 87 interior, secure bicycle parking spaces provided. Considerations 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 and access points,
  - Separate pedestrian entries where possible.
- **Bicycle Repair Tools:** Provide at least one (1) bicycle repair facility in a convenient location with Heavy-duty tools, including air pumps.

## Monitoring and Annual Reporting Annual Travel Surveys

The Proponent will conduct annual travel surveys of the tenants/employees of the property. These surveys will be developed through consultation with the City of Somerville to determine the number of employees utilizing the variety of different transportation options in the area.

Following the opening of the site, the Proponent will conduct biennial counts of 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



bicycle parking area will be conducted to capture the volume of entering and exiting bicycle 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 team 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:

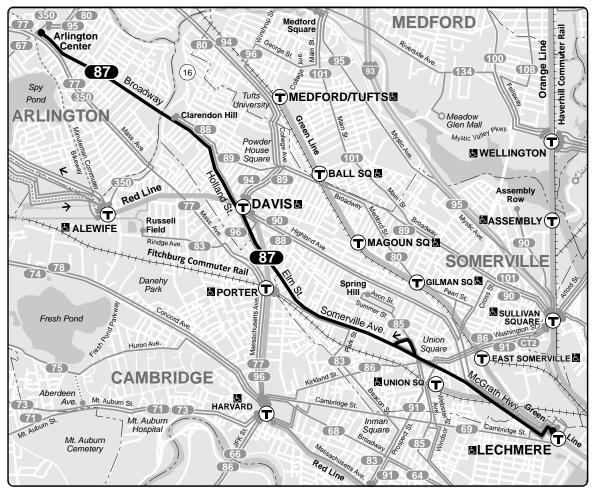
- Survey results
- Peak bicycle parking occupancy counts
- Digital files (as required)
- Comparison with and review of previous trends as data is available



## **APPENDIX**

PUBLIC TRANSPORTATION
TRIP GENERATION
COMPREHENSIVE SITE PLAN AND CORRESPONDING TRAFFIC FIGURES

## **PUBLIC TRANSPORTATION**



 Transfer to bus/subway available on CharlieCard—good for 2 hours, pay fare difference.

Children 11 & under ride free with a paying customer.

& All MBTA buses are accessible to people with disabilities.

		Cash on board	
Bus	\$1.70	\$1.70	\$0.85
Bus + Subway	\$2.40	\$4.10	\$1.10

Complete fare/pass rules and free/reduced fare eligibility: mbta.com/fares or call 617-222-3200 Effective March 13, 2022



Clarendon Hill or Arlington Ctr – Lechmere Sta

#### **Connections**

RED LINE

GREEN LINE E



Information **617-222-3200**Lost and Found **617-222-2229**TTY **617-222-5146** 

Realtime arrival information, maps, and more

mbta.com

A125-3-22.0

Weekda Inbound	y <b>8</b> 7			Outbound	ı		
Arlington Center	Clarendon Hill	Davis Station	Lechmere Station	Lechmere Station	Davis Station	Clarendon Hill	Arlington Center
	5:05	5:08	5:26	5:29	5:42	5:48	
_	5:25	5:28	5:46 6:14	5:50 6:14	6:03	6:09	6:13
_	5:50 6:08	5:53 6:12	6:34	6:34	6:27 6:47	6:33 6:53	6:37 6:57
6:19	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 7:39	7:28 7:44	7:33 7:49	8:02 8:19	8:06 8:27	8:23 8:44	8:32 8:53	8:38 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	9:53	10:10	10:19	10:25
9:13 9:35	9:18 9:40	9:21 9:43	9:45 10:07	10:22 10:52	10:39 11:10	10:48 11:20	10:54 11:25
9:57	10:02	10:05	10:07	11:22	11:40	11:50	11:55
10:30	10:35	10:38	11:03	11:52	12:10	12:20	12:25
11:00	11:05	11:08	11:35	12:22	12:40	12:50	12:55
11:30	11:35	11:38	12:05	12:52	1:10	1:20	1:25
12:00	12:05 12:35	12:08 12:38	12:35	1:22	1:40	1:50	1:55 2:25
12:30 1:00	1:05	1:08	1:05 1:35	1:52 2:22	2:10 2:40	2:20 2:50	2:55
1:30	1:35	1:38	2:05	2:48	3:06	3:16	3:21
2:00	2:05	2:08	2:35	3:08	3:26	3:36	3:41
2:17	2:22	2:25	2:54	3:28	3:46	3:56	4:01
2:37 2:57	2:42 3:02	2:45 3:05	3:14 3:34	3:48 4:09	4:06 4:27	4:16 4:38	4:21 4:45
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 4:57	4:41 5:02	4:44 5:05	5:14 5:35	5:50 6:10	6:09 6:28	6:21 6:37	6:25 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 7:03	6:42 7:07	6:45 7:10	7:09 7:30	7:55 8:25	8:11 8:38	8:19 8:44	-
7:03	7:27	7:10	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 9:55	9:28 9:58	9:46 10:14	10:50 11:20	11:03 11:33	11:09 11:39	-
_	10:25	10:28	10:14	11:55	12:07	12:13	- - - - - -
-	10:55	10:58	11:13	12:25	12:37	12:43	-
-	11:30	11:33	11:48	12:55	1:07	1:13	-
-	12:00	12:03	12:17	<b>₩</b> 1:22	1:34	1:40	-
_	12:30 1:00	12:33 1:03	12:47 1:17				
-	1.00	1.03	1.17				

Saturda Inbound	y <b>87</b>			Outbound	ı		
Arlington Center	Clarendon Hill	Davis Station	Lechmere Station	Lechmere Station	Davis Station	Clarendon Hill	Arlington
	5:15	5:18	5:31	5:38	5:50	5:55	6:00
-	5:45	5:48	6:02	6:10	6:22	6:27	6:32
6:10	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	12:11	11:40	11:59	12:05	12:1
12:00	12:06	12:10	12:36	12:05	12:24	12:30	12:30
12:25	12:31	12:35	1:01	12:30	12:49	12:55	1:0
12:50	12:56	1:00	1:24	12:55	1:14	1:20	1:20
1:15	1:21	1:25	1:49	1:20	1:39	1:45	1:5
1:41	1:47	1:51	2:15	1:45	2:04	2:10	2:10
2:06	2:12	2:16	2:40	2:10	2:29	2:35	2:4
2:31	2:37	2:41	3:05	2:35	2:54	3:00	3:00
2:56	3:02	3:06	3:30	3:00	3:19	3:25	3:3
3:21	3:27	3:31	3:55	3:25	3:44	3:50	3:50
3:46	3:52	3:56	4:19	3:50	4:09	4:15	4:2
4:11	4:17	4:21	4:44	4:15	4:34	4:40	4:40
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	5:3
5:26 5:51	5:32 5:57	5:36 6:01	5:59 6:24	5:30 5:55	5:48 6:13	5:54 6:19	6:00 6:2
	6:22	6:26	6:49	6:20	6:36	6:42	
6:16 6:45	6:51	6:55	7:14	6:50	7:05	7:11	6:48 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	7.52
8.00 -	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	12:04	12:07	
_	12:20	12:23	12:37	12:30	12:44	12:47	
-	12:55	12:58	1:12	W 1:20	1:33	1:36	

Sunday 87 Inbound			Out	tbound		
Clarendon Hill	Davis Station	Lechmere Station		Lechmere Station	Davis Station	Clarendon Hill
6:00 7:00 8:00 8:55 9:30 10:05 10:45 11:25 12:05 12:45 1:25 2:05 2:45 3:25 4:05 4:45 5:25 6:05 6:45 7:30	6:03 7:03 8:03 8:05 9:33 10:08 10:48 11:29 12:09 12:49 1:29 2:09 2:49 3:29 4:09 5:29 6:09 6:49 7:33	6:18 7:18 8:18 9:13 9:48 10:26 11:50 12:30 1:10 1:50 2:30 3:10 3:50 4:30 5:10 5:50 6:27 7:57		6:38 7:38 8:38 9:35 10:15 10:55 11:35 12:15 12:55 1:35 2:15 3:35 4:15 4:55 5:35 6:15 7:00 7:55	6:52 7:52 8:52 9:50 10:30 11:13 11:53 12:33 1:13 1:53 2:33 3:13 3:53 4:33 5:13 5:53 6:33 7:18 8:12 9:10	6:58 7:58 8:58 9:57 10:38 11:21 12:01 12:41 2:41 3:21 4:01 4:41 5:21 6:01 6:41 7:26 8:19
8:30 9:25 10:15 11:05 11:55	9:28 10:18 11:08 11:58 12:48	8:49 9:44 10:34 11:24 12:11 1:01	w	9:50 10:40 11:30 12:20 1:18	10:03 10:53 11:43 12:32 1:29	10:09 10:59 11:49 12:38 1:35

waits for last train to arrive station

PM times are bold

Information in this timetable is subject to change without notice. Traffic and weather may affect running times.

Always check bus destination signs before boarding. Some buses may only serve a part, or skip portions of this route.

#### 2022 Holidays

SUN Memorial Day

SUN Independence Day

SUN Labor Day

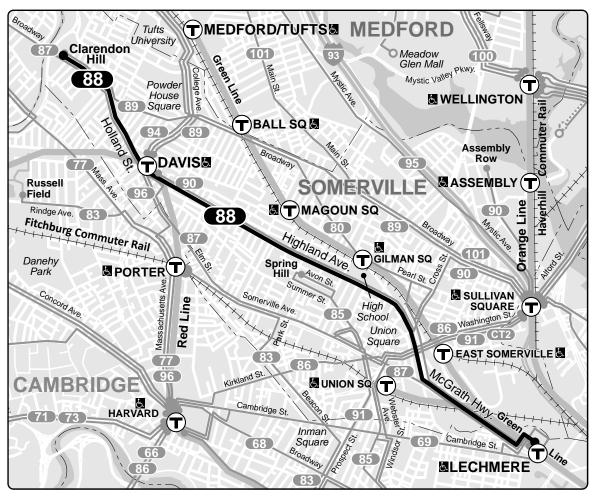
SUN Thanksgiving Day

SUN Christmas Day

SUN Christmas Day Observed

SAT New Year's Eve

SUN New Year's Day



• Transfer to bus/subway available on CharlieCard—good for 2 hours, pay fare difference.

• Children 11 & under ride free with a paying customer.

All MBTA buses are accessible to people with disabilities.

CharlieCard Reduced fare Cash on board \$1.70 \$0.85 Bus \$1.70 \$2.40 \$4.10 \$1.10 **Bus + Subway** 

> Complete fare/pass rules and free/reduced fare eligibility: mbta.com/fares or call 617-222-3200

Effective March 13, 2022



Clarendon Hill -**Lechmere Sta** 

**Schedule Change** 



#### **Connections**

RED LINE

GREEN LINE E



Information 617-222-3200 Lost and Found 617-222-2229 TTY 617-222-5146

Realtime arrival information, maps, and more

mbta.com

A125-3-22.0

Weekda Inbound	y <b>88</b>			Outbound	i		
Clarendon Hill	Davis Station	Somerville   High	Lechmere Station	Lechmere Station	Somerville High	Davis Station	Clarendon Hill
5:15	5:18	5:23	5:33	5:37	5:43	5:49	5:55
5:40	5:43	5:48	5:58	6:04	6:10	6:16	6:22
6:00 6:16	6:03 6:19	6:12 6:28	6:26 6:42	6:24 6:44	6:30 6:50	6:36 6:56	6:42 7:02
6:32	6:35	6:44	6:58	7:04	7:11	7:19	7:02
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
7:15	7:18	7:27	7:42	7:56	8:04	8:14	8:23
7:23	7:26	7:35	7:51	8:16	8:24	8:34	8:43
7:36	7:41	7:51	8:07	8:38	8:46	8:56	9:05
7:53	7:58	8:10	8:26	9:00	9:07	9:15	9:24
8:11 8:29	8:16 8:34	8:28 8:46	8:44 9:02	9:22 9:43	9:29 9:50	9:37 9:58	9:46 10:07
8:48	8:53	9:04	9:18	10:10	10:17	10:25	10:34
9:08	9:11	9:22	9:36	10:40	10:47	10:55	11:05
9:29	9:32	9:43	9:57	11:10	11:18	11:26	11:36
9:51	9:54	10:05	10:19	11:40	11:48	11:56	12:06
10:18	10:21	10:32	10:46	12:10	12:18	12:26	12:36
10:48	10:51	11:02	11:16	12:40	12:48	12:56	1:06
11:18 11:48	11:21 11:51	11:31 <b>12:01</b>	11:45 <b>12:15</b>	1:10 1:40	1:18 1:48	1:26 1:56	1:36 2:06
12:18	12:21	12:31	12:15	2:10	2:18	2:26	2:36
12:48	12:51	1:01	1:15	s -	2:35	2:43	2:53
1:18	1:21	1:31	1:45	s -	2:40	2:48	2:58
1:48	1:51	2:01	2:15	2:40	2:48	2:56	3:06
2:12	2:15	2:25	2:39	s -	2:50	2:58	3:08
2:32	2:35	2:45	2:59	3:00	3:08	3:16	3:26
2:52 3:12	2:55 3:15	3:05 3:25	3:19 3:39	3:20 3:40	3:28 3:48	3:36 3:56	3:46 4:06
3:32	3:35	3:45	3:59	4:00	4:08	4:16	4:26
3:52	3:55	4:05	4:19	4:20	4:28	4:38	4:50
4:10	4:13	4:23	4:37	4:40	4:49	4:59	5:11
4:30	4:33	4:43	4:57	5:00	5:09	5:19	5:31
4:54	4:57	5:07	5:23	5:20	5:29	5:39	5:51
5:14	5:17	5:27	5:43	5:40	5:49	5:59	6:11
5:34 5:54	5:37 5:57	5:47 6:07	6:03 6:23	6:00 6:20	6:09 6:29	6:19 6:37	6:31 6:45
6:14	6:17	6:27	6:41	6:40	6:47	6:55	7:03
6:34	6:37	6:46	6:59	7:00	7:07	7:15	7:23
6:55	6:58	7:05	7:15	7:20	7:27	7:35	7:43
7:15	7:18	7:25	7:35	7:40	7:47	7:55	8:03
7:39	7:42	7:49	7:59	8:10	8:17	8:25	8:32
8:10	8:13	8:20	8:30	8:40	8:46	8:52	8:58
8:40 9:10	8:43 9:13	8:50 9:20	9:00 9:30	9:10 9:40	9:16 9:46	9:22 9:52	9:28 9:58
9:40	9:43	9:50	10:00	10:05	10:11	10:17	10:23
10:10	10:13	10:20	10:30	10:35	10:41	10:47	10:53
10:40	10:43	10:50	11:00	11:05	11:11	11:17	11:23
11:10	11:13	11:20	11:30	11:35	11:41	11:47	11:53
11:45	11:48	11:55	12:05	12:10	12:16	12:21	12:27
12:15	12:18	12:23	12:33	12:40 W 1:22	12:46	12:51	12:57
12:50	12:53	12:58	1:08	W 1:22	1:28	1:33	1:39

Saturda Inbound	y <b>88</b>			Outbound	i		
Clarendon Hill	Davis Station	Somerville High	Lechmere Station	Lechmere Station	Somerville High	Davis Station	Clarendon Hill
5:30 6:00 6:30 7:00 7:30 8:00 8:30 9:02 9:33	5:33 6:03 6:33 7:03 7:33 8:03 8:33 9:05 9:36 10:04	5:38 6:08 6:38 7:08 7:38 8:10 8:40 9:13 9:44 10:13	5:47 6:18 6:48 7:18 7:48 8:20 8:50 9:24 9:55 10:26	5:55 6:25 6:55 7:25 7:55 8:25 8:55 9:25 9:55	6:01 6:31 7:01 7:31 8:01 8:31 9:01 9:31 10:02 10:37	6:07 6:37 7:07 7:37 8:07 8:39 9:09 9:39 10:11 10:46	6:12 6:42 7:12 7:42 8:12 8:45 9:15 9:45 10:17 10:52
10:30 11:00 11:31 11:56 12:21 12:46 1:11	10:04 10:34 11:04 11:35 12:00 12:25 12:50 1:15 1:40	10:43 11:13 11:44 12:09 12:34 12:59 1:24 1:49	10:26 10:56 11:26 11:57 12:22 12:47 1:11 1:36 2:01	11:05 11:30 11:55 12:20 12:45 1:10 1:35 2:00	10:37 11:12 11:37 12:02 12:27 12:52 1:17 1:42 2:07	11:21 11:46 12:11 12:36 1:01 1:26 1:51 2:16	10:52 11:27 11:52 12:17 12:42 1:07 1:32 1:57 2:22
2:01 2:26 2:51 3:16 3:41 4:06 4:31 4:56	2:05 2:30 2:55 3:20 3:45 4:10 4:35 5:00	2:14 2:39 3:04 3:29 3:54 4:19 4:44 5:09	2:26 2:51 3:16 3:41 4:06 4:31 4:56 5:21	2:25 2:50 3:15 3:40 4:05 4:30 4:55 5:20	2:32 2:57 3:22 3:47 4:12 4:37 5:02 5:27	2:41 3:06 3:30 3:55 4:20 4:45 5:10 5:35	2:47 3:12 3:36 4:01 4:26 4:51 5:16
5:21 5:48 6:13 6:36 7:08 7:40 8:20 9:00	5:25 5:52 6:17 6:39 7:11 7:43 8:23 9:03	5:34 6:01 6:26 6:48 7:20 7:52 8:32 9:11	5:46 6:13 6:38 7:00 7:32 8:02 8:42 9:21	5:45 6:10 6:35 7:05 7:45 8:30 9:10	5:52 6:17 6:42 7:12 7:51 8:36 9:16 9:56	6:00 6:25 6:50 7:20 7:59 8:43 9:23	6:06 6:31 6:56 7:26 8:05 8:49 9:29
9:40 10:15 10:50 11:23 12:00 12:40	9:43 10:18 10:53 11:26 12:03 12:43	9:51 10:26 11:01 11:32 12:09 12:49	10:01 10:36 11:11 11:42 12:19 12:59	10:25 11:00 11:35 12:10 12:45 W 1:20	10:31 11:06 11:41 12:16 12:50 1:25	10:38 11:13 11:48 12:23 12:57 1:32	10:43 11:18 11:51 12:26 1:00 1:35

Sunday 88 Inbound					Outbound	l		
Clarendon Hill	Davis Station	Somerville High	Lechmere Station		Lechmere Station	Somerville High	Davis Station	Clarendon Hill
6:40	6:43	6:49	6:58		6:20	6:26	6:32	6:38
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	12:09		11:57	12:04	12:12	12:20
12:25	12:29	12:37	12:49		12:37	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 6:25	5:49 6:29	5:57 6:37	6:09 6:49		5:57 6:37	6:04 6:44	6:12 6:52	6:20 7:00
7:05	7:08	7:15	7:25		7:30	7:37	7:45	7:53
8:00	8:03	8:10	7:25 8:20		8:25	7:37 8:32	7:45 8:39	7.53 8:46
9:00	9:03	9:10	9:20		9:25	9:32	9:37	9:43
9:50	9:53	10:00	10:10		10:15	10:22	10:27	10:33
10:40	10:43	10:48	10:10		11:05	11:12	11:17	11:23
11:30	11:33	11:38	11:48		11:55	12:02	12:07	12:13
12:18	12:21	12:26	12:36		12:40	12:44	12:49	12:55
12:58	1:01	1:06	1:16	6	w 1:18	1:22	1:27	1:33

S runs only on school days

waits for last train to arrive station

 $\ensuremath{\mathsf{PM}}$  times are  $\ensuremath{\mathsf{bold}}$ 

Information in this timetable is subject to change without notice. Traffic and weather may affect running times.

#### 2022 Holidays

SUN Memorial Day

SUN Independence Day

SUN Christmas Day Observed

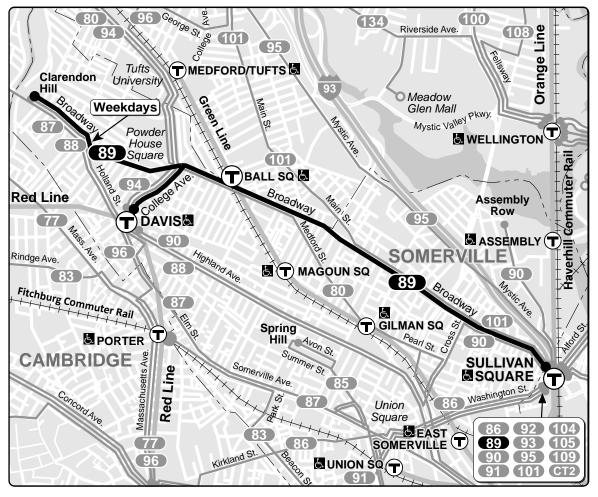
SUN Labor Day

SAT New Year's Eve

SUN Christmas Day

SUN Thanksgiving Day

SUN New Year's Day



 Transfer to bus/subway available on CharlieCard—good for 2 hours, pay fare difference.

Children 11 & under ride free with a paying customer.

& All MBTA buses are accessible to people with disabilities.

 CharlieCard
 Cash on board
 Reduced fare

 Bus
 \$1.70
 \$1.70
 \$0.85

 Bus + Subway
 \$2.40
 \$4.10
 \$1.10

Complete fare/pass rules and free/reduced fare eligibility: mbta.com/fares or call 617-222-3200 Effective March 13, 2022



**Connections** 

RED LINE

ORANGE LINE



Information **617-222-3200**Lost and Found **617-222-2229**TTY **617-222-5146** 

Realtime arrival information, maps, and more

mbta.com

A126-4-22.0

Weekday Inbound	y <b>8</b> 9			Inbound				Outbound	i			Outbound	d		
Davis Station	Clarendon Hill	Broadway & Main St	Sullivan Station	Davis Station	Clarendon Hill	Broadway & Main St	Sullivan Station	Sullivan Station	Broadway & Main St	Clarendon Hill	Davis Station	Sullivan Station	Broadway & Main St	Clarendon Hill	Davis Station
A -	4:30	4:39	4:47	1:15	-	1:23	1:32	4:45	4:51	5:02		2:05	2:14	-	2:26
5:00	-	5:06	5:14	1:40	-	1:48	1:57	5:15	5:21	5:32	-	2:30	2:39	-	2:51
-	5:10	5:18	5:26	2:05	-	2:13	2:22	5:20	5:26	-	5:33	2:30	2:39	2:52	-
5:15	-	5:21	5:29	2:30	-	2:38	2:47	5:35	5:41	-	5:48	2:55	3:04	-	3:16
5:30	-	5:36	5:44	2:55	-	3:04	3:13	5:45	5:51	6:02	-	3:00	3:09	3:22	-
-	5:40	5:48	5:56	-	3:00	3:11	3:20	5:50	5:56	-	6:04	3:20	3:29	-	3:41
5:45	-	5:51	5:59	3:20	-	3:29	3:38	6:05	6:12	-	6:21	3:30	3:39	3:52	-
6:00	-	6:06	6:14	-	3:30	3:41	3:50	6:15	6:22	6:35	-	3:45	3:54	-	4:06
-	6:10	6:18	6:26	3:45	-	3:54	4:03	6:20	6:27	-	6:36	4:00	4:09	4:23	-
6:15	-	6:21	6:29	-	4:00	4:11	4:20	6:35	6:42	-	6:51	4:08	4:17	-	4:30
6:30	-	6:36	6:44	4:10	-	4:19	4:28	6:45	6:52	7:05	-	4:28	4:37	-	4:50
-	6:40	6:48	6:56	-	4:30	4:41	4:50	6:50	6:57	-	7:08	4:30	4:39	4:53	-
6:45	-	6:51	6:59	4:35	-	4:44	4:53	7:05	7:13	-	7:24	4:45	4:54	-	5:07
7:00	-	7:08	7:16	4:56	-	5:05	5:14	7:10	7:18	7:31	-	5:00	5:09	5:23	-
-	7:10	7:20	7:28	-	5:00	5:11	5:20	7:20	7:28	-	7:39	5:02	5:11	-	5:24
7:15	-	7:23	7:31	5:14	-	5:23	5:32	7:35	7:43	-	7:54	5:22	5:31	-	5:44
7:30	-	7:38	7:46	-	5:30	5:41	5:50	7:45	7:53	8:06	-	5:30	5:39	5:53	-
-	7:40	7:50	7:58	5:32	-	5:41	5:50	7:50	7:58	-	8:09	5:40	5:49	-	6:02
7:45	-	7:53	8:01	5:50	-	5:59	6:07	8:05	8:13	-	8:24	5:58	6:07	-	6:20
8:00	-	8:08	8:16	-	6:00	6:10	6:18	8:10	8:18	8:31	-	6:00	6:09	6:23	-
8:15	-	8:23	8:31	6:08	-	6:16	6:24	8:20	8:28	-	8:39	6:14	6:23	-	6:36
-	8:15	8:25	8:33	6:28	-	6:36	6:44	8:35	8:43	-	8:54	6:30	6:39	6:53	-
8:30	-	8:38	8:46	-	6:30	6:40	6:48	8:45	8:53	9:06	-	6:34	6:43	-	6:56
-	8:40	8:50	8:58	6:50	-	6:58	7:06	8:50	8:58	-	9:09	6:52	7:01	-	7:12
8:45	-	8:53	9:01	7:15	-	7:23	7:31	9:05	9:13	-	9:24	7:00	7:08	7:21	-
9:05	-	9:13	9:21	7:40	-	7:48	7:56	9:15	9:23	9:36	-	7:12	7:20	-	7:31
-	9:15	9:25	9:33	8:05	-	8:13	8:21	9:30	9:38	-	9:49	7:37	7:45	-	7:56
9:30	-	9:38	9:46	8:30	-	8:38	8:46	9:55	10:03	-	10:14	8:05	8:13	-	8:24
9:55	-	10:03	10:11	9:00	-	9:07	9:14	10:20	10:28	-	10:39	8:25	8:33	-	8:44
10:20	-	10:28	10:36	9:45	-	9:52	9:59	10:45	10:53	-	11:04	8:50	8:58	-	9:09
10:45	-	10:53	11:01	10:30	-	10:37	10:44	11:10	11:18	-	11:29	9:20	9:28	-	9:39
11:10	-	11:18	11:26	11:15	-	11:21	11:28	11:35	11:43	-	11:54	10:05	10:12	-	10:21
11:35	-	11:43	11:51	12:00	-	12:06	12:13	12:00	12:08	-	12:19	10:50	10:57	-	11:06
12:00	-	12:08	12:17	12:45	-	12:51	12:58	12:25	12:33	-	12:44	11:35	11:42	-	11:51
12:25	-	12:33	12:42	1:35	-	1:40	1:45	12:50	12:58	-	1:10	12:20	12:27	-	12:36
12:50	-	12:58	1:07					1:15	1:24	-	1:36	w 1:20	1:26	-	1:33
								1:40	1:49	_	2:01				

2022	Π٨	idave	,
2022	HO	lidavs	š

SUN Memorial Day

SUN Independence Day

SUN Labor Day

SUN Thanksgiving Day

SUN Christmas Day

SUN Christmas Day Observed

SAT New Year's Eve

SUN New Year's Day

	turday <b>E</b> ound	<b>39</b>		Ou	ıtbound		
	,	8					
	s u	Broadway & Main St	van		van	Broadway & Main St	s ion
	Davis Station	Broadw Main St	Sullivan Station		Sullivan Station	Broadw Main St	Davis Station
Α	-	4:38	4:48		5:15	5:22	5:30
	5:35	5:41	5:48		6:03	6:10	6:18
	6:28	6:34	6:41		6:51	6:58	7:06
	7:16	7:23	7:31		7:39	7:47	7:55
	8:04	8:11	8:19		8:27	8:35	8:43
	8:52	8:59	9:09		9:15	9:24	9:33
	9:40	9:47	9:57		10:03	10:11	10:24
	10:28	10:35	10:45		10:30	10:38	10:51
	10:58	11:06	11:16		10:56	11:04	11:17
	11:24	11:32	11:42		11:22	11:30	11:43
	11:50	11:58	12:08		11:48	11:56	12:09
	12:16	12:24	12:34		12:14	12:22	12:35
	12:42	12:50	1:00		12:40	12:48	1:00
	1:08	1:16	1:26		1:06	1:17	1:28
	1:34	1:42	1:52		1:32	1:43	1:54
	2:00	2:08	2:18		1:58	2:07	2:18
	2:26	2:34	2:44		2:24	2:33	2:44
	2:52	3:00	3:10		2:50	2:59	3:10
	3:18	3:26	3:36		3:16	3:25	3:36
	3:44	3:52	4:02		3:42	3:51	4:02
	4:10	4:17	4:27		4:08	4:17	4:28
	4:36	4:43	4:53		4:34	4:43	4:54
	5:02	5:09	5:19		5:00	5:09	5:20
	5:28	5:35	5:45		5:26	5:35	5:46
	5:54	6:01	6:11		5:52	6:01	6:12
	6:20	6:27 6:53	6:37 7:03		6:18	6:27	6:38 7:29
	6:46 7:35	7:42	7:03 7:52		7:09 7:57	7:18 8:05	7:29 8:14
	8:23	7:42 8:30	7:52 8:38		7:57 8:45	8:53	9:02
	9:11	9:18	9:26		9:33	9:41	9:50
	9:59	10:06	10:14		10:21	10:29	10:38
	10:47	10:54	11:02		11:09	11:17	11:26
	11:35	11:42	11:49		11:57	12:05	12:14
	12:23	12:30	12:37		12:45	12:53	1:01
	1:05	1:11	1:16	w	1:20	1:27	1:35
	1.03	1.11	1.10	**	1.20	1.27	1.33

Su	nday 89 ound	)		Ou	tbound		
	Davis Station	Broadway & Main St	Sullivan Station		Sullivan Station	Broadway & Main St	Davis Station
Α	-	5:24	5:39	Α	6:00	5:05	
	6:30	6:36	6:43		6:05	6:12	6:19
	7:16	7:23	7:31		6:51	6:58	7:05
	8:02	8:09	8:17		7:37	7:45	7:52
	8:48	8:55	9:04		8:23	8:31	8:38
	9:34	9:41	9:51		9:09	9:18	9:26
	10:20	10:27	10:37		9:55	10:03	10:15
	11:06	11:14	11:24		10:41	10:49	11:01
	11:52	12:00	12:10		11:27	11:35	11:47
	12:38	12:46	12:56		12:13	12:21	12:33
	1:24 2:10	1:32 2:18	1:42 2:28		12:59 1:45	1:10 1:56	1:20 2:06
	2:10	2:18 3:04	2:28 3:14		2:31	2:40	2:50
	3:42	3:50	4:00		2:31 3:17	3:26	3:36
	4:28	4:35	4:45		4:03	4:12	4:22
	5:14	5:21	5:31		4:49	4:58	5:08
	6:00	6:07	6:17		5:35	5:44	5:54
	6:46	6:53	7:03		6:21	6:30	6:40
	7:32	7:39	7:49		7:07	7:16	7:26
	8:18	8:25	8:33		7:53	8:02	8:10
	9:04	9:11	9:19		8:39	8:47	8:55
	9:50	9:57	10:05		9:25	9:33	9:41
	10:36	10:43	10:51		10:11	10:19	10:27
	11:22	11:29	11:36		10:57	11:05	11:13
	12:08	12:15	12:22		11:43	11:51	11:59
	12:54	1:01	1:06		12:29	12:37	12:45
	1:40	1:46	1:51	W	1:15	1:22	1:29

1:51

waits for last train to arrive station

1:46

PM times are bold

1:40

Information in this timetable is subject to change without notice. Traffic and weather may affect running times.

Always check bus destination signs before boarding. Some buses may only serve a part, or skip portions of this route.

A leaves Clarendon Hill 4:30 AM weekdays, 4:33 AM Saturdays, 5:15 AM Sundays for service to Haymarket Station via Route 93

<b>T</b> Fares							
		+#	Ē	+ 🗒			
PER TRIP	Local Bus	Bus + Bus	Rapid Transit	Bus + Rapid Transit			
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			
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			

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.

#### **TRANSFERS**

If paying with a CharlieTicket or CharlieCard, discounted transfers that areavailable are automatic — use the same ticket or card throughout yourtrip. If paying with cash onboard a vehicle, free transfers are only allowedbetween subway lines and inside paid platform areas at gated stations.

#### SCHEDULES

Schedules are available at the subway stations that a route serves.

All schedules available at: South Station. North Station and Park Street.

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





Rapid		We	ekday			Saturday			Sunday	
Transit Line	First Trip	Peak	Off Peak	Last Trip	First Trip	Arriving Every	Last Trip	First Trip	Arriving Every	Last Trip
Red Line Alewife Braintree	5:23 AM 5:08 AM	11 mins	12-16 mins	12:23 AM 12:17 AM	5:24 AM 5:11 AM	15-16 mins	12:23 AM 12:17 AM	6:08AM 5:56AM	15-16 mins	12:23 AM 12:17 AM
Alewife	5:16 AM	11	12-16	w 12:30 AM	5:16 AM	15-16	w 12:30 AM	6:00AM	15-16	w 12:30 AM
Ashmont	5:16 AM	mins	mins	w 12:30 AM	5:16 AM	mins	w 12:30 AM	6:00AM	mins	w 12:30 AM
"M" Ashmont	5:17 AM	5	8-12 Day	w 1:05 AM	5:15 AM	8-12 Day	w 1:05 AM	6:03AM	8-12 Day	w 1:05 AM
Mattapan	5:05 AM	mins	26 Late	12:53 AM	5:05 AM	26 Early/Late	12:53 AM	5:51AM	26 Early/Late	12:55 AM
Blue Line Wonderland Orient Heights Bowdoin	5:13 AM 5:11 AM 5:29 AM	5-6 mins	9-11 mins	12:28 AM 12:34 AM w 1:00 AM	5:25 AM 5:13 AM 5:30 AM	9-15 mins	12:30 AM 12:35 AM w 1:00 AM	5:58AM 6:04AM 6:23AM	9-15 mins	12:30 AM 12:36 AM w 1:00 AM
Orange Line Oak Grove Forest Hills	5:16 AM	7-9	10-14	w 12:30 AM	5:16 AM	12-15	w 12:28 AM	6:00AM	15	w 12:30 AM
	5:16 AM	mins	mins	w 12:28 AM	5:16 AM	mins	w 12:30 AM	6:00AM	mins	w 12:28 AM
Green Line*  B Boston College Park Street	5:01 AM	7-8	9-12	12:16 AM	4:45 AM <sup>2</sup>	9-12	12:18 AM	5:20AM <sup>2</sup>	10-12	12:17 AM
	5:41 AM	mins	mins	w 12:52 AM	5:38 AM	mins	w 12:52 AM	6:11AM	mins	w 12:52 AM
C Cleveland Circle	4:57 AM	10	11-13	12:08 AM	4:50 AM	12-13	12:10 AM	5:30AM	12-13	12:11 AM
North Station	5:36 AM	mins	mins	w 12:46 AM	5:28 AM	mins	w 12:47 AM	6:09AM	mins	w 12:46 AM
D Riverside	4:56 AM	8-9	10-12	12:07 AM	4:55 AM	11-13	12:06 AM	5:25AM	11-14	12:08 AM
Government Ctr.	5:41 AM	mins	mins	w 12:49 AM	5:38 AM	mins	w 12:49 AM	6:07AM	mins	w 12:49 AM
E Lechmere	5:00 AM <sup>4</sup>	10	10-12	12:35 AM	5:00 AM	10-11	12:37 AM	5:35AM	14-15	12:32 AM
Heath Street	5:43 AM	mins	mins	12:47 AM <sup>3</sup>	5:38 AM	mins	12:47 AM <sup>3</sup>	6:16AM	mins	12:49 AM <sup>3</sup>
Silver Line SL1 Logan Airport South Station	5:38 AM 5:37 AM	7-12 mins	10-12 mins	f 1:06 AM w 12:49 AM	5:48 AM 5:45 AM	10-12 mins	1:15 AM w 12:59 AM	5:50AM 6:12AM	10-12 mins	f 1:12 AM w 1:00 AM
SL2 Design Center	6:18 AM	6	14-16	12:37 AM	6:03 AM	14-16	12:35 AM	6:51AM	14-16	12:51 AM
South Station	5:54 AM	mins	mins	12:51 AM	5:47 AM	mins	12:45 AM	6:35AM	mins	12:36 AM
SL3 Chelsea Station	4:55 AM	6-11	8-13	f 1:05 AM	5:30 AM	8-13	1:22 AM	6:26AM	8-13	f 1:25 AM
South Station	4:20 AM	mins	mins	w 12:35 AM	4:56 AM	mins	w 12:55 AM	5:53AM	mins	w 12:55 AM
SL4 Nubian Station	5:20 AM	6-11	6-11	12:20 AM	5:23 AM	13-20	12:20 AM	6:02AM	13-20	12:20 AM
South Station	5:38 AM	mins	mins	12:37 AM	5:40 AM	mins	12:40 AM	6:20AM	mins	12:40 AM
SL5 Nubian Station	5:15 AM	11-14	13-20	12:51 AM	5:19 AM	6-11	12:43 AM	6:00AM	6-11	12:25 AM
Downtown Xing	5:32 AM	mins	mins	w 1:07 AM	5:34 AM	mins	w 1:00 AM	6:16AM	mins	w 12:47 AM

Peak Service: Weekdays 7 AM - 9 AM, 4 PM - 6:30 PM

#### **Green Line Notes:**

New and ongoing infrastucture projects may result in diversions on some branches at various times.

## See GL service changes at mbta.com/GLwork View service alerts at mbta.com/alerts

\* E trains start/end at North Station for Green Line Extension work – shuttles provided between North Station and Lechmere.

More: mbta.com/GLEwork

- 2 The first B train from Boston College operates to North Station
- 3 From Heath Street, these following trip times are guaranteed connections:

Weekday - 12:23 AM Saturday - 12:25 AM Sunday - 12:26 AM

All trips after the above times will not provide guaranteed connections.

- 4 Early morning service from North Station to Riverside departs at 5 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 2021 Holidays 4/19: Sat; 5/31 Sun; 7/4-5 Sun

## TRIP GENERATION

MEANS OF TRANSPORTATION TO WORK	Census Tract 3505	Percentages	Adjusted Percentages
Car, truck, or van	329	26.1%	32.7%
Drove alone	315	25.0%	31.3%
Carpooled:	14	1.1%	1.4%
In 2-person carpool	14	1.1%	1.4%
In 3-person carpool	0	0.0%	0.0%
In 4+ person carpool	0	0.0%	0.0%
Public transportation	575	45.6%	57.2%
Bicycle	20	1.6%	2.0%
Walked	82	6.5%	8.2%
Other means/Telecommute	254	20.2%	0.0%

254	20.2%	0.0%				
			•			
Average Vehicle Occupancy (AVO)						
# Occupants	Weight	Occupants	Product			
Drove Alone	0.313	1	0.313			
Carpool (2)	0.014	2	0.028			
Carpool (3)	0	3	0.000			
Carpool (4)	0	4	0.000			
Sums	0.327		0.341			
AVO (Sum of	1.043					

	Census Tract 350 Massachusetts	95, Middlesex County,
Label	Estimate	Margin of Error
Гotal:	1,260	±200
Car, truck, or van:	329	±121
Drove alone	315	±121
Carpooled:	14	±21
In 2-person carpool	14	±21
In 3-person carpool	0	±13
In 4-person carpool	0	±13
In 5- or 6-person carpool	0	±13
In 7-or-more-person carpool Public transportation (excluding	0	±13
taxicab):	575	±104
Bus	52	±36
Subway or elevated rail	523	±98
Long-distance train or commuter		
rail	0	±13
Light rail, streetcar or trolley		
(carro público in Puerto Rico)	0	±13
Ferryboat	0	±13
Taxicab	0	±13
Motorcycle	0	±13
Bicycle	20	±19
Walked	82	±52
Other means	0	±13
Worked from home	254	±140

#### **MEANS OF TRANSPORTATION TO WORK**



Note: The table shown ma	ny have been modified by user selections. Some information may be missing.				
DATA NOTES					
TABLE ID:	B08301				
SURVEY/PROGRAM:	American Community Survey				
VINTAGE:	2020				
DATASET:	ACSDT5Y2020				
PRODUCT:	ACS 5-Year Estimates Detailed Tables				
UNIVERSE:	Workers 16 years and over				
FTP URL:	None				
API URL:	https://api.census.gov/data/2020/acs/acs5				
USER SELECTIONS					
TABLES	B08301				
GEOS	Census Tract 3505, Middlesex County, Massachusetts				
EXCLUDED COLUMNS	None				
APPLIED FILTERS	None				
APPLIED SORTS	None				
PIVOT & GROUPING	None				
WEB ADDRESS	https://data.census.gov/cedsci/table?q=b08301&g=1400000US25017350500&tid=ACSDT5Y2020.B08301				
TABLE NOTES	Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, for 2020, the 2020 Census provides the official counts of the population and housing units for the nation, states, counties, cities, and towns. For 2016 to 2019, the Population Estimates Program provides estimates of the population for the nation, states, counties, cities, and towns and intercensal housing unit estimates for the nation, states, and counties.				
	Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Technical Documentation section.				
	Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.				
	Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates				
	Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see ACS Technical Documentation). The effect of nonsampling error is not represented in these tables.				
	Workers include members of the Armed Forces and civilians who were at work last week.				
	2019 ACS data products include updates to several categories of the existing means of transportation question. For more information, see: Change to Means of Transportation.  The 2016-2020 American Community Survey (ACS) data generally reflect the September 2018 Office of Management and				
	Budget (OMB) delineations of metropolitan and micropolitan statistical areas. In certain instances, the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB delineation lists due to differences in the effective dates of the geographic entities.				

COLUMN NOTES	None
	Explanation of Symbols:- The estimate could not be computed because there were an insufficient number of sample observations. For a ratio of medians estimate, one or both of the median estimates falls in the lowest interval or highest interval of an open-ended distribution.N The estimate or margin of error cannot be displayed because there were an insufficient number of sample cases in the selected geographic area. (X) The estimate or margin of error is not applicable or not available.median- The median falls in the lowest interval of an open-ended distribution (for example "2,500-")median+ The median falls in the highest interval of an open-ended distribution (for example "250,000+").** The margin of error could not be computed because there were an insufficient number of sample observations.*** The margin of error could not be computed because the median falls in the lowest interval or highest interval of an open-ended distribution.***** A margin of error is not appropriate because the corresponding estimate is controlled to an independent population or housing estimate. Effectively, the corresponding estimate has no sampling error and the margin of error may be treated as zero.
	Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

## Land Use: 221 Multifamily Housing (Mid-Rise)

#### **Description**

Mid-rise multifamily housing includes apartments and condominiums located in a building that has between four and 10 floors of living space. Access to individual dwelling units is through an outside building entrance, a lobby, elevator, and a set of hallways.

Multifamily housing (low-rise) (Land Use 220), multifamily housing (high-rise) (Land Use 222), offcampus student apartment (mid-rise) (Land Use 226), and mid-rise residential with ground-floor commercial (Land Use 231) are related land uses.

#### Land Use Subcategory

Data are presented for two subcategories for this land use: (1) not close to rail transit and (2) close to rail transit. A site is considered close to rail transit if the walking distance between the residential site entrance and the closest rail transit station entrance is ½ mile or less.

#### **Additional Data**

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 2.5 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 96 percent of the total dwelling units were occupied.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/tripand-parking-generation/).

It is expected that the number of bedrooms and number of residents are likely correlated to the trips generated by a residential site. To assist in future analysis, trip generation studies of all multifamily housing should attempt to obtain information on occupancy rate and on the mix of residential unit sizes (i.e., number of units by number of bedrooms at the site complex).

The sites were surveyed in the 1990s, the 2000s, the 2010s, and the 2020s in Alberta (CAN), California, District of Columbia, Florida, Georgia, Illinois, Maryland, Massachusetts, Minnesota, Montana, New Jersey, New York, Ontario (CAN), Oregon, Utah, and Virginia.

#### Source Numbers

168, 188, 204, 305, 306, 321, 818, 857, 862, 866, 901, 904, 910, 949, 951, 959, 963, 964, 966, 967, 969, 970, 1004, 1014, 1022, 1023, 1025, 1031, 1032, 1035, 1047, 1056, 1057, 1058, 1071, 1076



### Multifamily Housing (Mid-Rise) Not Close to Rail Transit (221)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban

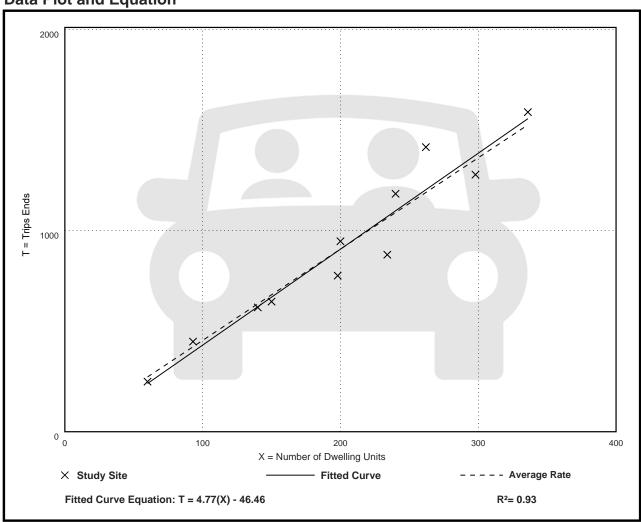
Number of Studies: 11 Avg. Num. of Dwelling Units: 201

Directional Distribution: 50% entering, 50% exiting

#### **Vehicle Trip Generation per Dwelling Unit**

Average Rate	Range of Rates	Standard Deviation
4.54	3.76 - 5.40	0.51

#### **Data Plot and Equation**





## **Multifamily Housing (Mid-Rise) Not Close to Rail Transit (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

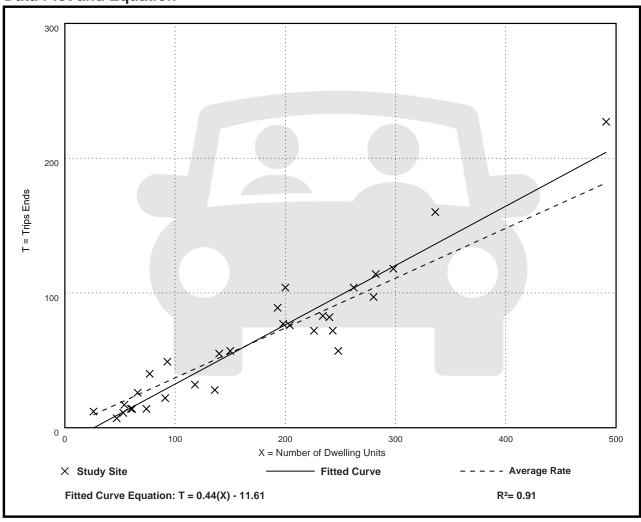
Number of Studies: 30 Avg. Num. of Dwelling Units: 173

Directional Distribution: 23% entering, 77% exiting

#### **Vehicle Trip Generation per Dwelling Unit**

Average Rate	Range of Rates	Standard Deviation
0.37	0.15 - 0.53	0.09

#### **Data Plot and Equation**





## **Multifamily Housing (Mid-Rise) Not Close to Rail Transit (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

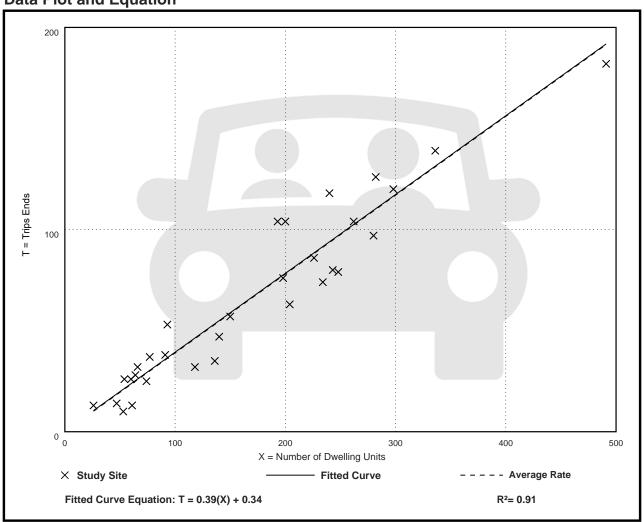
Number of Studies: 31 Avg. Num. of Dwelling Units: 169

Directional Distribution: 61% entering, 39% exiting

#### **Vehicle Trip Generation per Dwelling Unit**

Average Rate	Range of Rates	Standard Deviation
0.39	0.19 - 0.57	0.08

#### **Data Plot and Equation**





# COMPREHENSIVE SITE PLAN AND CORRESPONDING TRAFFIC FIGURES

