

III - Mobility Management Plan

Alta XMBLY 290 Revolution Drive

Somerville, Massachusetts

PREPARED FOR



WP East Acquisitions, L.L.C.
91 Hartwell Avenue
Lexington, MA 02421

Contact: Jim Lambert

jim.lambert@woodpartners.com

781.541.5821

PREPARED BY



101 Walnut Street PO Box 9151 Watertown, MA 02471 617.924.1770

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Project Information

Contact Information

The Project development site address and contact information is as follows:

Alta XMBLY

290 Revolution Drive (Lots 88-A-1)

WP East Acquisitions, LLC (c/o Wood Partners) 91 Hartwell Avenue Lexington, MA 02421

Contact: Jim Lambert

jim.lambert@woodpartners.com

781.541.5821

Project Description

The Alta XMBLY development will be constructed within an approximately 71,935 square foot (sf) (1.65 acre) parcel of land within the approved XMBLY development in Somerville, Massachusetts (the "Site"). Alta XMBLY was previously named Block 23 in the XMBLY master plan Planned Unit Development (PUD). This initial XMBLY development will occur within Alta XMBLY, which is bound by Grand Union Boulevard to the east, the planned Road K to the west, and the planned Road L and Revolution Drive to the north and south,

respectively. A total of 329 residential units are proposed within the planned eight-story Alta XMBLY building, along with 4,140 sf of street-level retail/restaurant use (the "Project"). As noted earlier, approximately 2,250 sf of retail/active space also will be located at the southwest corner of the Grand Union Boulevard/Road L intersection. The parking needs for this parcel will be accommodated by 199 structured parking spaces within the new Alta XMBLY building footprint. This parking will be designated for use by residents only, with parking for the retail/restaurant uses being provided on-street along Road K, and other nearby roadways where public parking is available. The proposed Site parking supply falls below the 342-space supply required by the City of Somerville Zoning Ordinance, but still will meet the anticipated functional needs of the proposed Project. A waiver from this parking requirement is being requested in conjunction with this submittal.

The proposed development for Alta XMBLY is consistent with the recently approved PUD-PMP for the overall XMBLY development. The anticipated trip generation associated with this proposed development is discussed in detail later in this Mobility Management Plan (MMP).

Build Out/Program Estimates

At its full build-out, the overall XMBLY development will include approximately 489 residential units, 612,500 sf of general office space, and 335,500 sf of research & Development/lab space. Approximately 27,140 sf of street-oriented retail/restaurant space also will be provided within multiple tenant spaces within the individual blocks comprising the Project. A new, approximately 16,000 sf fire station serving the Assembly Square district also will be constructed. This amenity will be located at the northwest corner of the building adjacent to the Foley Street/Middlesex Avenue intersection. The development also will feature new publicly accessible and sustainably designed open spaces which will benefit both the Project tenants and residents as well as visitors to the surrounding Assembly Square area.

The initial Alta XMBLY development considered under this MMP will consist of 329 residential units with 4,140 sf of supporting ground-floor retail/restaurant space.

Anticipated Phasing

The full development plans for the overall XMBLY development are summarized in the preceding section, and this project will be developed on an ongoing basis over several years. The Project's initial phase will consist of the development of Alta XMBLY, as described in the following section.

Alta XMBLY

The initial development of the Project will occur within Alta XMBLY. This new building will be bound by Grand Union Boulevard to the east, Road K to the west, and Road L and Revolution Drive to the north and south, respectively. A total of 329 residential units are proposed within Alta XMBLY, along with 4,140 sf of street-level retail/restaurant use. The parking needs for this parcel will be accommodated by 199 structured parking spaces

contained within the ground- and second levels of the building. In addition to automobile parking, this Block also will include the number of secured bicycle parking spaces needed to comply with City of Somerville requirements.

A summary of the uses and associated building areas within the blocks described above is provided in Table 1. The building areas shown in Table 1 represent the total building areas for each block, including both leasable area, and "back-of-house" supporting space such as lobbies, mechanical rooms, etc.

Table 1 Development Program

			Research &	Retail/		
Development	Residential	Officea	Development ^a	Restaurant space ^b	Fire Station	Total
Initial development						
Alta XMBLY	329 units	0 sf	<u>0 sf</u>	<u>4,140 sf</u>	<u>0 sf</u>	420,000 sf
Subtotal	329 units	0 sf	0 sf	4,140 sf	0 sf	420,000 sf
Subsequent development						
Block 21	0 units	373,500 sf	272,500 sf	20,000 sf	16,000 sf	682,000 sf
Block 24 (existing) ^b	0 units	162,000 sf	0 sf	0 sf ^b	0 sf	162,000 sf
Block 25 ^c	160 units	0 sf	0 sf	3,000 sf	0 sf	190,000 sf
Block 26	0 units	77,000 sf	63,000 sf	<u>0 sf</u>	<u>0 sf</u>	140,000 sf
Subtotal	489 units	612,500 sf	335,500 sf	23,000 sf	0 sf	1,174,500 sf
Total Full Build-out	489 units	612,500 sf	335,500 sf	27,140 sf	16,000 sf	1,594,000 sf

a A total of 948,000 sf of building space will be devoted to office or research and development space. The exact breakdown for between these two uses is based on current development plans, but may change over time based on market conditions and tenant needs

Parking Plan

The following section summarizes the proposed Alta XMBLY parking supply.

Proposed Parking Supply

The parking needs for the 329 residential units within Alta XMBLY will be accommodated by the 199-space parking structure within the ground- and second levels of the building. Patrons of the proposed 4,140 sf of street-level retail/restaurant uses are expected primary to be in the form of shared trips with other nearby businesses or residences within the Project Site and/or the surrounding area.

b Block 24 currently contains a health club facility oriented towards existing Assembly Square workers and visitors. While there are no plans for this use to vacate the Site, it was assumed that this 25,000 sf could be converted to office space under the future conditions evaluated in the Traffic Impact and Access Study accompanying this submittal so as to consider a "worst-case" analysis.

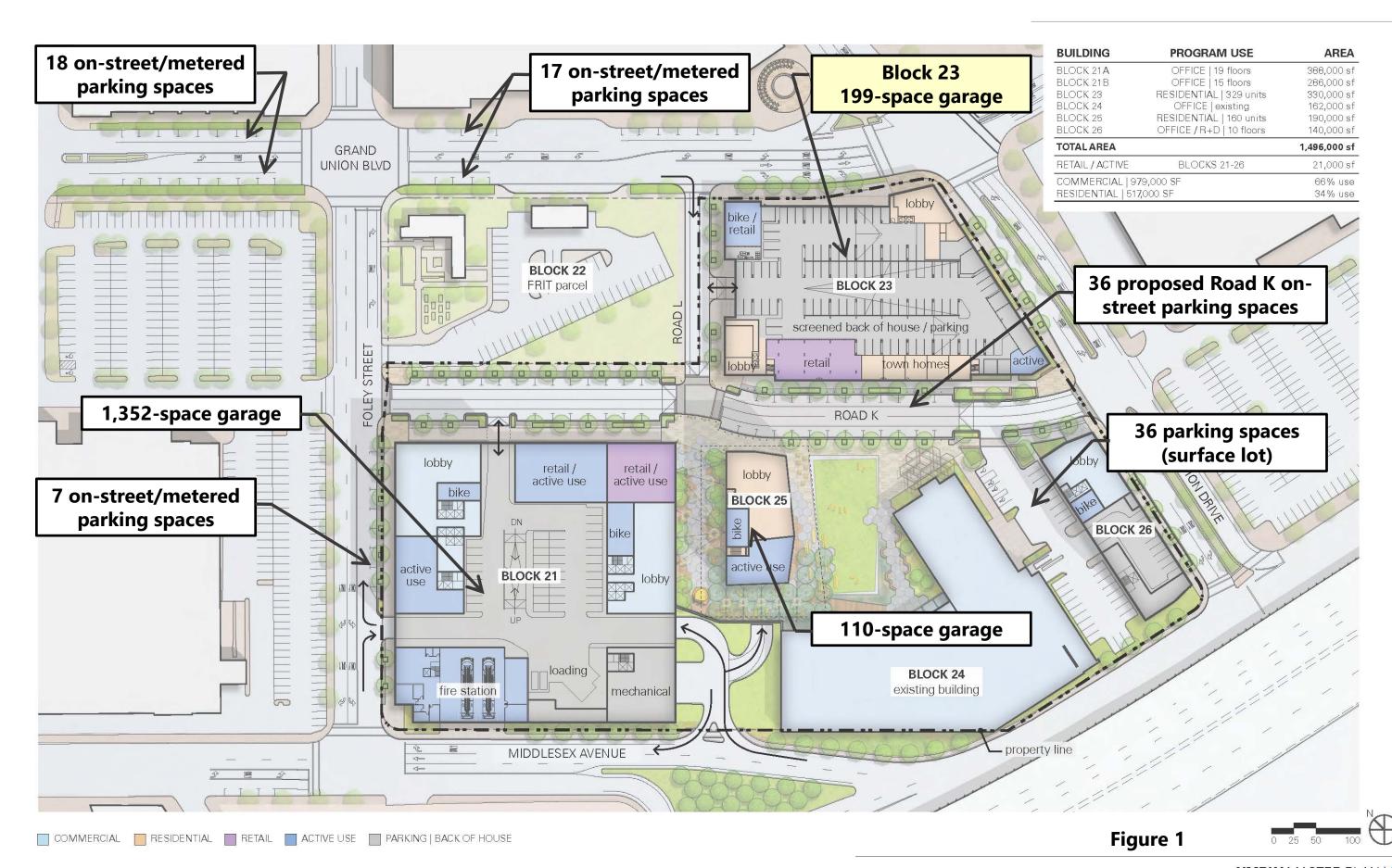
The parking facilities within Alta XMBLY will be controlled through gating, ticketing, reader cards or other means. This will help avoid this parking being used for the MBTA or other nearby developments so that it will be available only for Project use.

The Somerville Zoning Ordinance requires 111 bicycle parking spaces for the proposed Alta XMBLY development, and this requirement will be satisfied within the proposed parking garage. The Project also will be providing short-term bicycle racks within 50 feet of each building entrance. The exact capacity and location of each rack will be determined through ongoing consultation with the City planning staff.

In addition to the parking facilities discussed above, there will be 36 newly created onstreet parallel parking spaces provided along Road K. In addition to this parking there also is an abundance of on-street parking in the immediate vicinity of the Site. The parking spaces along Foley Street and Grand Union Boulevard along the Site frontage are metered. The cost for the spaces currently is \$0.25 per fifteen minutes, with a 2-hour time limit during the Monday-Saturday (8 AM-8PM) metered operation of these spaces.

A graphic depicting the proposed Alta XMBLY parking supply, and the nearby on-street existing parking supply, is provided in Figure 1.

Motor Vehicle Parking Plan – Block 23 and On-Street parking



Nearby Transit Services

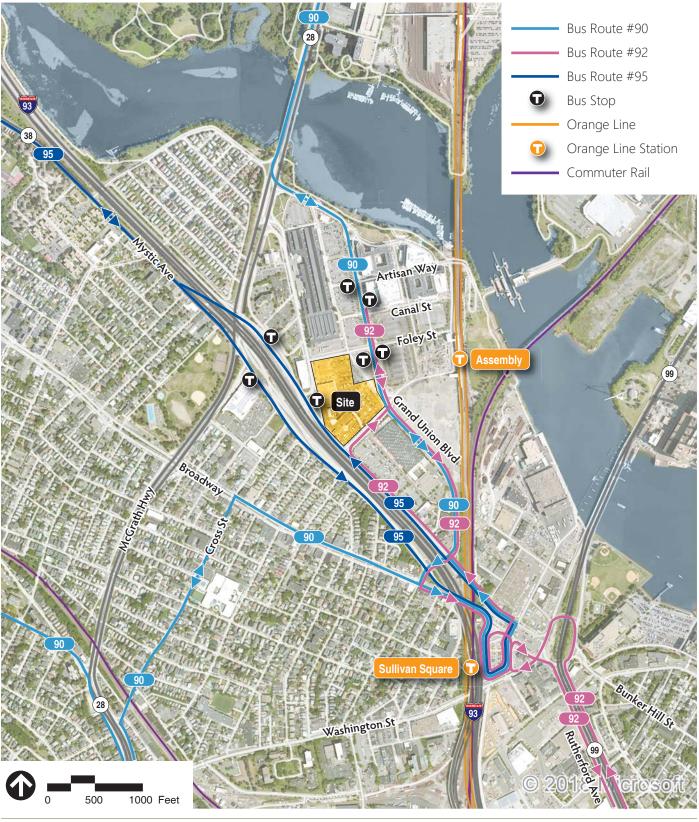
Ample public transportation services by the Massachusetts Bay Transportation Authority (MBTA) currently are provided in the immediate vicinity of the Project Site as summarized in the following section.

Existing Conditions

The study area is currently served by five MBTA bus routes within 0.5 miles of the Project Site. The area is serviced by MBTA Bus Routes 89, 90, 92, 95, and 101. MBTA Bus Routes 90, 92, and 95 directly serve the Site with stops on Mystic Avenue and Grand Union Boulevard. In addition, the Site is served by the Orange Line of the MBTA with Assembly Station located less than 1,000 feet east of the Site. Descriptions of each transit service is provided below:

- Bus Route 89 travels between Sullivan Square and Davis Square or Clarendon Hill via Broadway. The nearest stop to the Site is approximately 0.5 miles away at the intersection of Broadway and Lombardi Way / Mt. Vernon Street. During peak periods, Bus Route 89 has a frequency of approximately 7-15 minutes.
- Bus Route 90 travels between Wellington Station and Davis Square via Assembly Square Mall, Sullivan Square, and Highland Avenue. The nearest stop to the Site is on Grand Union Boulevard adjacent to the Site, at Foley Street. During peak periods, Bus Route 90 has a frequency of approximately 40-50 minutes.
- Bus Route 92 travels between Assembly Square Mall and Downtown Boston via Sullivan Square and Haymarket. The nearest stop to the Site is on Grand Union Boulevard adjacent to the Site, at Foley Street. On weekday, Bus Route 92 terminates at Sullivan Square before 9:30 AM and after 4:00 PM, therefore not providing service to the Site during peak periods.
- Bus Route 95 travels between Sullivan Square and West Medford via Mystic Avenue and Medford Square. The nearest stop to the Site is on Mystic Avenue (Route 38) adjacent to the Site, at Middlesex Avenue. During peak periods, Bus Route 95 has a frequency of approximately 25-40 minutes.
- Bus Route 101 travels between Sullivan Square and Malden Center via Broadway and Medford Square. The nearest stop to the Site is approximately 0.5 miles away at the intersection of Broadway and Lombardi Way / Mt. Vernon Street. During peak periods, Bus Route 89 has a frequency of approximately 5-20 minutes.

Peak period frequencies/headways for MBTA bus services are summarized in Table 2, and are shown graphically in Figure 2.



Source: Bing Aerial, MassGIS



Figure 2 Public Transit

XMBLY Somerville, Massachusetts

Table 2 Project Area MBTA Service

Bus Route	Origin / Destination	Peak-Hour Frequency (minutes)		Weekday	Saturday	Sunday
89	Charlestown; Clarendon	7-15	Inbound	2,079	973	367
	Hill or Davis Square –		<u>Outbound</u>	<u>2,077</u>	<u>945</u>	<u>492</u>
	Sullivan Station via Broadway		Total	4,156	1,917	858
90	Charlestown; Davis Square	45-50	Inbound	588	334	230
	 Wellington Station 		<u>Outbound</u>	<u>593</u>	<u>350</u>	<u>163</u>
		Total	1,182	684	393	
92	Square Mall – Downtown	25-45	Inbound	667	294	N/A
			<u>Outbound</u>	<u>654</u>	<u>285</u>	<u>N/A</u>
	via Main Street		Total	1,321	579	N/A
95	Fellsway; West Medford –	25-40	Inbound	896	445	206
	Sullivan Square		<u>Outbound</u>	<u>986</u>	<u>491</u>	<u>236</u>
			Total	1,881	936	442
101	Charlestown; Malden	20-30	Inbound	2,453	1,165	603
	Station – Sullivan Station		<u>Outbound</u>	<u>2,314</u>	<u>1,232</u>	<u>516</u>
	via Medford Square		Total	4,767	2,397	1,119

Based on MBTA's Ridership and Service Statistics – Fourteenth Edition, 2014.

Assembly Square Orange Line Station

Assembly Station on the Orange Line of the MBTA is approximately 800- to 1,000 feet east of the Site via Revolution Drive or Foley Street. The Orange Line travels from Oak Grove in the north to Forest Hills in the south and serves the cities of Malden, Medford, and Somerville, as well as the Boston neighborhoods of Charlestown, Downtown, Chinatown, Back Bay, South End, Roxbury, and Jamaica Plain. The Orange Line runs approximately every six minutes during peak periods. The Assembly Square Station on the Orange Line opened in 2014.

Additional transit service is available within the study area beyond the 0.5 miles range discussed above. Additional stops on the Orange Line are located at Sullivan Square Station (located approximately 0.6 miles south of the Site) and Wellington (located approximately 1 mile north of the Site). Both Sullivan Square Station and Wellington Station are local transit hubs and provide connections to several additional MBTA bus routes as well.

Bicycle Network

As part of the traffic data collection, current biking activity was recorded for the study area intersections. The area surrounding Alta XMBLY has ample bike accommodations which were implemented as part of the adjacent Assembly Row development. These include new bike

lanes, a multi-use path, and other amenities. Grand Union Boulevard currently features striped bicycle lanes on both sides of the roadway. The newly proposed Road K is being designed with single travel lanes in both directions along with parking along both sides of the street for most of its length. Space also is available within the Road K cross-section for 5-foot wide bike lanes on both sides of the direction. With the planned multi-modal setting, the festival-street configuration of Road K, and other factors, bicyclists should be able to readily ride within the flow of automobile traffic if desired due to the expected low speeds. The nearest Blue Bikes bike-sharing station to the Site is located at Broadway at Mt. Pleasant Street approximately 0.40 miles to the south. The new internal Site roadways proposed as part of the Project will be designed to accommodate bicycle traffic within the mixture of vehicular and pedestrian traffic along Road K and Road L.

Sidewalks

As part of the planned multi-modal environment of XMBLY there will be ample pedestrian accommodations in place surrounding Alta XMBLY. Grand Union Boulevard already features 8-foot wide sidewalks along both sides of the roadway, with crosswalks provided at Foley Street to the north, and Revolution Drive to the south. Push-button actuated exclusive pedestrian phases are provided at both intersections.

A 10.5-foot minimum-width sidewalk will be constructed along the northerly Site frontage along Road L, with street furniture provided and tree pits at the wider mid-block segment. A variable-width sidewalk will be constructed along the Site's Road K frontage along with street furniture, trees and other amenities. A 12+foot wide sidewalk also will be provided along the northerly side of Revolution Drive, including street trees and other amenities. The segment of Road K between Road L and Revolution Drive is being designed as a "festival street", which may be shut down for automobile traffic for special events. This segment will be designed with the sidewalk being flush with the roadway surface to help promote the desired multi-modal environment. Bollards will be provided along the roadway edge between the on-street parking and sidewalk area for added pedestrian protection.

Mode Split / Trip Generation

The proposed Alta XMBLY development is comprised of residential and supporting retail/restaurant uses. The rate at which any development generates traffic is dependent upon a number of factors such as size, location, and concentration of surrounding developments. The Trip Generation Manual published by the Institute of Transportation Engineers (ITE) categorizes these land uses and provides weekday daily, weekday morning, weekday evening, Saturday daily and midday peak hour unadjusted vehicle trip generation estimates for each use. For the proposed development, the trip generation estimates for the planned uses were projected using Land Use Code (LUC) 221 (Mid-Rise Residential) and LUC 820 (Shopping Center). The methodology used and results of this analysis are discussed in detail in the following sections.

Proposed Project-Generated Traffic

The proposed transit-oriented Alta XMBLY development will consist of a mixture of residential and supporting retail/restaurant/active uses set within the overall surrounding mixed-use XMBLY development. As noted above, traffic associated with the proposed residences was estimated using ITE LUC 221 (Mid-Rise Residential). The retail uses are expected to be small, service-oriented businesses. While exact tenants have not yet been secured, these are not expected to be large destination-retail uses. Instead, potential uses will include small eating establishments, coffee shops, or gallery uses. While these clearly do not fit the description of a transitional ITE "Shopping Center", retail traffic was estimated using this land use code (LUC 820), which results in an overly conservative analysis. The overall unadjusted vehicle trip estimates for the Project are presented in Table 3.

¹ <u>Trip Generation Manual (10th Edition)</u>, Institute of Transportation Engineers, Washington D.C., 2017.

Table 3
Alta XMBLY Trip Generation –
Total <u>Unadjusted</u> Trips

Time Period	Apartments: 329 units ¹ +	Retail/Restaurant: 4,140 sf ²	= Total
Weekday Daily (vpd)	1,790	156	1,946
Weekday Morning Peak (vph)			
Enter	29	2	31
<u>Exit</u>	<u>81</u>	<u>2</u>	<u>83</u>
Total	110	4	114
Weekday Evening Peak (vph)			
Enter	85	8	93
<u>Exit</u>	<u>54</u>	<u>8</u>	<u>62</u>
Total	139	16	155
Saturday Daily (vpd)	1,418	192	1,610
Saturday Midday Peak (vph)			
Enter	71	10	81
<u>Exit</u>	<u>74</u>	<u>9</u>	<u>83</u>
Total	145	19	164

vpd Vehicles per day

The values shown in Table 3 are the base unadjusted vehicle-trip estimates prior to the necessary adjustments for internal Assembly Square trip sharing, mode-splits, and other factors. The details of how these subsequent adjustments were made by each step are discussed in the following sections.

vph Vehicles per hour

Source: <u>Trip Generation Manual; Tenth Edition</u>; Institute of Transportation Engineers; Washington, D.C.; 2017. Based on ITE LUC 221 (Mid-Rise Residential), based on 329 units.

² Based on ITE LUC 820 (Shopping Center), assumes 4,140 sf of retail/restaurant space.

Person Trips

The unadjusted vehicle trips calculated using the ITE data were subsequently converted into person trips by applying national data² for vehicle-occupancy rates for a variety of uses. This was done so that the national ITE-based data also would be converted to person trips using national data for consistency.

Internal Capture Trips

As described in the ITE Trip Generation Handbook "because of the complementary nature of these land uses, some trips are made among the on-site uses. This capture of trips internal to the site has the net effect of reducing vehicle trip generation between the overall development site and the external street system (compared to the total number of trips generated by comparable land uses developed individually on stand-alone sites)...an internal capture rate can generally be defined as the percentage of total person trips generated by a site that are made entirely within the site. The trip origin, destination, and travel path are all within the site."

Based on the methodology outlined in the ITE Trip Generation Handbook, internal capture rates were applied to the gross person trips. The resulting peak-hour person trip estimates for the Project and are presented in Table 4.

Summary of Travel Trends – National Household Travel Survey; USDOT Federal Highway Administration (Washington, DC), 2017.

Table 4 Alta XMBLY Peak-Hour Person Trips

	Residential ^a	Retail ^a	Total Person Trips
Weekday Morning	Residential	itetaii	ilips
Enter	32	4	36
<u>Exit</u>	<u>92</u>	<u>3</u>	<u>95</u>
Total	124	7	131
Weekday Evening			
Enter	96	13	109
<u>Exit</u>	<u>61</u>	<u>15</u>	<u>76</u>
Total	157	28	185
Saturday Midday			
Enter	80	17	97
<u>Exit</u>	<u>84</u>	<u>16</u>	<u>100</u>
Total	164	33	197

a Person trip generation estimate with internal capture credits applied.

Mode Share

The mode shares used for this evaluation were developed considering multiple sources. These include a traffic study³ for a prior development proposal on the Project Site, and data from the Notice of Project Change (NPC)⁴ prepared for the Partner's office development within Assembly Square. Mode shares presented as part of the nearby North Point development also were considered due to the similarities in some components of that project. The resulting anticipated mode splits are presented in Table 5. These represent the mode-splits which were conservatively utilized in the Traffic Impact and Access Study accompanying this submittal. Through the implementation of this Mobility Management Plan it is the hope and expectation of the Proponent that the percentage of trips made by automobile can be reduced to under 50-percent. Accordingly, while an 80-percent retail automobile usage was evaluated as part of the PUD-PMP transportation analysis, the estimates shown in Table 5 are based on the desired 50-percent maximum, which should be attainable in the overall multi-modal environment.

^{3 &}lt;u>The Office and Research Center + The Residences at Assembly (Chapter 3 – Transportation)</u> Design Consultants, Inc. (Somerville, Massachusetts), September 30, 2016.

^{4 &}lt;u>Assembly Row Revised Program for Partners Healthcare Site – Notice of Project Change:</u> VHB, Watertown, Massachusetts (May 15, 2014).

Table 5 Alta XMBLY Mode Share

Use	Vehicle	Transit	Bike/Walk
Residential	43%	47%	10%
Retail/Restaurant	50%	25%	25%

Source: Based on hybrid of mode shares used in Partners Health Care Study PNF (2014), Certified NorthPoint TIS (with data from Kendall Square K2 City of Cambridge, "Hotel Parking and Transportation Demand Management Reports – City of Cambridge", Assembly Edge PUD-PMP (2017), US Census data, and Boston Transportation Department data for Zone 11 (Sullivan Square).

The mode shares discussed above were applied to the net-new person trips to generate the adjusted Project trips by mode. The <u>local</u> average vehicle occupancy, based on US Census data for each primary use then was applied to the vehicle mode to reflect the number of vehicle trips generated by the Site.

Pass-By Trips

While the ITE rates provide estimates for all the traffic associated with each land use, not all of the traffic generated by the Project will be new to the area roadways. For example, a portion of the vehicle-trips generated by the retail land use will likely be drawn from the traffic volume roadways adjacent to the Project Site. For example, someone traveling on Grand Union Boulevard may choose to deviate from their original travel path to visit the site retail, before heading back to continue to their final destination. For this evaluation, ITE pass-by rates for LUC 820 (Shopping Center) were utilized for the retail trip generation, and applied to existing trips on the surrounding roadways. Specifically, 34-and 26-percent of the Site trip generation was assumed to be drawn from the surrounding roadway network during the weekday evening and Saturday midday peak hours, respectively. For all other time periods studied, a 25-percent pass-by rate was assumed.

Project-Generated Trips

The mode share and local average vehicle occupancy were applied to the person trips to estimate net new trips by mode, and then the pass-by adjustments noted above were applied to the vehicle trips generated by the retail portion of the Site. Tables 6 and 7 summarize the net new trips by mode and net new vehicle trips by use, respectively.

Table 6 Project-Generated Peak-Hour Trips by Mode

	Bike/Walk	Transit	Vehicle ^a
Weekday Morning			
Enter	3	15	12
<u>Exit</u>	<u>9</u>	<u>43</u>	<u>33</u>
Total	12	58	45
Weekday Evening			
Enter	9	43	34
<u>Exit</u>	<u>6</u>	<u>28</u>	<u>23</u>
Total	15	71	57
Saturday Midday			
Enter	8	36	29
<u>Exit</u>	<u>8</u>	<u>39</u>	<u>30</u>
Total	16	75	59

a Total development vehicle trips (<u>including pass-by trips</u> associated with the retail portion).

As shown in Table 6, the Project is expected to generate between 45 and 59 total vehicle trips during the peak hours studied. The breakdown of these trips by use are summarized below in Table 7.

Table 7 Project-Generated Peak-Hour Vehicle Trips by Use ^a

	Residential	Retail	- Pass-By ^b	Total Trips
Weekday Morning				
Enter	11	1	0	12
<u>Exit</u>	<u>32</u>	<u>1</u>	<u>0</u>	<u>33</u>
Total	43	2	0	45
Weekday Evening				
Enter	32	3	1	34
<u>Exit</u>	<u>21</u>	<u>3</u>	<u>1</u>	<u>23</u>
Total	53	6	2	57
Saturday Midday				
Enter	26	4	1	29
<u>Exit</u>	<u>28</u>	<u>3</u>	<u>1</u>	<u>30</u>
Total	54	7	2	59

New vehicle trips with internal capture credits applied.

As shown in Tables 7, the Project is expected to generate between 45 and 59 vehicle trips during the critical peak hours studied.

b Pass-by credits of 25%, 34%, and 26% applied to weekday morning, weekday evening, and Saturday midday peak hour retail trip generation, respectively.

Programs and Services

Transportation Demand Management (TDM) measures are most often directed at commuter travel and implemented at office sites. However, due to the mixed-use and transit-orientated nature of the Proposed Project, there also are opportunities to bring TDM programs to Alta XMBLY's proposed land uses involving residential housing, retail shops, restaurants, and active uses.

The following sections discuss the land use types for which TDM measures/Mobility Management Programs will be implemented for the Project. A description of the TDM elements is presented in this section along with information on how those elements aid employees, residents, visitors, residents, and retail patrons getting to and from the Project Site. As there may be multiple tenants located within the Site, TDM obligations will need to be included as part of the lease language between tenants and the property owner.

General TDM measures to be implemented as part of this Project will involve promoting transit use and facilitating bicycle and pedestrian travel both through Site amenities and ongoing practices and programs. These will include providing bicycle racks and amenities and also may involve providing a new Blue Biles bike-share station within the overall XMBLY development site. The mixed-use nature of the overall XMBLY site by itself also effectively will function as a TDM measure. Specifically, with the variety of uses proposed and already in place in the surrounding area, the need to travel off-site by automobile for dining or shopping opportunities will be minimized. With the mixture of Alta XMBLY residences and office/lab uses in the surrounding XMBLY site and beyond, it is possible that some residents may specifically choose to work at the Site due to it also being their place of employment, further reducing the need for vehicular travel.

The following plan first addresses general TDM measures that apply to the whole Project Site, then special programs for the residents, retail shops and restaurants.

General Measures

TMA involvement

The Proponent is committed to becoming an active member of the Assembly Square Transportation Management Association. Through this involvement, the pedestrian-friendly nature of the Site design, and internal roadway networks a framework for offering alternative transportation services will be provided. Post-construction traffic monitoring and evaluation of TDM programs also will be the responsibility of the Proponent as discussed later in this section.

Transportation Coordinator

A TDM coordinator will be designated to oversee all TDM programs for Alta XMBLY. Starting with this initial phase of development, an overall on-site TDM coordinator also will be designated. The TDM Coordinator work location and contact information will be

provided to the Director of Transportation & Infrastructure (the "Director") prior to the issuance of a Certificate of Occupancy for Alta XMBLY. The specific office location for the TDM Coordinator will be shown on plans to be submitted to the Director prior to the submittal of the Building Permit application.

If any buildings are sold to a separate property owner in the future (which is not anticipated), then any such building will be required to have its own TDM coordinator as well due to the separate ownership. The person(s) in this role will coordinate with other organizations within Assembly Square to help promote a reduced reliance on single-occupant motor-vehicle travel to the Project Site. To that end, the TDM measures identified in the following sections will be implemented under the direction and supervision of this person. The final job description for this role will be determined over time, but the duties of the on-site TDM coordinator will include, but not be limited to:

- Acting as a liaison with Site employers and MassRIDES;
- Assisting site retail employees and residents with ride matching and transportation planning;
- Developing and implementing appropriate TDM measures;
- Disseminating information on alternate modes of transportation and developing transportation related marketing and education materials;
- Hosting an annual mobility management educational meeting for tenants and their employees (both the content of this meeting and associated posted material also shall be provided to the Director for review and approval prior to the issuance of a Certificate of Occupancy);
- Developing and maintaining information pertaining to pedestrian and cycling access to and from the Project Site;
- Distributing transit maps and passes;
- In retail tenants' lease agreements the Proponent will require that tenants be registered with the MassRIDES Emergency Ride Home (ERH) program, or to provide a similar ERH service, with a copy of the lease agreement language specifying that being provided to the Director for review prior to the issuance of the building's Certificate of Occupancy; and
- Retail tenants will make efforts to seek qualified candidates located within one-quarter mile (i.e., walking distance) of the Site.

Any retail tenants with more than fifty (50) employees also will submit their own Mobility Management Plan, with a copy of the lease noting this requirement being provided to the Director prior to the lease execution.

Promote Transit Use

Access to public transportation will significantly reduce demand for vehicular travel and parking spaces. This should be particularly effective in relation to the MBTA Orange Line Assembly Square Station already being in operation within a short walking distance to the Site.

As noted earlier, the on-site TDM coordinator will provide a central commuter information center within the Project Site in a prominent location such as in a building foyer, or near

garage elevators. This will provide retail employees, residents, and visitors with transit maps and schedules and route information for pedestrians and cyclists.

Facilitate Bicycle and Pedestrian Travel

Travel to the Project Site by cycling or walking will be promoted by the Proponent through the provision of improved bicycle and pedestrian connections within the Project Site and surrounding Assembly Square area. In addition to secured, 111 covered bike parking spaces within Alta XMBLY, bicycle racks also will be provided at locations surrounding the building. Walking to and from Alta XMBLY will be encouraged by the provision of the surrounding pedestrian-friendly XMBLY site layout, which features sidewalks and crosswalks at key points and connecting to adjacent planned developments. The bicycle and pedestrian infrastructure improvements will help to promote non-vehicular travel to the Project Site.

The nearest Blue Bikes bike-sharing station to the Site is located at Broadway at Mt. Pleasant Street approximately 0.40 miles to the south. The overall XMBLY developer already is committed to working with Blue Bikes to inquire about the possibility of a new station located in close proximity to Alta XMBLY. The exact timing and number of bike at the station will be determined through discussions between Blue Bikes, the City of Somerville, and the overall XMBLY developer.

Secured bicycle parking spaces will be provided to meet the City of Somerville requirements. In total, 111 secured bicycle parking spaces area required for Alta XMBLY, and these spaces will be provided within the building. The Project also will be providing short-term bicycle racks within 50 feet of each building entrance. The exact capacity and location of each rack will be determined through consultation with the City of Somerville.

Parking Management

The parking ratios proposed for the Project are considerably lower than those found in a suburban setting, and are low even for sites that are well-served by public transportation. With the limited supply, parking spaces will need to be allocated to a select number of residents.

With the Site being located within 1,000 feet of the MBTA Orange Line Assembly Square Station retail employees not having an automobile should not be a hardship. In addition to the Orange Line, travel by bus, bicycle, or walking all are viable options which would not require parking. Most of the Project retail space will consist of small shops, restaurants, or cafes within the ground-level of the buildings. Even without any formal shared parking program, there clearly will be shared activity. With this type of retail/restaurant development, most customer traffic should be in the form of residents or office/lab workers already working in the immediate area as opposed to destination retail traffic.

Shared Vehicle Services

The parking needs for the Project will be lessened due to the nearby availability of public transit currently provided in the area. Furthermore, alternate means of travel, such as taxi,

private ride services (Uber, Lyft, and others) should continue to reduce the parking needs for this area. The exact level of usage by these private ride-sharing services can be quantified through post-opening monitoring studies to be conducted as discussed later in this document.

Use-Specific Measures

In addition to the general TDM measures outlined above, the following use-specific programs for the residents, retail shops and restaurants also will be provided.

Retail/Restaurants

The Proponent will seek to attract a variety of retail shops, restaurants, and service tenants as ground-floor supporting uses. These shops will potentially include restaurants, apparel, furnishings, general merchandise, and service uses like banks and office supplies. As most of these businesses will be small shops, there will not be the same levels of TDM opportunities internal to each individual business as will be available with larger employers, but employees who work on the Project Site will be able to take advantage of the transportation guidance and programs coordinated by the transportation coordinator.

The suite of TDM measures to be implemented in association with the retail shops are fewer than for traditional offices, but will still have an impact in reducing single-occupant vehicle travel. The retail/restaurant TDM program may include the following:

- Ride matching services and transit information provided by the on-site TDM coordinator or MassRIDES.
- > Tenants will provide employees with Qualified Transportation Fringe benefits per current U.S. Internal Revenue Service Code, with a copy of the lease agreement language specifying that being provided to the Director for review prior to the issuance of the building's Certificate of Occupancy;
- Offer direct deposit to employees.
- As noted earlier, the Proponent will consider providing preferred parking for lowemitting fuel-efficient vehicles and/or electric vehicle charging stations within each of the garages serving the buildings comprising the Proposed Project.

Residential

In addition to providing a pedestrian friendly, mixed-use transit-orientated environment, the Proponent will enact a variety of additional strategies to reduce the need for auto trips by Alta XMBLY residents. This will include working with a car-sharing service (such as Zipcar) to provide cars for periodic use by residents, if such as demand exists.

Several of the TDM measures to be implemented for the entire Project Site will be attractive to new residents. Specifically, the provision of secured bicycle storage, bicycle racks, pedestrian walkways, and proximity to public transportation, including several bus lines and the MBTA Assembly Square Orange Line station should help to minimize the

need for vehicular travel and parking spaces. As noted earlier, the Proponent will consider providing preferred parking for low-emitting fuel-efficient vehicles and/or electric vehicle charging stations within each of the garages serving the buildings comprising the proposed Project.

Monitoring and Annual Reporting

The Proponent will conduct annual travel surveys through the on-site TDM coordinators to be appointed as outlined above. These surveys will be developed through consultation with the City to determine the number of retail site employees utilizing public transportation, those traveling to the Site by private automobile, and those using carsharing services. Employees also will be surveyed to identify those that bike or walk to and from work.

Following the opening of the Site, biennial (every other year) counts of entering and exiting automobile trips for the Alta XMBLY parking garage will be conducted as part of the overall XMBLY traffic monitoring. The post-opening monitoring also will include the annual reporting of parking utilization for the Alta XMBLY parking garage. This will be done through an inventory to be conducted for a representative weekday midday period when it can reasonably be assumed that the combined peak parking demand would occur. As part of the summary report to be provided to the City, a status summary of the Mobility Management Plan in place at the Site also will be provided. In keeping with standard practices for the City of Somerville, all of the monitoring outlined above will occur during the months of April/May or September/October, unless other time periods are pre-approved by the City.