



CITY OF CAMBRIDGE

TRAFFIC, PARKING, + TRANSPORTATION

MEMORANDUM

To: Cambridge Planning Board

From: Brooke McKenna, Transportation Commissioner *BMCK*

Date: July 2, 2024

Subject: 2400 Massachusetts Avenue Project, North Cambridge Partners (PB#403)

The Cambridge Traffic, Parking, and Transportation Department (TP+T) has reviewed the Transportation Impact Study (TIS) for the proposed 2400 Massachusetts Avenue Project by North Cambridge Partners.

The Project proposes a 56-unit multifamily building, approximately 7,200 square feet of ground floor retail space, 67 auto parking spaces, 60 long-term bicycle parking spaces, and 12 short-term bicycle parking spaces. The Project will replace an existing 19,472 sf office/retail building and a surface parking lot with about 45 parking spaces.

TP+T certified the Project's TIS as accurate and complete on May 10, 2024. The TIS evaluated the transportation conditions around the site, including adjacent roadways and intersections, the Project's trip generation, and a 5-year future transportation analysis which includes a general background traffic growth rate and other development projects in the area. The TIS reviewed all modes of transportation (automobiles, transit, walking, and bicycling).

The TIS indicated that the project will generate a total of:

- 1050 daily person trips (91 AM person trips/97 PM person trips).
- 380 daily vehicle trips (33 AM Peak/36 PM peak hour vehicle trips)
- 316 daily transit trips, (27 AM Peak/29 PM Peak hour transit trips)
- 90 daily pedestrian trips, (7 AM/6 PM Peak hour pedestrian trips)
- 160 daily bicycle trips, (14 AM/17 PM Peak hour bicycle trips)
- 96 daily work from home trips (9 AM/8 PM Peak hour work from home trips).
- 8 daily other trips (1 AM/1 PM Peak hour other trips).

The TIS indicated that the Planning Board Special Permit transportation criteria were exceeded in 7 instances as shown below. The full Planning Board criteria summary Tables are attached.

- The pedestrian delay criteria were triggered at the Massachusetts Avenue / Cedar Street intersection for pedestrians crossing Cedar Street and crossing Massachusetts Avenue during the AM and PM peak time periods (PLOS E).
- The bicycle facility criteria were triggered for Harvey Street, Cedar Street, and Alberta Terrace because none of these road segments have bicycle facilities.

TP+T offers the Planning Board the following comments and recommendations for this Project:

1.0 General Comments.

Overall, TP+T supports replacing a large surface parking lot with a mixed-use housing/retail project because a surface parking lot is not the best use of land in a city.

The Project is located in a multimodal area. The site is a block away from bus stops for the MBTA route #77, the Alewife Linear Park path, and a Bluebikes bikesharing station at the Mass. Avenue /Cameron Avenue intersection. The MBTA Davis Square station, which serves the MBTA Red Line and six buses (#87, #88, #89, #90, #94 and #98), is about a 10-minute walk from the site. The site is also about a 15–20-minute walk to the MBTA Porter Square and Alewife Stations.

The area roadways, especially Massachusetts Avenue, are very congested today, particularly during peak morning and evening commute rush hours. Massachusetts Avenue was counted in January and February 2024 as having an average daily traffic of 19,500 vehicles per day, including 1,348 in the morning peak hour and 1,660 in the evening peak hour. This level of traffic will continue to be the case with and without this Project, which is why the most important thing for this Project is to do everything it can to minimize new automobile trips and support and encourage more sustainable forms of traveling such as walking, biking and taking transit.

The key transportation issues TP+T have been discussing with the Applicant include site access and loading locations, number of parking spaces, short-term bicycle parking space layout and sidewalk designs, and transportation mitigation. These items are discussed in further detail below.

2.0 Site Curb Cut Access.

TP+T has indicated to the Applicant that we are open to supporting a curb cut on Harvey Street if it meets the TP+T and Department of Public Works guidelines for creating a new curb cut (e.g., must meet sightline triangles and slopes) and the impacts of the curb cut is mitigated. TP+T will work with the Applicant to finalize the details on the proposed Harvey Street curb cut prior to the issuance of the building permit.

A new curb cut on Harvey Street would be instead of using the site's existing curb cut on Cedar Street which they would close. The Applicant indicated this was a promise they made to residents living on Cedar Street and Alberta Terrace who did not want the site's curb cut on those streets. TP+T understand residents' preferences and the position the Applicants is in to get support for the Project.

From TP+T's perspective, a curb cut for the Project would be best located at or near the existing curb cut on Cedar Street for the following reasons:

- Havey Street is a short block and a curb cut on Harvey Street would be closer to an intersection and add more conflicts on this short street.
- During peak commuting hours, especially during the evening peak hour. Cars backup on Harvey Street from Massachusetts Avenue to Cedar Street which will

block the proposed curb cut and could make it difficult for vehicles to turn left off Harvey Street into the site. If a car is blocked from making a left into the site from Harvey Street, cars can back up onto Mass. Avenue.

- A new curb cut on Harvey Street could potentially impact potential future changes to Harvey Street. There are currently no design plans for Massachusetts Avenue or Harvey Street in this area, but it is expected to be considered as the Massachusetts Avenue partial reconstruction plan and later if and when any future full reconstruction of Massachusetts is considered. It is also unknown what impacts a curb cut on Harvey Street may have on any potential future development of the triangle parcel bounded by Mass. Ave, Harvey Street, and Cedar Street.

However, as stated above, TP+T is open to a curb cut on Harvey Street.

3.0 Loading and Service Delivery.

The Project also proposes a new loading zone on Alberta Terrace. TP+T believes loading activities should occur on a Projects' site, like it is today for this site. But the Applicant indicated that it is not possible for them to provide loading on the site.

Although TP+T does not fully agree with the Applicant, we have indicated that we are open to designating a loading zone on Alberta Terrace, with the understanding that the loading zone would not be exclusive to serving this Project. It would be a public on-street loading zone and TP+T reserves the right to eliminate or relocate at any time in the future if needed to best manage safe and efficient traffic conditions for the area. Like a potential new curb cut on Harvey Street, the Project should mitigate its loading, service delivery needs and drop-off/pick-up activities in a manner approved by TP+T (See TP+T's recommended Transportation Mitigation below in Section 6.0).

4.0 Residential and Retail Parking Spaces.

The Project proposes 67 total parking spaces (plus seven (7) motorcycle parking spaces) in an underground garage or 1.2 parking spaces per dwelling unit. TP+T does not support a parking ratio of more than 1 space per dwelling unit because parking ratio demands at other nearby multi-family units in the Project's area have not shown that level of demand. In 2023, the 46-unit St. James Place condos at 7 Beech Street and 37-unit apartments at 7 Cameron Avenue had a maximum parking demand of 0.95 and 0.7 spaces per unit respectively.

TP+T understands neighbors' concerns about a Project's potential impact on on-street parking. It is a common concern raised by neighborhood residents. But TP+T has not seen any multi-family Projects in Cambridge with a parking demand greater than 1 space per unit. Providing a lot of parking encourages more automobile ownership and more traffic and area parking impacts.

The project will not provide any parking for retail patrons but has mentioned the possibility of providing a few parking spaces for retail employees. The applicant did not provide the number of parking spaces expected to be used for retail employee parking or information about how parking access would be managed.

5.0 Sidewalk Design, Short and Long-Term Bicycle Parking.

TP+T believes that the 60 long-term bicycle parking spaces appear to be acceptable.

TP+T is concerned that the 12 short-term bicycle parking spaces on Alberta Terrace may not meet the City’s bike parking layout guidelines taking into account sidewalk widths that can successfully support street trees, potential curbside EV charging stations, and comfortable clear sidewalk space for pedestrians. Figure 9.c.2 in the TIS shows a section of Alberta Terrace with only 3 feet clear space between a short-term bike rack and street tree, which would not meet DPW’s minimum of 4 feet clear sidewalk space. Sidewalk widths for Harvey and Cedar Street also need more review.

6.0 Transportation Mitigation.

TP+T provides the following recommendations for transportation mitigation to offset the project’s transportation impacts, which are consistent with other development projects that have a Planning Board Special Permit in Cambridge.

Item#	Transportation Mitigation	Due Date
1	<p>To mitigate a new curb cut on Harvey Street and for providing no on-site loading, TP+T recommends the Project either design and construct a physically separated cycle track along the site’s frontage on Mass. Avenue, between Harvey Street and Alberta Terrace, or contribute \$125,000 to the city for this effort. This cycle track will also prevent vehicles blocking the bike lane to access the retail stores.</p> <p>The scope of work is expected to include designing either a sidewalk level cycletrack or a raised curb/island between the vehicular space and bicycle facility, as approved by TP+T and DPW, and serving as a continuation of the bicycle facility being constructed on Massachusetts Avenue in this area as part of the City’s Mass Ave Partial Construction Project. TP+T will work with the Project’s civil engineer on the design, which will include roadway surface elements, drainage considerations, signs, markings, and other related streetscape items. TP+T may remove or modify this condition based on mutual agreement with the developer.</p> <p>Following construction of the cycle track, the Property owner should also be responsible for maintaining the cycle track along the site frontage (i.e., remove debris, snow and ice).</p>	<p>If the Developer opts to construct the cycle track, final design is to be approved by the City prior to the issuance of a Building Permit and construction must be complete prior to issuance of an Occupancy Permit unless approved by TP+T due to unforeseen or reasonable delays.</p> <p>If the Developer opts to make the payment, the first half of the payment will</p>

		be due prior to issuance of the Building Permit and second half of the payment will be due prior to the issuance of the final Certificate of Occupancy.
2	Contribute \$25,000 to the City toward the public Bluebikes bikeshare system.	Payment shall be provided prior to the issuance of the final Certificate of Occupancy.
3	EV stations for 25% of parking spaces and 75% EV ready.	Ongoing after issuance of the first Occupancy Permit.
General TDM		
4	<p>Designate a transportation coordinator (TC) to implement the TDM plan. For condos the TC can be Property Manager for the building. The TC will:</p> <ul style="list-style-type: none"> a) Oversee the marketing and promotion of transportation options to all residents and retail employees and respond to individual requests for information in person and via phone and email. b) Compile and distribute up-to-date information explaining all transportation options to new residents as part of their welcome packet. c) Post their email and phone information in a central and visible location where all residents can access it and ensure their contact information is available to all retail employees. Be the liaison between the site and transportation organizations including, but not limited to, the MBTA and the City of Cambridge. d) Participate in any TC training offered by the City of Cambridge. 	Ongoing after issuance of the first Occupancy Permit.

Residential TDM	Prior to the issuance of the first Occupancy Permit, the project should demonstrate that the TDM measures will be implemented and how.	
5	To establish the habit of using public transportation, advertise and offer a Charlie Card loaded with value equivalent to two months of a bus/subway LinkPass (currently \$90/month) to each adult member of a residential household upon move-in. For rental units, this requirement renews each time a new household moves in. For condominium units, the requirement shall apply to only the initial condominium owners but is not required if individual owners subsequently sell their unit.	Applies only to first owners if units are condominiums. Otherwise, ongoing after issuance of the first Occupancy Permit.
6	To share and promote sustainable transportation information with residents and visitors, provide information on nearby transportation options in a central and visible location where residents and visitors can access it. If the information is provided in print, include nearby bicycle facilities, pedestrian facilities, and public transit schedules. An accurate real-time transportation information screen may be provided instead of print maps and schedules. If provided, the real-time transportation information screen must show nearby public transit, shuttle, and bikeshare availability.	Ongoing after issuance of the first Occupancy Permit.
7	Offer a one-year Bluebikes membership (minimum Gold Level) to each adult member of each household upon move-in. For rental units, this requirement renews each time a new household moves in. For condominium units, the requirement shall apply to only the initial condominium owners but not be required if individual owners subsequently sell their unit.	Applies only to first owner if units are condominiums. Otherwise, ongoing after issuance of the first Occupancy Permit.
8	Do not charge residents fees for bicycle parking.	Ongoing after issuance of the first Occupancy Permit.
9	Provide and maintain bike repair areas, including air pumps and other bike repair tools, in the long-term bicycle parking areas.	Ongoing after issuance of the first Occupancy Permit.
10	Provide information about transportation options available to residents in a welcome packet. The packet will contain information on both the range of options available and any building manager or condominium association programs	Ongoing after issuance of the

	to support the use of these options. Transportation information can be purchased from the Community Development Department. For condominium units, the requirement shall apply to only the initial condominium owners but not be required if individual owners subsequently sell their unit.	first Occupancy Permit.
11	Provide sustainable transportation information on the project's website, advertising, social media, and property newsletters.	Ongoing after issuance of the first Occupancy Permit.
Retail TDM	Prior to the issuance of the first Occupancy Permit, the project should demonstrate that the TDM measures will be implemented and how.	
12	Compile and provide to all retail tenants up-to-date transportation information explaining all commute options for distribution to all new employees as part of their orientation to full-time employees at retail businesses located in spaces over 2,000 square feet.	Applies only to first owner if retail spaces are condominiums. Otherwise, ongoing after issuance of the first Occupancy Permit.

CITY OF CAMBRIDGE
Special Permit Transportation Impact Study (TIS)

Planning Board Criteria Performance Summary
Page 1

Planning Board Permit Number: _____

Project Name: 2400 Massachusetts Avenue

Total Data Entries = 95

Total Number of Criteria Exceedances = 7

1. Project Vehicle Trip Generation

Weekday = 284 AM Peak Hour = 27 PM Peak Hour = 20 Exceeds Criteria? [Y/N] N/N/N

2. Level of Service (LOS)

Intersection	Weekday Morning Peak Hour			Weekday Evening Peak Hour		
	2024 Existing	With Project	Exceeds Criteria?	2024 Existing	With Project	Exceeds Criteria?
<i>Massachusetts Avenue at Cedar Street</i>	C	C	N	C	C	N
<i>Massachusetts Avenue at Harvey Street/ Cameron Avenue</i>	C	C	N	B	B	N
<i>Cedar Street at Harvey Street</i> Harvey Street WB LT/TH/RT Cedar Street NB LT/TH/RT Cedar Street SB LT/TH/RT	A A A	A C B	N N N	A A A	A C A	N N N
<i>Cedar Street at Existing Site Driveway</i> Site Driveway WB LT/RT Cedar Street NB TH/RT Cedar Street SB LT/TH	A A A	-- -- --	-- -- --	C A A	-- -- --	-- -- --
<i>Cedar Street at Alberta Terrace</i> Cedar Street NB TH/RT Cedar Street SN LT/TH	A A	A A	N N	A A	A A	N N
<i>Massachusetts Avenue at Alberta Terrace</i> Alberta Terrace EB RT Massachusetts Avenue SB TH	A A	A A	N N	B A	B A	N N
<i>Harvey Street at Proposed Site Driveway</i> Harvey Street EB TH/RT Harvey Street WB LT/TH Site Driveway NB LT/RT	-- -- --	C A A	-- -- --	-- -- --	C A C	N N N



3. Traffic on Residential Streets

Street Segment	Weekday Morning Peak Hour			Weekday Evening Peak Hour		
	2024 Existing Volume	With Project	Exceeds Criteria?	2024 Existing Volume	With Project	Exceeds Criteria?
Cedar Street, Massachusetts Avenue to Harvey Street (Amount of residential = >1/3 but <1/2)	278	283	N	280	284	N
Cedar Street, Harvey Street to Alberta Terrace (Amount of residential = >1/3 but <1/2)	421	424	N	455	458	N
Alberta Terrace, Massachusetts Avenue to Cedar Street (Amount of residential = >1/3 but <1/2)	14	18	N	18	22	N
Cameron Avenue, Massachusetts Avenue to Somerville City Line (Amount of residential = >1/3 but <1/2)	435	438	N	474	480	N

4. Lane Queue (for Signalized Intersections Critical Lane)

Intersection	No. of	Weekday Morning Peak Hour			Weekday Evening Peak Hour		
	Lanes Analyzed	Modified Baseline	With Project	Exceeds Criteria?	Modified Baseline	With Project	Exceeds Criteria?
<i>Massachusetts Avenue at Cedar Street:</i>	4						
Cedar Street EB LT/RT		2	2	N	5	5	N
Massachusetts Avenue NB TH		5	6	N	6	6	N
Massachusetts Avenue NB TH ^a		--	--	--	--	--	--
Massachusetts Avenue SB TH		20	20	N	18	19	N
Massachusetts Avenue SB RT	4	5	N	3	3	N	
<i>Massachusetts Avenue at Harvey Street/ Cameron Avenue:</i>	6						
Harvey Street EB LT/TH/RT		3	3	N	4	4	N
Cameron Avenue WB LT/TH/RT		12	12	N	5	6	N
Massachusetts Avenue NB LT/TH		6	6	N	10	12	N
Massachusetts Avenue NB TH/RT		3	3	N	4	4	N
Massachusetts Avenue SB TH		2	2	N	2	2	N
Massachusetts Avenue SB TH/RT	1	1	N	1	1	N	

^aThis is a "Bus Only Lane" and it was not modeled in the analysis. Therefore no calculated queue is provided.



5. Pedestrian and Bicycle Facilities (for Critical Pedestrian Crossing)

Pedestrian LOS

Intersection	Weekday Morning Peak Hour			Weekday Evening Peak Hour		
	2024 Existing PLOS	With Project	Exceeds Criteria?	2024 Existing PLOS	With Project	Exceeds Criteria?
Massachusetts Avenue at Cedar Street: Crossing Cedar Street (West) Crossing Massachusetts Avenue (Diagonal) Crossing Massachusetts Avenue (South)	E E D	E E D	Y Y N	E E D	E E D	Y Y N
Massachusetts Avenue at Harvey Street/ Cameron Avenue: Crossing Cameron Avenue (East) Crossing Harvey Street (West) Crossing Massachusetts Avenue (North) Crossing Massachusetts Avenue (South)	D D D D	D D D D	N N N N	D D D D	D D D D	N N N N
Cedar Street at Harvey Street: Crossing Harvey Street (East) Crossing Harvey Street (West) Crossing Cedar Street (North) Crossing Cedar Street (South)	B A B B	B A B B	N N N N	B A C B	B A C B	N N N N
Cedar Street at Alberta Terrace: Crossing Alberta Terrace (East)	A	A	N	A	A	N
Massachusetts Avenue at Alberta Terrace: Crossing Alberta Terrace (West)	A	A	N	A	A	N

Safe Pedestrian and Bicycle Facilities

Adjacent Street or Public Right-of-Way	Sidewalks or Walkways Present?	Exceeds Criteria?	Bicycle Facilities or Right-of-Ways Present?	Exceeds Criteria?
Harvey Street	Y	N	N	Y
Cedar Street	Y	N	N	Y
Alberta Terrace	Y	N	N	Y
Massachusetts Avenue	Y	N	Y	N



CITY OF CAMBRIDGE
Special Permit Transportation Impact Study (TIS)

Summary Sheet

Planning Board Permit Number: _____

Project Name: 2400 Massachusetts Avenue

Address: 2400 Massachusetts Avenue, Cambridge, MA

Owner/Developer Name: North Cambridge Partners LLC

Contact Person: Daniel Sibor

Contact Address: 9 South Street
Chestnut Hill, MA 02467

Contact Phone: 617-297-8849

ITE sq. ft.: 56 Apartments, 6,400 sf of retail space

Zoning sq. ft.: _____

Land Use Type: Mixed-Use

Existing Parking Spaces: 43 Use: Retail

New Parking Spaces: 67 Use: Mixed-Use

Date of Parking Registration Approval: _____

Trip Generation:	Daily	AM Peak Hour	PM Peak Hour
Total Trips	1050	91	97
Vehicle	380	33	36
Transit	316	27	29
Pedestrian	90	7	6
Bicycle	160	14	17
Work From Home	96	9	8
Other	8	1	1

Mode Split (person trips):	Residential		Retail	
	Vehicle:	%	Vehicle:	%
	35.4	%	37	%
	Transit:	33.6 %	27	%
	Pedestrian:	4.6 %	12	%
	Bicycle:	4.9 %	24	%
	Work From Home	20.0 %	--	%
	Other:	1.5 %	0	%

Transportation Consultant: Vanasse and Associates, Inc.

Contact Name: Scott W. Thornton, P.E.

Phone: 978-474-8800

Date of Building Permit Approval: _____

