



**Memorandum**

**To:** Cambridge Planning Board  
**From:** Brooke McKenna, Commissioner *BMK*  
**Date:** April 21, 2026  
**Subject:** Healthpeak PUD – Transportation Impact Study (TIS) (PB# 410)

The Cambridge Department of Transportation (DOT) has reviewed the Planned Unit Development (PUD) Master Plan and Transportation Impact Study (TIS) for Healthpeak, OP, LLC.

The Project proposes to redevelop approximately 42-acres in the Alewife Quadrangle neighborhood, into approximately five million square feet of development consisting of residential, office/laboratory, and retail uses.

The Project includes new public open space, a new pedestrian and bicycle bridge over the railroad tracks, and the conveyance of land for a Department of Public Works yard and administrative building(s) to be constructed by the city. A summary of the Project is shown in the Table below:

**Table 1  
Proposed Development Program Summary**

Land Use	Size
Technical Office/Lab	±1,260,500 SF
General Office	±1,310,500 SF
Residential	±1,985,000 SF / ±2,300 units
Retail	±75,640 SF
<b>Total (net new)</b>	<b>±4,631,640 GFA</b>
<b>Total (includes existing to remain)</b>	<b>±4,825,140 GFA</b>
<b>Maximum Auto Parking Spaces</b>	4,578 spaces*
<b>Minimum Long-Term Bicycle Spaces</b>	±3,076 spaces*
<b>Minimum Short-Term Bicycle Spaces</b>	±442 spaces*
<b>Open Space</b>	13 acres

Source: Healthpeak PUD Master Plan, Preliminary Development Plan, Vol. 1, March 2026

\* Final number to be determined in Final Development Plan and Building Permits.

Healthpeak OP, LLC completed a Transportation Impact Study (TIS) for the Project, which was certified by DOT on January 20, 2026. The Project will generate the following trips:

- 1,538 net new AM and 1,583 net new PM peak hour vehicle trips
- 883 AM/945 PM peak hour transit trips
- 299 AM/347 PM peak hour pedestrian trips
- 224 AM/226 PM peak hour bicycle trips
- 17 AM/18 PM peak hour micromobility trips
- 953 AM/926 PM peak hour telecommuting trips

### **Planning Board Special Permit Transportation Exceedances**

The TIS indicated that the Project triggered 107 Planning Board Special Permit Transportation Exceedances, which are summarized below.

- 3 exceedances pertain to Project trip generation
- 20 exceedances pertain to vehicle level of service (LOS)
- 20 exceedances pertain to traffic on residential streets
- 13 exceedances pertain to vehicle queues
- 51 exceedances pertain to pedestrian level of service (PLOS)

The Planning Board Transportation Criteria Summary Sheets are attached to this memo and the full TIS is included in Appendix A in the Healthpeak March 2026 Preliminary Development Plan application.

### **Project's Impact on Areawide Traffic Congestion**

The TIS provided a comprehensive multi-modal analysis of the existing transportation conditions in the Alewife area and impacts the Project will have on roads, intersections, on and off-street parking, pedestrian, bicycle, and transit conditions. The TIS included 20 intersections and considered the cumulative transportation impacts with other development projects in the area.

The existing deficiencies in the Project area in the Quadrangle include fair-to-poor sidewalk and roadway conditions, no separated bicycle facilities, limited connections and barriers into and out, though, and around the Quadrangle (such as the Fitchburg railroad).

As the Planning Board members know, the Alewife area roadways are highly congested today, especially during morning and evening peak commuting hours. The vehicle trips resulting from the Project will add vehicle travel time delay and queuing to study area intersections. Excessive traffic undermines the Project's stated goals of creating

walkable streets, vibrant open space, and pedestrian-oriented experience that fosters face-to-face interaction.

Table 2 shows the average increase in delay at some intersections when the Project is fully built out and with the mitigation proposed in the TIS, such as traffic signal timing adjustments. When considering other area development projects and a general background traffic growth rate of 0.5% per year the traffic model shows additional intersection delays.

**Table 2**  
**Summary of Project impacts at some Intersections**

Intersection	Peak Hour	Increase in delay (2024 Build Mitigated Condition)
<b>Concord Avenue at Blanchard Road / Griswold Street</b>	AM	58.6 seconds
	PM	40.5 seconds
<b>Concord Avenue at Fawcett Street</b>	AM	12.9 seconds
	PM	24.9 seconds
<b>Concord Ave at Alewife Brook Pkwy Rotary</b>	AM	90.6 seconds
	PM	93.8 seconds
<b>Concord Ave at Fresh Pond Pkwy Rotary</b>	AM	72.4 seconds
	PM	38.9 seconds
<b>Alewife Brook Parkway at Rindge Ave</b>	AM	52.2 seconds
	PM	109.4 seconds

Source: Healthpeak TIS, January 2026. Chapter 6, Vehicle Capacity Analysis

**DOT Initial Comments**

DOT is enthusiastic about this Project to help bring about a long-standing City goal to transform the Quadrangle area into a vibrant, sustainable, and multi-modal neighborhood. The transportation impacts are significant with many new trips that need to be adequately mitigated so that new residents and workers have a wide variety of equally attractive options for accessing the site in sustainable ways.

Healthpeak’s commitment to build the pedestrian and bicycle bridge is a zoning condition that allows them to exceed the base zoning district limits on Gross Floor Area (GFA) and Floor Area Ratio (FAR), subject to Planning Board approval. The new bridge is linked to these zoning requirements.

The bridge is an important component of the project and will provide meaningful transportation benefits, but it will not fully offset all of the project’s transportation impacts.

The Project's mixed-use program—which designates at least 40 percent of the non-exempt GFA for residential use—generally aligns with the City's 2019 Alewife District Plan. By allowing more people to live and work within the same area, mixed-use development reduces reliance on automobiles for commuting. However, this outcome is strongest when paired with limited parking spaces. DOT is concerned about the Project's proposed maximum of 4,578 parking spaces because it includes currently overbuilt parking that is proposed to remain and we think shared parking and other parameters of their parking analysis can be refined.

New and reconstructed streets—with wider pedestrian sidewalks, street trees, and separated bicycle facilities—generally align with the City's Alewife District Plan. DOT has been working with Healthpeak and has been providing comments to them on the street plan.

The Project proposes a new multi-use path along the south side of the Fitchburg railroad tracks to Blanchard Road. This path extension will create a new east-west pedestrian and bicycle connection into and through the Quadrangle. DOT strongly supports this commitment by Healthpeak, which will also require coordination with the MBTA, the landowner.

### **Proposed Scope of Work for Final Development Plan**

DOT believes that the transportation sections in the Final Development Plan should focus on the following items.

#### **1. PTDM Plan**

- Because the Project is creating new non-residential parking spaces, it triggers the City's Parking and Transportation Demand Management (PTDM) Ordinance 10.18. The Ordinance requires the Project to obtain an approved PTDM plan from the City's PTDM Planning Officer to minimize air pollution, single occupancy vehicle trips, and/or vehicle miles of travel generated by the proposed new parking spaces.
- The PTDM Planning Officer is currently working with the applicant to create a PTDM Plan for the Project. The PTDM plan will include a commitment to keep the percentage of drive-alone trips to the site below a certain level, a commitment to implement comprehensive non-residential Transportation Demand Management (TDM) measures, annual transportation monitoring, and other PTDM-related commitments.
- The Alewife District Plan established the expectation that PTDM Plans in this neighborhood will require end-users to be charged market rate for parking, and that the PTDM Plans will be "robust." The most recent draft provided by the applicant includes commitments to many of the TDM measures typically included in PTDM Plans, including offering employees transit pass subsidies and

Bluebikes memberships, and charging employees for parking. The PTDM Planning Officer is continuing to work with the Applicant to ensure that the final PTDM Plan for the Project meets the expectations of the Alewife District Plan. Alewife TMA shuttle service expansion and Bluebikes station expansion are expected to be included in the PTDM Plan.

- As noted in 10.18.050(f), a final PUD Special Permit cannot be issued until the Project has an approved PTDM Plan.

## **2. Automobile Parking**

- The Final Development Plan should include a maximum number of parking spaces for the PUD. DOT staff have been working with the applicant on the number of parking spaces in coordination with the PTDM plan.
- The Final Development Plan should include on-street parking spaces on private ways in the total number of proposed parking spaces.
- DOT recommends that the Final Development Plan incorporate as many of the following reductions in proposed built parking as possible:
  - According to the shared parking analysis in the certified TIS, 1,024 of the 1,722 residential spaces are proposed to be reserved for residential parking only. Pooled parking is most effective at reducing the amount of building parking when uses with different occupancy peaks (like residential and office/lab uses) share parking. At the peak office/lab demand hour (noon), residential parking demand drops to 57% of the overnight maximum. The applicant could build up to 440 fewer parking spaces by sharing all residential parking with other uses.
  - Reducing existing parking to remain over time, to no more than the current zoning maximums for those uses (366 fewer spaces).
  - Reducing the parking ratio for General Office use: A 30% SOV rate (Citywide goal) could be accommodated with 185 fewer spaces.
  - Reducing the parking ratio for Residential use: 2024 residential reporting for the Alewife area shows a parking occupancy ratio of about 0.6 spaces per unit. Even a modest reduction from 0.75 to 0.70 spaces per unit (slightly higher than the 2023-2024 average of 0.67) would mean 115 fewer spaces.
- DOT recommends that the Final Development Plan include a plan for evaluating the built and planned parking supply at key points in the project's design and build out, with conditions to reduce the maximum number of parking spaces in later phases, if appropriate.
- The proposal includes a request for Planning Board approval of Parking as a Principal Use under 20.1100.4.3.1 for the above-ground garages P1, P2, P3, and P4. It is not clear from the application materials why the applicant is seeking this

particular approval. The shared parking described in the application appears to be pooled accessory parking, allowed with Planning Board approval under 20.1100.6.3. The Final Development Plan should include more detail about the anticipated use of these garages as principal use parking facilities. The Final development plan should also clarify how a portion of the “accessory residential parking spaces” will be shared with non-residential uses in the PUD.

### **3. 40-Scale Street Plan, Conveyance of Land, and Street Maintenance Agreements**

- For the PUD Final Development Plan, the applicant should provide an updated 40-scale street and infrastructure plan that has the general dimensional layout and urban design character of the streets in the Quadrangle.
- The plan should be reviewed and approved by DOT, DPW, and CDD before submittal to the Planning Board.
- The schematic plan shall show roadways, existing and proposed curbs, sidewalks, and bicycle facilities and widths, pavement markings, traffic control devices, street trees, parking, general alignment of utilities, existing property lines, and proposed setbacks and easements. Key dimensions include maximum travel lane width (10-10.5 feet), minimum plowable width for bike lanes (7 feet), and Corridor and Neighborhood Main Street widths for sidewalks and separated bike lanes, as outlined in the Citywide Urban Design Guidelines for Cambridge. Healthpeak should work with DOT staff to identify opportunities where flexibility in minimum dimensions may be recommended to achieve connected networks during and after project construction.
- The schematic plan should show how transitions and temporary facilities on unreconstructed portions of streets work with the proposed plans.
- The Final Development Plan should propose a construction phasing plan (e.g., when streets will be reconstructed and a general framework for a maintenance agreement with the City (e.g., snow removal in bicycle facilities).
- As approved in the 40-scale plan, the Project will construct or reconstruct Quadrangle roadways including Fawcett Street, Moulton Street, Smith Place, Wilson Road extension, New Mooney Street, Smith Place extension, and Fawcett Street extension. The limits of work on public streets may need to be expanded or refined from what was presented in the Preliminary Development Plan. For example, a raised bicycle facility may need to be constructed on both sides of a street using public right of way—whether Healthpeak owns the abutting property or not—to avoid network gaps.
- DOT recommends that as the Project is built out over time, minor changes to the geometric elements of the 40-scale plan can be proposed by Healthpeak and reviewed and approved by DOT administratively. The Planning Board should

approve major changes that DOT believes significantly change the original plan concepts.

- DOT recommends the conveyance of Wilson Road between Fawcett Street and Moulton Street into the public right of way. Wilson Road is an important east-west collector, distributing trips and providing access to parcels, including those not owned by Healthpeak, within the Quadrangle. Street design and materials must conform to City standards to be accepted into the public right-of-way.
- DOT recommends that New Main Street function like a typical street with curbs and separation for users or like an actively managed, shared space that restricts access by passenger vehicle and limits deliveries at certain times.
- DOT recommends a 77-foot right-of-way for Adley Road, which is anticipated to connect to Spinelli Place as an extension of Wilson Road.
- DOT recommends more detailed working meetings with the City to refine the design of Smith Place. The layout constructed by Healthpeak should future-proof the implementation of further changes that advance the accessibility, safety, comfort, and connectivity of the walking and biking networks as additional properties along the street are redeveloped.

#### **4. Project Mitigation and Phasing**

The Project will have wide-ranging transportation impacts. To address exceedances of Planning Board transportation criteria and broader area impacts, the Final Development Plan should refine and build upon the Preliminary Development Plan, providing clear, actionable transportation mitigation commitments and timelines to effectively reduce Healthpeak’s TIS-related impacts, which may include the following:

- 4.1 Realign and fully signalize the Concord Avenue/Smith Place intersection. Slightly more work is needed to describe this specific commitment and timeline. For example, DOT questions if the new traffic signal should be installed sooner rather than later in Project phases. The commitment should be more specific and concise (such as the signal equipment will include transit priority signal, Miovision, new crosswalks and pedestrian ramps, audible pedestrian signals, etc).
- 4.2 Upgrade signal equipment at Moulton Street intersection and others. The Final Development Plan should provide details and timeline.
- 4.3 Connection between Fawcett Street to the 55 Wheeler Street project “Mews.” The Final Development Plan should describe this connection in more detail including design parameters, timeline, public pedestrian and bicycle access easement and maintenance (i.e., snow removal).

- 4.4 Construct or Upgrade MBTA and Alewife TMA shuttle bus stops. More work is needed on the specific locations, timelines, and verification that amenities such as benches and shelters will fit.
- 4.5 Multi-Use Path (Segment 1: Mooney Street area segment). DOT strongly supports extending the Belmont Path on the south side of the railroad tracks, adjacent to the “New Mooney Street” area. The Final Development Plan should clearly describe Healthpeak’s commitments to the design, construction, and path maintenance, including timeline. DOT understands that the path will need MBTA approval and will work with Healthpeak. If such approval is not granted by MBTA, an alternate mitigation project of approximately equal impact should be agreed upon by the property owner and the City.
- 4.6 Multi-Use Path (Segment 2: Between Smith Place and future Pedestrian and Bicycle Bridge). The Final Development Plan should clearly describe Healthpeak’s commitment to this path segment. If such approval is not granted by MBTA, an alternate mitigation project of approximate equal impact should be agreed upon by the property owner and the city.
- 4.7 Multi-use path (Segment 3: Between future Pedestrian and Bicycle Bridge and Alewife Brook Parkway). The Final Development Plan should clearly describe Healthpeak’s commitment for this path segment. DOT recognizes that none of the land in this segment is owned by Healthpeak. A potential mitigation option could be funding for a study and design of this path segment. If such approval is not granted by MBTA, an alternate mitigation project of approximate equal impact should be agreed upon by the property owner and the city.
- 4.8 Concord Ave Corridor Design and Construction. The TIS proposes several changes along Concord Avenue, including dedicated left- and right-turn lanes from the Quadrangle streets onto Concord Avenue, refreshed crosswalk markings, and minor curblin adjustments near the Concord Avenue/Fawcett Street intersection. DOT appreciates VHB’s work and believes additional study is needed, including mitigation of bus delay and unreliability caused by Project trips. As mitigation for the Healthpeak PUD, DOT recommends further advancement of the Concord Avenue Corridor Study, which may include developing additional alternatives, engaging with the public, and funding the 100% design and construction of the preferred improvements. As part of the Final Development Plan process, DOT can work with Healthpeak to establish an initial scope, timeline, and funding commitments.
- 4.9 Concord Ave./Blanchard Rd./Griswold St. Intersection. The TIS found that project-generated trips will increase congestion, delays, and queues at this intersection and did not provide other recommendations aside from signal

timing optimization. DOT is very concerned about the Project's impacts on this intersection. The Final Development Plan should further explore mitigation options and funding commitments, including up to a full redesign and reconstruction of this intersection.

- 4.10 Future proof pedestrian and possibly vehicle connection from Concord Avenue to Spinelli Place. The Final Development Plan should clarify Healthpeak's commitments on this topic.
- 4.11 Pedestrian and Bicycle connection to Rafferty Park. The Final Development Plan should clarify the specific location and type of connection, timeline, design details, and commitments for this connection.
- 4.12 Wheeler Street to Terminal Road connection. The TIS includes discussion of the longstanding "Terminal Road Connection" concept, which has been raised by the City and the public over many years. DOT appreciate VHB's work on this topic. DOT acknowledges that Healthpeak does not own any of the land needed for this connection. As part of the Final Development Plan, DOT recommends clarifying Healthpeak's commitments to further advance this connection, including any additional studies and potential funding needed to develop a final, feasible, and implementable plan. A connection for pedestrians, bicycles, and possibly vehicles could improve access and circulation for people living, working, and visiting the Quadrangle area and Healthpeak's buildings.
- 4.13 Rotary Improvements. The TIS found that Project-generated trips will increase congestion, delays, and queues at the Alewife Brook Parkway and Fresh Pond Parkway rotaries but did not provide recommendations. The Final Development Plan should explore potential mitigation measures to address these impacts. Because these are state-owned roadways, this analysis should also be incorporated into the MEPA Environmental Impact Review and coordinated with the state. Coordination with the state should also include planning for the future Alewife MBTA station and potential commuter rail station, as these projects will affect the Healthpeak PUD and vice versa.

## **5. Pedestrian and Bicycle Bridge**

- The Final Development Plan should fully describe the Pedestrian and Bicycle Bridge commitments. In general, the bridge shall abide by the following parameters:
  - The pedestrian and bicycle bridge shall meet all zoning conditions.
  - The final design and location of the bridge shall be approved by the City and MBTA.

- The final plan should describe in detail the process by which Healthpeak will certify agreement with the MBTA on a final bridge location, design review process, and construction schedule.
- The bridge shall include at least one elevator on each end and accessible ramps, including convenient ramp turns for bicyclists to accommodate all typical bike types and other mobility devices. Paths of travel on the bridge structure should target a 10- to 15-foot corner radius. The location of the bridge must not preclude any future MBTA right-of-way or commuter rail expansion or station projects.
- A final agreement on the ownership and maintenance of the bridge shall be completed prior to the completion of the bridge.
- Healthpeak should work with Triangle property owners and the City to provide and maintain continuous, ADA-compliant public access for pedestrians and bicyclists between the bridge and the Alewife MBTA Station, using easy-to-access streets and sidewalks within the Triangle. Healthpeak should identify and secure all necessary approvals, easements, and permits from the City, private owners and any other jurisdictions, and execute access agreements with property owners as needed.

## **6. Residential TDM**

The Final Development Plan should include a Residential Transportation Demand Management (TDM) plan approved by DOT.

## **7. Electric Vehicle (EV) Charging Network**

- DOT recommends that twenty-five percent of the parking spaces at the project shall have dual-head Level 2 chargers and install conduit and /or wiring to support the future installation of additional Level 2 chargers to serve the remainder of the parking space and ensure sufficient capacity in electrical panel and transformer to support future installation of chargers for all parking spaces.
- Healthpeak should show on the Final Development Plan the approximate location where publicly accessible Level 2 (e.g., 4 sets of heads, 8 ports) and Level 3 (e.g. 2 heads, 4 ports) charging stations would be located. They can be in parking garages and/or on-street spaces, particularly near retail or other land uses with short-term parking. Details can be worked out later in the design review process, but Healthpeak should account for electrical needs when it considers the approximate location of these publicly accessible charging stations, especially for charging stations located on sidewalks.
- The Final Development Plan should include commitments for infrastructure in the sidewalk for EV stations, such as conduits for electrical wires under the sidewalk for new or reconstructed sidewalks.

- Healthpeak should regularly track use of the EV charging stations and increase the number of installed stations to meet/slightly exceed demand such that there is always available capacity for EV charging as the number of EVs expands.

#### **8. Truck Routes, Loading Dock Management and Operations Plan, and Wayfinding Plans**

- A truck route and signage plan should be included in the Final Development Plan and/or as part of the construction management plan and/or loading dock and operations plan for each building, approved by DOT prior to the issuance of a Certificate of Occupancy for each new building.
- The PTDM Plan will include a Wayfinding Plan, including signs for the bridge that directs users between the bridge and Alewife MBTA station, including decision points and alternative routes.

#### **Other Comments on Special Permit Requests**

- The Applicant is seeking a Special Permit to allow more than a 30-foot curb cut length for loading zones. If needed for a functional loading zone, DOT may be supportive of longer than 30 feet curb cut but we believe this should be addressed administratively through the design review process for each building and not a blanket approval in the PUD.
- The Applicant is seeking a Special Permit for curb cut location and design for two buildings that are closer than 100 feet from an intersection. DOT may be fine with this, but, like our comment above, we believe this should be addressed administratively through the design review process for each building and not a blanket approval in the PUD.
- The Applicant is seeking principal use parking for all non-residential parking garages and accessory parking for all residential garages. As stated above in the Automotive Parking Section, DOT recommends that The Final Development Plan should include more details about the anticipated use of these garages as principal use parking facilities, and clarify how a portion of the “accessory residential parking spaces” will be shared with non-residential uses in the PUD.

# Planning Board Criteria Summary

The Project has been evaluated within the context of the Planning Board Criteria (the “Criteria”) to determine whether the Project has any potential adverse transportation impacts. Exceeding one or more of the Criteria is indicative of a potentially adverse impact on the City’s transportation network. However, the Planning Board will consider mitigation efforts, their anticipated effectiveness, and other information that identifies a reduction in adverse transportation impacts.

The Criteria consider the Project’s vehicular trip generation, impact to intersection level of service and vehicle queuing, as well as increase of traffic volume on residential streets. In addition, the Criteria consider walking and bicycling conditions. The Planning Board Criteria Performance Summary is presented below; further discussion of the Criteria set forth by the Planning Board is presented in the last section of this TIS report.

The Project has an estimated 107 exceedances out of 363 total data entries.

- 3 exceedances pertain to Project trip generation, see Table Criteria A-1.
- 20 exceedances pertain to vehicle Level of Service (“LOS”), see Table Criteria B-2.
- 20 pertain to traffic on residential streets, see Table Criteria C-2.
- 13 pertain to vehicular queues, see Table Criteria D-2.
- 51 pertain to pedestrian LOS, see Table Criteria E-1.

**PROJECT**

**Project Name:** Healthpeak PUD Special Permit  
**Project Address:** Multiple Addresses  
 Cambridge, MA 02138  
**Owner/Developer:** Healthpeak OP, LLC  
**Contact Person:** Rylan Squirrel  
**Contact Address:** 1900 Main Street Suite 500  
 Irvine, CA 92614  
**Contact Phone Number:** (949) 407-0700

**SIZE**

ITE sq. ft.: 4,825,000 GFA  
 Land Use Type: Mixed Use Development – Residential, Technical Office/Lab, General Office, and Retail/Neighborhood Uses

**PARKING**

Existing Parking Spaces:	1,290 surface parking spaces (639 to be removed, 651 to be maintained)	Building Use: Office + Industrial
Proposed Parking Spaces:	4,578 parking spaces (including 651 existing maintained)	Building Use: Residential, General Office, Technical Office/Lab + Retail/Neighborhood Use
Net New Parking Spaces:	3,288 spaces	(compared to existing)

TRIP GENERATION	Morning Peak Hour	Evening Peak Hour
Vehicle ( <i>Net-New</i> )	1,538	1,583
Transit	883	945
Walk	299	347
Bicycle	224	226
Micromobility	17	18
Telecommuting	953	926

MODE SPLIT (Share of Person Trips)	Residential Use	Technical Office/ General Office Use	Retail/Neighborhood Use
SOV	31.8%	40.0%	30.0%
HOV	4.7%	4.4%	7.2%
Transit	29.2%	17.8%	28.9%
Walk	8.5%	6.3%	25.1%
Bike	3.8%	6.3%	6.4%
Micromobility	0.5%	0.4%	0.5%
Telecommuting	21.5%	24.8%	1.8%

**TRANSPORTATION CONSULTANT**

**Company Name:** VHB  
**Contact Name:** Selma Mandzo-Predzic, PE  
**Contact Phone Number:** 617-607-2943  
**Date of Building Permit Approval:** TBD

## Planning Board Criteria

Total Data Entries = 363

Total Number of Criteria Exceedances = 107

### Criteria A – Project Vehicle Trip Generation

Period	Criteria (trips)	Build (trips)	Exceeds Criterion?
Weekday Daily	2,000	15,732	Yes
Weekday Morning Peak Hour	240	1,538	Yes
Weekday Evening Peak Hour	240	1,583	Yes

**Criteria B – Vehicular LOS**

Intersection	Morning Peak Hour				Evening Peak Hour			
	Existing Condition	Build Condition	Traffic Increase	Exceeds Criterion?	Existing Condition	Build Condition	Traffic Increase	Exceeds Criterion?
Concord Avenue at Blanchard Road/ Griswold Street	F	F	42%	Yes	E	F	48%	Yes
Concord Avenue at Spinelli Place*	B	D	n/a	No	A	C	n/a	No
Concord Avenue at Smith Place*	A	E	n/a	Yes	A	E	n/a	Yes
Concord Avenue at Moulton Street	A	B	n/a	No	B	C	n/a	Yes
Concord Avenue at Fawcett Street	B	F	n/a	Yes	B	F	n/a	Yes
Concord Avenue at Wheeler Street*	A	B	n/a	No	A	B	n/a	No
Concord Avenue at Alewife Brook Parkway*	F	F	23%	Yes	F	F	26%	Yes
Concord Avenue at Fresh Pond Parkway*	F	F	9%	Yes	F	F	11%	Yes
Concord Avenue at Walden Street	C	C	n/a	No	C	C	n/a	No
Concord Avenue at Huron Avenue	E	E	7%	No	D	E	7%	Yes
Concord Avenue at Garden Street	C	C	n/a	No	C	D	n/a	No
Fresh Pond Parkway at Huron Avenue	F	F	4%	No	F	F	4%	No
Alewife Brook Parkway at Terminal Road/ Fresh Pond Mall	B	E	n/a	Yes	B	B	n/a	No
Alewife Brook Parkway at Rindge Avenue	E	F	16%	Yes	F	F	15%	Yes
Alewife Brook Parkway at Cambridgepark Dr	D	E	14%	Yes	E	F	13%	Yes
Alewife Brook Parkway at Concord Turnpike (Route 2)	E	E	8%	Yes	D	E	8%	Yes
Massachusetts Avenue at Alewife Brook Parkway	F	F	6%	Yes	F	F	5%	No
Rindge Avenue at Sherman Street	C	C	n/a	No	C	C	n/a	No
Garden Street at Walden Street	D	D	0%	No	C	C	n/a	No
Garden Street at Sherman Street at Huron Avenue	E	E	1%	No	D	D	1%	No

**Criteria C – Traffic on Residential Streets**

Roadway	Segment	Amount of Residential	Morning Peak Hour			Evening Peak Hour		
			Existing <sup>1</sup>	Increase <sup>2</sup>	Exceeds Criterion?	Existing <sup>1</sup>	Increase <sup>2</sup>	Exceeds Criterion?
Concord Avenue	Hamilton Road to Blanchard Road/Griswold Street	1/2 or more	516	140	Yes	500	160	Yes
	Fayerweather Street to Walden Street	1/2 or more	935	105	Yes	980	120	Yes
	Walden Street to Appleton Street	1/2 or more	865	100	Yes	945	115	Yes
	Chauncy Street to Garden Street	>1/3 but <1/2	915	85	Yes	845	100	Yes
Blanchard Road	Merrill Avenue to Concord Avenue	1/2 or more	915	370	Yes	875	410	Yes
Griswold Street	Concord Avenue to Sunset Road	1/2 or more	47	0	No	39	0	No
Walden Street	Sherman Street to Garden Street	1/2 or more	795	5	No	896	5	No
	Garden Street to Fayerweather Street	1/2 or more	590	5	No	635	5	No
	Copley Street to Concord Avenue	1/2 or more	620	5	No	725	5	No
	Concord Avenue to Saville Street	1/2 or more	530	0	No	530	0	No
Huron Avenue	Cutler Ave to Garden Street/Sherman Street	1/2 or more	335	5	No	422	5	No
	Garden Street/Sherman Street to Daniel R Tierney Street	1/2 or more	555	5	No	695	5	No
	Fresh Pond Parkway to Larch Road	>1/3 but <1/2	690	0	No	750	0	No
	Larchwood Drive to Fresh Pond Parkway	1/2 or more	840	15	No	887	15	No
Garden Street	Ivy Street to Walden Street	1/2 or more	495	0	No	460	0	No
	Walden Street to Stearns Street	1/2 or more	280	0	No	161	0	No
	Winslow Street to Huron Avenue	1/2 or more	231	0	No	130	0	No
	Huron Avenue to Gray Gardens	1/2 or more	350	0	No	150	0	No
Rindge Avenue	Alewife Brook Parkway to Clifton Street	>1/3 but <1/2	730	80	Yes	780	80	Yes
	Clay Street to Sherman Street	1/2 or more	675	80	Yes	595	80	Yes
	Sherman Street to Reed Street/Sargent Street	1/2 or more	710	70	Yes	460	65	Yes
Fresh Pond Parkway	Larch Road to Huron Avenue	1/2 or more	1,705	90	Yes	1,695	100	Yes
	Huron Avenue to Fresh Pond Lane	1/2 or more	1,615	75	Yes	1,572	85	Yes
Sherman Street	Rindge Avenue to Pemberton Street	1/2 or more	645	10	No	435	15	No
	Winslow Street to Huron Avenue	1/2 or more	351	0	No	377	0	No

- 1 Where driveways/on-street parking created a segment inflow/outflow volume imbalance, an average was calculated per direction and added.
- 2 Net new project trips after trip credits are applied.

**Criteria D – Length of Vehicle Queues at Signalized Intersections**

Intersection	Lane Group	Morning Peak Hour			Evening Peak Hour		
		Existing Condition	Build Condition	Exceeds Criterion?	Existing Condition	Build Condition	Exceeds Criterion?
Concord Avenue at Blanchard Road/ Griswold Street	Concord Avenue EB L/T	9	15	No	4	7	No
	Concord Avenue EB T/R	6	14	No	4	7	No
	Concord Avenue WB L	6	13	No	8	20	Yes
	Concord Avenue WB T	5	8	No	6	11	No
	Concord Avenue WB R	3	4	No	5	24	Yes
	Blanchard Road NB L/T	12	12	No	10	12	No
	Blanchard Road NB R	0	0	No	0	0	No
	Blanchard Road SEB L/T/R	26	49	Yes	12	18	No
Concord Avenue at Moulton Street	Concord Avenue EB L/T	3	31	Yes	2	6	No
	Concord Avenue EB T/R	3	31	Yes	2	6	No
	Concord Avenue WB L/T/R	4	8	No	4	14	No
	Driveway NB L/T/R	0	0	No	1	1	No
	Moulton Street SB L/T/R	1	3	No	3	5	No
Concord Avenue at Fawcett Street	Concord Avenue EB L/T	3	8	No	3	6	No
	Concord Avenue EB T	3	8	No	3	6	No
	Concord Avenue WB T/R	7	24	Yes	5	11	No
	Fawcett Street SB L/R	3	9	No	3	26	Yes
Concord Avenue at Walden Street	Concord Avenue EB L	1	1	No	3	3	No
	Concord Avenue EB T/R	10	11	No	11	15	No
	Concord Avenue WB L/T/R	7	9	No	10	11	No
	Walden Street NB L/T/R	6	6	No	7	7	No
	Walden Street SB L/T/R	11	11	No	8	8	No
Concord Avenue at Huron Avenue	Concord Avenue EB L/T/R	7	9	No	9	14	No
	Concord Avenue WB L/T/R	10	11	No	12	13	No
	Huron Avenue NB L/T/R	11	12	No	8	9	No
	Huron Avenue SB L/T/R	8	8	No	9	9	No
Concord Avenue at Garden Street	Concord Avenue SEB T	12	12	No	9	9	No
	Garden Street NB L/T	10	12	No	12	13	No
	Garden Street SB T	5	5	No	5	5	No
Fresh Pond Parkway at Huron Avenue	Huron Avenue EB L	2	2	No	2	2	No
	Huron Avenue EB T/R	29	30	No	18	18	No
	Huron Avenue WB L	0	0	No	1	1	No
	Huron Avenue WB T/R	6	6	No	8	8	No
	Fresh Pond Parkway NB L/T	11	12	No	11	12	No
	Fresh Pond Parkway NB T/R	11	12	No	11	12	No
	Fresh Pond Parkway SB L/T	16	17	No	14	16	No
	Fresh Pond Parkway SB T/R	16	17	No	13	15	No
Alewife Brook Parkway at Terminal Road/ Fresh Pond Mall Driveway	Terminal Road EB R	0	0	No	2	3	No
	Fresh Pond Mall Driveway WB R	1	2	No	7	10	No

Fresh Pond Mall	Alewife Brook Parkway NB T	10	26	Yes	12	19	Yes
	Alewife Brook Parkway NB R	0	0	No	0	1	No
	Alewife Brook Parkway SB T	10	13	No	19	25	No
	Alewife Brook Parkway SB R	0	1	No	1	1	No
Alewife Brook Parkway at Rindge Avenue	Rindge Avenue WB L	6	9	No	3	4	No
	Rindge Avenue WB R	16	16	No	16	16	No
	Alewife Brook Parkway NB T/R	42	70	Yes	32	45	Yes
	Alewife Brook Parkway SB T	10	10	No	10	10	No
Alewife Brook Parkway at Cambridgepark Drive	Cambridgepark Drive EB L	2	2	No	2	2	No
	Alewife Brook Parkway NB L	5	5	No	4	3	No
	Alewife Brook Parkway NB T	5	5	No	5	6	No
	Alewife Brook Parkway SB T	20	27	Yes	33	44	Yes
Alewife Brook Parkway (ABP) at Concord Turnpike (Route 2)	Route 2 (Signal 16b) EB L	44	43	No	100+	100+	No
	Route 2 (Signal 16d) EB T	34	39	No	100+	100+	No
	Alewife Station Ramp (16c) WBT	3	3	No	6	5	No
	Alewife Station Ramp (16c) WBR	2	2	No	3	2	No
	ABP (Signal 16b) NB T	18	13	No	28	26	No
	ABP (Signal 16c) NB T	2	3	No	3	3	No
	ABP (Signal 16b) SB T	5	7	No	4	5	No
	ABP (Signal 16a) SB R	20	20	No	17	14	No
Massachusetts Avenue at Alewife Brook Parkway	Massachusetts Avenue EB L/T	11	11	No	6	6	No
	Massachusetts Avenue EB T	11	11	No	8	9	No
	Massachusetts Avenue EB R	6	6	No	4	5	No
	Massachusetts Avenue WB L	11	13	No	13	14	No
	Massachusetts Avenue WB L/T	10	12	No	14	14	No
	Massachusetts Avenue WB T/R	6	6	No	11	11	No
	Alewife Brook Parkway NB L	3	4	No	3	3	No
	Alewife Brook Parkway NB T	10	11	No	23	27	No
	Alewife Brook Parkway NB T/R	10	11	No	23	27	No
	Alewife Brook Parkway SB L	2	2	No	3	3	No
	Alewife Brook Parkway SB T	31	31	No	31	31	No
	Alewife Brook Parkway SB T/R	1	1	No	30	30	No
Rindge Avenue at Sherman Street	Rindge Avenue EB T/R	1	1	No	2	2	No
	Rindge Avenue WB L/T	8	10	No	6	7	No
	Sherman Street NB L/R	4	4	No	8	8	No
Garden Street at Walden Street	Garden Street EB L/T/R	5	5	No	6	6	No
	Garden Street WB L/T/R	1	1	No	1	1	No
	Walden Street NB L/T/R	3	3	No	7	7	No
	Walden Street SB L/T/R	12	12	No	8	8	No
Garden Street at Sherman Street at Huron Avenue	Garden Street EB L/T/R	9	9	No	3	3	No
	Huron Avenue NB L/T/R	6	6	No	12	12	No
	Huron Avenue SB L/T/R	10	11	No	8	8	No
	Sherman Street SEB L/T/R	11	11	No	4	4	No

**Criteria E-1 Study Area Intersections PLOS Summary**

Intersection	Crosswalk	Morning Peak Hour			Evening Peak Hour		
		Existing Condition	Build Condition	Exceeds Criterion?	Existing Condition	Build Condition	Exceeds Criterion?
Concord Avenue at Blanchard Road/ Griswold Street	East	F	F	Yes	E	E	Yes
	West	F	F	Yes	E	E	Yes
	North	F	F	Yes	E	E	Yes
	South	F	F	Yes	E	E	Yes
Concord Avenue at Spinelli Place	East	D	F	Yes	F	F	Yes
	North	A	A	No	A	A	No
Concord Avenue at Smith Place	West	F	D	No	E	D	No
	North	A	D	Yes	A	D	Yes
Concord Avenue at Moulton Street	East	D	D	No	D	D	No
	North	D	D	No	D	D	No
Concord Avenue at Fawcett Street	West	D	D	No	D	D	No
	North	D	D	No	D	D	No
Concord Avenue at Wheeler Street	West	E	F	Yes	E	F	Yes
	North	A	A	No	A	A	No
Concord Avenue at Walden Street	East	C	C	No	C	C	No
	West	C	C	No	C	C	No
	North	B	B	No	B	B	No
	South	B	B	No	B	B	No
Concord Avenue at Huron Avenue	East	C	C	No	C	C	No
	West	C	C	No	C	C	No
	North	B	B	No	B	B	No
	South	B	B	No	B	B	No
Concord Avenue at Garden Street	Northwest	B	B	No	B	B	No
	South	D	D	No	D	D	No
Fresh Pond Parkway at Huron Avenue	East	E	E	Yes	E	E	Yes
	West	E	E	Yes	E	E	Yes
	North	E	E	Yes	E	E	Yes
	South	E	E	Yes	E	E	Yes
Alewife Brook Parkway at Terminal Road/Fresh Pond Mall	East	E	E	Yes	F	F	Yes
	West	E	E	Yes	F	F	Yes
	North	D	D	No	E	E	Yes
Alewife Brook Parkway at Rindge Avenue	East	E	E	Yes	E	E	Yes
	South	E	E	Yes	E	E	Yes
Alewife Brook Parkway at Concord Turnpike (Route 2)	East	E	E	Yes	E	E	Yes
Massachusetts Avenue at Alewife Brook Parkway	East	F	F	Yes	F	F	Yes
	West	F	F	Yes	F	F	Yes
	North	F	F	Yes	F	F	Yes
	South	F	F	Yes	F	F	Yes
Rindge Avenue at Sherman Street	East	D	D	No	D	D	No

### Criteria E-1 Study Area Intersections PLOS Summary

Intersection	Crosswalk	Morning Peak Hour			Evening Peak Hour		
		Existing Condition	Build Condition	Exceeds Criterion?	Existing Condition	Build Condition	Exceeds Criterion?
Garden Street at Walden Street	North	D	D	No	D	D	No
	East	C	C	No	C	C	No
	West	C	C	No	C	C	No
	North	C	C	No	C	C	No
	South	C	C	No	C	C	No
Garden Street at Sherman Street at Huron Avenue	East	F	F	Yes	E	E	Yes
	West	F	F	Yes	E	E	Yes
	North	F	F	Yes	E	E	Yes
	Northwest	F	F	Yes	E	E	Yes
	South	F	F	Yes	E	E	Yes

### Criteria E-2 – Pedestrian and Bicycle Facilities

Adjacent Street	Link (between)	Sidewalk or Walkway Present?	Exceeds Criteria?	Bicycle Facilities or Rights of Way Present?	Exceeds Criteria?
Concord Ave	Blanchard Road to Smith Place	Yes	No	Yes	No
	Smith Place to Moulton Street	Yes	No	Yes	No
	Moulton Street to Fawcett Street	Yes	No	Yes	No
	Fawcett Street to Wheeler Street	Yes	No	Yes	No