

# Alewife Transportation Update

## City Council Transportation Committee

June 19, 2014

Tobin School

- “address the traffic, transportation and access to transit issues in the Fresh Pond/Concord Avenue/Alewife area with a view toward understanding the impact of recent development trends in the area.”

# Presentation Outline

- Concord-Alewife Planning Overview
- Development Trends and Development to-date
- Area Transportation Trends
- Development Review Process
- Completed, in Planning and Transportation Goals
- Q&A

# Overcome barriers

- Create an enhanced pedestrian environment that weaves the site together to include open space, transit, retail/shopping.
- Create pedestrian/bicycle connection between the Triangle and Quadrangle.
- Improve internal connections within the Quadrangle.
- Create open space connections.

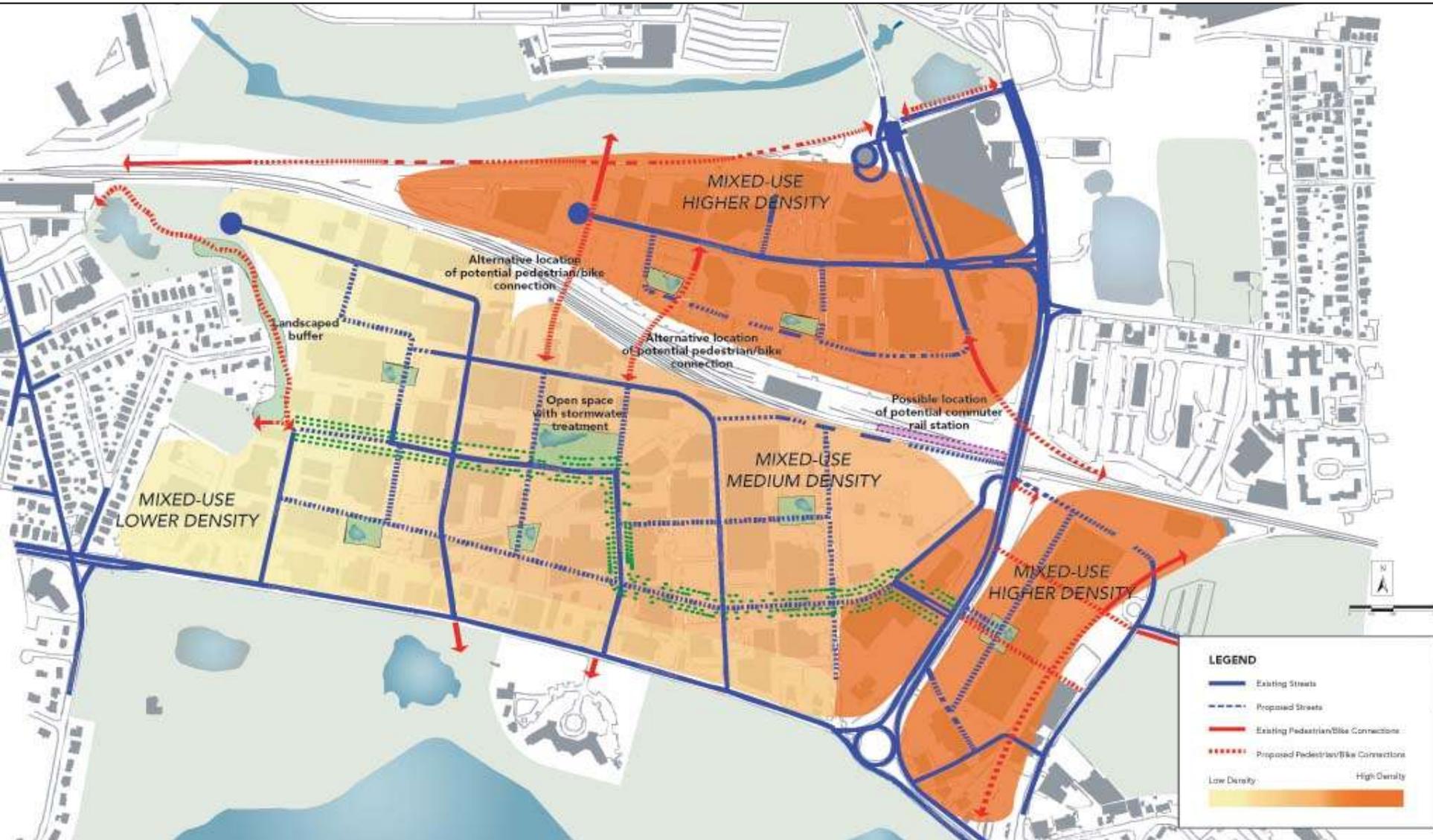


# Respond to transportation issues

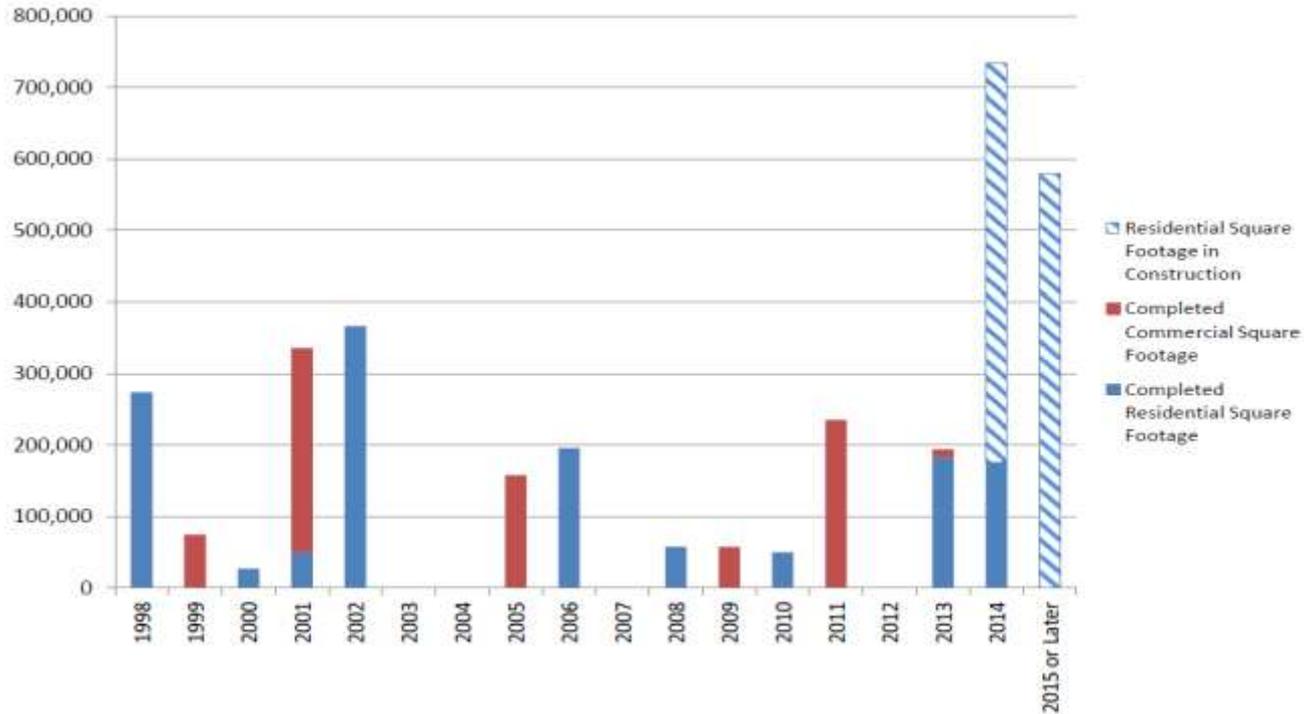
- Understand the implications of local vs. regional traffic.
- Encourage alternatives to single-occupancy vehicles through transit and bike/pedestrian access.
- Reduce trip growth from future development.
- Reduce anticipated auto mode share in study area through improvements in transit and bike/pedestrian access



# Concord-Alewife Plan



# Significant Projects Constructed in Alewife 1998 – Present (sq ft)



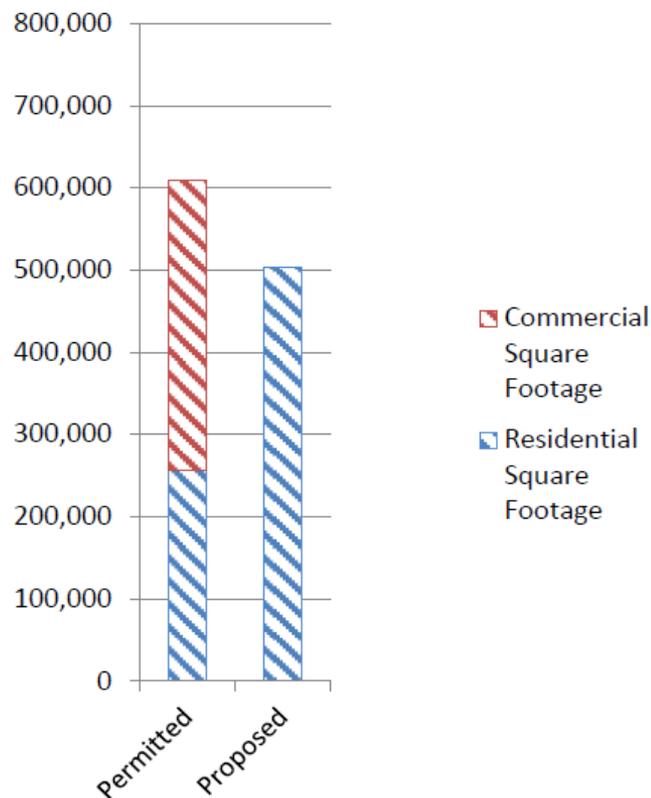
## In Construction - Expected Complete 2014 (Note: Approximate)

Primary Use	Address	# of Units	Square Footage
Residential	160 - 180 Cambridgepark Dr. (Phase I)	273	307,050
Residential	563 - 603 Concord Ave.	61	64,189
Residential	70 Fawcett St. (Bldg 1 - Phase II)	171	186,480

## In Construction - Expected Complete 2015 or Later (Note: Approximate)

Primary Use	Address	# of Units	Square Footage
Residential	160 - 180 Cambridgepark Dr. (Phase II)	125	137,950
Residential	165 Cambridgepark Dr.	244	260,000
Residential	80 Fawcett St. (Bldg 2)	168	181,881

# Significant Alewife Projects Permitted and Proposed



## Permitted - Not Yet In Construction

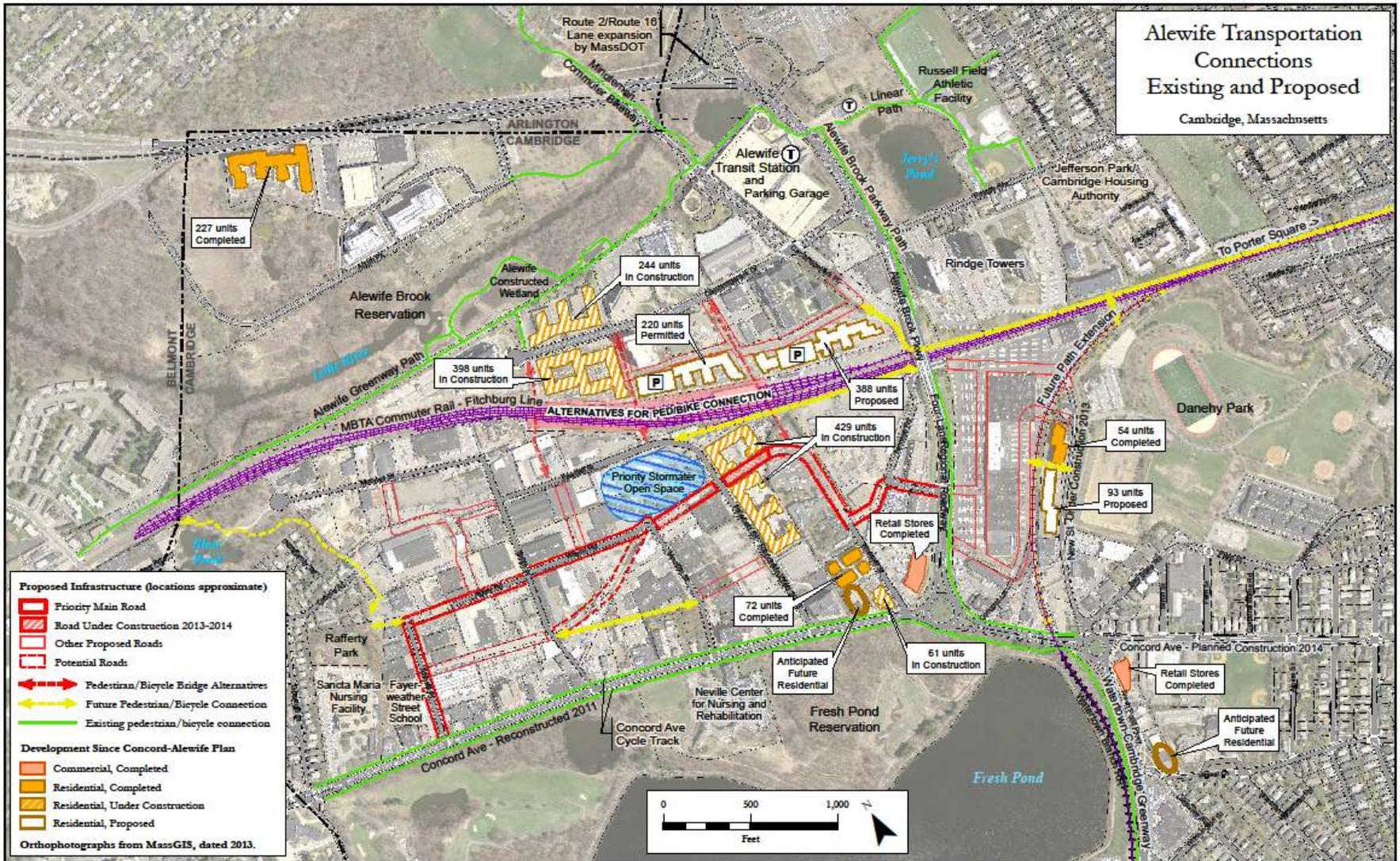
Primary Use	Address	# of Units	Square Footage
Residential	130 Cambridgepark Dr.	220	231,321
Office R&D	400,500,600 Discovery Park		353,000
Residential	307 Fresh Pond Parkway	20	24,900

## Proposed - In Permitting Process

Primary Use	Address	# of Units	Square Footage
Residential	180R Cambridgepark Dr.	378	348,992
Residential	75 New St.	147	154,549

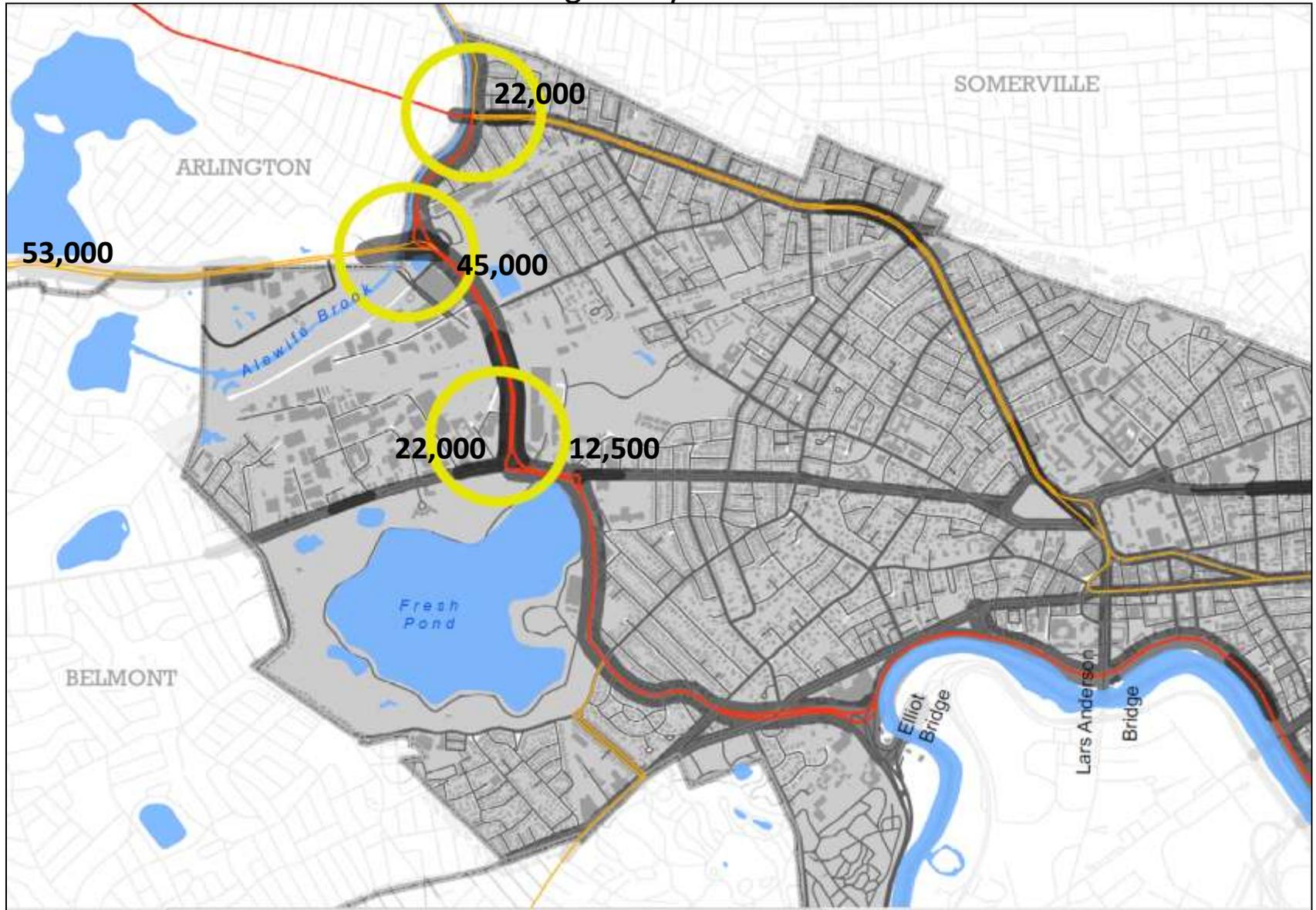
# Alewife Transportation Connections Existing and Proposed

Cambridge, Massachusetts



# Current Traffic Conditions and Trends in the Area

## 2013 Average Daily Traffic Volumes



# Three Destinations of Alewife Traffic

## CTPS 2007 Report

Market	Vehicles	% Total
North-South Cross-Region**	4,391	61
Downtown Boston and Nearby Boston Neighborhoods	1,512	21
Cambridge	1,296	18
Total	7,199	100

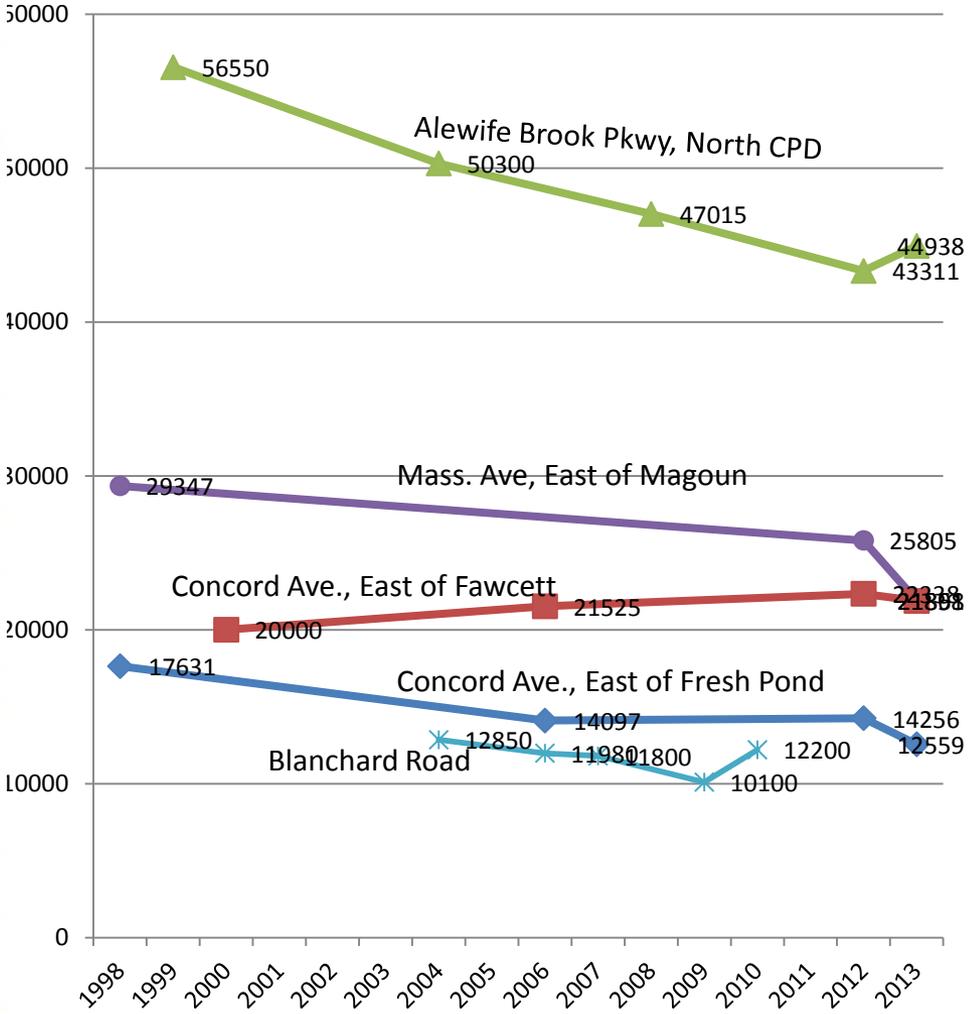
---

\*Source: Boston Region MPO regional transportation model

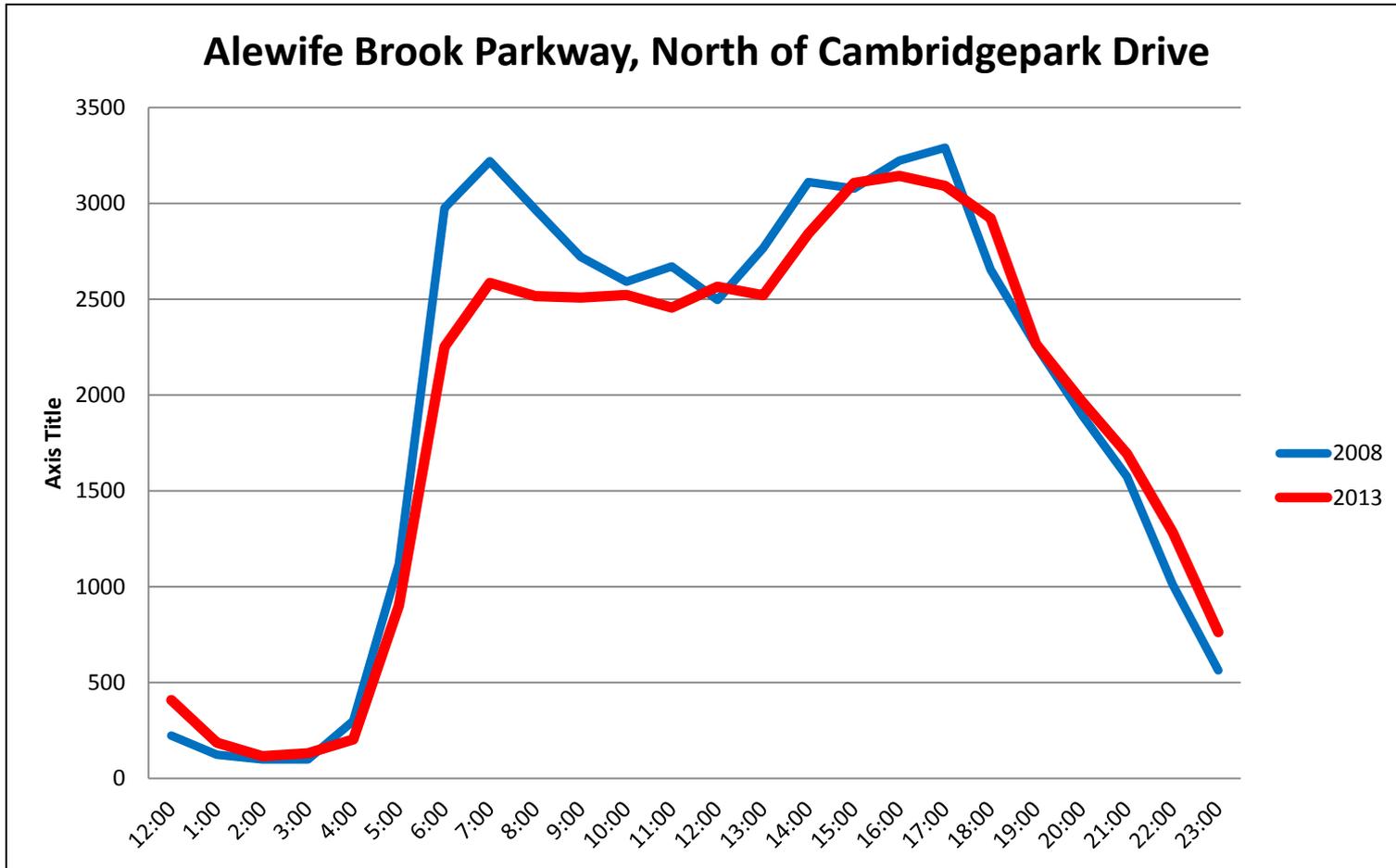
\*\*Includes Allston/Brighton, Jamaica Plain, West Roxbury, Roslindale, Hyde Park, and Mattapan

# ADT (Average Daily Traffic)

- ▲ Alewife Brook Parkway (North of Cambridgepark Drive)
- Massachusetts Avenue (South of Magoun St)
- Concord Avenue (East of Fawcett St)
- ◆ Concord Avenue (East of Fresh Pond Parkway)
- ✱ Blanchard Road (By Raised Device)



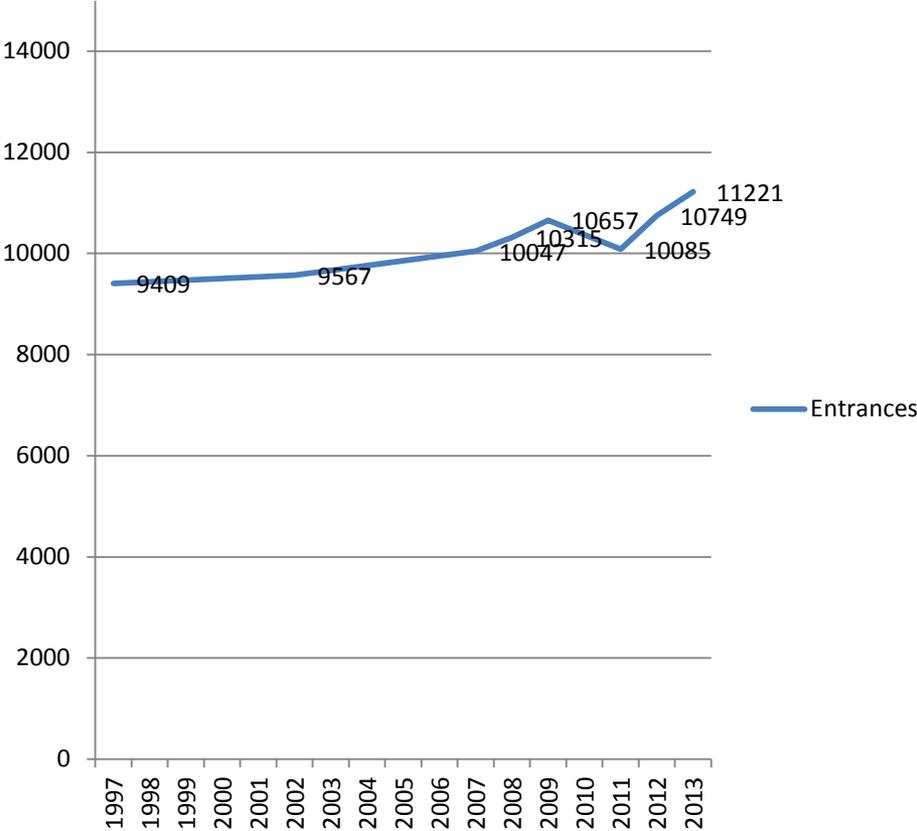
# Hourly Variation in Traffic



# 19% Increase in Transit Use

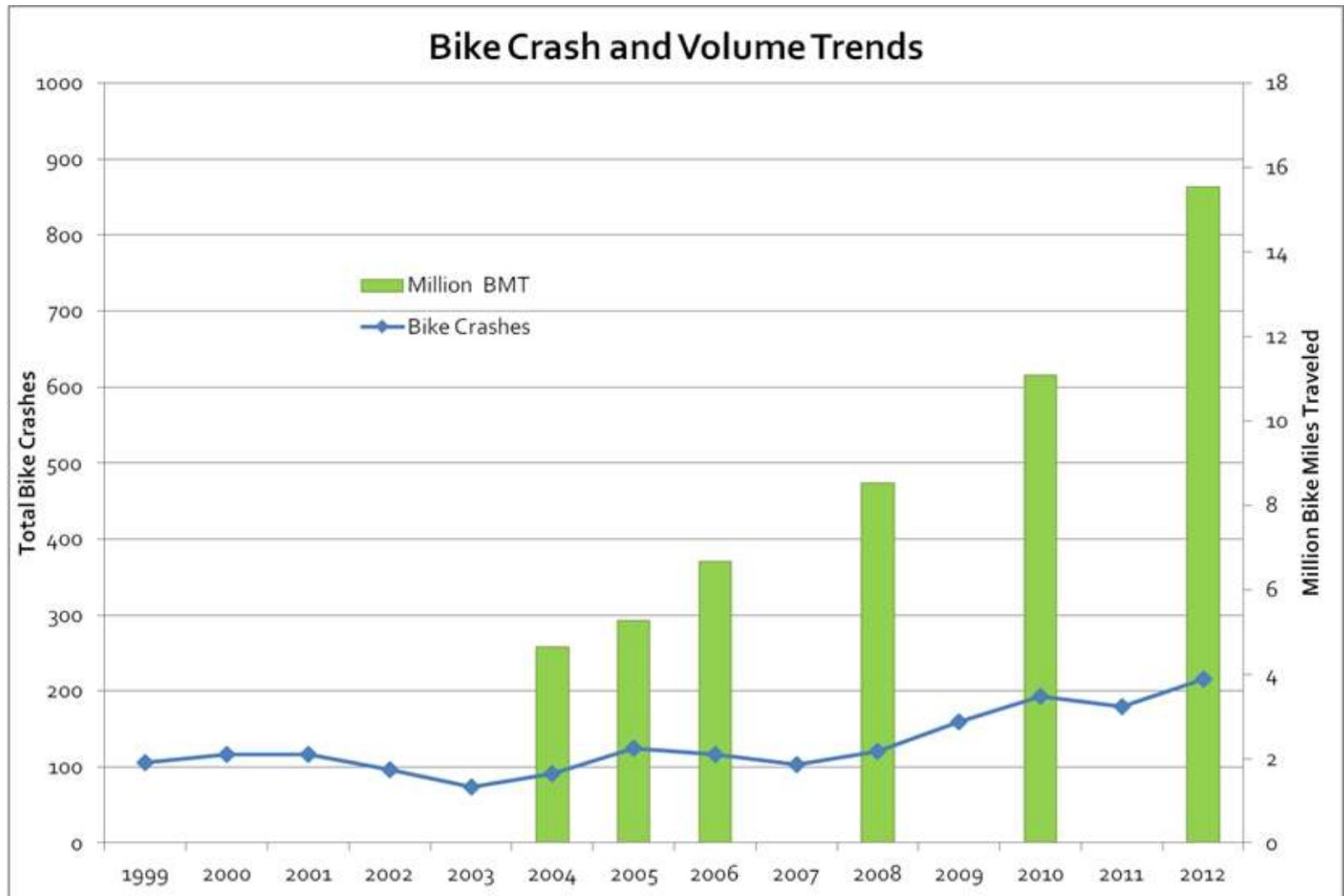


### Alewife Station Typical Weekday Entrances



# Biking Triples in Last Decade

Cambridge Bicycle Counts and Crashes  
Combined AM/PM Peak Hour

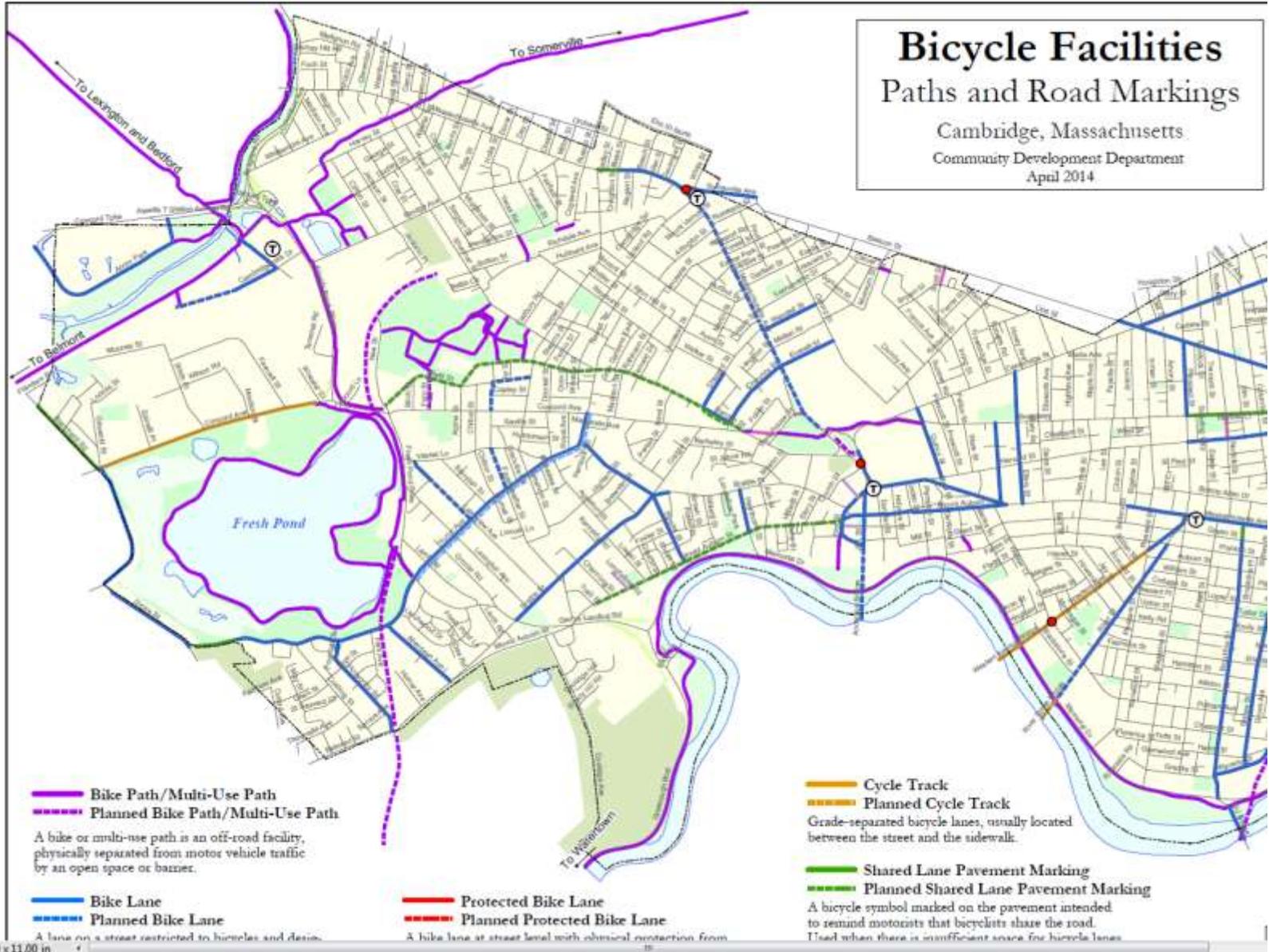


# Bicycle Facilities Paths and Road Markings

Cambridge, Massachusetts

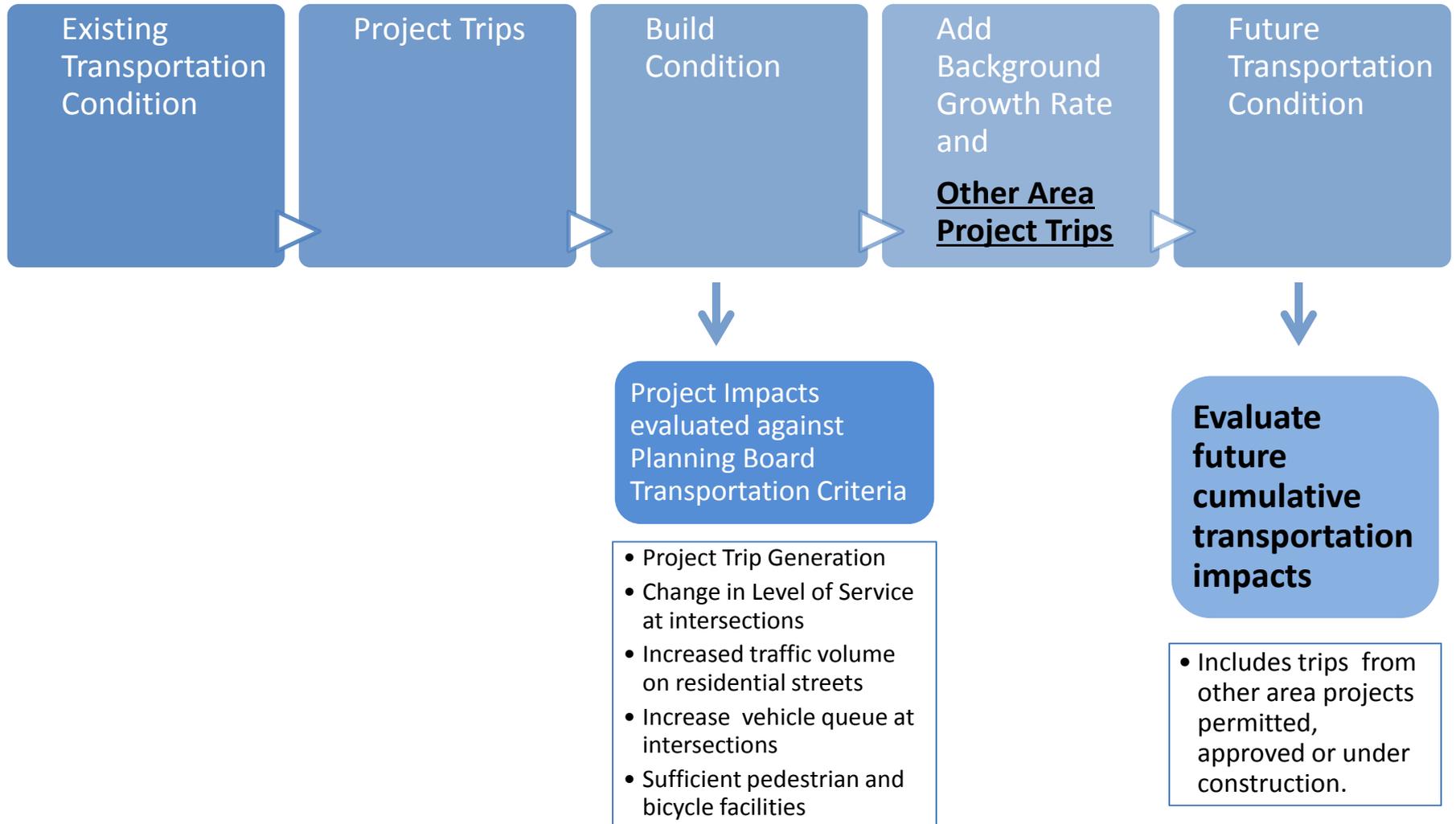
Community Development Department

April 2014



# DEVELOPMENT REVIEW PROCESS

## Transportation Impact Reports (TIS)



# Alewife Current and Proposed Development

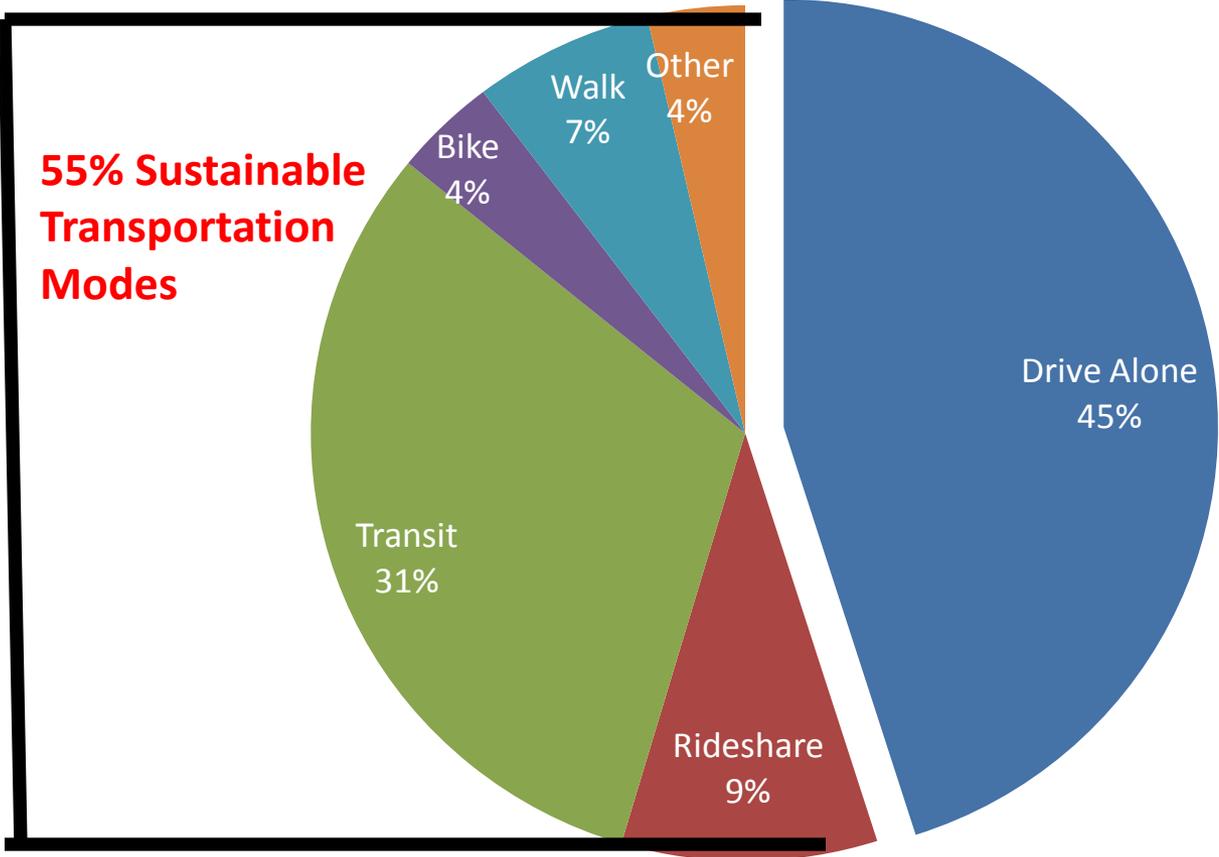
- Residential was recommended in Alewife-Concord Plan to support a transit-oriented development and a mixed use neighborhood.
- Residential Use has less trips and better non-auto mode share than office use.

## 8 Projects in Alewife Area

Project Name	Units	Status
70 Fawcett Street	428	Partly occupied
The Residences at Rt. 2 (Faces site)	227	Partly occupied
603 Concord Ave(Concord/Wheeler Phase I)	61	Under construction
160 Cambridgepark Drive (Hanover)	398	Under construction
165 Cambridgepark Drive (Hines)	244	Under construction
130 Cambridgepark Drive	220	Approved
180R Cambridgepark Drive	378	Under review
75 New Street	93	Under review
<b>Total</b>	<b>2049</b>	

# Assumed Mode Shares for 8 Alewife Residential Projects

## Residential Mode Share



# Assumed Vehicle Trips vs. Observed

	Assumed	Observed
AM Peak Hr.	0.26 trip/unit	0.25 trip/unit
PM Peak Hr.	0.30 trip/unit	0.16 trip/unit

- Assumed – 8 Alewife Residential Projects
- Observed – Driveway counts at 3 existing projects (30 Cambridgepark Drive, 87 New Street, and 25-39 Wheeler Street)
- Fawcett St - drive is less than we assume and Transit is more.

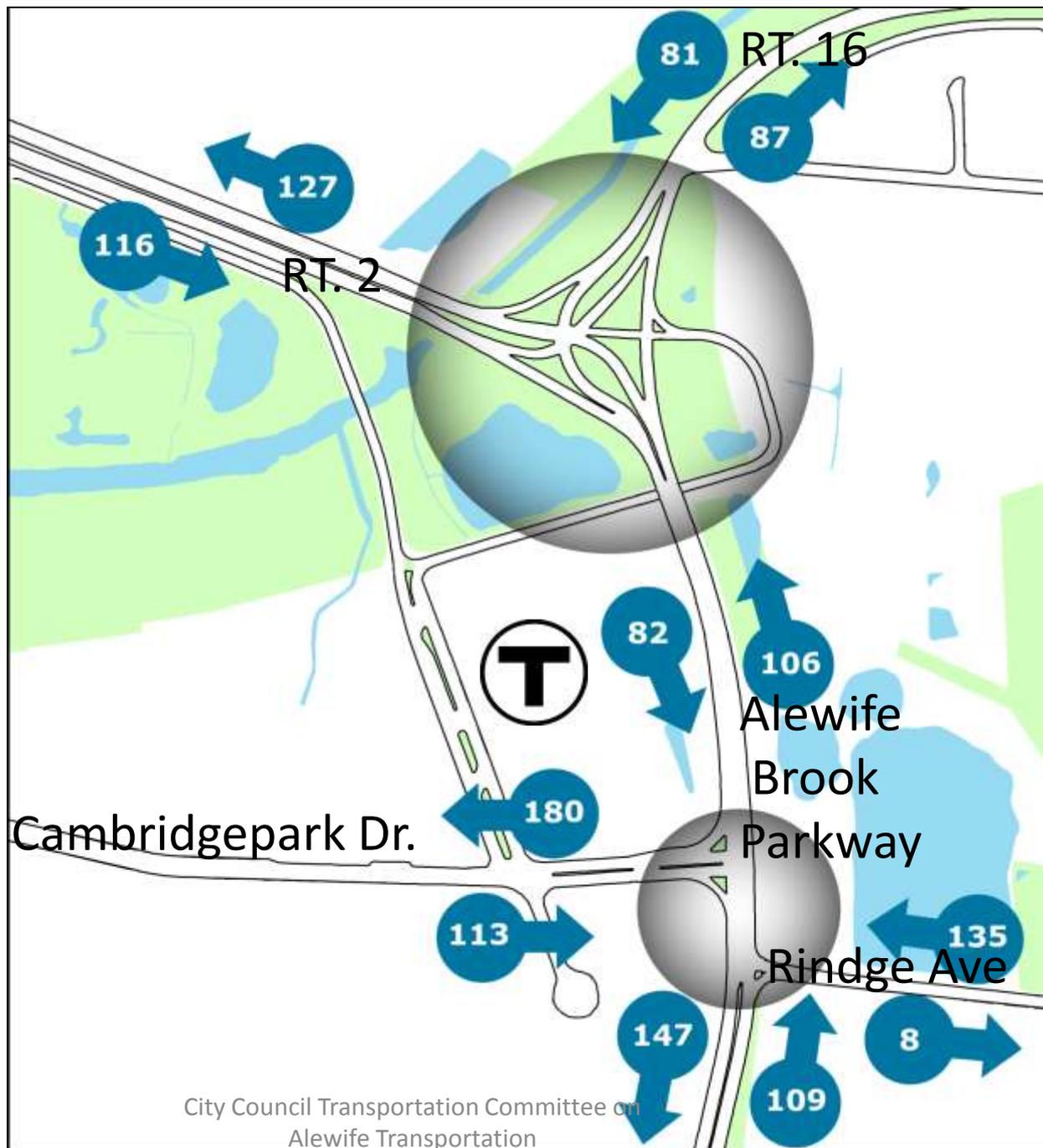
# Special Permit Mitigation

- Parking and Transportation Demand Management (PTDM) Ordinance
  - Commercial Projects: PTDM ordinance required
  - Residential Projects: Residential TDM required per Special Permit (16 currently)
- Improvements to local bike connections
- Construction of path to Discovery Park
- Pedestrian/bike bridge feasibility/design study
- Reduced off-street parking ratios and shared parking
- Reserved bridge landings sites
- Starting Quadrangle interior street connections

# Alewife Transportation Management Association (TMA)

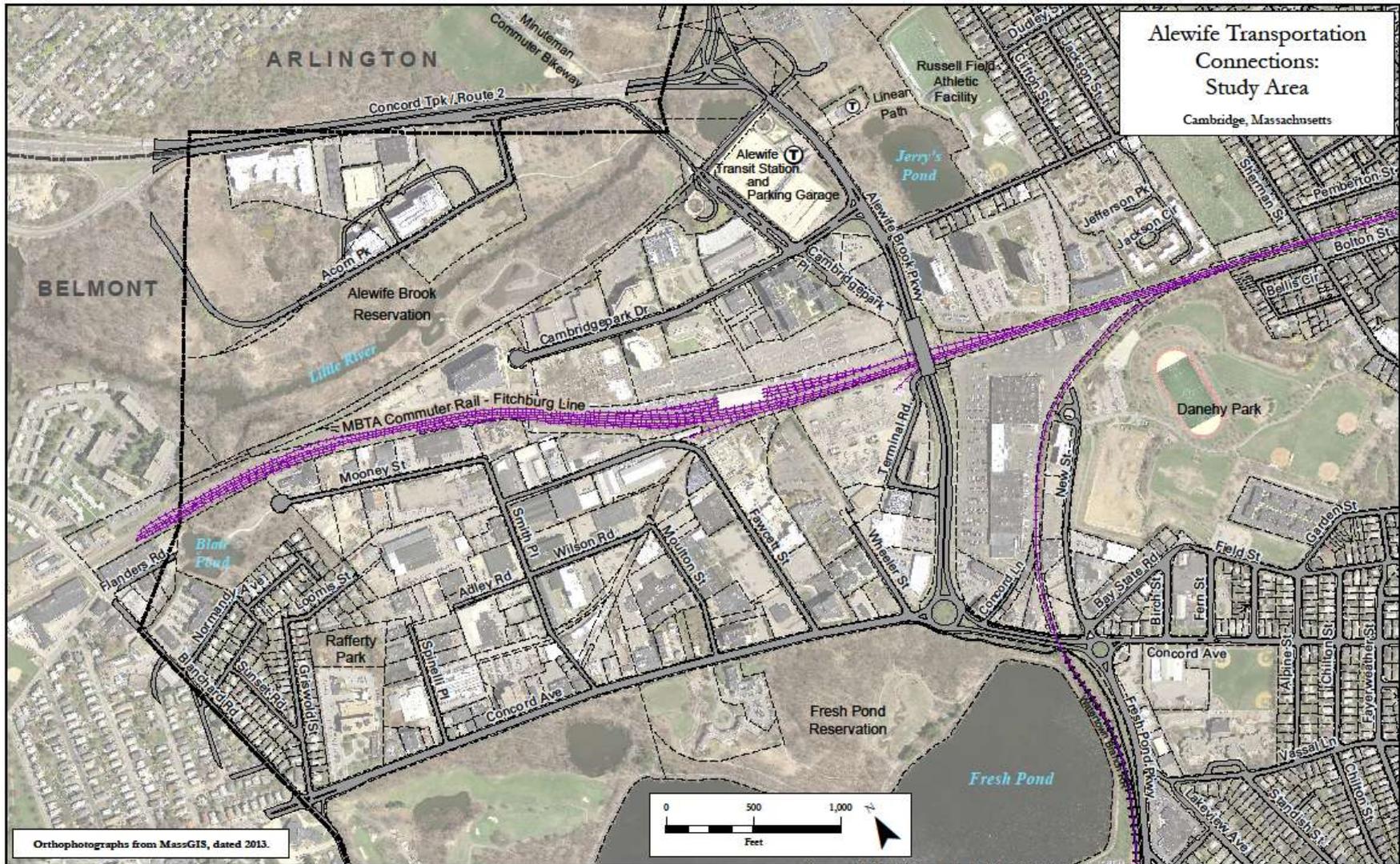
- TMA is a partnership between businesses, developers, and residential buildings who join together to reduce traffic congestion, air pollution and improve transportation options
- 12 existing and future permitted developments in Alewife are required to join a TMA, once it's formed
- A TMA can help promote new resources for shuttles, commuter connections and employee benefits to reduce vehicle trips.
- Study underway to lay the groundwork for establishing an Alewife TMA by fall 2014.

PM Peak  
Hour  
Cumulative  
New Trips



# Transportation Observations

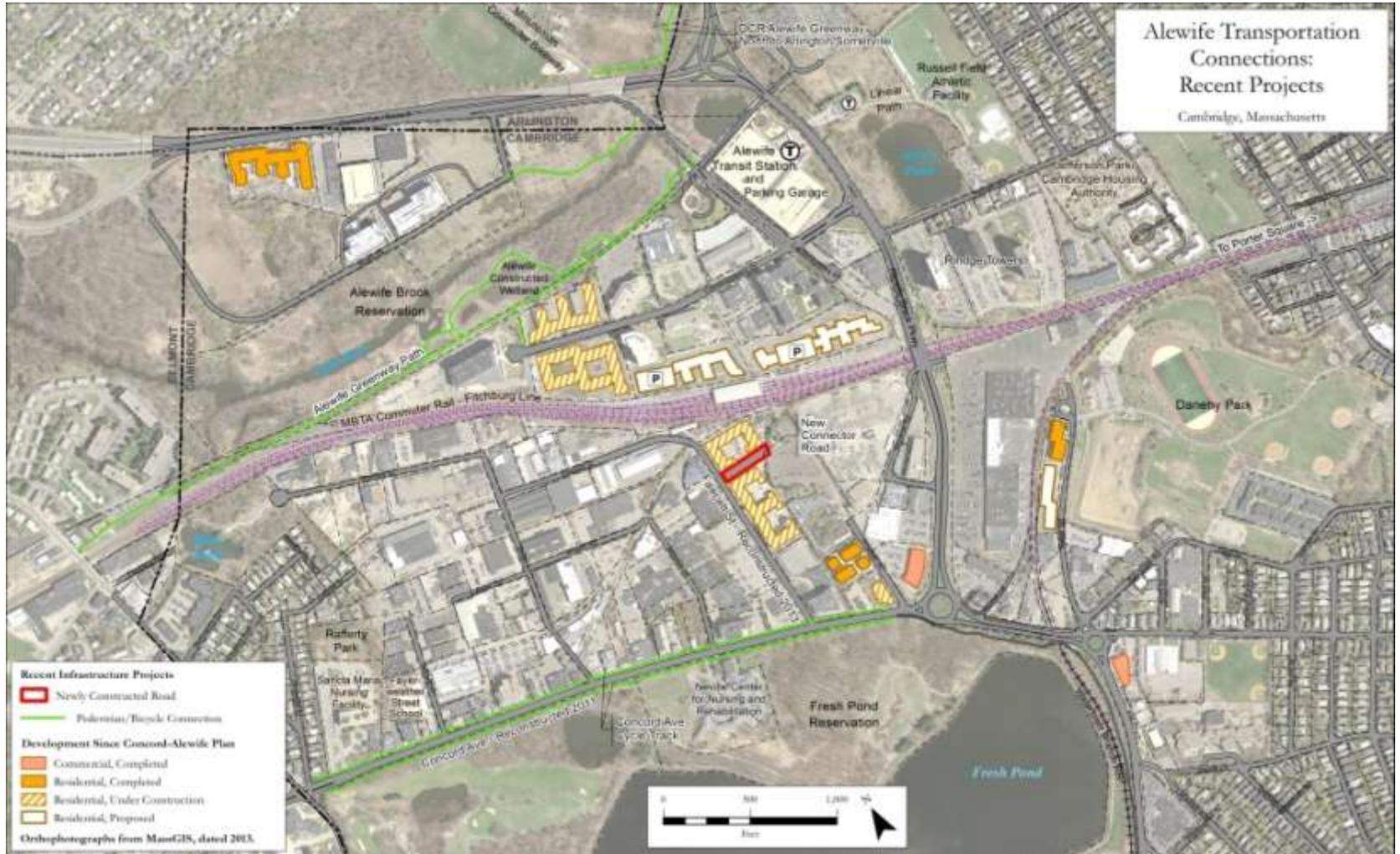
- Current congestion will remain even if no new development in Cambridge due to geography and development elsewhere.
- Congestion will cause some people to change modes or time of travel to off-peak.
- Local Trips will displace some regional trips to roads to the east, west, north and south of Alewife.
- New residents choosing to live here, are more likely to drive less and use sustainable modes more.
- Encouraging sustainable modes is the most important way to manage traffic in this area.



# Recent Transportation Projects

- DCR Alewife Greenway – connects north to Arlington and Somerville, up Rt. 16
- Alewife Greenway Extension – path from Alewife Station to Brighton Street along stormwater wetland
- Concord Avenue cycle tracks
- Fawcett St. reconstruction with new sidewalks and new connector road
- Bicycle Parking added at Alewife - 488 spaces

# Recent Projects Plan



# Projects in Planning

- Hubway stations being installed at Alewife head-house at Russell field and Rindge Avenue in summer 2014, Fresh Pond Water Treatment Plant in late 2014-15 and other locations
- Route 2 & 16 intersection project by MassDOT – add portion of a lane from Alewife Station –bidding July 2014, fall construction
- Alewife Bicycle/Pedestrian Bridge – consultant to conduct feasibility study for bridge and commuter rail station beginning this summer, TIGER grant for \$1m pending for final design
- Watertown/Cambridge Greenway – DCR close to beginning design process – likely in Fall 2014
- Red Line Capacity Improvements – working with MassDOT to look at options
- Cambridgepark Drive - repaving and bicycle facilities
- New Street Reconstruction-larger sidewalks and trees

# Projects in Planning



# New Street

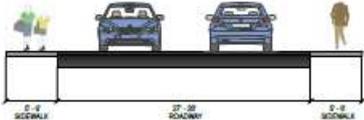
## STREETSCAPE IMPROVEMENTS

NEW STREET

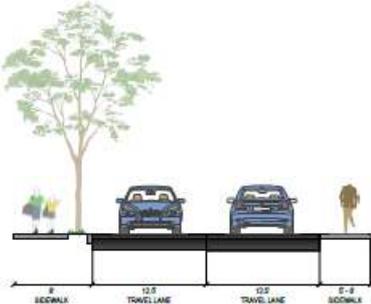
JUNE 2014

DRAFT

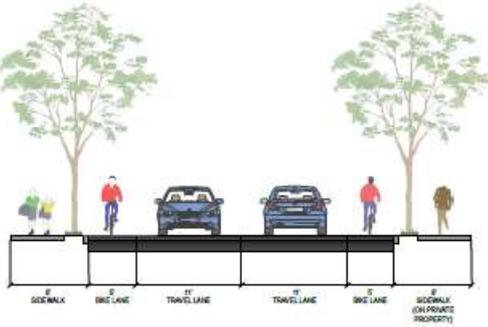
### 1. EXISTING CONDITIONS



### 2. INTERIM CONDITIONS



### 3. PROPOSED CONDITIONS

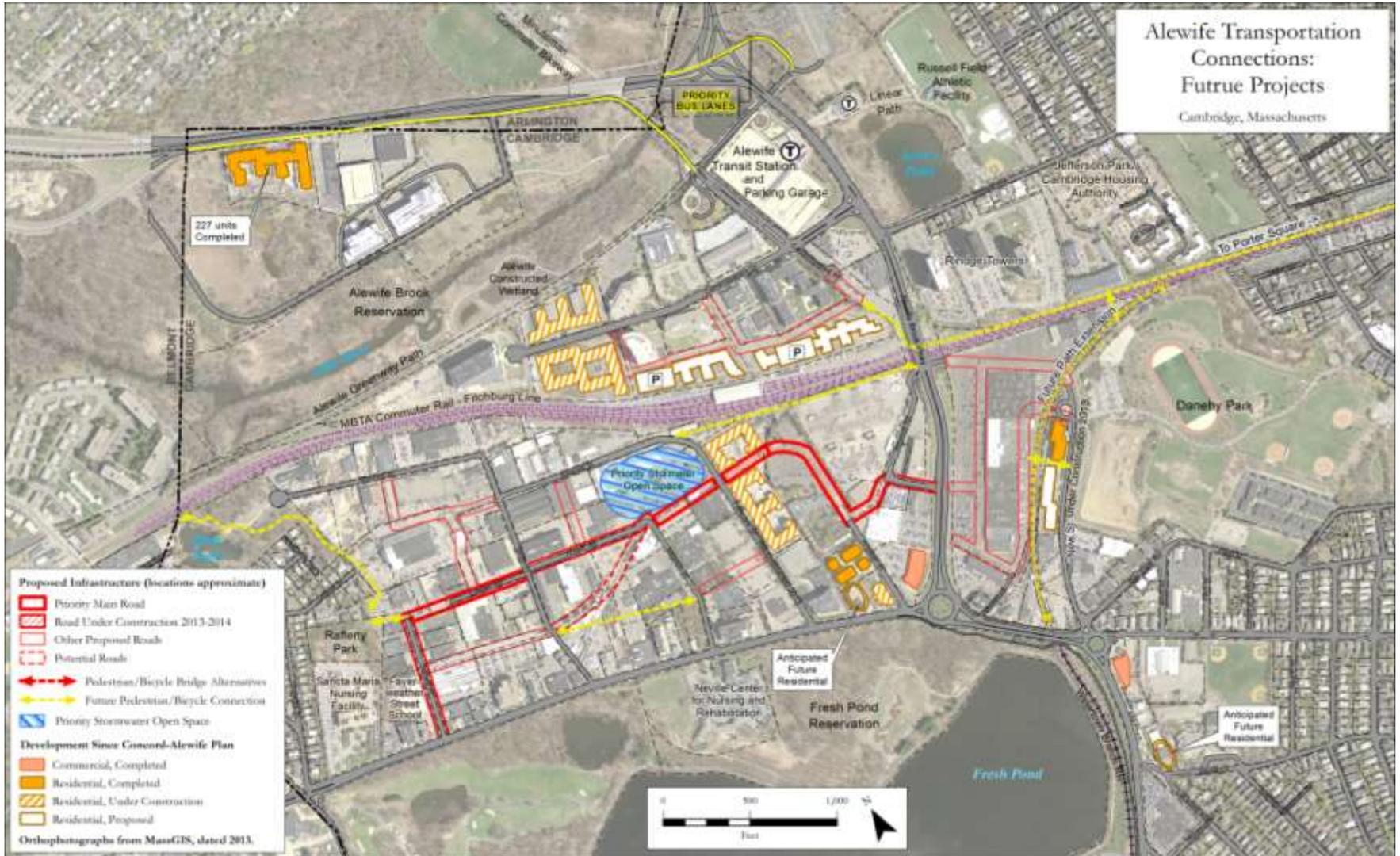


APPROX. SCALE: 1" = 9'-0"

# Future Goals

- Bus priority lanes into and out of Alewife Station
- Create Quadrangle roadway and pedestrian connections
- Extend Watertown/Cambridge Multi-use path to Danehy & connect to Fitchburg Line Path with a bridge over railroad, and extend path to Porter
- Expand Hubway locations to nearby towns
- Create connections into & through shopping center property

# Future Projects



# Question and Answers