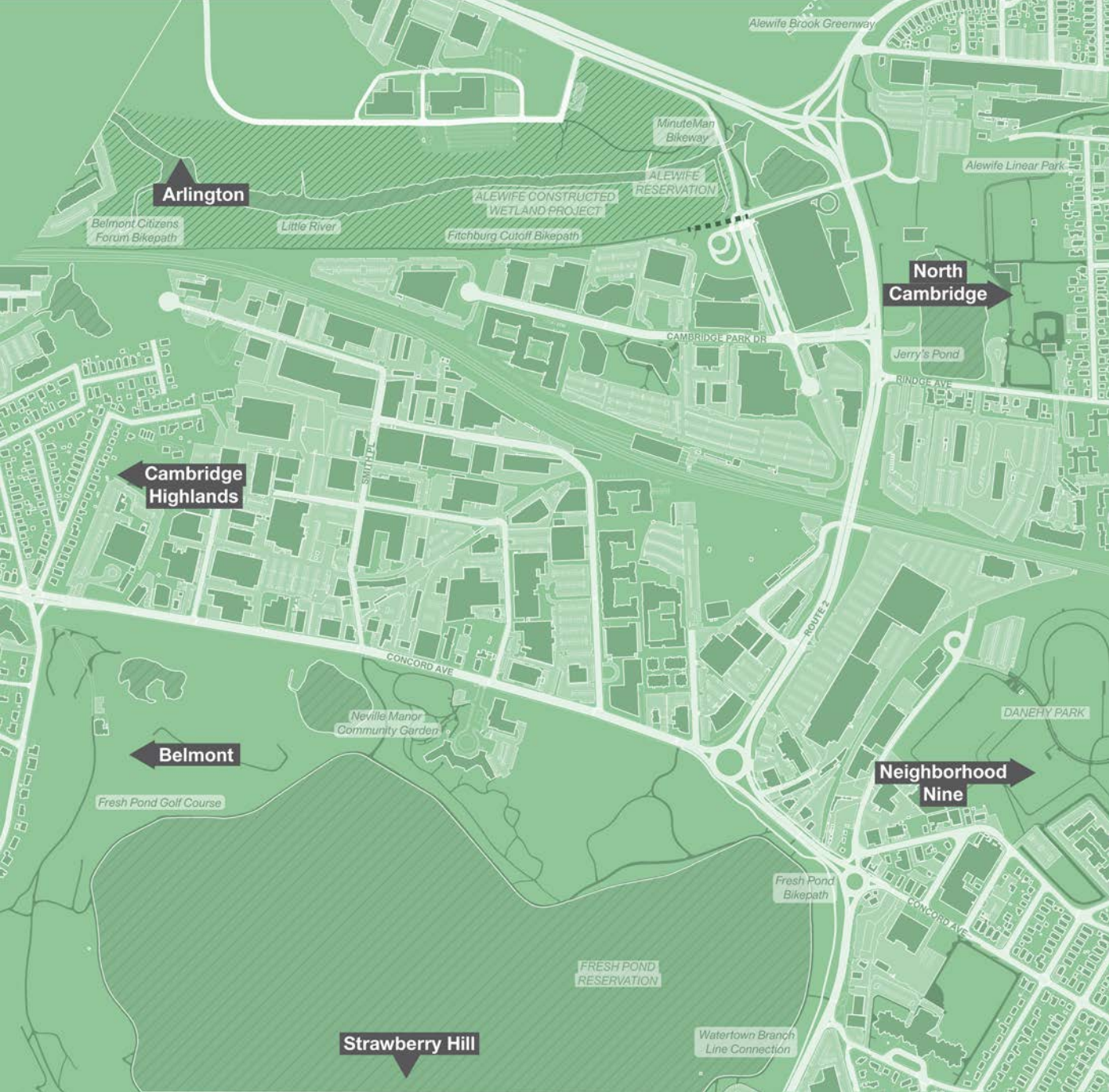


Alewife Working Group June 14, 2016

ENVISION CAMBRIDGE



Agenda

What we've heard

Past plans and studies for Alewife

- Alewife Revitalization Plan (1979)
- Citywide Plan (1997- 2000)
- Concord-Alewife Planning Study (2005)
- Alewife Transportation Update (2014)
- Climate Change Vulnerability Assessment, CCVA Report (2015)

Current and future challenges

- Climate change
- Transportation & Connectivity
- Urban Design

What we've heard



Previous Alewife working group meeting

Affordability and housing

- Affordability is a major concern.
- The housing that has been built is not well-integrated into the neighborhoods.
- There are questions around the balance of housing and retail, both existing and new.

Mobility and transportation

- Traffic is a regional issue, and will require coordination with other cities and agencies.
- The T Station might be improved, through either physical improvements to the facility or connections to the commuter rail.
- It can be unpleasant to travel by car, and more so by foot or bike.

Environment and sustainability

- Jerry's Pond is a way to reconnect to nature, and is underutilized.
- New or improved open space might be linked development in the floodplain.

What themes kept coming up in the listening phase?

- Diversity
- Affordability
- Makes spaces for everyone
- A sustainable environment
- Thriving economy
- Opportunities for all
- Resilient communities
- Improve livability
- Improve transportation
- Better housing options
- Diversity of retail
- Economic vigor
- Shared prosperity
- Shared opportunity
- Strong city and community services

“Having **affordable housing** available is critical to the fabric of the community.”

“Make Cambridge a **net zero** city and model for the nation and the world.”

“Opportunities for Cantabrigians of **all types and education levels.**”

“**Beyond housing**, the citywide conversation and planning efforts need to be better synthesized in how **open space, health, transportation**, etc. become collectively woven.”

“Do not forget about **middle-class families.**”

“**Preserve the character** of the neighborhood while expanding housing options to keep up with growth.”

Past plans and studies for Alewife



Alewife Revitalization Plan (1979)

Vision:

- New center for research and development.
- The plan aimed to benefit citizens by creating job opportunities, increasing the city's tax base, removing visual blight and ecological hazards, and by adding useable open space in the area.



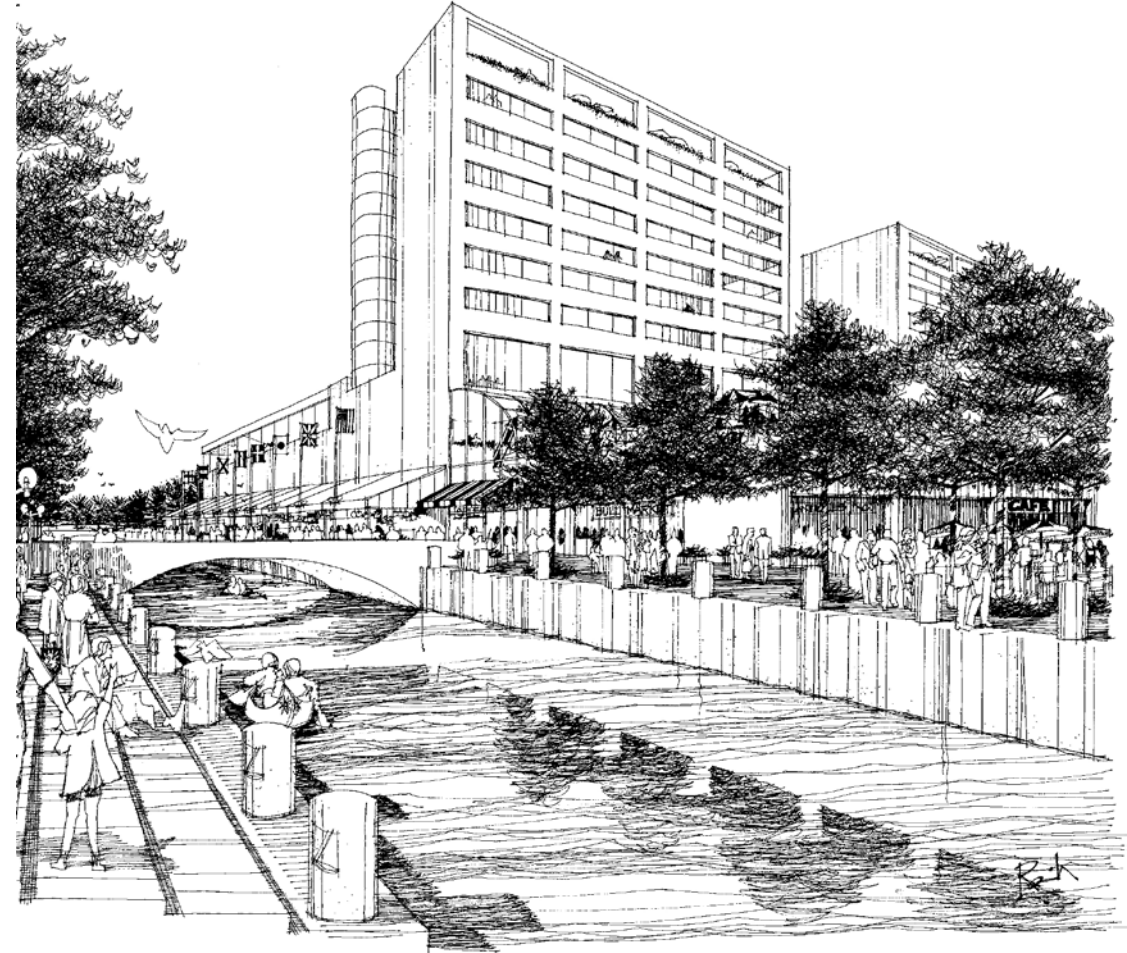
Alewife Urban Design Plan

(Source: Alewife Revitalization. Alewife Urban Design Study Phase II)

Alewife Revitalization Plan (1979)

Key recommendations:

- Create a framework for development for the area's transition from an industrial area to an office, research, and service-oriented center.
- Discourage “inappropriate” development (heavy manufacturing, warehousing, major retailing, housing).
- Improve the image of the area.
- Limit the scale of development.
- Protect residential neighborhoods.
- Protect public open space.

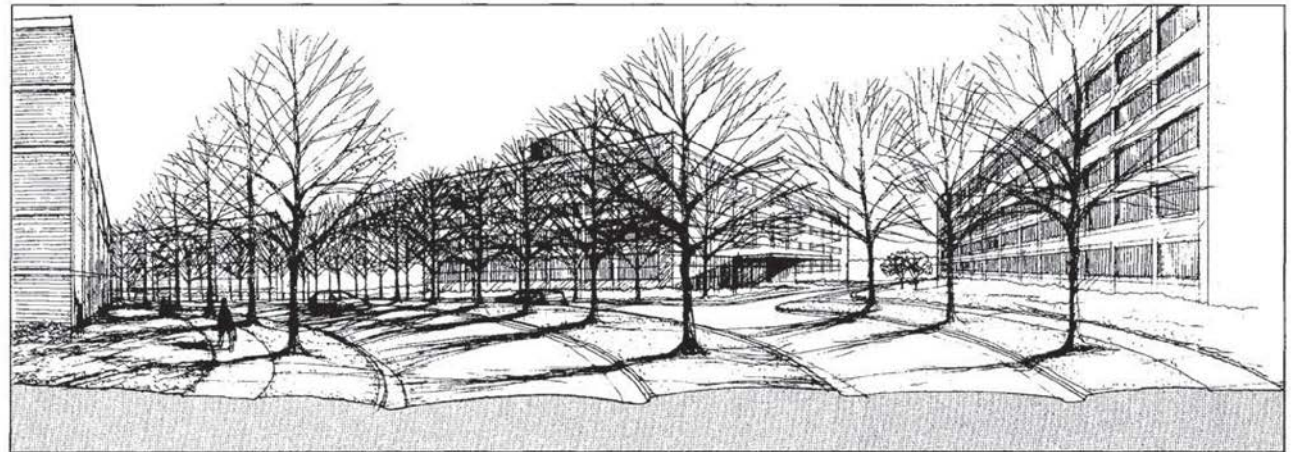


Rendering of Alewife Canal. A pedestrian environment and place for outdoor activities.
(Source: Alewife Revitalization. Alewife Urban Design Study Phase II)

Alewife Revitalization Plan (1979)

Plan's Implementation:

- The Alewife Commercial Area Revitalization District was established as part of the City's strategy to revitalize and strengthen its commercial base.
- In 1981 the Parkway Overlay District zoning was enacted, creating setbacks and height limitations to guide the character of development along the major parkways in the area—Fresh Pond Parkway, Alewife Brook Parkway, and the areas in Cambridge adjacent to Route 2.
- Infrastructure improvements: MBTA extension line and construction of Alewife T station.
- A special permit/ PUD provision was established in the Triangle. However, the large threshold for special permits meant that several projects were developed as-of-right, with limited review, public input, and public realm improvements tied to bonuses.



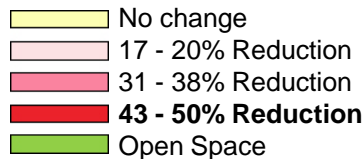
Example of improvement for parkways in Alewife
(Source: Alewife Revitalization. Alewife Urban Design Study Phase II)

Citywide Plan (1997- 2000)

Study by a Citywide Growth Management Advisory Committee and the Community Development Department.

Results:

- Citywide rezoning was adopted in February 2001.
- In the Concord-Alewife area, new zoning reduced commercial FAR and nonresidential densities permitted in the office and business districts by 38%, facilitating housing.
- Citywide project review requirements were established.
- Reduced allowable off-street parking for commercial development in order to control traffic impacts.
- 1992 Growth Policy Plan contributed to this plan.

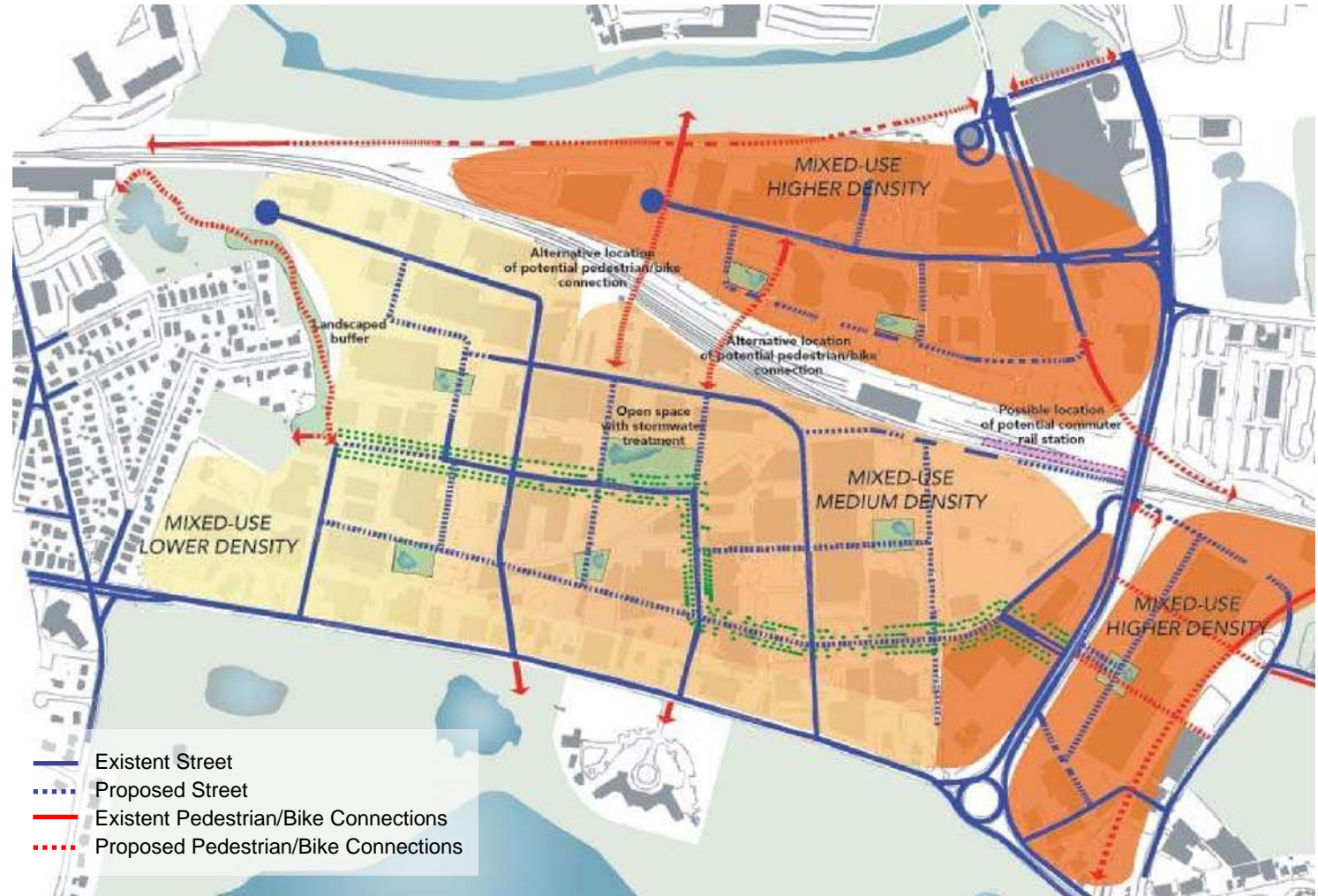


Proposed Reduction in Commercial FAR
(Source: Alewife Revitalization. Alewife Urban Design Study Phase II)

Concord-Alewife Planning Study (2005)

Vision:

- Create a people-oriented sense of place and developing a neighborhood “heart” for people who live, work, play, and shop in Alewife.



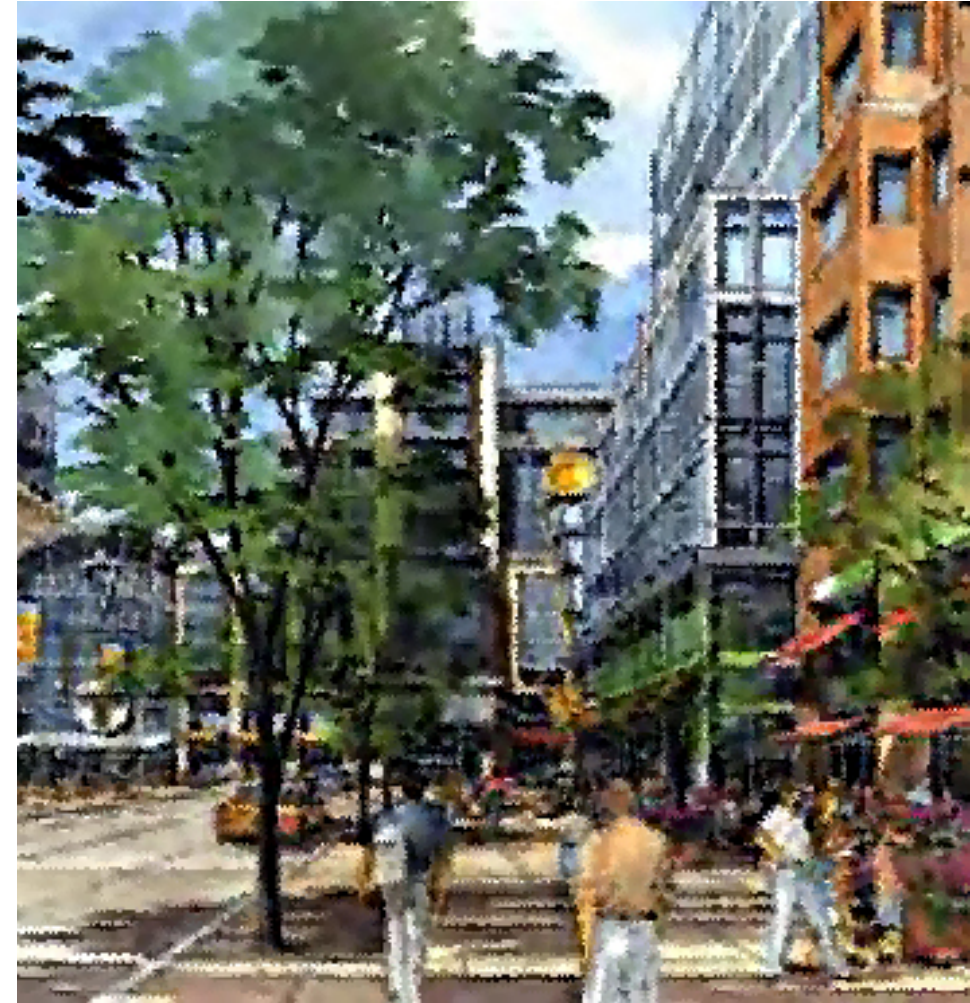
Concord Alewife Concept Plan (2005)

(Source: Concord-Alewife Plan. A report of the Concord-Alewife Planning Study, November 2005)

Concord-Alewife Planning Study (2005)

Key recommendations:

- Mixed-use development, allowing higher densities closer to Alewife Station.
- Low Impact Development strategies and creation of diverse types of open space to enhance stormwater retention and treatment.
- Create a variety of housing opportunities.
- Transfer-of-development rights (TDR) provision was included to protect the Cambridge Highlands while promoting development.
- Increase pedestrian and bicycle connections.
- Improve traffic patterns by adding new roads



Rendering illustrating the desired future character of the mixed-use area.
(Source: A report of the Concord-Alewife Planning Study, November 2005)

Concord-Alewife Planning Study (2005)

Plan's Implementation:

- Incentives for residential development have created a more mixed-use district.
- Developments have been required to contribute to the creation of a bicycle/pedestrian bridge across the railroad tracks: 1) with dedicated landing locations for a bridge, and 2) with funding for the design of the bridge.

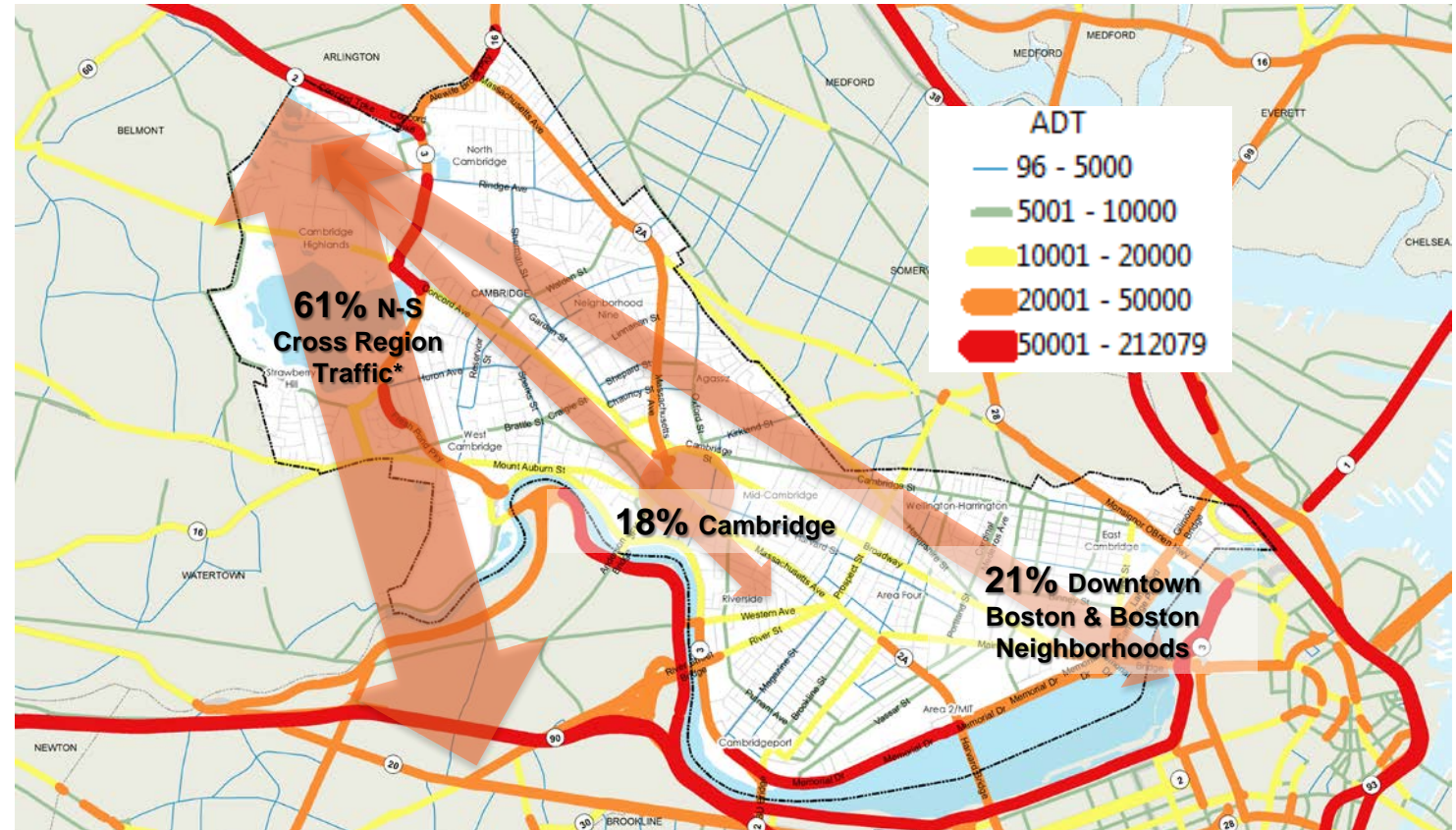


Alewife Urban Design Plan

(Source: Alewife Revitalization. Alewife Urban Design Study Phase II)

Alewife Transportation Update (2014)

- There is a lot of people going through Cambridge to other employment centers.
- 82% of vehicle trips through Alewife are thru-trips.
- Traffic congestion in Alewife is part of a regional transportation problem.
- Inadequate pedestrian and bicycle connections.
- Lack of coherence/ connectivity in traffic patterns.
- Update from 2006 Study



Average Daily Traffic

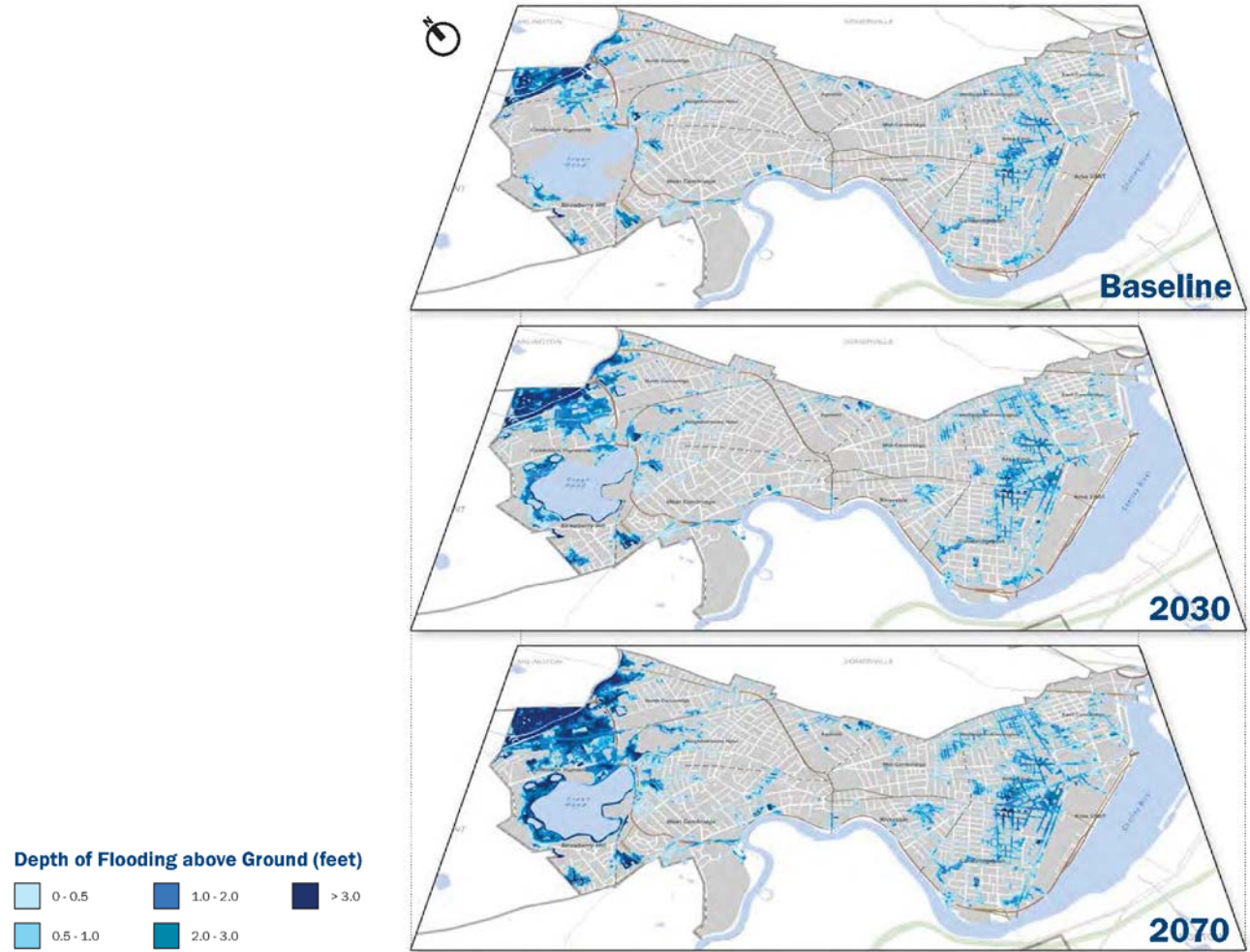
(Source: ADT data: MassDOT. Through traffic data: City Council Transportation Committee presentation on Alewife Transportation. Data from Boston Region MPO regional transportation model).

Climate Change Vulnerability Assessment, CCVA Report (2015)

- Anticipates how climate might shift, using the best available science, and identifies vulnerabilities so that the City can manage and protect Cambridge's future under climate change.
- The assessment will serve as the technical foundation for the next phase involving the development of Cambridge's first Climate Change Preparedness and Resilience Plan.

CCVA / Inland Flooding

- Alewife is one of the most vulnerable zones.
- The Concord-Alewife area falls in within the Mystic River watershed.
- Impervious surfaces contribute to flooding problems (surface parking).
- Precipitation-driven flooding is likely to become more frequent, expansive, and deeper.
- Cambridge has joined Belmont and Arlington to form the Tri-Community Working Group, which addresses flooding issues that involve all three cities.

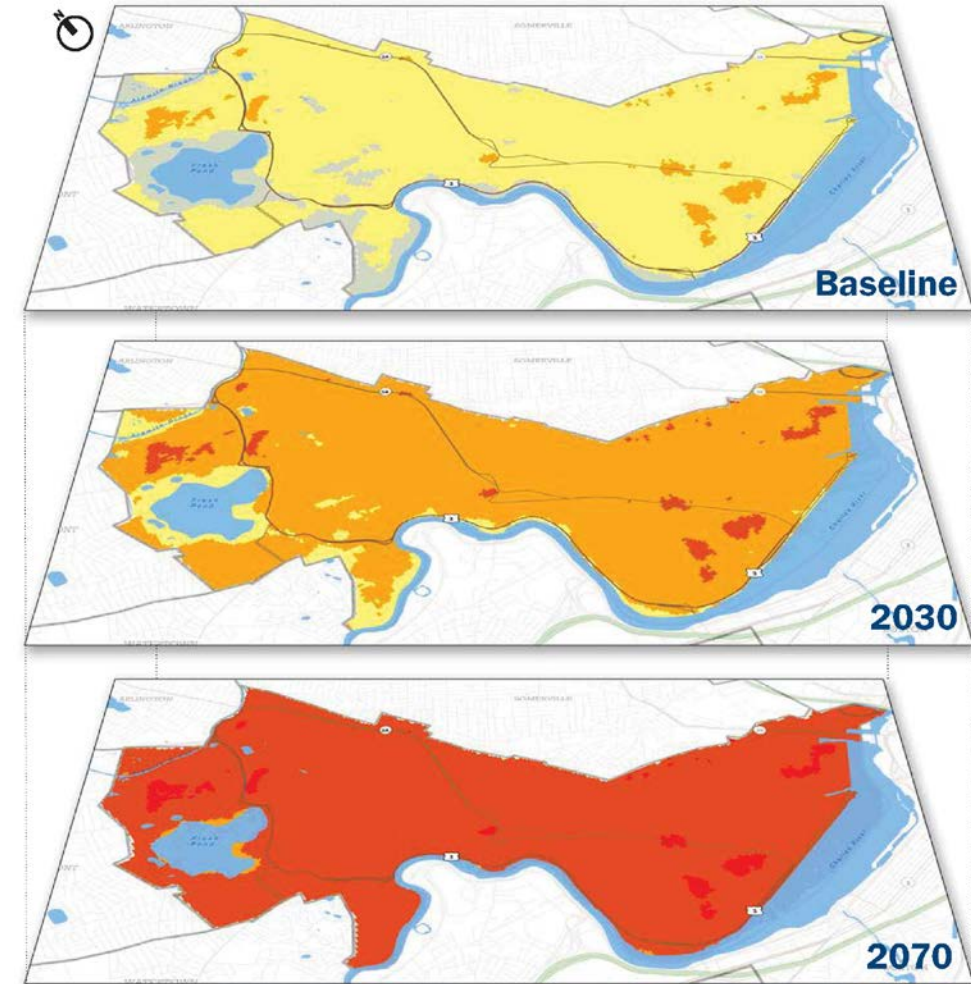


Inland Flooding – 100-year 24-hour storm

(Source: Kleinfelder with manhole flooding by MWH, riverine flooding by VHB, November 2015)

CCVA / Heat Island Map

- Alewife is one of the most vulnerable zones.
- Heat waves are expected to increase significantly. By 2030, the number of days each year above 90°F could triple. By 2070, there could be more than 2 months in a year over 90°F.
- Extreme heat causes more deaths in the U.S. than floods, hurricanes, lightning, tornados and earthquakes. But heat-related death are preventable.



Heat Island Map (Heat Index)

(Source: Produced by Kleinfelder based on ATMOS research, November 2015)

Current and Future Challenges



Alewife: challenges and opportunities

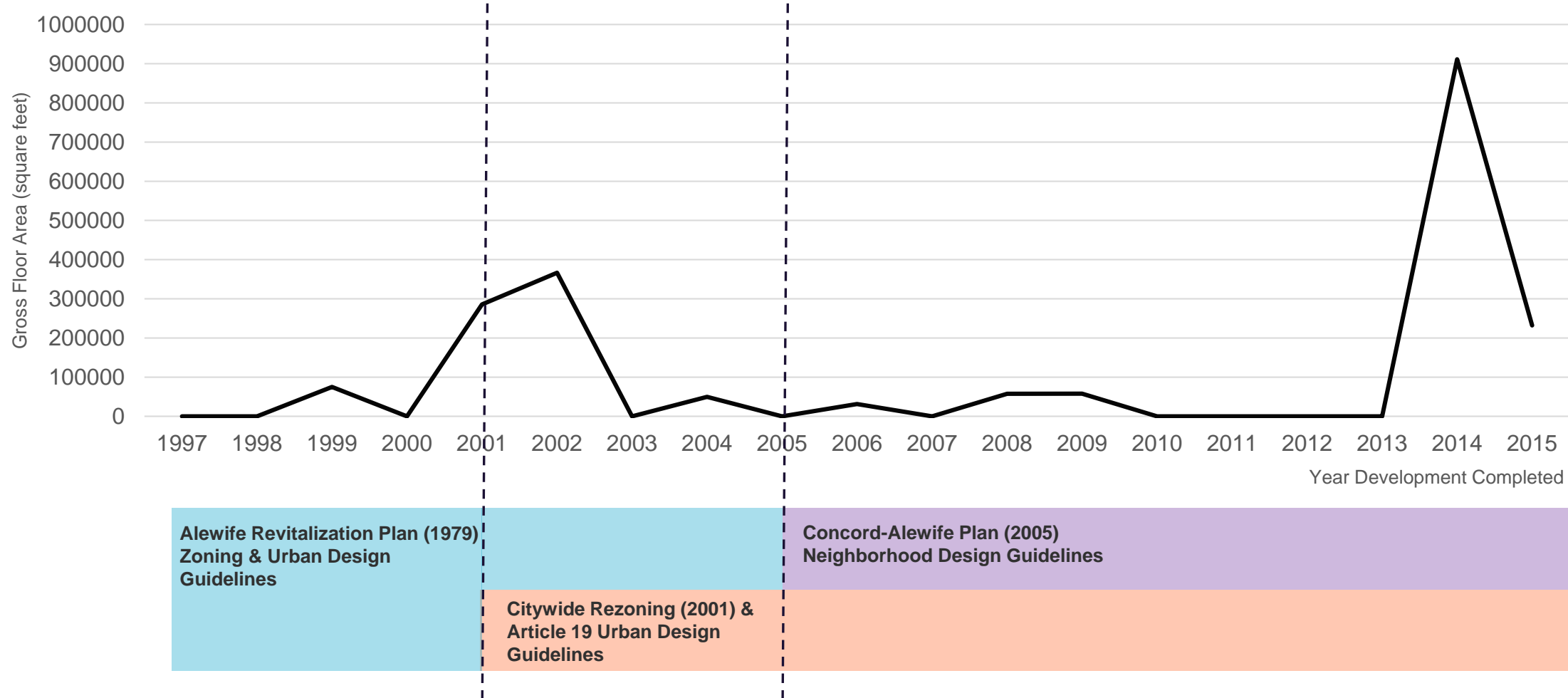
Challenges:

- Sensitive environment.
- Existing buildings and infrastructure, and future growth, must respond to climate change challenges.
- A lack of sense of place.
- Pattern of ownership – recent consolidation

Opportunities:

- Development potential
- Housing demand
- Low Impact Development principles
- Change character from auto-oriented to a pedestrian friendly environment

Large-scale Alewife Development by Year Completed



(Source: City of Cambridge Development Log 1997-2015)



1995

Danehy Park



2004

200 Cambridge Park Dr. (Lab/R&D)

Cambridge Park Apartments

10 Wilson Rd. (Northrop Grumman Lab)

Neville Center at Fresh Pond (Assisted Living)

2010

773 Concord Ave.
(Residential)

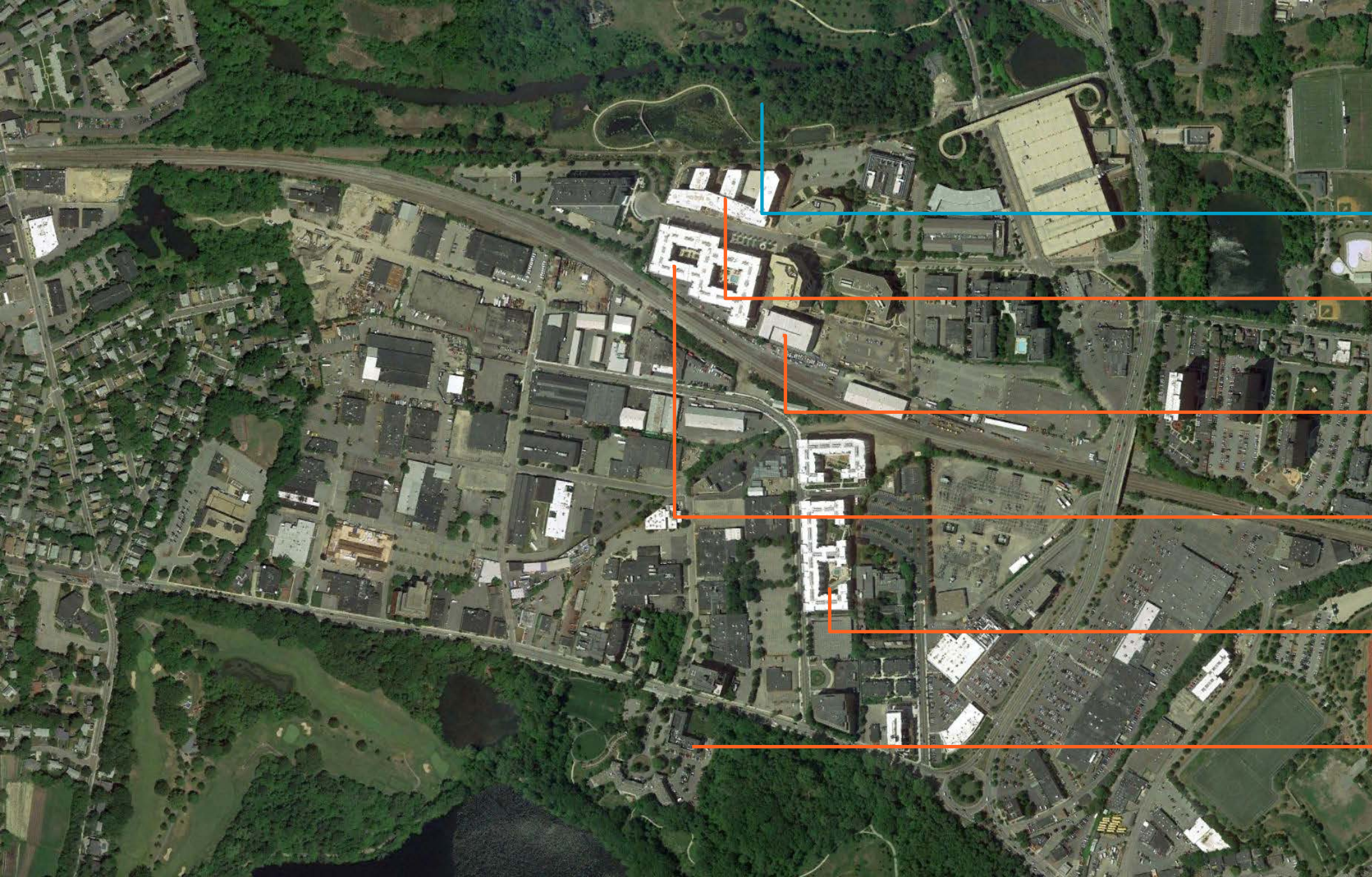
Baker Building
(Residential)

Hotel Tria
Expansion

Little Fresh Pond
Restoration

Habitat
Improvement
Project





2015

Stormwater wetland

Fuse Cambridge
(Residential)

Parking Garage

Hanover Cambridge
Park (Residential)

Atmark
(Residential)

603 Concord
(Residential)

Traffic Congestion on Alewife

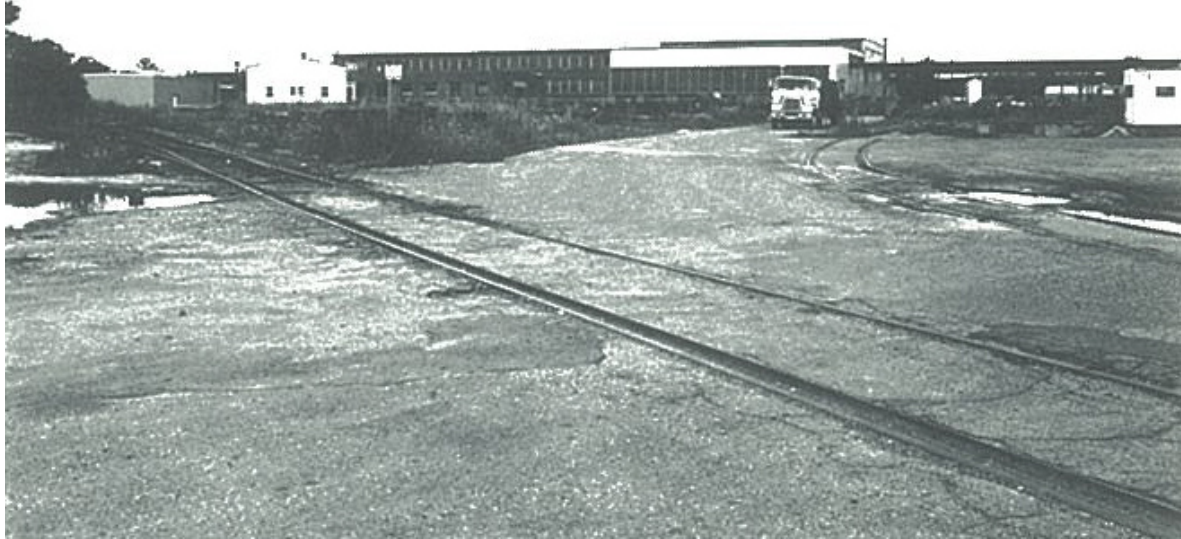


Traffic Congestion on Alewife Brook Parkway / 1979.
(Source: Alewife Revitalization. Alewife Urban Design Study Phase II)



Traffic Congestion in the intersection of Alewife Brook Parkway and Route 2 / 2015.
(Source: www.bostonglobe.com)

Industrial Areas



Typical Industrial Area Surface Condition / 1979.
(Source: Alewife Revitalization. Alewife Urban Design Study Phase II)



Spinesi PI / 2016.
(Source:)

Industrial Buildings



Industrial Buildings / 1979.
(Source: Alewife Revitalization. Alewife Urban Design Study Phase II)



Industrial Buildings in Spinelli PI / 2016.
(Source:)

Concord Avenue along Fresh Pond Reservation



Roadway lack adequate sidewalks, tree planting, and other public amenities / 1979.
(Source: Alewife Revitalization. Alewife Urban Design Study Phase II)



Concord Avenue, improved sidewalk and addition of bike line / 2016.
(Source: Google Earth)

Danehy Park



Cambridge City Dump / 1979.
(Source: Alewife Revitalization. Alewife Urban Design Study Phase II)



Danehy Park / 2010.
(Source: Google Earth)

Rail Tracks



Underutilized Railroad Yards / 1979.
(Source: Alewife Revitalization. Alewife Urban Design Study Phase II)



Rail / 2016.
(Source:)

Flooding



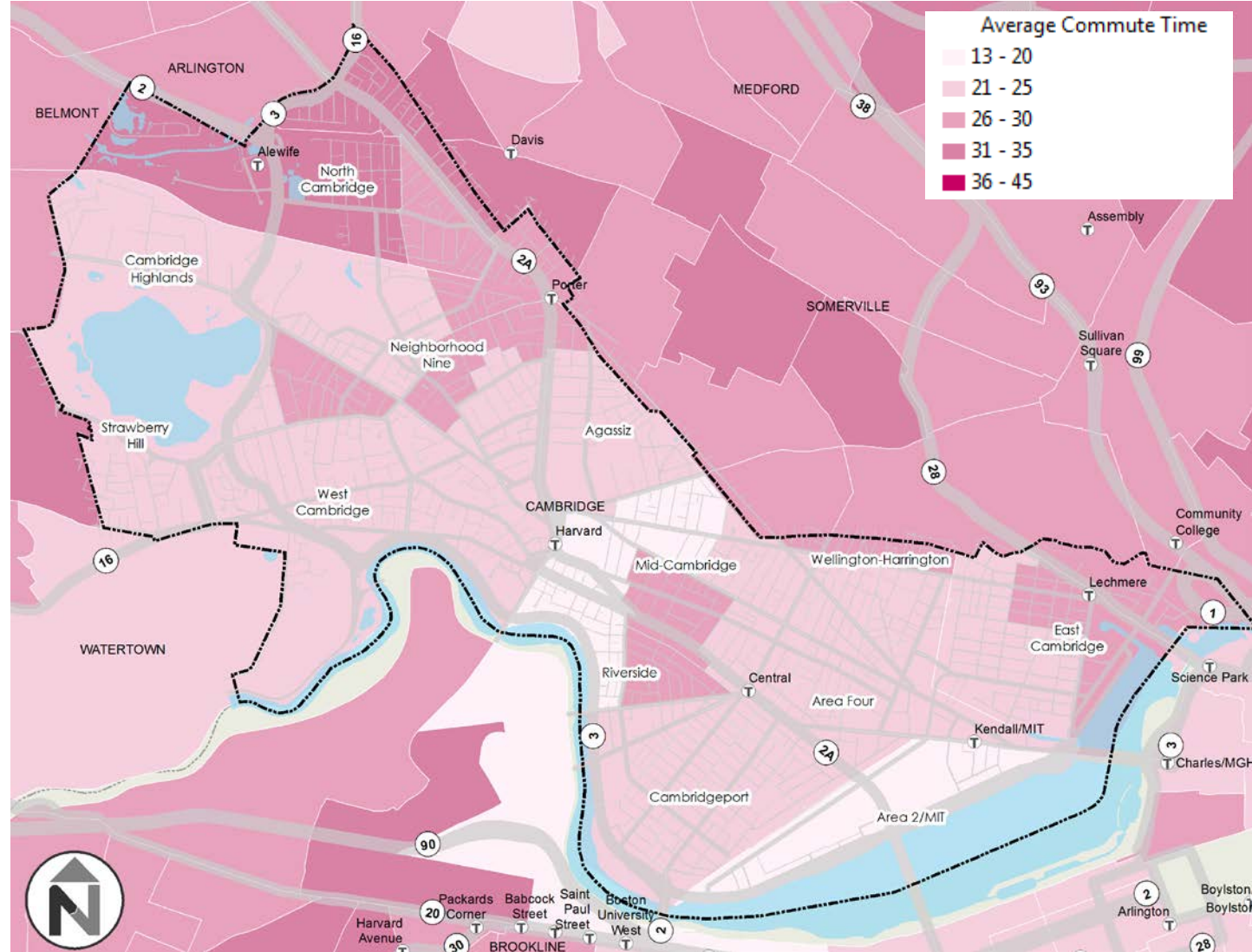
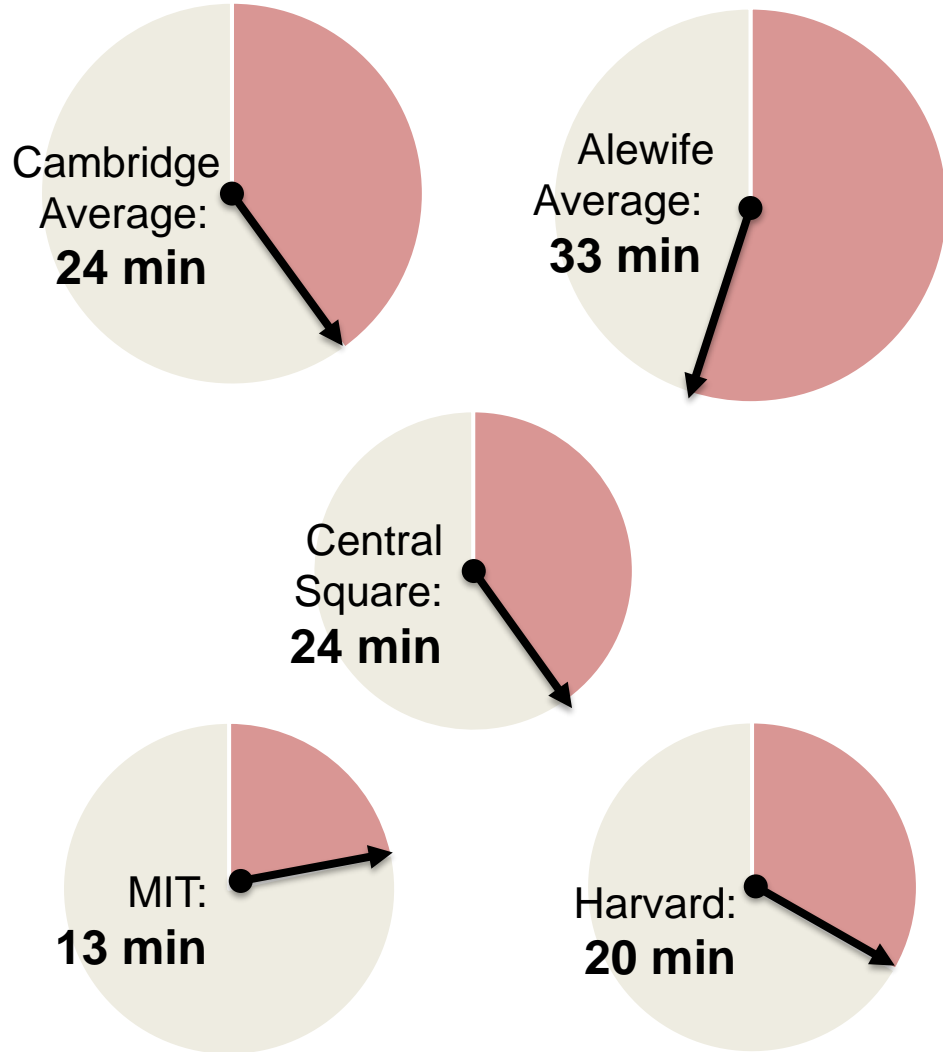
Flooding in Fawcett St / 2014.
(Source: <https://freshpondresidents.org>)



Cambridge Park Drive / 2016.

Alewife – How does it compare in commute time?

Commute times (normalized for Cambridge)



(Source: 2014 American Community Survey 5-year census tract estimates)

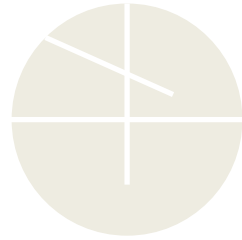


Alewife – How does it compare in intersection density?

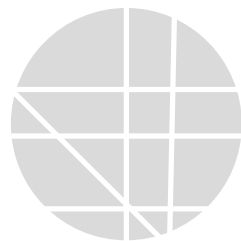
Intersection Density



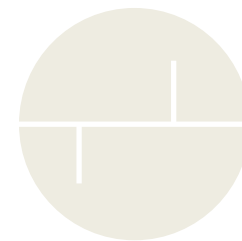
Cambridge
Average:
426/mi²



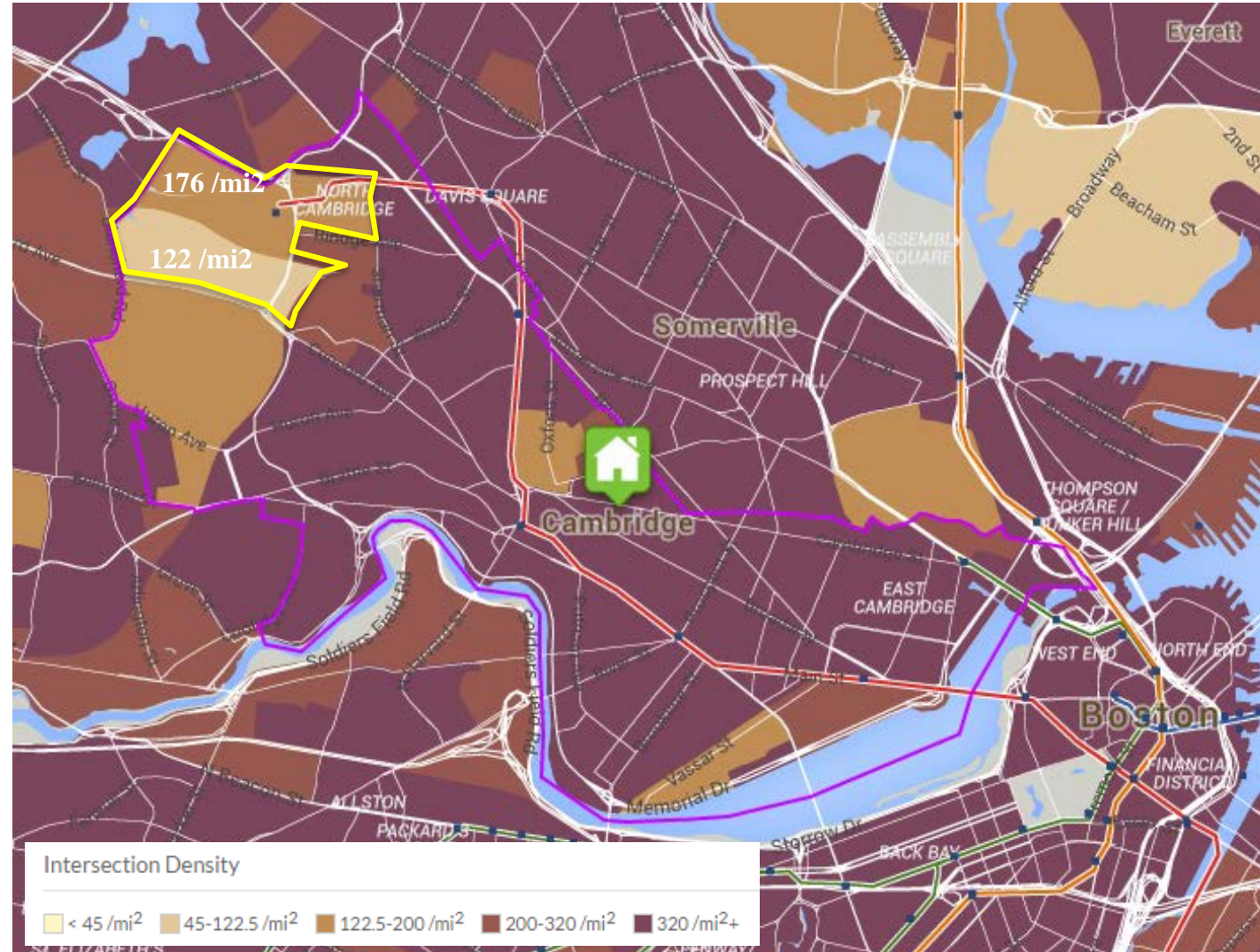
Alewife
Station Area
176/mi²



Best Practice:
Central Sq.
1,224/mi²






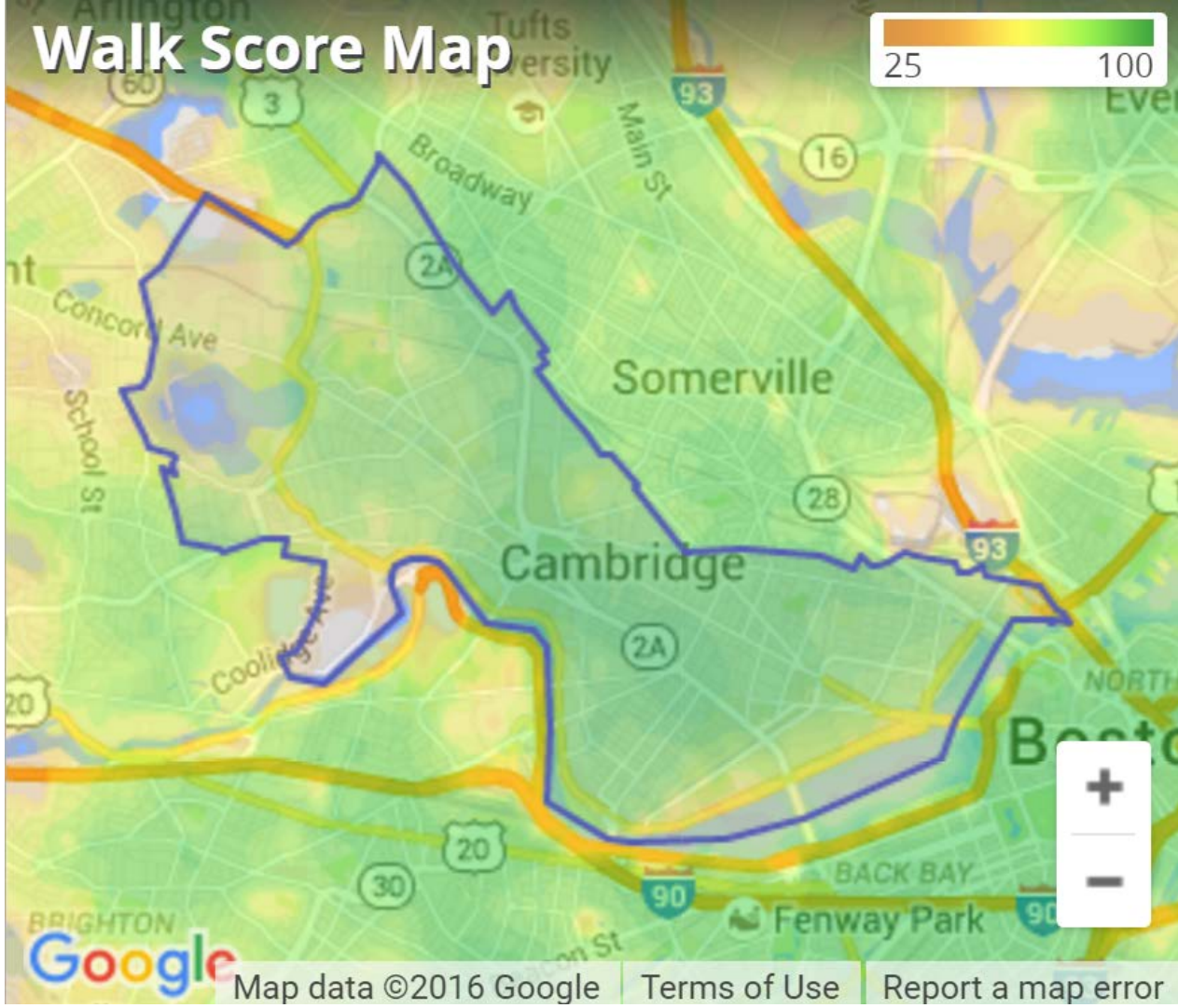
Alewife Concord Ave
@Brook Pkwy:
122/mi²



(Source: Center for Neighborhood Technology)

Alewife – Walking, transit, bike

	Walk score 	Transit score 	Bike score 
Cambridge Average	88	72	93
Alewife	68	68	92
Central Square	98	73	99
East Cambridge	90	84	94



(Source: www.walkscore.com/)

Auto-focused street design

Lots of Surface Parking

Poor connections around T station

↑
South

Alewife Brook Parkway

Cambridge Park Drive





New development brings residential uses

West

Office Park style street design

Auto-oriented land uses by T station

Cambridge Park Drive

Cambridge Park Place



*Lots of
Impermeable
Surfaces*

*Disconnected
Street
Pattern*

*Inconsistent
Pedestrian
Infrastructure*

*Upstart
Commercial
and Light
Industrial
Uses*

North

Concord Ave

Spinelli Place

Traffic



Wrap-Up and Discussion



Discussion Questions

- As a broad overview, does this capture the challenges of the area?
- What from past plans should the planning team revisit?
- How should the Alewife study fit into the larger citywide plan?

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