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)

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.”

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

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

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

“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 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)
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 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).

- 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 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, lighting, 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)
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)

**Spineli PI / 2016.**
(Source: )
Industrial Buildings

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

(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)

Daheny 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

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(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

Office Park style street design

Auto-oriented land uses by T station

West
North

Lots of Impermeable Surfaces

Disconnected Street Pattern

Inconsistent Pedestrian Infrastructure

Upstart Commercial and Light Industrial Uses

Concord Ave

Swinelli Place
Traffic
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?