Agenda

Project Update

Alewife
Quadrangle Scenario

Next Steps
Corridors

Discussion
Project Framework

VISION
What we want to be

CORE VALUES
What is important to us

FOCUS AREAS
What we are going to concentrate on

EXISTING CONDITIONS

DRAFT GOALS, ISSUES, & OPPORTUNITIES

STRATEGIES
TARGETS & INDICATORS

THE PLAN
Alewife: The Quadrangle
District As-Built

*Note: Number of housing units does not include units that are under construction, permitted, or in the pipeline. They are tabulated later in the presentation.

<table>
<thead>
<tr>
<th>District FAR</th>
<th>0.61</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total GFA</td>
<td>2.48m SF</td>
</tr>
<tr>
<td>- Housing units*</td>
<td>494 units</td>
</tr>
<tr>
<td>- Office / lab space</td>
<td>905,500 SF</td>
</tr>
<tr>
<td>- Industrial space</td>
<td>826,550 SF</td>
</tr>
<tr>
<td>- Institutional uses</td>
<td>197,300 SF</td>
</tr>
</tbody>
</table>

- Educational
- Industrial
- Commercial
- Residential
- Parcels less likely to be developed
- Existing Development
- Permitted Projects
- Future Projects
Relevant Engagement to date

Mobile Engagement Station:

- Huron Avenue, March 26, 2016
- Alewife Sewer Separation, Tobin School, March 30, 2016
- Alewife T Station, April 6, 2016
- Collins Branch Library, April 11, 2016
- Fresh Pond Day, June 11, 2016
- Family Fun Day, Rindge Field, June 24, 2016
- Summer Barbecue, Rindge Towers, July 28, 2016
- DPW BBQ at Observatory Hill, September 15, 2016
- Danehy Park Family Day, September 17, 2016
- DPW Neighborhood BBQ: West Cambridge, October 5, 2016
- Fresh Pond Day, May 20, 2017

Street Teams / Surveys:

- Alewife T
- Alewife Reservation
- Fresh Pond
- Trader Joe’s in Alewife
- Rindge Towers
- Danehy Park
- Rindge Field
- Russell Field
- Sarah’s Market and Café
- Gately Youth Center
- Haggerty School
- Cambridge Center for Families
- Banneker Charter School
- O’Neill Branch Library
- Tobin School
- Sofra Bakery
- Crate Escape too

Mobile Engagement Station, Family Day at Danehy Park, September 17, 2017
<table>
<thead>
<tr>
<th>Optimized Baseline</th>
<th>Mixed-use Residential</th>
<th>Mixed-use Commercial</th>
<th>Mixed-use Industrial</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Same use-mix as the Baseline: 2/3 Residential and 1/3 Commercial</td>
<td>• Same use-mix and urban design/resiliency approach as the Optimized Baseline</td>
<td>• Same urban design/resiliency approach and densities as the Mix-use Residential</td>
<td>• Density same as Baseline</td>
</tr>
<tr>
<td>• Revised setback requirements to improve the urbanism and increase flood resiliency</td>
<td>• Increased densities</td>
<td>• Use-mix favors Commercial: 2/3 Commercial and 1/3 Residential</td>
<td>• Same resiliency approach as other scenarios</td>
</tr>
<tr>
<td></td>
<td>• Increase the housing supply (market-rate and affordable)</td>
<td>• Increase commercial tax base and minimize residents in the flood plain.</td>
<td>• Provide low-barrier-to-entry jobs for residents</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Provide space for fabrication and maker businesses</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Minimize residents in the floodplain</td>
</tr>
</tbody>
</table>

*These scenarios for the Quadrangle were presented in February and March 2017.*
Alewife Process to date

8 Alewife Working Group meetings
• May 19, 2016 (25 attendees)
• June 14, 2016 (11 attendees)
• September 15, 2016 (18 attendees)
• October 20, 2016 (20 attendees)
• November 17, 2016 (24 attendees)
• January 26, 2017 (38 attendees)
• March 7, 2017 (38 attendees)
• April 27, 2017 (21 attendees)

3 Public Workshops at the Tobin School
• Listening Workshop, March 2016 (40+ attendees)
• Visioning Workshop, July 2016 (45+ attendees)
• Alewife Scenarios Workshop, February 2017 (70+ attendees)

One Alewife-focused Envision Cambridge Advisory Committee meeting
• January 18, 2017 (29 attendees)

Note: Alewife Quadrangle scenarios were shared at the italicized meetings above.
What we heard

**Existing businesses:** There was general concern about existing businesses and how they fit into the long-term plan for Alewife.

**Industrial uses:** Several people stated that industrial uses are an important part of Cambridge's history, job base, and identity. However, there was also concern that industrial uses remaining would mean keeping the same urban form, traffic patterns, etc.

**Public Improvements and Amenities:** Several people asked about open space and want to understand the proposed open space in relation to other open spaces nearby and elsewhere in Cambridge.

**Land Use:** There was general interest in pursuing a more complex mixed-use scenario, with 21st-century industrial and innovation uses and maintaining a balance of housing and jobs.

**Effects of new development:** Members of the public asked about the need for new infrastructure and streets with new development, as well as new costs, such as schools and City services. Several people mentioned traffic and said that the surrounding streets (Concord Ave, Alewife-Brook Parkway) are already at a breaking point.

**Urban Form:** Several people expressed a desire for building variety and a stronger urban form, with similarly scaled buildings and less monolithic facades.

**Surrounding neighborhoods:** There were conflicting desires to connect neighborhoods, such as the Highlands to Alewife, and also for a buffer. Many wanted to understand how the scenarios would relate to the Highlands, Huron Village, and the rest of West Cambridge.

**Vision:** Alewife needs a vision that goes beyond pragmatism in these scenarios. It needs to become a real neighborhood.
Proposed land use

Guiding considerations:

- Create a mixed-use district that has low barrier-to-entry jobs.
- Create a “Main Street” with active ground-floor uses.
- Achieve a scaled transition towards Cambridge Highlands.
Proposed Open Space Network

<table>
<thead>
<tr>
<th>Proposed Open Space Network</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Path Length</strong></td>
</tr>
<tr>
<td>0.25 miles</td>
</tr>
<tr>
<td><strong>Path Type</strong></td>
</tr>
<tr>
<td>Protected Bike Lane with Separate Pedestrian Path</td>
</tr>
<tr>
<td><strong>Area</strong></td>
</tr>
<tr>
<td>3.3 acres</td>
</tr>
<tr>
<td><strong>Important Features</strong></td>
</tr>
<tr>
<td>Two adjacent triangular parks; storm water management swale; connects to Concord Avenue cycle track and Fresh Pond</td>
</tr>
</tbody>
</table>
Open Space Comparison: Dana Park

<table>
<thead>
<tr>
<th></th>
<th>Southwest Park</th>
<th>Northeast Park</th>
<th>Dana Park</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Area</strong></td>
<td>1.60 acres</td>
<td>1.10 acres</td>
<td>1.40 acres</td>
</tr>
<tr>
<td><strong>Important Features</strong></td>
<td>Direct connection to Fresh Pond</td>
<td>Completes retail corridor with an active open space</td>
<td>Playground, Water Play, Basketball</td>
</tr>
<tr>
<td><strong>Location</strong></td>
<td>Smith Place</td>
<td>Wilson Road and Fawcett Street</td>
<td>Magazine St and Lawrence St Cambridgeport</td>
</tr>
</tbody>
</table>
Open Space Comparison: Clement Morgan Park

<table>
<thead>
<tr>
<th></th>
<th>Southwest Park</th>
<th>Northeast Park</th>
<th>Clement Morgan Park</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Area</strong></td>
<td>1.60 acres</td>
<td>1.10 acres</td>
<td>1.04 acres</td>
</tr>
<tr>
<td><strong>Important Features</strong></td>
<td>Direct connection to Fresh Pond</td>
<td>Completes retail corridor with an active open space</td>
<td>Playground, basketball</td>
</tr>
<tr>
<td><strong>Location</strong></td>
<td>Smith Place</td>
<td>Wilson Road and Fawcett Street</td>
<td>Columbia St and Washington St The Port</td>
</tr>
</tbody>
</table>
Scenario Building Prototypes

<table>
<thead>
<tr>
<th>Townhouse</th>
<th>Residential</th>
<th>Commercial</th>
<th>Industrial/Commercial Hybrid</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Typical Floorplate</strong></td>
<td>800 SF per townhouse</td>
<td>14,000-20,000 SF</td>
<td>25,000-32,000 SF</td>
</tr>
<tr>
<td></td>
<td>6,400 SF per row</td>
<td></td>
<td>24,300-48,600 SF Ground Floor</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>16,200-48,600 SF Upper Floor</td>
</tr>
<tr>
<td><strong>Minimum Floorplate</strong></td>
<td>800 SF</td>
<td>10,000 SF</td>
<td>20,000 SF</td>
</tr>
<tr>
<td><strong>Typical Building Width</strong></td>
<td>25 Feet</td>
<td>65 Feet</td>
<td>120 Feet</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>135 Feet</td>
</tr>
</tbody>
</table>

All Prototypes:
First habitable floor raised 4’ for flood protection, with parking below. Continuous raised walkway/porch along “A Streets”
60% Buildout

Draft Alewife Scenarios: Revised Quadrangle Scenario

Total GFA at 60% buildout

<table>
<thead>
<tr>
<th>Category</th>
<th>SF</th>
</tr>
</thead>
<tbody>
<tr>
<td>New housing</td>
<td>1,080 units</td>
</tr>
<tr>
<td>Office / lab space</td>
<td>1.78m SF</td>
</tr>
<tr>
<td>Ground floor active uses</td>
<td>31,100 SF</td>
</tr>
<tr>
<td>Industrial space</td>
<td>387,120 SF</td>
</tr>
<tr>
<td>Total</td>
<td>3.36m SF</td>
</tr>
</tbody>
</table>

Note: Buildings less likely to be developed include: Parcels with multiple ownerships, Owner-occupied parcels, Buildings built since 1995, Institutional uses.
100% Buildout

Note: At full buildout, there will be ~600,000 sf of industrial space in comparison to ~825,000 sf today.

<table>
<thead>
<tr>
<th>Total GFA at 100% buildout</th>
<th>5.61m SF</th>
</tr>
</thead>
<tbody>
<tr>
<td>District FAR</td>
<td>1.56</td>
</tr>
</tbody>
</table>

- Accessory Retail Zone
- Industrial/Commercial Hybrid
- Retail (Mixed-use)
- Commercial
- Residential
- Open Space
Why Light Industrial Uses

Existing businesses provide:
- Important amenities for Cambridge residents
- Diverse jobs for Cambridge residents that are different in profile than the jobs in Kendall Square

A diverse innovation jobs district can provide:
- Low barrier to entry jobs with a living wage
- Economic and environmental sustainability of the supply chain through local production of goods to local end-users
Food Manufacturing
4% job growth nationally, 2011-2015
Only 38% of regional demand for beverage manufacturing is met by local companies.

Examples:
- Manufacturing of baked goods
- Fruit and Vegetable Preserving
- Grain Milling
- Confectionery Product Manufacturing
- Dairy Product Manufacturing

Beverage Manufacturing
4% job growth nationally, 2011-2015
Only 41% of regional demand for beverage manufacturing is met by local companies.

Examples:
- Breweries
- Wine manufacturing
- Ice manufacturing
- Soda or tea manufacturing

Fabricated Metal Product Manufacturing
2% job growth, 2011-2015
Only 53% of regional demand for fabricated metal manufacturing is met by local companies.

Examples:
- Machine shops
- Makerspace
- Forging and Stamping
- Architectural and Structural Metals Manufacturing

Medical Equipment and Supplies Manufacturing
Level employment nationally, 2011-2015
Only 37% of regional demand for medical manufacturing is met by local

Examples:
- Medical kit assembly
- Manufacturing of surgical and medical instruments, appliances, and supplies
- Dental equipment and supplies manufacturing

Sources: National job growth rates calculated from U.S. Census Bureau LEHD. All other stats are calculated using EMSI.
# Light Industrial Jobs and Wages

<table>
<thead>
<tr>
<th>Industry</th>
<th>National Salary</th>
<th>Regional Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>$80,018</td>
<td>$114,472</td>
</tr>
<tr>
<td>Food</td>
<td>$56,300</td>
<td>$62,105</td>
</tr>
<tr>
<td>Beverage</td>
<td>$69,600</td>
<td>$88,960</td>
</tr>
<tr>
<td>Medical Equipment</td>
<td>$97,400</td>
<td>$119,630</td>
</tr>
<tr>
<td>Fabricated Metal Product</td>
<td>$65,800</td>
<td>$86,865</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>$85,133</td>
<td>$112,639</td>
</tr>
<tr>
<td>Accommodation and Food Services</td>
<td>$22,868</td>
<td>$28,128</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>$35,729</td>
<td>$39,473</td>
</tr>
</tbody>
</table>

Source: EMSI, 2016
Increasing Intensity of Precipitation - Flooding

- Rain and snow will fall harder
- More rain and snow in the winter and spring
- Overbank flooding from Alewife Brook will worsen
- Street flooding will worsen

10 year 24-hour storm by 2070 (6.4 inches over 24 hours)

Source: Kleinfelder for the City of Cambridge Climate Change Vulnerability Assessment, updated 2017
Draft Alewife Scenarios: Revised Quadrangle Scenario

Raised Platform as Urban Realm
A and B streets

- A Streets
- B Streets
- Parcels not part of this analysis
- Recently completed (since 1995)
- Planned affordable housing (671 Concord Ave)
Open for business!
A network of bike and pedestrian connections

- Proposed pedestrian walkways
- Proposed bike accommodations
- Existing bike accommodations
- Proposed open space
- Proposed figure-ground
- Parcels not part of this analysis
- Existing Development
- Permitted Projects
- Pipeline affordable housing (671 Concord Ave)
Evaluating Housing, Employment, and Fiscal Impacts
Ground-floor uses 60% buildout

- New housing: 1,080 units
- Office / lab space: 1.78m SF
- Ground floor active uses: 31,100 SF
- Industrial space: 387,120 SF

Total GFA at 60% buildout: 3.36m SF

District FAR: 1.56

Total GFA at 100% buildout: 5.61m SF
Represented a 60% Build-Out

Estimated Housing Units

<table>
<thead>
<tr>
<th>Units</th>
<th>Affordable units</th>
<th>Market-rate units</th>
<th>Existing and pipeline units*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing (inc. pipeline)</td>
<td>697</td>
<td>697</td>
<td>697</td>
</tr>
<tr>
<td>Baseline</td>
<td>340</td>
<td>1,361</td>
<td>1,590</td>
</tr>
<tr>
<td>Optimized Baseline</td>
<td>400</td>
<td>2,130</td>
<td>2,550</td>
</tr>
<tr>
<td>Mixed-use Residential (with optional high-rise overlay)</td>
<td>530</td>
<td>640</td>
<td></td>
</tr>
<tr>
<td>Mixed-use Commercial (with optional high-rise overlay)</td>
<td>270</td>
<td>1,090</td>
<td>1,240</td>
</tr>
<tr>
<td>Mixed-use Industrial</td>
<td>170</td>
<td>670</td>
<td>864</td>
</tr>
<tr>
<td>Recommended Scenario</td>
<td>216</td>
<td>697</td>
<td>697</td>
</tr>
</tbody>
</table>

"Pipeline" units include the City-owned parcel at 671 Concord Avenue, which has 98 affordable units.

Note: Housing unit counts will be revised, pending final unit count for 55 Wheeler Street.
Housing Units – Existing and Pipeline

Note: For comparison across scenarios through this planning process, this includes only existing and pipeline units as of late 2016. Recently proposed units, such as 55 Wheeler, will be incorporated into the final analysis.

98 units in pipeline

~37 units

429 units

72 units

61 units

# Existing or pipeline housing units
- Accessory Retail Zone
- Industrial/Commercial Hybrid
- Retail (Mixed-use)
- Commercial
- Residential
- Open Space
Estimated Public School Students

- Baseline: 3,360 students
- Optimized Baseline: 3,910 students
- Mixed-use Residential: 5,240 students
- Mixed-use Commercial: 2,690 students
- Mixed-use Industrial: 1,650 students
- Recommended Scenario: 2,180 students

Note: The resident and student generation scenarios were verified by comparing to 1) recent fiscal impact scenarios for the Boston region, and 2) CPS data on the number of public school students living in recently developed residential buildings in Alewife.
Estimated Annual Fiscal Revenues and Costs

Represented are 60% Build-Outs

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Revenues</th>
<th>Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>$2.6M</td>
<td></td>
</tr>
<tr>
<td>Optimized Baseline</td>
<td>$1.6M</td>
<td></td>
</tr>
<tr>
<td>Mixed-use Residential (with optional high-rise overlay)</td>
<td>$4.0M</td>
<td>$4.3M</td>
</tr>
<tr>
<td>Mixed-use Commercial (with optional high-rise overlay)</td>
<td>$17.6M</td>
<td>$20.2M</td>
</tr>
<tr>
<td>Mixed-use Industrial</td>
<td>$5.3M</td>
<td>$6.7M</td>
</tr>
<tr>
<td>Recommended Scenario</td>
<td>$6.7M</td>
<td></td>
</tr>
</tbody>
</table>

Note: The two primary sources of revenue are 1) property taxes, and 2) other taxes and fees, corporate excise taxes, motor vehicle excise taxes, charges for services, fines, and forfeits and licenses.

Costs include 1) general services for each new resident and worker based on four City budget categories (General Govt., Community Development, Human Resources, and Public Safety) and 2) education costs for public school students.
Represented a 60% Build-Out

Estimated Jobs

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Residential</th>
<th>Retail</th>
<th>Industrial</th>
<th>Commercial lab</th>
<th>Commercial office</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>6,130</td>
<td>5,680</td>
<td>5,780</td>
<td>23,640</td>
<td>21,920</td>
</tr>
<tr>
<td>Optimized Baseline</td>
<td>9,460</td>
<td>10,800</td>
<td>10,800</td>
<td>20,670</td>
<td>19,840</td>
</tr>
<tr>
<td>Mixed-use Residential (with opt. high-rise overlay)</td>
<td>4,480</td>
<td>5,150</td>
<td>5,150</td>
<td>11,605</td>
<td>10,800</td>
</tr>
<tr>
<td>Mixed-use Commercial (with opt. high-rise overlay)</td>
<td>10,130</td>
<td>11,605</td>
<td>11,605</td>
<td>23,640</td>
<td>22,800</td>
</tr>
<tr>
<td>Mixed-use Industrial</td>
<td>3,710</td>
<td>3,710</td>
<td>3,710</td>
<td>5,105</td>
<td>5,105</td>
</tr>
<tr>
<td>Recommended Scenario</td>
<td>11,240</td>
<td>11,240</td>
<td>11,240</td>
<td>23,640</td>
<td>22,800</td>
</tr>
</tbody>
</table>

* Residential jobs are building leasing, operations, and maintenance jobs.
Estimated Auto Trips on Alewife Brook Parkway

- Quadrangle Traffic (Current multi-modal)
- Quadrangle Traffic (Denser street grid, enhanced TDM)
- Existing Quadrangle traffic
- Existing non-Quadrangle traffic

### Quadrangle Travel Demand

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Traffic Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optimized Baseline</td>
<td>Mixed-use Residential (with optional high-rise overlay)</td>
</tr>
<tr>
<td>Mixed-use Commercial (with optional high-rise overlay)</td>
<td>Mixed-use Industrial</td>
</tr>
<tr>
<td>Recommended Scenario</td>
<td>Non-Quadrangle Traffic</td>
</tr>
</tbody>
</table>

Represented as a 60% Build-Out
Represented a 60% Build-Out

Estimated Auto Trips on **Outer Concord Avenue**
(from rotary to the Belmont line)

- Quadrangle Traffic (Current multi-modal)
- Quadrangle Traffic (Denser street grid, enhanced TDM)
- Existing Quadrangle traffic
- Existing non-Quadrangle traffic

![Graph showing estimated auto trips on Outer Concord Avenue.](image-url)
Alewife Next Steps  Key comments from Alewife Working Group, April 27, 2017

Next Steps

Incorporate feedback of the Alewife Working Group, City Council, and Planning Board into the overall plan.

Develop plan for the shopping centers and integrate into the larger vision for Alewife.

Develop draft implementation strategies.

Next Alewife Working Group meeting: June 8 – focused on the shopping mall.

Move housing away from industrial uses, or buffer with commercial.

Consider higher density housing along Concord Ave.

Clarify truck routes, pedestrian paths, and bike paths.

Consider how connectivity can be strengthened.
Next Steps: the Corridors

85% of the buildings are within a 10-minute walk to a mixed-use corridor.

Retail Walkshed
- Clustered buildings with retail space
- Non-clustered buildings with retail space
- Quarter-mile walk to retail cluster (5 min)
- Half-mile walk to retail cluster (10 min)

Source: City of Cambridge CDD, Envision Cambridge Analysis. Retail clusters are any group of five or more buildings with retail space without a distance of 400 ft. or greater between those buildings. List of land use codes used to determine retail space available upon request.
Corridors Scenarios: Cambridge Street / Inman Square

Most Likely to Transform
Less Likely to Transform
** Study Boundary

Approximately 160 units and 79,800 SF of retail generated by stick-built construction.
Next Steps

**Alewife Working Group**
Thursday, June 8
Russell Youth Center
680 Huron Avenue, 2nd floor Community Room
6:00 - 8:30pm

**Economy Working Group**
Thursday, June 15
Community Development Department
344 Broadway, 2nd floor Community Room
9:00 - 11:30am

**Housing Working Group**
Thursday, June 15
Community Development Department
344 Broadway, 2nd floor Community Room
6:00 - 8:30pm

**Climate & Environment Working Group**
Monday, June 19
Community Development Department
344 Broadway, 4th floor Conference Room
6:00 - 8:30pm

**Mobility Working Group**
Wednesday, June 21
Citywide Senior Center
806 Massachusetts Avenue, Large Ballroom
6:00 - 8:30pm
Discussion