Transit Advisory Committee
Project Updates

June 2019

1. River Street Reconstruction Project – brief update
2. Transport Kendall
3. Grand Junction Multi-use Path and Conceptual Transit Design
4. Mt. Auburn Bus Priority Pilot evaluation
5. Other updates
Recent Events

- May 14: Held 1st Public Walk on transportation and mobility
- May 20: Held 2nd coordination meeting with the MBTA to discuss bus terminal options (River/Magazine/Green St)
- May 28: Held 4th River Street Working Group meeting (urban design/streetscape)
- June 1: Attended River Fest

Upcoming events

- Tonight and June 8: Carl Barron Plaza existing conditions open house and outdoor engagement
- July 17: Next WG meeting on transportation and mobility
- Sept: Carl Barron Plaza design charrettes
- Concepts developed and discussed in fall 2019
Transport Kendall

• https://www.transportkendall.org/

The Backbone of the Cambridge Transit System

The Red Line is the MBTA’s busiest subway line with more than 280,000 passenger trips each weekday. It is a backbone of the transit system connecting several major economic centers and universities. The Kendall Red Line Station is the eighth busiest station in the MBTA system and the fifth fastest growing station.

Today’s Red Line travelers in Kendall Square often find themselves on full trains and crowded platforms, sometimes getting left behind. With current and planned development, the expectation is that more people will want to take the Red Line to and from Kendall Square and regional growth puts more people on the Red Line. The increase of passengers will greatly exacerbate today’s problems.

New Red Line Trains

A new fleet of Red Line cars, estimated to be fully operating by 2024, should enable the MBTA to run 50% more capacity at rush hour — a train every 3 minutes. However, even with the new trains and additional signal and trackwork, the question remains as to whether these improvements will fully meet the future, growing demands of Kendall Square and the region, which makes other initiatives like a new Grand Junction public transit link and improvements for bus service on streets so critical. There also remains a need for improvements to the station itself.

Kendall Square station entries increased 34% from 2007 to 2016.

Station entries are expected to DOUBLE from 2012 to 2040.
Next steps:

• Create a PowerPoint template populated with all content
• Advance website functionality
• Film short video(s) for social media and other uses
• Finalize all other materials (posters / handout templates, etc.)

Note:

• Targeting Sept TAC meeting for discussion of KSTEP
Project Scope: Fully design and create construction documents for a multi-use path adjacent to the existing rail tracks in the Grand Junction corridor from the Boston University Bridge to Somerville.
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Project Team

City:
- Tegin Teich, Andrew Reker (Community Development Department)
- Jerry Friedman (Department of Public Works)
- Patrick Baxter (Traffic, Parking, & Transportation)

Consultants
- Kleinfelder – Project manager
- McMahon Engineering – Public outreach
- Hatch – Landscape & path design
- Stantec - Engineering
- kmdg – Urban design & public art
- Toole Design Group – Transportation engineer
- IBI Group – Railway analysis
- WSP – Right-of-way survey
Residents and neighborhoods

- Cambridgeport (2+ residents)
- East Cambridge (4 residents)
- Port (2+ residents)
- Wellington-Harrington (2+ residents)
- 1 MIT graduate student
- 1 Cambridge Rindge & Latin School student

Organizations, Institutions, Committees

- Cambridge Health Department
- Cambridge Housing Authority
- Vision Zero Committee
- Bicycle Committee
- Transit Advisory Committee
- Friends of the Grand Junction Path
- LivableStreets Alliance
- Kendall Square Association
- East Cambridge Business Association
- MIT & MITIMCo
- Alexandria Real Estate
Current Use

- Only north-south rail connection between Framingham on the west and Boston on the east
- 2 to 4 trains a day run on the Grand Junction through Cambridge
- Adjacent uses on MIT include access and loading
- Street crossings and 3 grade crossings not at intersections
Overall Project Cross Section

- 14' paved path with 2' buffers with landscaping where feasible
- Must consider other adjacent uses described in MIT Feasibility Study (e.g. MIT access/loading)
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Project Scope

- Public Engagement Plan and Public Meetings
- Field Investigation Work
- Traffic Analysis and Intersection Modeling
- Urban Design, Landscape and Art
- Conceptual Design
- 25%, 75%, 100% design, up to three (3) bid packages for construction
Schedule Overview

- **Conceptual Design (Summer to Fall 2019)**
  - Working Group Meeting #2 (July 2019)

- **Agency Review (Fall 2019 to Spring 2020)**
  - Community Meeting #2 (Fall 2019)

- **Final Design (Fall 2020 to Spring 2021)**
  - 25% Design and approval (Spring to Fall 2020)

- **Commence Construction (Spring 2021)**
Collaboration

- Institutions (e.g. MIT)
- Developers (e.g. Alexandria Real Estate)
- Cities of Somerville and Boston
- State agencies, including:
  - Massachusetts Bay Transportation Authority (MBTA)
  - Massachusetts Department of Transportation (MassDOT)
  - Department of Conservation and Recreation (DCR)
- State/regional processes, including:
  - Rail Vision, Better Bus Project, Network Redesign, LandLine Initiative
Mount Auburn St. Bus Priority Pilot
Survey Response Snapshot

**Before / Total = 218**
- Nearby residents: 50.9%
- Nearby workers: 15.1%
- Commuting: 14.7%
- Running errands: 12.8%

**Modes**
- Drove: 26.3%
- Took bus: 32.7%
- Walked: 23.0%
- Biked: 15.2%

**After / Total = 588**
- Nearby residents: 46.4%
- Commuting: 20.6%
- Nearby workers: 15.0%
- Running errands: 10.9%

**Modes**
- Drove: 41.4%
- Took bus: 32.9%
- Walked: 13.5%
- Biked: 11.2%
## Survey Response Snapshot

People rated Mount Auburn Street on a scale of 1 to 5 for:

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<th>Design and function</th>
<th>Comfort</th>
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<td>Before</td>
<td>After</td>
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<tr>
<td>Overall</td>
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<tr>
<td>Driving</td>
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</tr>
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</table>
"It has completely changed my commute and given me back precious time. My commutes is shorter 25 to 30 minutes each day."

"The buses are more consistent, reliable, and faster. I used to take 70 but now I take the 71 and Red Line for my commute."
Evaluation – Bus Riders

Route 71 – all day
The pilot decreased variance by 10% for the entire route towards Harvard Square in the morning, and by almost 40% for those returning home in the evening rush hour.

Therefore, the pilot significantly increased the overall reliability of the bus and made the worst day travel time more similar to the average day.
Evaluation - Vehicles

Data Collected

- Automated Traffic Recorders (ATRs) to understand daily traffic volumes;
- Turning Movement Counts (TMCs) at intersections on and parallel to the corridor to understand changes in peak hour traffic volumes;
- Vehicle travel time observations where bus lanes were implemented; and
- Vehicle queues and turning delays for two unsignalized intersections during the AM and PM peak hours.
Evaluation - Vehicles

Key Takeaways

• **Vehicle volumes are about the same throughout the day**
• **No indication of traffic diversion to parallel routes**
• **Vehicle travel times did not indicate a significant impact** to drivers as a result of the pilot
• **Off-peak traffic does not experience delay due to bus lanes**
Evaluation - Vehicles

It took a little while, but the bus-bike separated lane is great and traffic seems to be back to normal.

It was confusing. I have the hang of it now, but not all drivers are familiar with the new lane.
Evaluation/Next Steps

Hard Questions?
• Why not be peak only?
• How can longer lines not mean longer travel times?

Next Steps
• Public meeting: Wednesday, June 12, 2019 at 6:00 PM
• Coordinate with DCR on short-term improvements to Fresh Pond Parkway/Mt. Auburn intersection
• Plan for more permanent installation (e.g. better red material) in late spring 2019
• Incorporate recommendations into Belmont Street reconstruction
Other Updates

1. Real-time bus arrival prediction signage
   - Identified two lists for (a) larger-format signage for stops with multiple routes/destinations and (b) small-format signage for stops with one route
   - Coordinate with MBTA for their ongoing real-time signage pilot
   - Developing purchasing/procurement documents

2. Future of Mobility Implementation Blueprint Study
   - Identify a framework to help the City adjust policies, programs, regulations as new mobility options appear in coming years
   - From micromobility to microtransit, from technology like mobility as a service to communications like 5G for AI-enhanced mobility and transportation services
Other Updates

3. Inner Mount Auburn Corridor Safety Improvement Project

• Mount Auburn Street in Harvard Square between JFK St. and Putnam Ave.
• Route 1 currently travels from Dewolfe St. to Putnam Ave.
• MBTA proposed using Mt. Auburn from Dunster St. to Putnam Ave.
• Goals are to improve safety by adding a separated bike lane, improve pedestrian crossings, identify transit priority measures
• Community meeting next Tuesday, June 11 - 6:00 PM to 8:00 PM
  • Smith Center (formerly Holyoke Center), Isaacson Room, 1350 Mass Ave in Harvard Square

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