Welcome!

- Introductions and Welcome (5 min)
  - Virtual Meeting Instructions
- Project Recap (10 min)
  - Design Updates and Schedule
  - Working Group Meetings Recap
- Urban Design, Public Art, and Lighting Concepts (30 min)
- Tree Inventory Update (10 mins)
- Intersection Analysis Update (10 min)
- Public Comment (15 min)
- Next steps (5 min)
  - Community Meeting #2, Fall 2020
  - Working Group Meeting #6, Fall 2020
Virtual Meeting Instructions

- Working group members may speak and show webcam video
  - Use "Raise Hand" button during discussion
- Members of the public are muted and cannot show webcam video
- Public can write in questions or ask for assistance in Q&A Window
  - Questions may be submitted at any time and will be addressed, as time allows, during discussion/comment periods
- Participants will be removed for inappropriate behavior
- Technical support – Wallensteen Joseph – wajoseph@cambridgema.gov
PROJECT RECAP
PROJECT PURPOSE

- Design multi-use path adjacent to the Grand Junction rail tracks
- Create a safe way to sustainably move eastern half of Cambridge for all ages and abilities
- Create attractive spaces for path users that react to different neighborhoods
- Account for future transit projects
Design Updates:

- Urban design, public art, and lighting concepts developed;
- Tree inventory complete and planting potential identified;
- Preliminary traffic analysis performed, will continue into 25% design;
- Transitioning concept design to 25% engineering design;
  - Performing geotechnical field work Summer to Fall 2020;
- Coordination with ongoing development projects and state agency transportation projects.
Overview Schedule

Conceptual Design (Completed December 2019)
Traffic Analysis (Spring 2020 – Fall 2020)
Working Group Meeting #5 (August 2020)
Working Group Meeting #6 (Fall 2020)
Agency Review (Winter 2020 to Spring 2021)
What We’ve Heard

What you hope to see overall:

- Separation from traffic
- Separation from rail with barrier/fence
- Water fountains, trash bins, and quality seating of different types
- Bicycle parking and Blue Bikes stations
- Public art
- Trees and plantings
- Renewed and integrated open spaces

What transportation features you hope to see:

- Separating directions of travel along path
- Protected pedestrian and bicycle crossings at intersections
- Considerations for local pedestrian movements in neighborhoods

Concerns:

- Public Safety on path corridor
- Bicycle and pedestrian interaction on path and at crossings
Input on Design Concepts

Massachusetts Avenue

Main Street

Little Binney Street

Cambridge Street
Key Take-Aways:

- Vision is for a Grand Junction Multi-Use Path as a corridor for commuting, exercise, safe cycling, and a connection to other modes.
- Varied availability of right of way along track and varied ownership.
- Multi-use path will have to cross sides of the railroad at two points and has major street intersections to cross as well.
- Identified a preferred path cross-section and a limited space cross-section.
- Designing for current rail use, but not precluding future two-track transit.
URBAN DESIGN, PUBLIC ART, & LIGHTING CONCEPTS
Working Group Overview

PLACEMAKING KIT OF PARTS - ELEMENTS

Special Paving
Possible Seating/Furniture
Lighting
Art fence + perimeter fence
Working Group Overview

PLACEMAKING KIT OF PARTS - PLANTING

- Street trees
- Low plantings/perennials/ground cover
- Shrubs (where sight lines allow)
WORKING GROUP OVERVIEW

VARIATIONS IN PATH CONDITIONS

CROSS SECTION A
Cambridgeport - South of MIT

CROSS SECTION B
MIT South of Mass Ave.

CROSS SECTION C
MIT Mass Ave. to Main St.

CROSS SECTION D
Binney to Cambridge St.

CROSS SECTION E
North of Cambridge St.
VARIATIONS IN PATH CONDITIONS

Binney St. to Cambridge St.
Working Group Overview

VARIATIONS IN PATH CONDITIONS

North of Cambridge St.
Fin Fences

Lenticular Murals
Public art
• idea of incorporating into the fence discussed

Cone of vision and isovist shapes
• Analyze each crossing and each entry location for sight lines from:
  • Neighboring streets
  • The multi-use path
• Locate murals in places that are most visible from the approach to the crossing or entry point
Corridor Viewsheds with Crossings

Legend
- **Grand Junction Corridor**
- **Open Space**
- **Existing Tree Canopy**
- **Pedestrian Viewshed of Corridor**
- **Street Crossing**
- **Pedestrian Crossing or Entry Point**

Working Group Overview
VIEWSHED ANALYSIS
Points of Greatest Impact / Public Art Opportunities

Legend
- Grand Junction Corridor
- Open Space
- Existing Tree Canopy
- Pedestrian Viewshed of Corridor
- Street Crossing
- Pedestrian Crossing
- Pedestrian Entry Point
Cambridgeport – Ft. Washington Park

Legend
- Grand Junction Corridor
- Open Space
- Existing Fence - Perforated
- Existing Fence - Solid
- Pedestrian Viewcone
- Overall Pedestrian Viewshed of Rail Corridor
Cambridgeport – Southern End

Legend

- Grand Junction Corridor
- Open Space
- Existing Fence - Perforated
- Existing Fence - Solid
- Pedestrian Viewcone
- Overall Pedestrian Viewshed of Rail Corridor

[Map showing viewshed analysis and pedestrian entry points]
Fin Fences

Lenticular Murals
• Primary goal from MBTA perspective (as we understand it currently) is to prevent trespassing onto the railroad tracks

• Impact mitigation/attenuation viewed as a secondary goal

• Armature for integrating public art

• Support wayfinding and identify for Grand Junction corridor

• Efficient, cost effective fabrication and installation
FIN FENCE / LENTICULAR MURAL STRATEGY

Fin Fence Location
Typical Cross Section
Faceted Concrete Base with Perpendicular Fins

Pros:
- Concrete base can become part of the public art
- Concrete base allows for simpler installation with less excavation
- Concrete base protects multi-use path from gravel or other projectiles from RR corridor
- Concrete base raises artwork away from snow

Cons:
- Overall fence may feel less transparent because of solid raised base
- More fins are needed than in angled placement

4” between fins
2’ high concrete base
Fins raise from 4’-6’ total height

Path Elevation

Fins 12” wide @ base,
3.5” wide @ top

Path Corridor View
Faceted Concrete Base with Angled Fins

Pros:
- Concrete base can become part of the public art
- Concrete base allows for simpler installation with less excavation
- Concrete base protects multi-use path from gravel or other projectiles from RR corridor
- Concrete base raises artwork away from snow
- Angled fin placement requires fewer fins needed than perpendicular placement

Cons:
- Overall fence may feel less transparent because of solid raised base and angled fins
Faceted Concrete Base with Angled Fins Shifting to Perpendicular Fins
Curb Height Base with Perpendicular Fins

Pros:
- Fence feels more transparent overall because of low concrete base
- Larger ‘canvas’ surface area for mural because of taller fins

Cons:
- Likely more challenging to construct and more excavation will be required
- Less protection from ballast or other projectiles between path and RR corridor
- Base of mural potentially impacted by snow/ice
Curb Height Base with Angled Fins

Pros:
• Fence feels more transparent overall because of low concrete base
• Larger ‘canvas’ surface area for mural because of taller fins

Cons:
• Likely more challenging to construct and more excavation will be required
• Less protection from ballast or other projectiles between path and RR corridor
• Base of mural potentially impacted by snow/ice
PUBLIC ART - CHECK-IN QUESTION

AS BUDGET ALLOWS, WHERE WOULD YOU LIKE TO SEE PUBLIC ART INCORPORATED ALONG THE GRAND JUNCTION PATH?

• Along straightaways
• At entry points and crossings
• Both
• Not sure
City Standards

Waverley Path

Left: Selux Saturn

Right: Cree Edge

Loughrey Walkway
PATH LIGHTING - GOALS

- Shielded light distribution to focus light on path
- Shorter pedestrian poles (11’ vs. typical 13’ in a park) also limit spread of light
- Pole spacing of 100-105’ apart to achieve but not exceed targeted light levels
- Wireless dimming control module
- Warm white color specification
WHICH PATH LIGHTING OPTION DO YOU MOST PREFER?

- Selux Saturn
- Cree Edge
- Both options
- Not Sure

Left: Selux Saturn
Right: Cree Edge
TREE INVENTORY
Tree Inventory Overview
Tree Inventory Overview

Legend:
- Trees to remain
- Trees to be removed
- Multi-use path construction
- Transplant candidates (path construction)
- Invasive trees to be removed
- Stump or dead tree
- Proposed planting areas
- Private property planting opportunities
Working Group Overview

TREE PLANTING OPPORTUNITIES

Trees near the Trail

For trees proposed directly adjacent to the tracks or multi-use path, we suggest choosing species with some or all of the following characteristics in order to minimize leaf litter and canopy spread that could interfere with cycling safety or track activity:

- Narrow growth habit (Taller than wide)
- Small leaf size
- Evergreen trees
INTERSECTION ANALYSIS UPDATE
Refined the preferred intersection crossing concepts

- Analyzed 4 street crossings
  - Broadway intersection is part of a separate project
- Conducted traffic analysis for each intersection
- Continue to refine through 25% design
Massachusetts Avenue between Albany St/Vassar St

- Provide fully signalized crossing between the intersections of Albany St and Vassar St
- Coordinate with signals at Albany St and Vassar St
- Provide clearance for vehicles between Albany St and Vassar St for path crossing.
Path crossings on western side of the intersection with Vassar Street
- Protected path crossing from vehicular movements
- Coordination with area development projects
  - Restrict left turns from Vassar Street
Binney Street - “Little Binney”

- Path transitions from east side to west side of tracks north of Little Binney
- Raised flush crossing
- Recommend adding RRFB
- Coordination with adjacent development
Transition path from west side to east side of tracks
Provide signalized path crossing by shifting existing pedestrian crossing
Signalize Cardinal Medeiros Ave and coordinate phasing and timing with path crossing
PUBLIC COMMENT
"Raise hand" to speak

- If you wish to speak, click on "Raise Hand" in the Zoom application
  - On the telephone, enter * 9 on the dial pad
- Staff will call your name or phone number to acknowledge
- Before starting, please state your name and staff will confirm that we can hear you
- You will have **two minutes** to make your comment
Next Meetings

- Working Group Meeting #6 - Fall 2020
- 25% Design Community Meeting - Fall/Winter 2020

Find us online: CambridgeMA.gov/GrandJunction

- Most recent updates
- Historical information
- Documentation of Design Working Group to date
THANK YOU

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