Brattle Street Safety Improvement Project
Community Meeting
Separated Bike Lanes and Pedestrian Safety Improvements
May 3, 2022 | 6:00 pm | Zoom
Agenda

• Planning Background
• Project Overview
• Schedule / Next Steps
• Questions + Feedback
Planning Background
What drives our street design?

We design for people of ALL ages and abilities. This includes:

• People who may not have access to a car
• Creating safe and accessible facilities, including bike lanes, that can be used by a wide range of people

How we think about vehicle congestion and delay

• Moving people slowly is moving people safely
• We do not prioritize eliminating delay for people driving alone
Street Design vs Enforcement vs Education

Street Design

• A Safe System is a human-centered approach to street design - engineered to prevent errors as much as possible and lessen the impacts of errors when they do happen.
• Shifts away from individual blame
• Keep road users safe by designing for the most vulnerable (e.g., people not in cars)
• Crash prevention is more effective than crash mitigation

Enforcement and Education

• Enforcement and Education are supplemental to proper street design, not a replacement

Example:
A momentary distraction can mean a driver doesn't see a cyclist or vice versa.

Providing separation between people in cars and people on bikes decreases the chances that a momentary distraction leads to a deadly crash.
Cambridge Policies that Support Sustainable Transportation

- Vehicle Trip Reduction Ordinance
- Parking & Transportation Demand Ordinance
- Climate Protection Plan
- School Wellness Policy
- Envision Cambridge
- Cycling Safety Ordinance

- Complete Streets
- Vision Zero
- Cycling Safety Ordinance
Cycling Safety Ordinance

2019: Cambridge City Council Passed the Cycling Safety Ordinance
• Requires the construction of separated bike lanes when streets are being reconstructed as part of the City’s Five-Year Plan for Streets and Sidewalks

2020: Cambridge City Council Passed Amendments to the Cycling Safety Ordinance
• Sets ambitious requirements for the installation of approximately 25 miles of separated bike lanes in 5 to 7 years
• Location of these facilities is informed by the Cambridge Bicycle Plan and Bicycle Network Vision
Cambridge Bicycle Plan

- City’s blueprint for improving bicycling throughout Cambridge
- Updated every five years

Bicycle Network Vision

- Plan identifies need for separated bike lanes on Brattle St
Cambridge Residents Biking

Citywide
• Over 60% of Cambridge residents reported biking at least once in 2020
• Over 30% of Cambridge residents biked on a regular basis (2+ times per month)
• 53% of people who did not bike in 2020 wanted to bike more

On Brattle St
• 195 bicyclist using the Brattle St/Mason St intersection during a typical one-hour period (5:15 pm – 6:15 pm, Fall 2019)

Source: Resident telephone and online survey, 2020
Separated Bike Lane Benefits

- Increases comfort and access for people of all ages and abilities
- Reduces crash and injury risk
- Eliminates threat of "dooring" from parked vehicles
- Reduces potential conflicts between vehicles and people biking
- Provides shorter crossing distance and increased separation from vehicles for people walking
- Encourages slower traffic speeds by visually narrowing the roadway width
Previous Safety Improvements

2017 -- Installed two-way separated bike lane from Harvard Sq to Mason St

2018 -- Reconfigured merge at Brattle St/Mt Auburn St
Sparks St /Craigie St Intersection

- 2018 community meeting on long-term safety improvements
- Community preferred roundabout as long-term alternative
- Current project will implement interim improvements at this intersection
- As part of this project, we will refine design and cost estimates for the roundabout option
- Future funding for roundabout has not yet been identified
Project Overview
Project Limits

- Brattle Street from Mason St to Mt Auburn St/Aberdeen Ave
- Intersection modifications at
  - Brattle St @ Sparks St/Craigie St
  - Brattle St @ Mt Auburn St/Aberdeen Ave
Project Scope

• Install separated bike lanes that provide separation between people biking and vehicles
• Improve crossings for people walking
• Reduce speeds
• Address safety for all users at key intersections
What is a Quick-Build Project?

Quick-build projects allow us to make safety improvements more rapidly.

Our quick-build toolbox includes:
- Pavement marking changes
- Installation of flex posts
- Changes to signage
- Some modifications to signal timing

This project may include very limited curb changes.
Existing Layout

- Lack of vertical separation between people biking and people driving
- No dedicated space for bikes on some sections
- Traffic speeds and wide crossing distances that are uncomfortable for people walking
Existing Bike Facilities

- Eliot St to Mason St -- Two-Way Separated Bike Lane
- Mason St to Sparks -- Shared Lane Markings
- Sparks St to Fresh Pond Pkwy -- In-Street Bike Lanes
- Fresh Pond Pkwy to Mt Auburn St -- No Bicycle Facilities
Layout Alternatives Considered

- One-Way Separated Bike Lane on Both Sides
- Two-Way Separated Bike Lane on One Side
Alternative 1 – One Way Separated Bike Lanes on Both Sides

- People biking travel in the same direction as vehicles on each side
- Lack of space to provide parking on most of the corridor
- Would complicate the transition from the existing two-way bike lane east of Mason St
Alternative 2 – Two-Way Separated Bike Lane on One Side (Recommended)

- Room for parking on at least one side of the street
- In some locations, room for parking on both sides
- People biking will need to cross the road to access the south side of the street
Bike Lane Separators

• We are exploring a variety of separator types, such as pre-cast concrete, to add to our inventory of flex-posts
Crossing Locations

Design Goals

• Reduce crossing distance for people walking
• Increase visibility of people crossing the street
• Visually narrow the roadway to reduce speeds

Design Constraints

• We are limited to using quick-build materials, such as paint, flex posts and pre-cast concrete barriers
Interim Intersection Improvements – Sparks St/ Craigie St/ Brattle St

- Simplify traffic pattern
- Incorporate traffic calming measures
- Improve comfort and safety for people crossing
- Improve bicycle facilities
- Reduce conflict points between cars, bikes, and walkers
- Reduce crossing distance for people walking
- Improve sight lines and visibility
Intersection Improvements – Mt. Auburn St / Brattle St

- Reduce potential conflict points between people biking, walking, and driving
- Provide safe transition for people biking
- Reduce crossing distance for people walking
Schedule / Next Steps
Coordination with Gas Main Replacement

• Eversource currently replacing the gas main on Brattle Street between **Sparks St and Fresh Pond Pkwy**
• Brattle St from Mason St to Sparks is unaffected by this work
  • Implementation of safety improvements can begin in 2022
• We will begin safety improvements between Sparks St and Mt. Auburn St after gas main replacement is complete in 2023

Limits of gas line repair
Project Schedule

**Spring 2022**
- Develop preliminary plans
- Meet with local stakeholders (i.e., Longfellow House, Cambridge Historic Commission, Lesley University)

June 21, 2022
- Second Community Meeting to Review Plans for Mason St to Sparks St

**Summer 2022**
- Ongoing Community Engagement for Mason St to Sparks St
  - Targeted installation late summer

**Fall/Winter 2022**
- Ongoing Community Engagement for remaining portion of Brattle St
Implementation Schedule

**Late Summer 2022**
- Phase 1
  - Separated bike lanes installed between Mason St and Sparks St
  - Safety improvements at Brattle St and Sparks St/Craigie St intersection

**Spring/Summer 2023**
- Phase 2
  - Separated bike lanes installed between Sparks St and Mt Auburn St
  - Safety improvements west of Sparks St
  - Intersection improvements at Brattle St/Mt Auburn St/Aberdeen Ave
Questions + Feedback
Questions

• Which planned improvements are most important?
• What could make this project better?
• What do you want to know more about?

Project Mailing List

• Visit the website below to sign up for the project mailing list

Project Feedback Survey

• We are launching a survey to gather your feedback
• We will follow up with an email to provide the link

www.cambridgema.gov/BrattleStSafety
Feedback

• We will take comments in the order hands are raised
  • If calling in, dial *9 to raise your hand / *6 to unmute
• Additional questions can be asked using the Q+A function
• Approximately every 15 minutes, we will provide answers to questions
• The meeting is scheduled to end at 8:00 p.m.

Contact Information
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www.cambridgema.gov/BrattleStSafety