

# 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

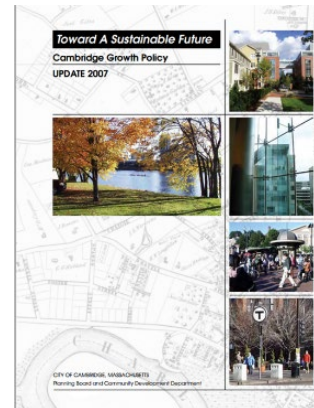
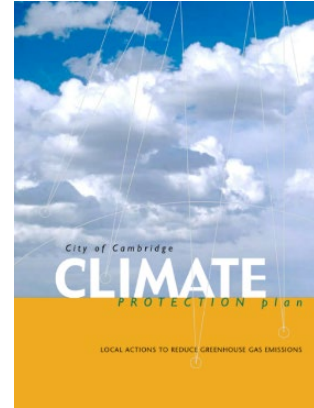
### *Example:*

*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





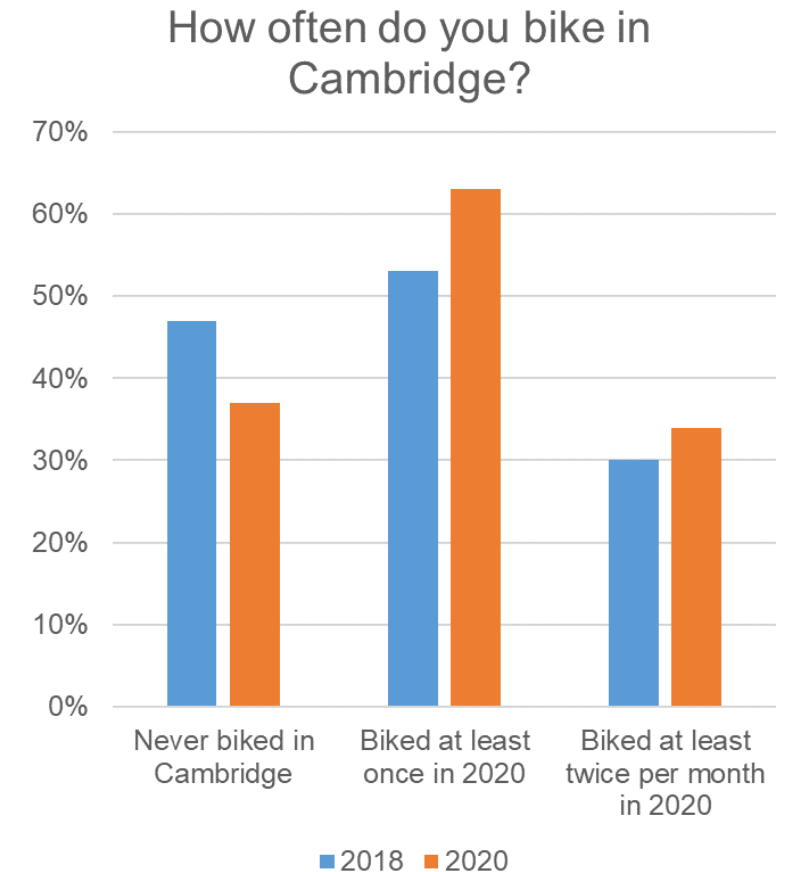
# Cambridge Residents Biking

## 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



City of Cambridge | Brattle St Separated Bike Lanes & Pedestrian Safety Improvements



# Previous Safety Improvements

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

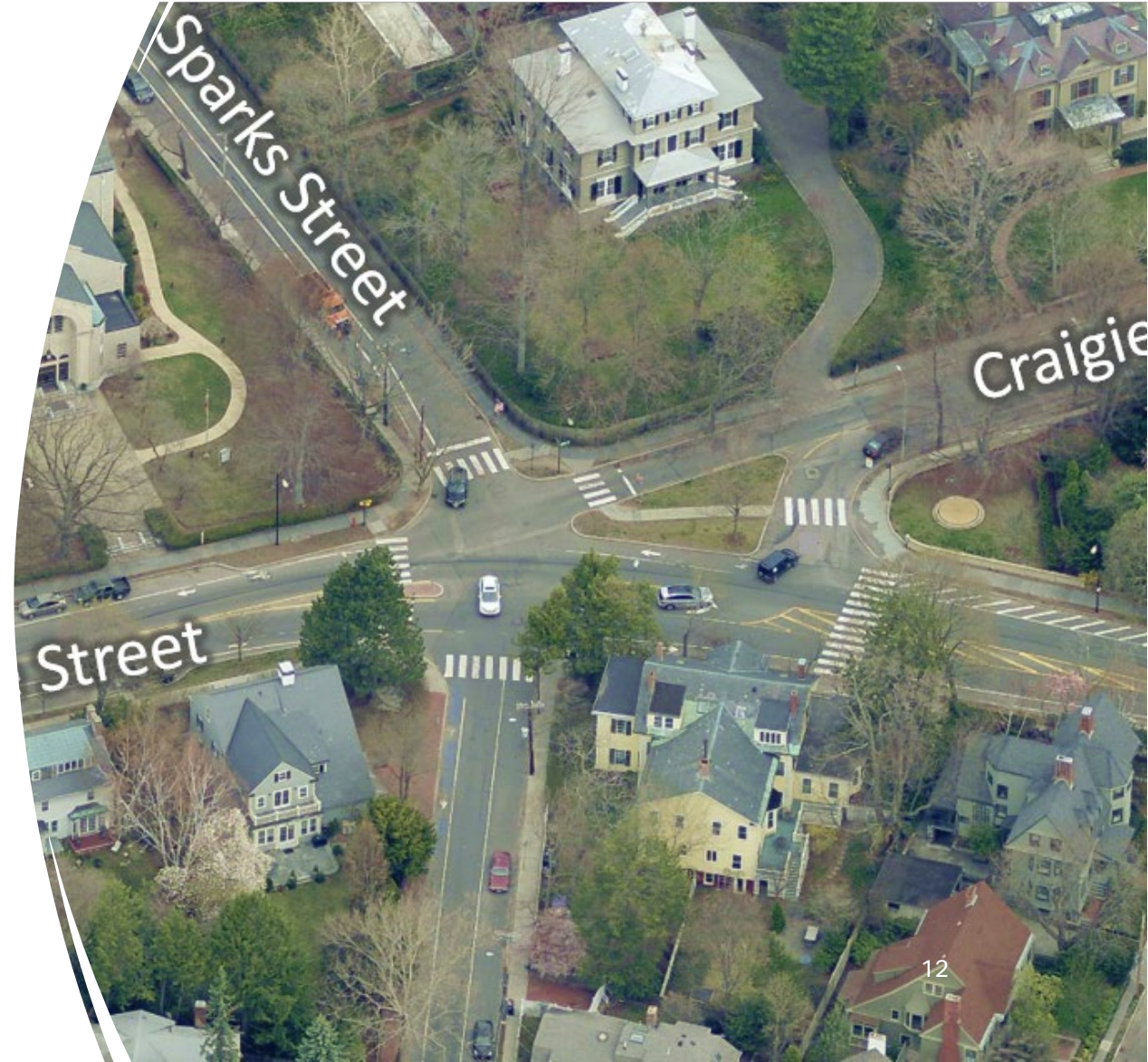
**2018** -- Reconfigured merge at Brattle St/Mt Auburn St





# 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

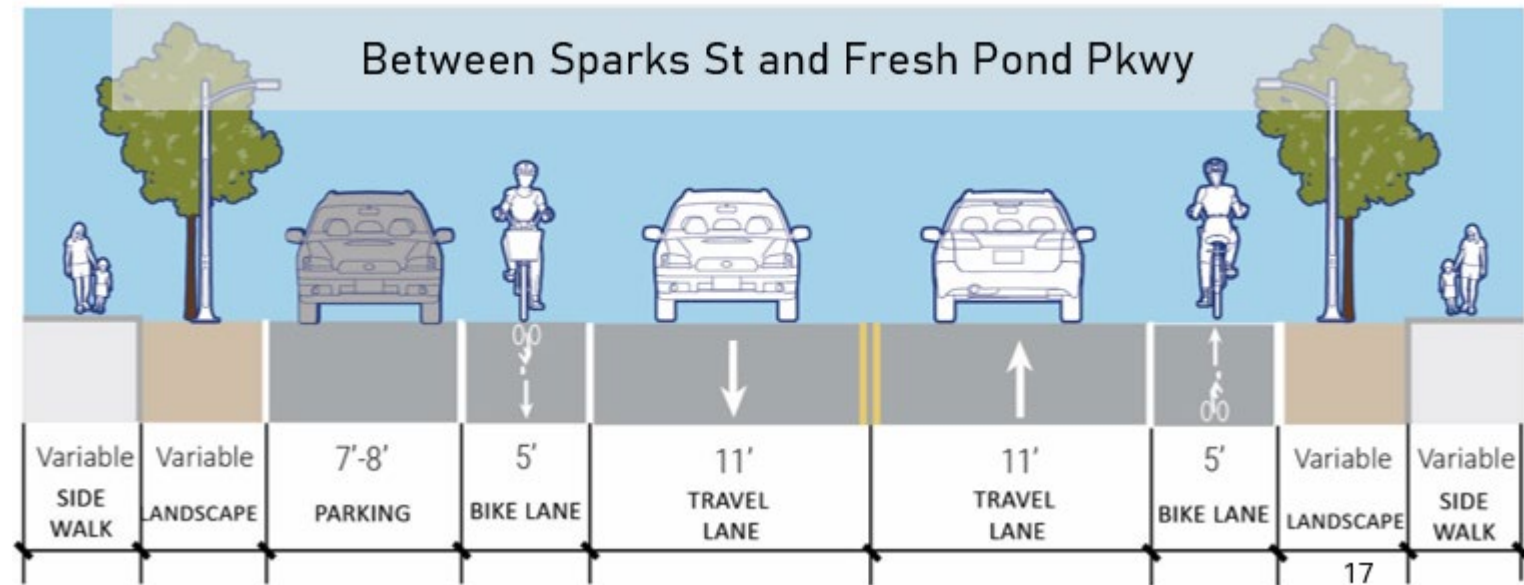
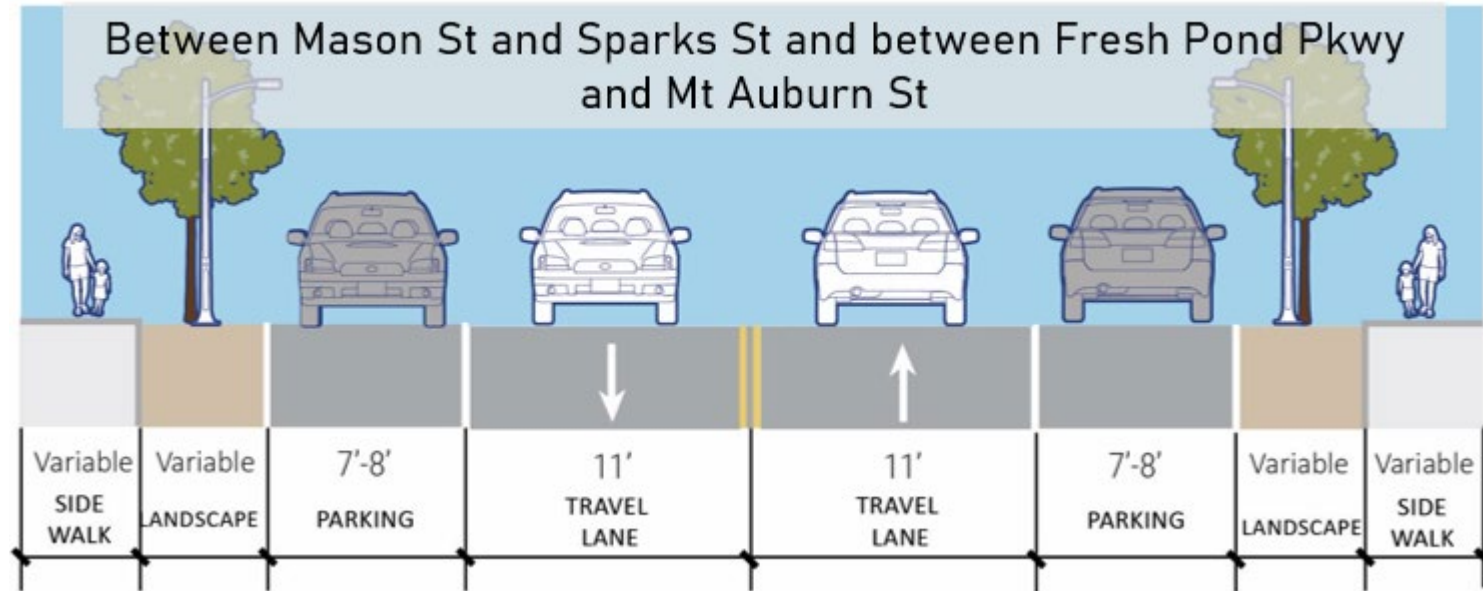
This project may include very limited curb changes



Image: Brattle St 2-way Protected Bike Lane

# Existing Layout

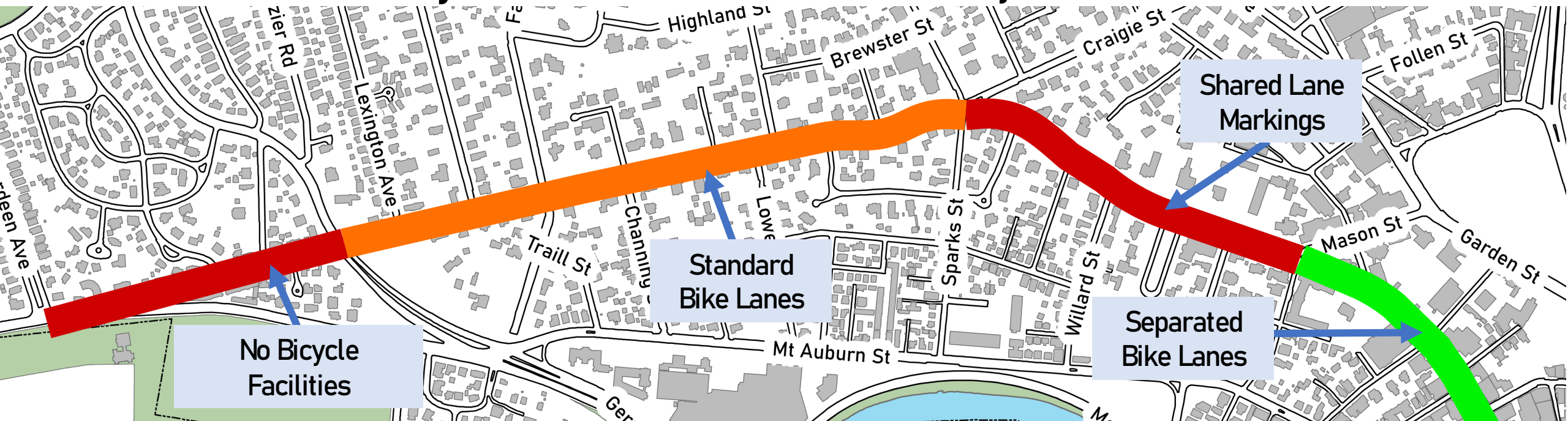
- Lack of vertical separation between people biking and people driving
- No dedicated space for bikes on some sections
- Traffic speeds and wide crossing distances that are uncomfortable for people walking





# 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

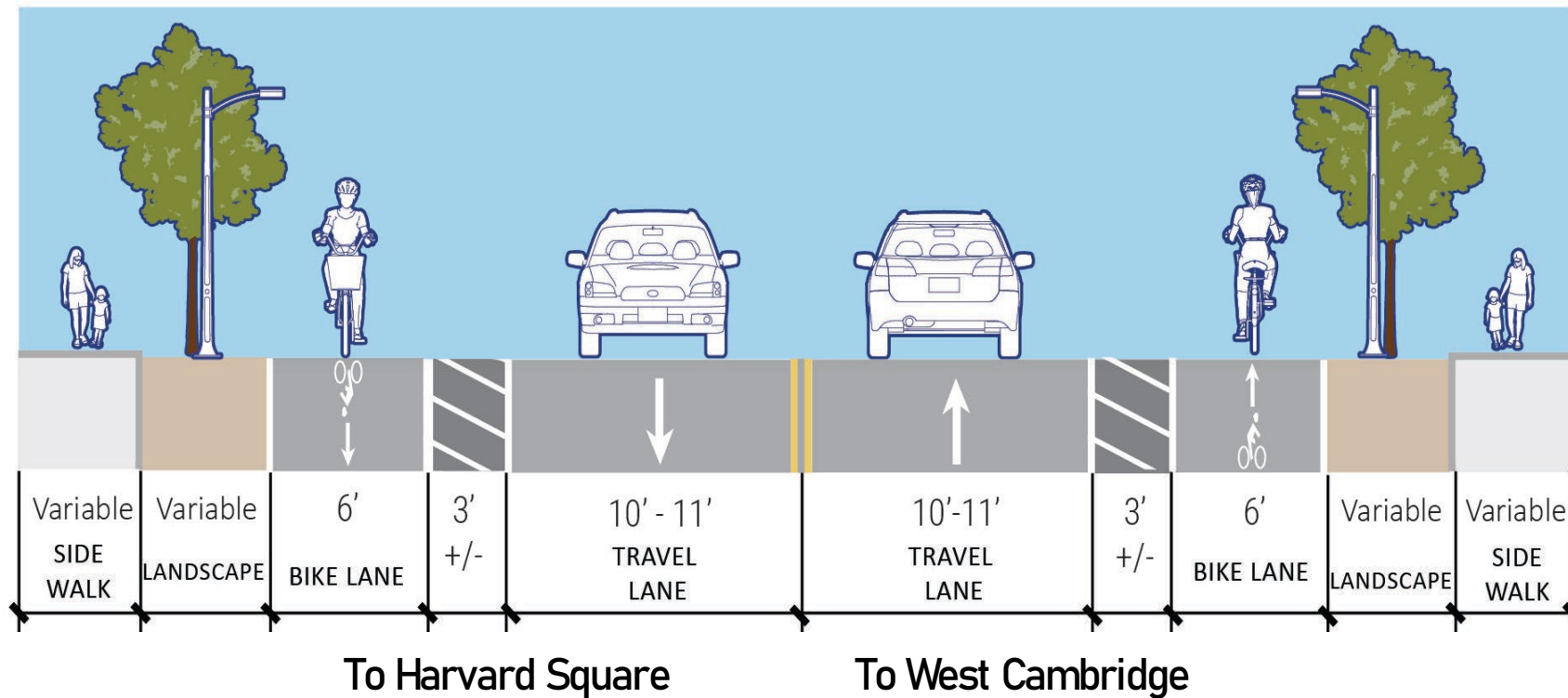


# Layout Alternatives Considered

- 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

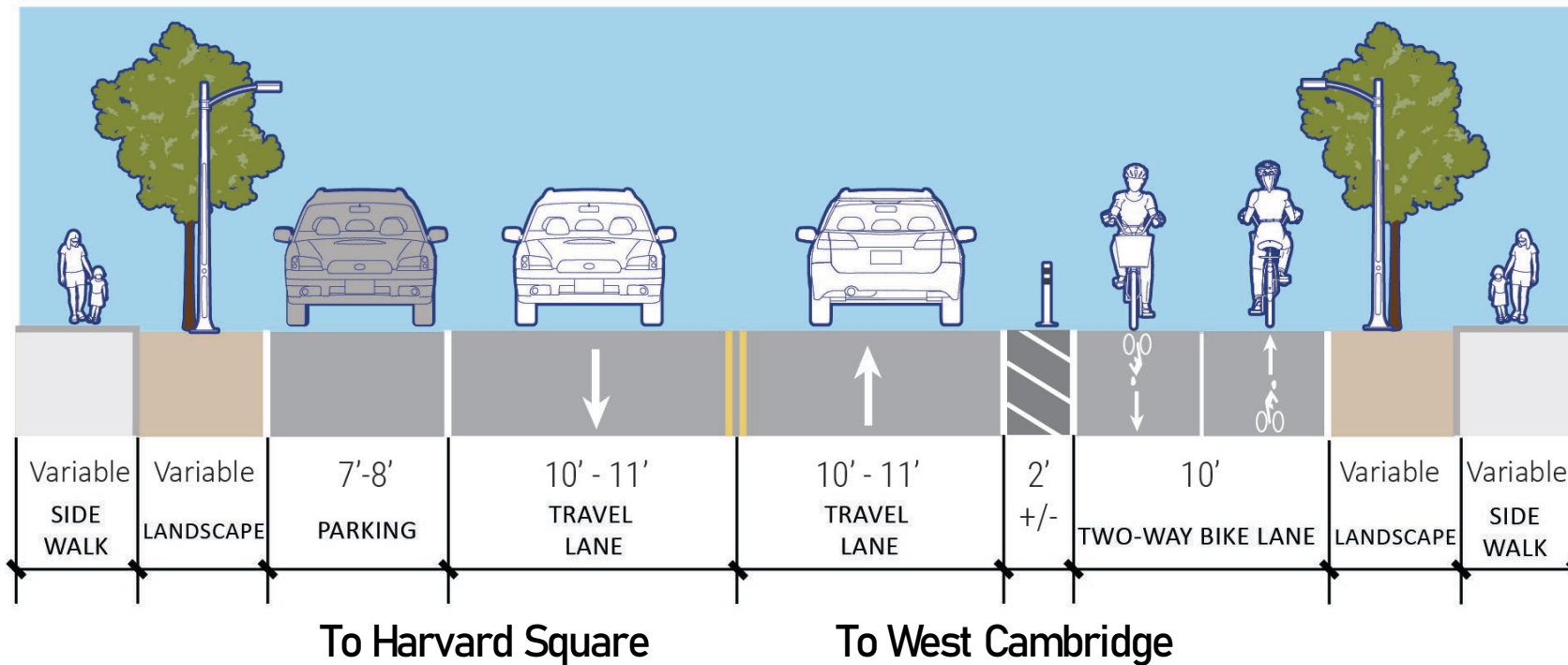
- People biking travel in the same direction as vehicles on each side
- Lack of space to provide parking on most of the corridor
- Would complicate the transition from the existing two-way bike lane east of Mason St





# 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

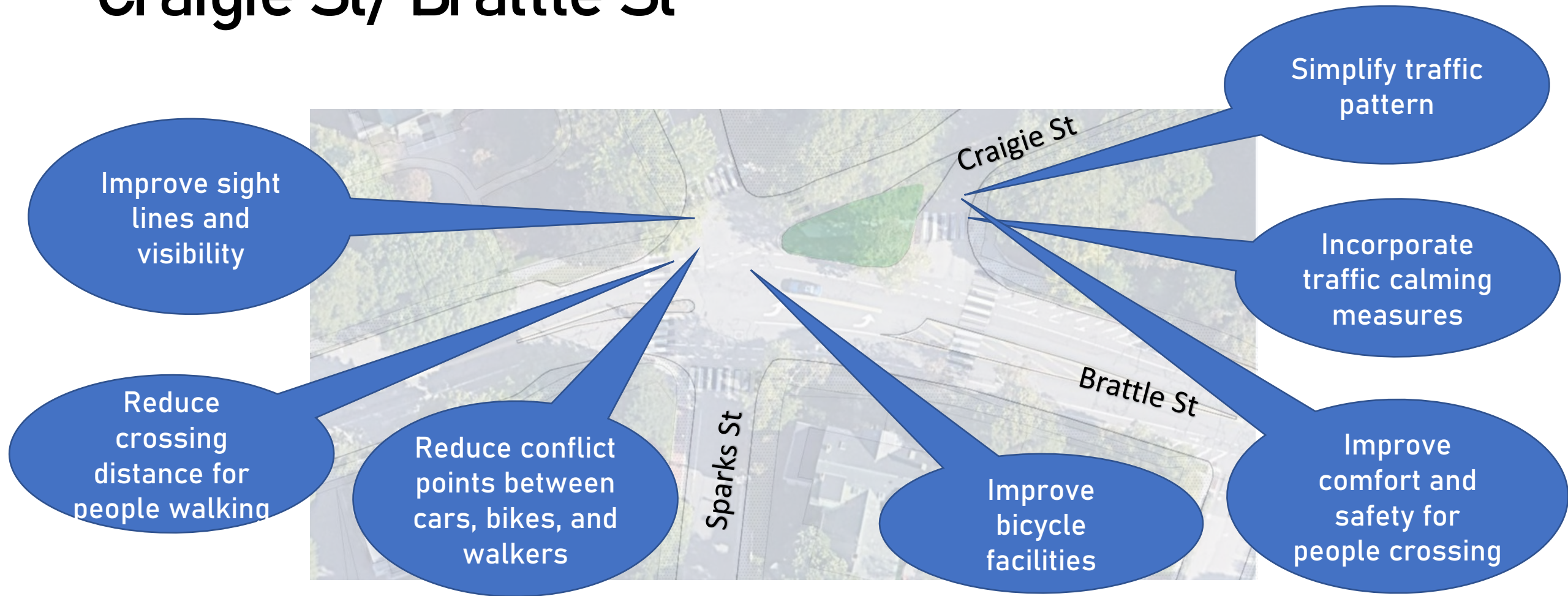
## Design Constraints

- 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



# Intersection Improvements – Mt. Auburn St / Brattle St



Provide safe transition for people biking

Reduce potential conflict points between people biking, walking, and driving

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

### Project Phasing

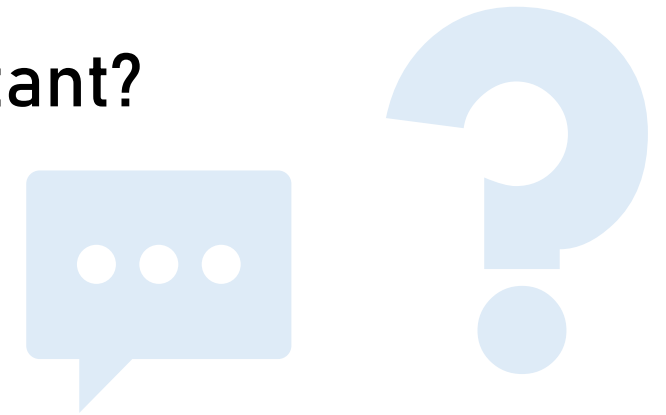




# Questions + Feedback

# Questions

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

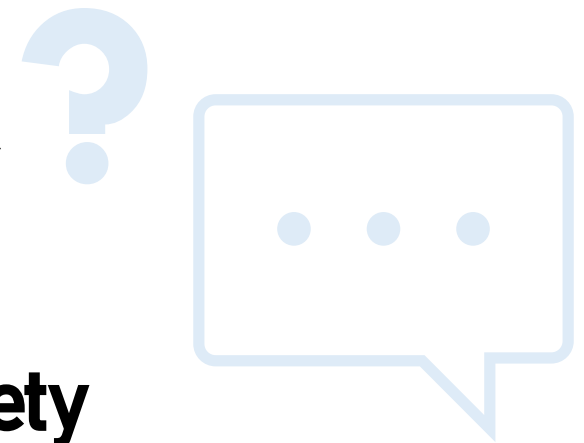


## Project Mailing List

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

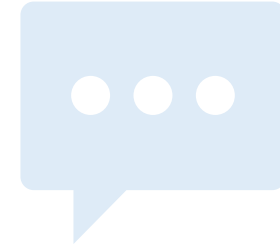
## Project Feedback Survey

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

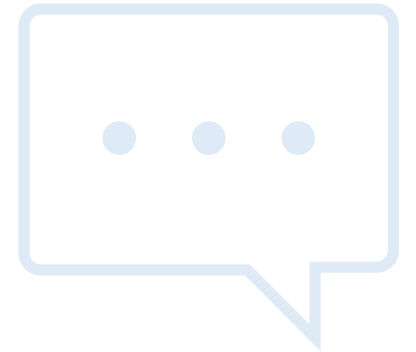


**[www.cambridgema.gov/BrattleStSafety](http://www.cambridgema.gov/BrattleStSafety)**

# 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](http://www.cambridgema.gov/BrattleStSafety)**