

A photograph of a city street scene. On the left, there are brick buildings and a green van. In the center, a dark car is driving down the street. On the right, there is a U-Haul store with a tall sign that says 'U-H-A-U-L' and a sign that says 'GUARANTEED RESERVATIONS ONLY AT UHAUL UHAUL.COM'. A dark car is parked on the right side of the street. The sky is blue with some clouds.

Main Street Safety Improvement Project Community Meeting #1

March 16, 2023 | 6:00 pm | Zoom

Main Street Safety Improvement Project

First Community Meeting

March 16, 2023

Provide Feedback after the Presentation

- You will find information on how to give feedback at the end of the presentation

Look for blue question boxes like this in the presentation. They'll help identify specific issues we'd like to hear your feedback on.

Cameras + Microphones

- Your camera is off
- We will enable your microphone only when you are speaking

We are Recording

- We will post the recording of tonight's meeting on the project page

www.cambridgema.gov/MainStreetSafety

Meeting Purpose, Outcome, + Process

Purpose

- In this meeting, we will introduce the Main Street Safety Improvement Project. You will learn about the project's goals and background.

Outcome

- You'll have enough background information to be able to provide feedback on Main Street today and make suggestions to help us start designing the project.

Process

- We will share background on the project and then hear from you. In the coming months, there will more opportunities to be involved in different ways.

Contact Information

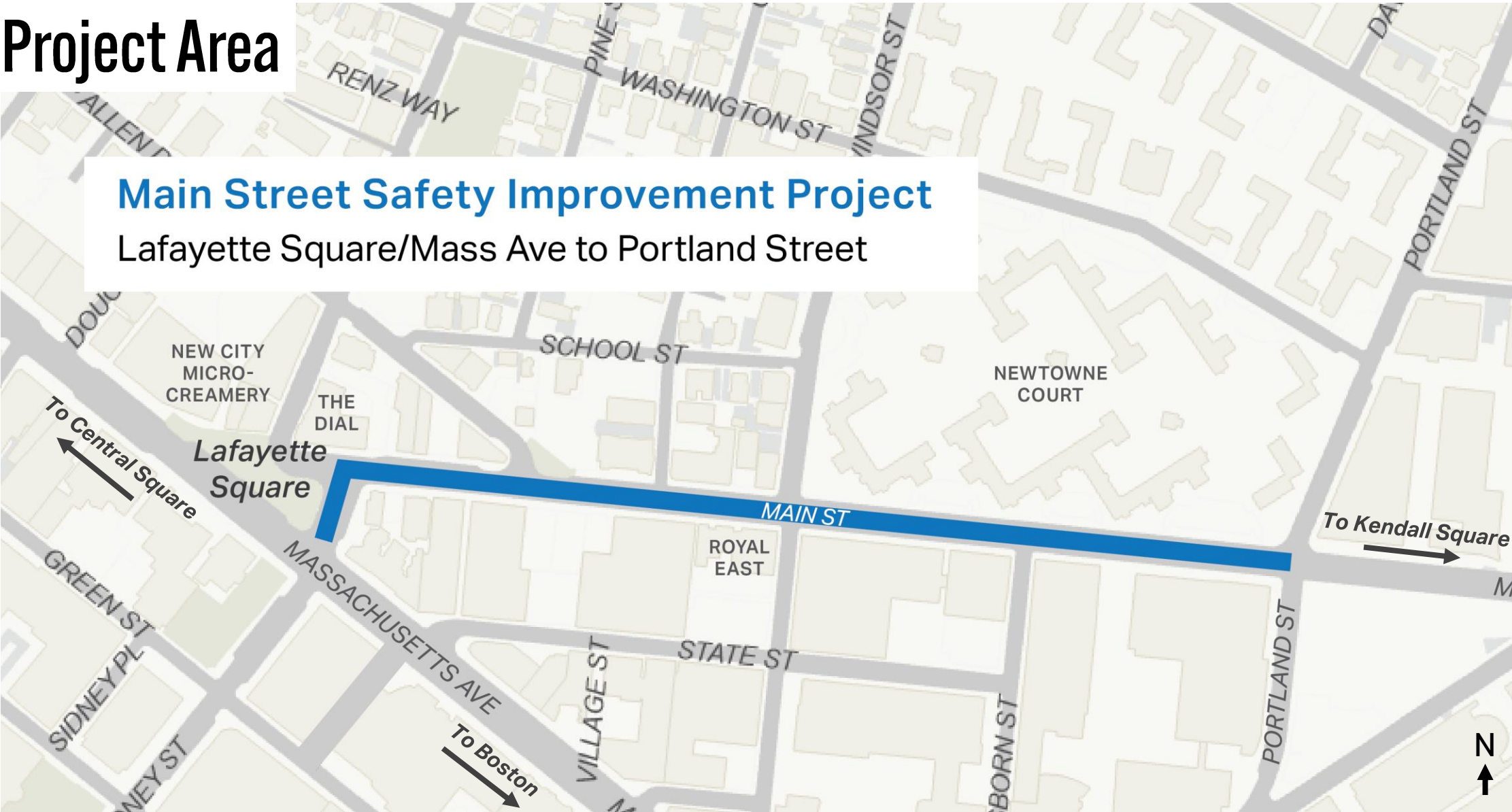
Stephen Meuse, P.E.
Street Design Project Manager
617-349-4713
smeuse@cambridgema.gov

www.cambridgema.gov/MainStreetSafety

Project Area

Main Street Safety Improvement Project

Lafayette Square/Mass Ave to Portland Street



Agenda

- **Timeline**
- **Planning Background**
 - How do we design our streets?
 - Why are we making changes?
- **Project Introduction**
 - What's Main Street like today?
 - What things are we proposing to change?
- **Outreach**
 - How can you be involved?
 - How can we let you know what's going on?
- **Questions + Feedback**



City of Cambridge | Traffic, Parking, + Transportation

Main Street Safety Improvement Project

Main Street between Massachusetts Avenue and Portland Street

We are starting the community outreach process to make safety improvements to a section of Main Street. This project will:

- install separated bicycle lanes in both directions
- improve crossing locations for people walking
- identify locations for parking and loading
- address safety at key intersections

Get involved! Join us for our first community meeting and an informational open house. We'll review the planning background, introduce the project, and share a timeline. Ask questions and let us know what we can improve!

First Community Meeting
Thursday, March 16, 2023 – 6:00 p.m. to 8:00 p.m. via Zoom

Project Open House
Wednesday, March 22, 2023 – 4:30 p.m. to 6:30 p.m.
Main Street at Bishop Allen Drive

Learn More About the Project and Meetings
www.cambridgema.gov/MainStreetSafety

Contact the Project Manager
Stephen Meuse | smeuse@cambridgema.gov | 617-349-4713

Accessibility Statement
People with disabilities may request accommodations by contacting Traffic, Parking, and Transportation at 617-349-4700 (voice), 711 (relay), or tpt@cambridgema.gov.

City of Cambridge
Traffic, Parking, + Transportation

Project Timeline



March 16

Community Meeting 1: Project Introduction

March 22

Community Open House 1

March to May

- Community provides feedback to help us design this project
- **Ways to get involved:** Give feedback today, online comment map, online feedback form, attend an open house, email or call, request site visit from project manager

May

Community Meeting 2: We present draft designs/options

Community Open House 2

May to June/July

Community provides feedback on draft designs/layouts

June/July

Community Meeting 3: We present revised layouts

After Community Meeting 3

- Community gives feedback on revised layouts
- We make final changes to design
- We announce project installation: timeline, changes, what to expect

Late Summer 2023

Project Installation

Getting Involved

- **Attend a meeting or open house:**
 - You can learn more about the project by attending an online meeting or in-person open house, but attending meetings is not the only way to get involved.
- **Visit the project webpage:**
 - You'll find presentations and recordings from meetings, background information on the project, and information on how to get involved: www.cambridgema.gov/MainStreetSafety
- **Sign up for the email list:**
 - Sign up for the email list for the latest news.
- **Provide feedback online:**
 - We will have options to provide feedback online at every stage of the process. These include comment forms, surveys, and comment maps.
- **Call or email the project manager:**
 - If you want to talk to the project manager directly, reach out via the contact information on the project webpage. We are available for in-person and/or virtual meetings with community members, businesses, and other stakeholders.

Outreach- Notification

What we've done:

- Posters attached to signposts along street
- Individual notifications to major stakeholders including businesses, houses of worship, etc.
- Update emails sent to city and project mailing lists
- Mailed postcards to 3,800 addresses within project area

Let us know: What else can we do to get the word out?

www.cambridgema.gov/MainStreetSafety



Image: Postcards mailed to project area

Outreach- Next Steps

We acknowledge that the entire community isn't present tonight

- Project mailings, signage, visits to businesses, and online engagement will help us reach members of the community who could not make it tonight
- We'll do more outreach to hear from more people
- Let us know your suggestions for how to reach a wider audience
 - Are you on a neighborhood list serve?
 - Is there a community bulletin board you check regularly?

Tonight is the beginning of the feedback period, not the end

- We do not plan to make any decisions tonight
- Over the coming months, we welcome your feedback, whether online or in-person
- We'll post a recording of tonight's meeting online, including the presentation slides

www.cambridgema.gov/MainStreetSafety

Planning Background: Street Design + Policies

What guides our street design?

We design for people of all ages and abilities.

- People who may not have access to a car
 - ▶ May not be able to drive
 - ▶ May not want to drive
 - ▶ May not be able to afford to drive
- People who use different kinds of mobility devices
 - ▶ Mobility scooters
 - ▶ Adult tricycles
 - ▶ Child trailers
 - ▶ Adaptive bicycles
 - ▶ and more!



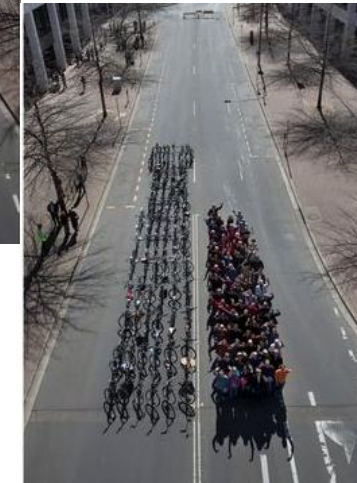
What guides our street design?- Continued

How we think about vehicle congestion and delay:

- Moving people slowly is moving people safely
- We do not prioritize eliminating delay for people driving over the safety of others

Focus is on moving people and goods, not their vehicles.

- Biking and riding transit is a more efficient use of limited street space
- Safe and accessible facilities, including bike lanes, that can be used by a wide range of people, young and old
- Need to safely allow access for trucks and local deliveries
- Public space on streets can also be used for other purposes, such as outdoor dining or public gathering



Images: Amount of street space occupied by the same number of people on a bus, on bicycles, and in single-occupant vehicles

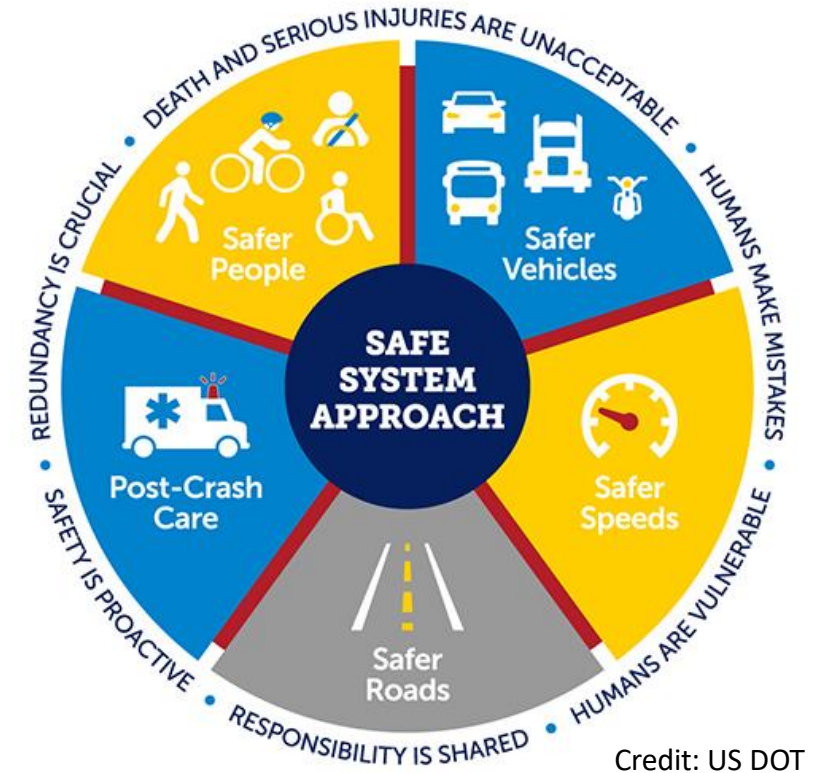
Street Design - Enforcement - Education

Street Design

- We take a human-centered approach to street design. We design our streets to prevent errors as much as possible and lessen the impacts of errors when they do occur.
- Shifts away from individual blame to create a safe system
- Keep road users safe by designing for the most vulnerable (i.e. 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 chance that a momentary distraction leads to a deadly crash.

Sustainable Transportation

Sustainable transportation options allow people to get around in ways that reduce emissions and congestion, such as walking, biking, and public transit.

The City supports this through many policies, plans, and ordinances, including:

- ▶ Vehicle Trip Reduction Ordinance (1992)
- ▶ Parking & Transportation Demand Ordinance (1998)
- ▶ Climate Protection Plan (2002)
- ▶ School Wellness Policy (2017)
- ▶ Envision Cambridge (2019)

- ▶ Complete Streets (2016)



- ▶ Vision Zero (2018)



- ▶ Cycling Safety Ordinance (2019)



Planning Background: Cambridge Bicycle Plan and Separated Bike Lanes

Cambridge Bicycle Plan

The *Vision* of the 2020 Bicycle Plan is that Cambridge will be a place where:

- ▶ Bicycling is equally available to everyone
- ▶ All destinations can be reached by bike
- ▶ Streets are designed to accommodate bicycling **for people of all ages, abilities and identities.**

We're removing the barriers that make it harder for people to choose to bicycle in Cambridge. Creating safe and comfortable streets makes it easier for people to substitute car trips for bike trips.



Cambridge Bicycle Plan- A Plan for Everyone

Who should feel comfortable biking in Cambridge? Everyone!

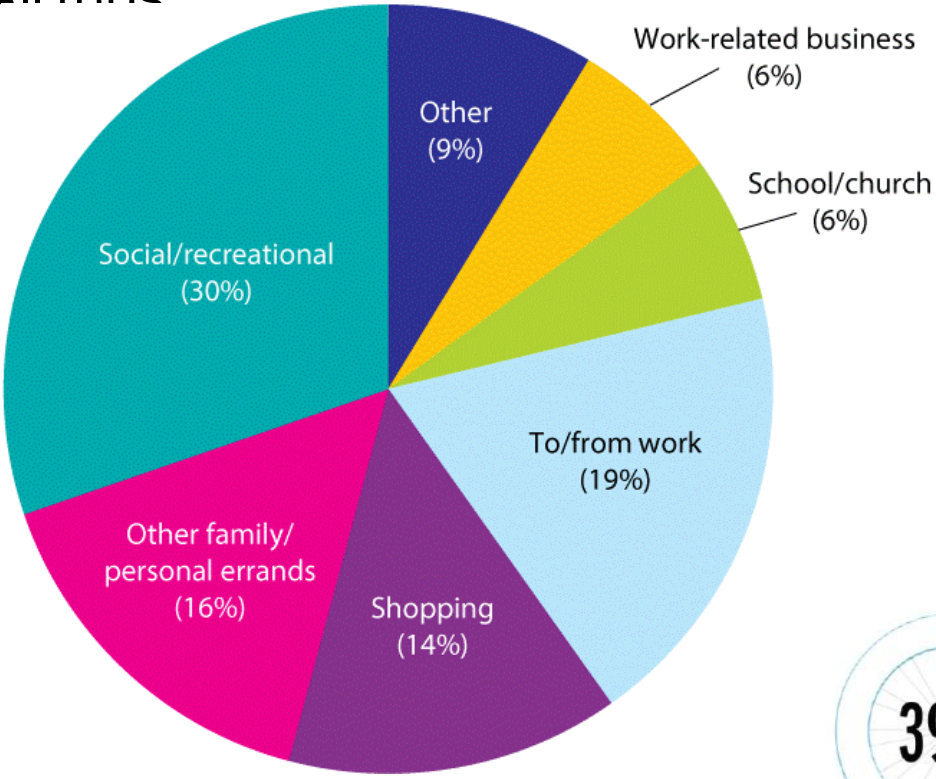
That means:

- ▶ Young children to seniors
- ▶ New cyclists to confident riders
- ▶ Low income to high income riders
- ▶ Non-English speakers
- ▶ People of all physical abilities, races, genders, and cultural backgrounds



People Travel for Many Reasons

All trips



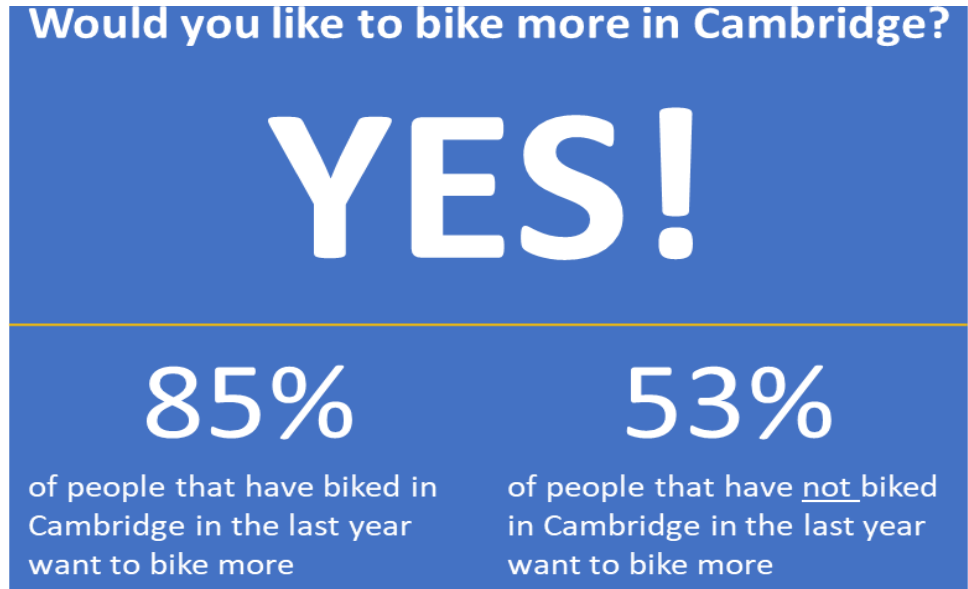
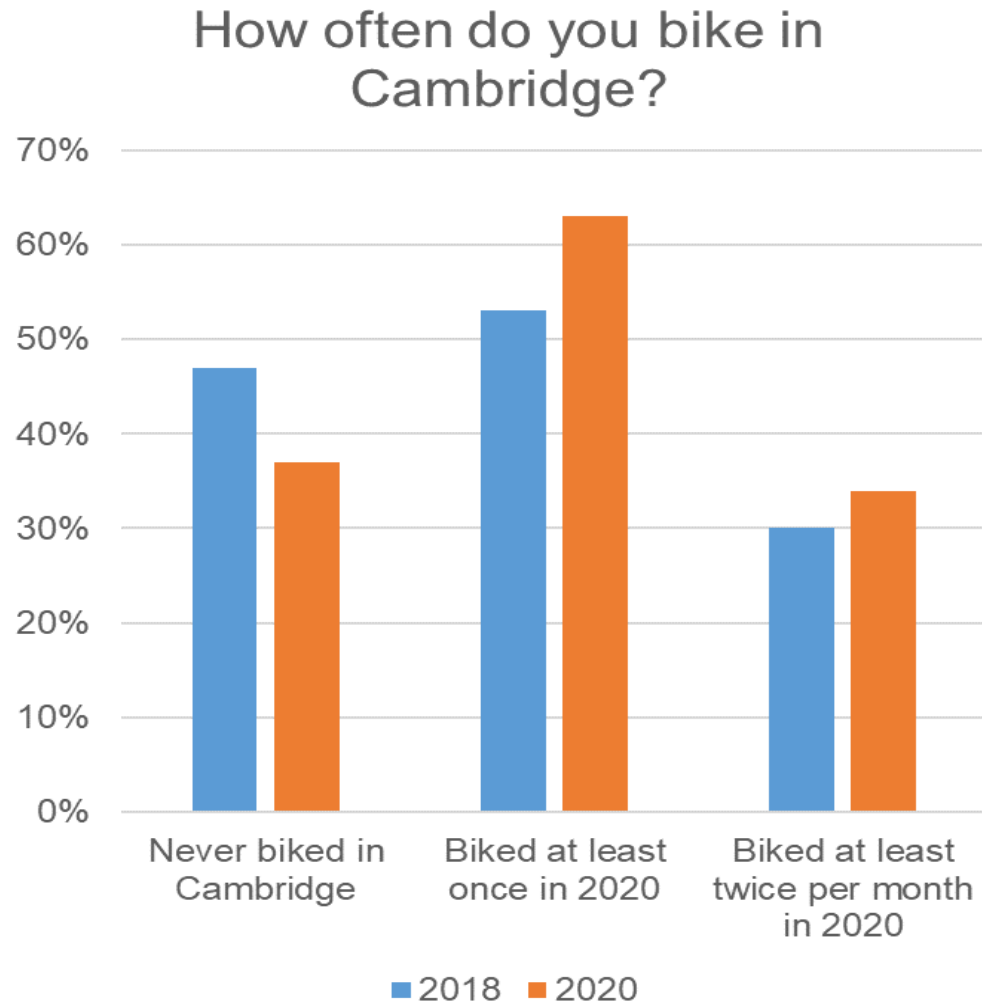
Source: Bureau of Transportation Statistics



Trips by bicycle



Cambridge General Population Survey

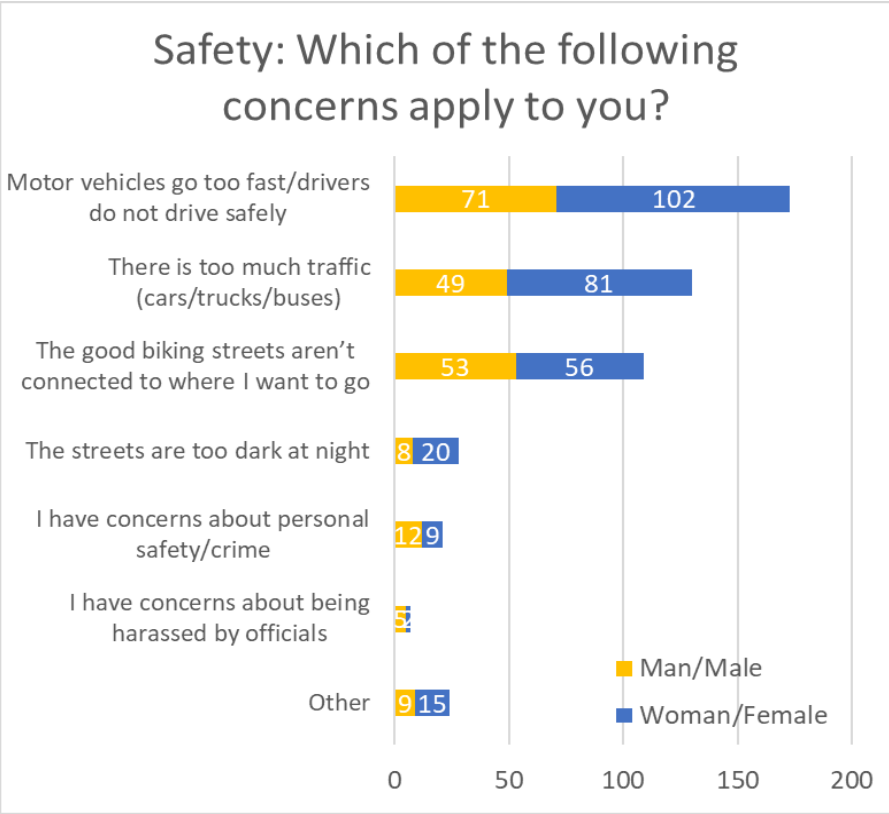
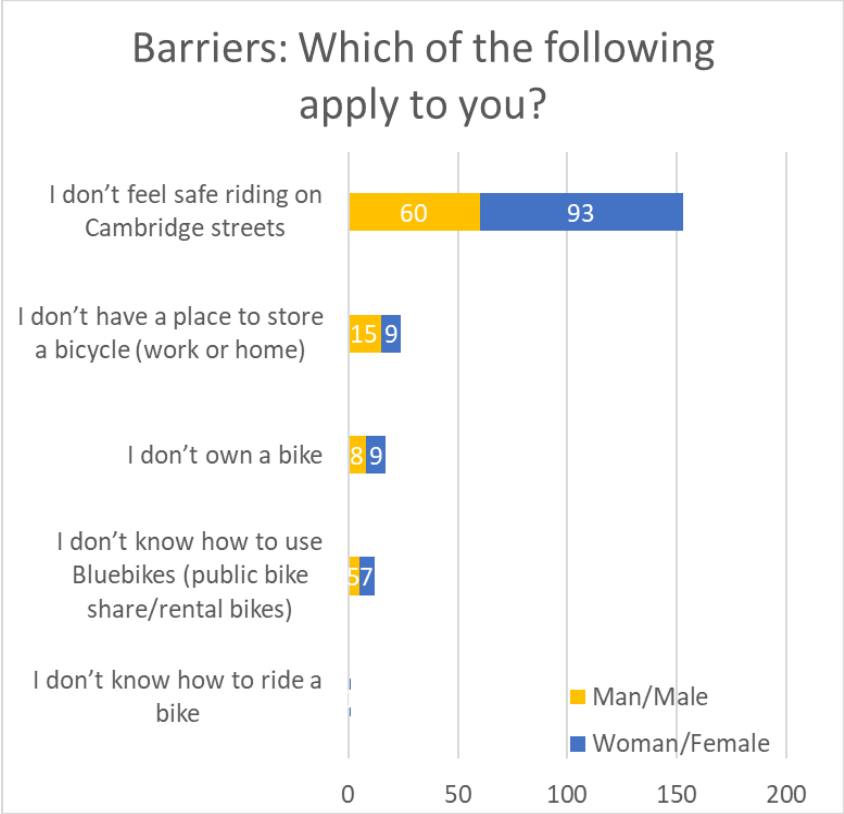


Over 60% of Cambridge residents reported biking at least once in 2020

One-third of Cambridge residents biked on a regular basis (2+ times per month)

Source: Resident telephone and online survey, 2020

Resident Voices - Safety Concerns

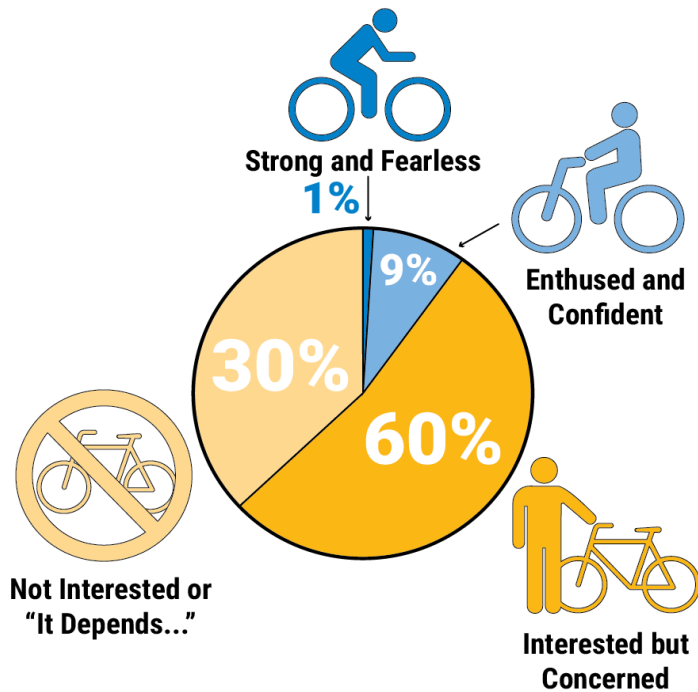


Source: Community Needs Survey, 2020



Bicycling Comfort

People's comfort level riding on city streets

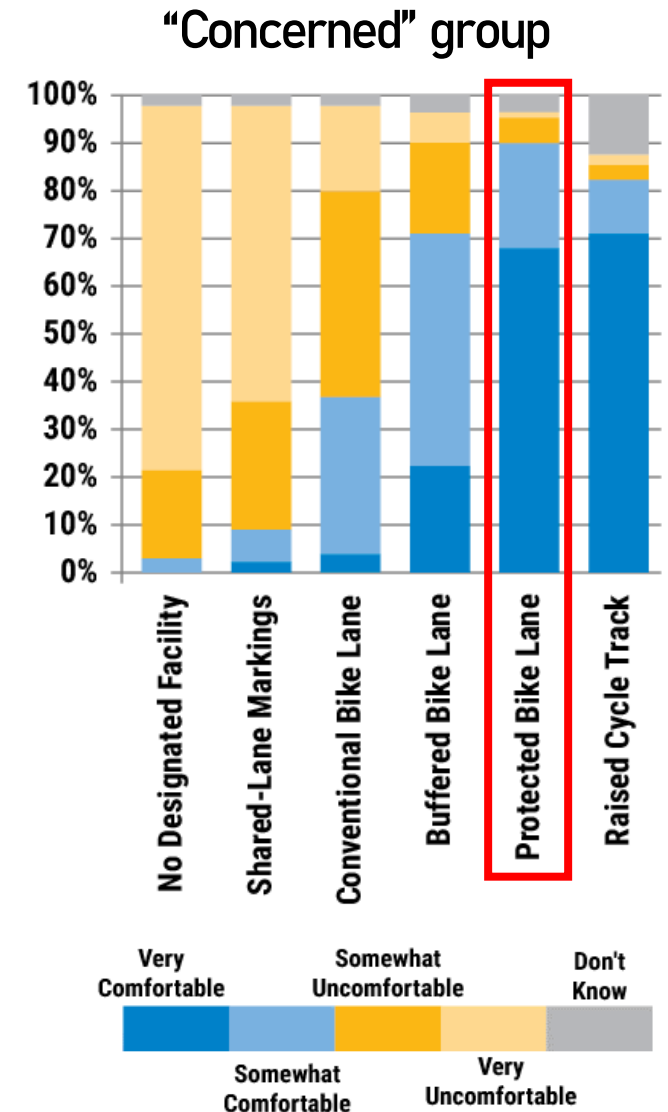


Source: Dill, J. (2012). Categorizing Cyclists: What Do We Know? Insights from Portland, OR.

Most people want to ride a bicycle, but are concerned about safety.

Safer bicycle facilities can help "interested but concerned" people begin biking.

Over 90% of people who would bike prefer and feel comfortable biking on separated bicycle facilities.



Source: Cambridge Community Survey, 2014

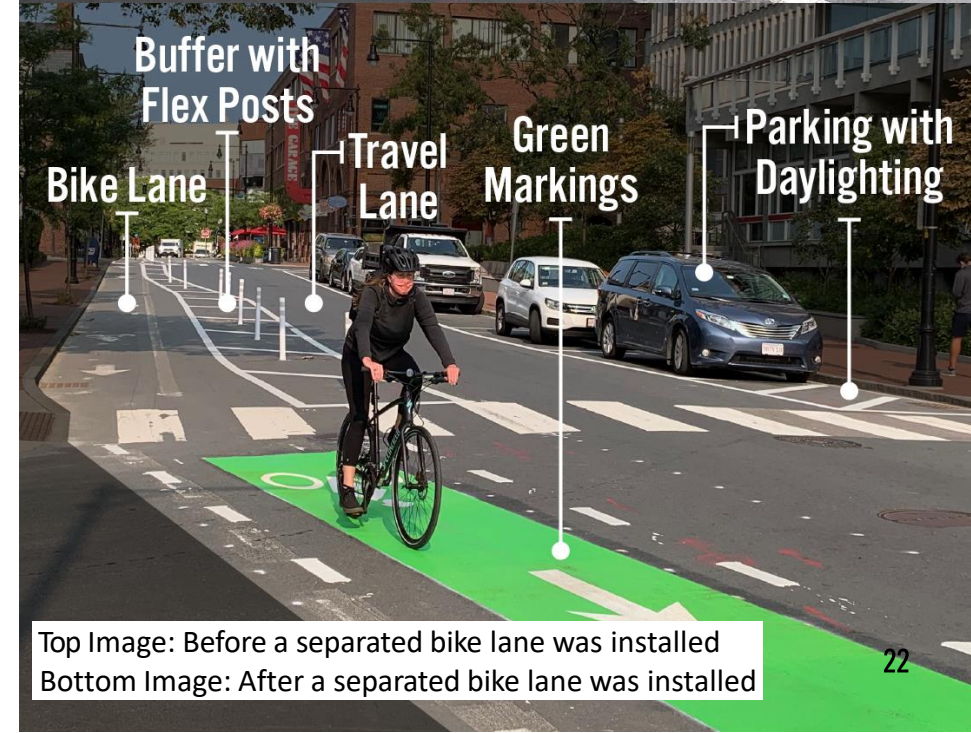
Separated Bike Lanes

What are separated bike lanes?

- People biking and driving are each provided dedicated travel space
- The bike lane has physical separation from the vehicle lane (i.e., curb, flex post)

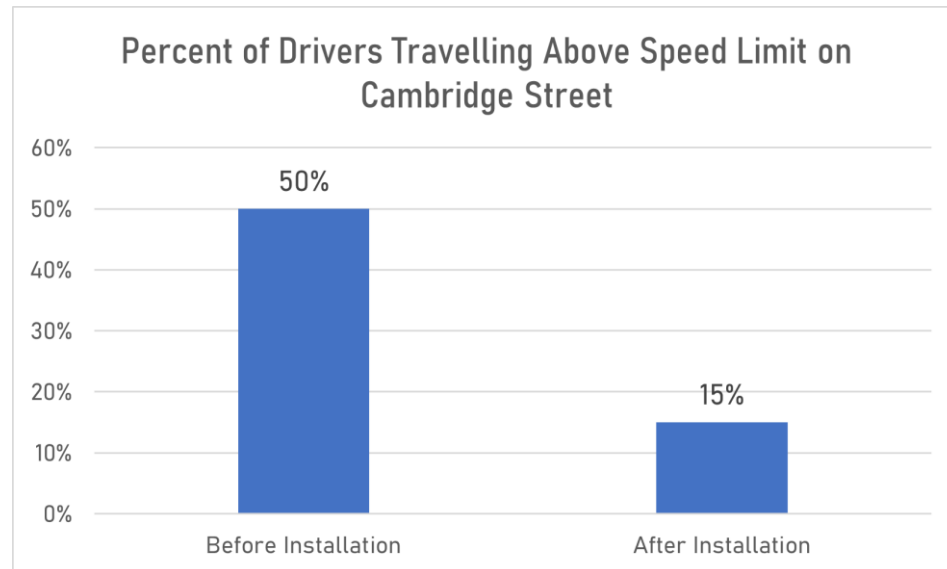
Benefits for people biking:

- 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
- Encourages slower traffic speeds by visually narrowing the roadway width



Separated Bike Lanes- Speed Reduction

- Separated bike lane projects narrow the roadway for drivers, both physically and visually
- This lowers driver speeds, which increases overall safety
- Lower speeds are safer for all users, including people walking, driving, and biking
- Example: The Cambridge Street project (2017/2018) saw a reduction in overall speeds of about 25%



[Cambridge Street Bicycle Safety Demonstration Project - CDD - City of Cambridge, Massachusetts \(cambridgema.gov\)](#)

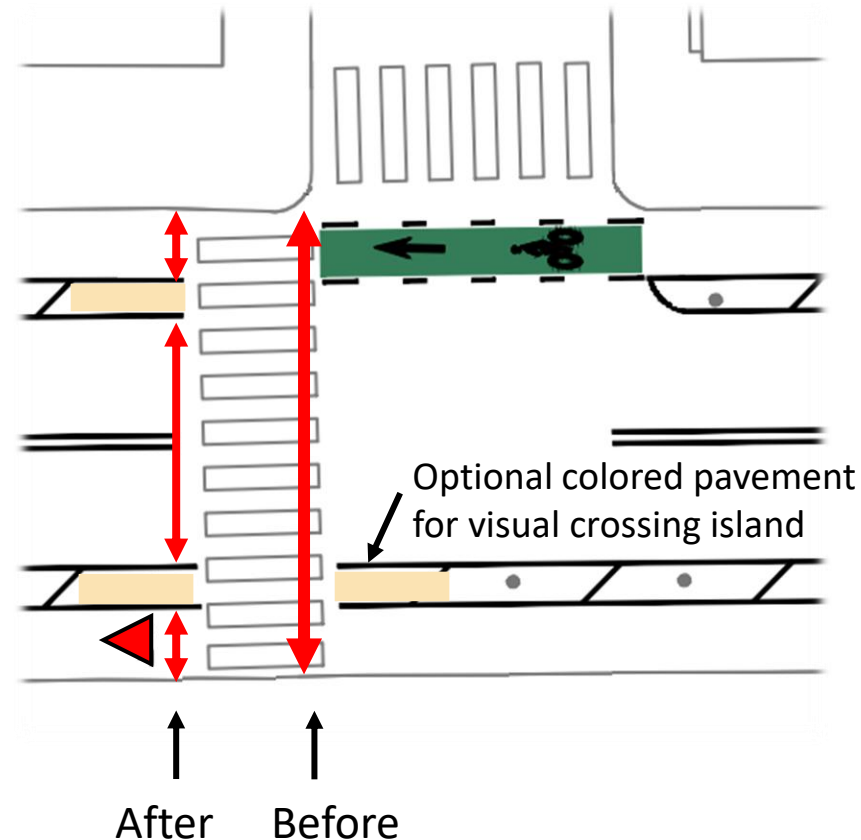


Image: Cambridge Street separated bike lane (2017)

Separated Bike Lanes- Pedestrian Safety

Benefits for people walking:

- Shorter crossing distances
- Better sightlines
- Each potential conflict can be handled separately (i.e., cross bike lane, then vehicle lanes)
- Visually narrows the roadway for drivers, encouraging lower speeds and higher yielding rates at crosswalks



Example: Separated bike lane at crosswalk at Mass Ave at Clinton St

Separated Bike Lanes- Usage Data

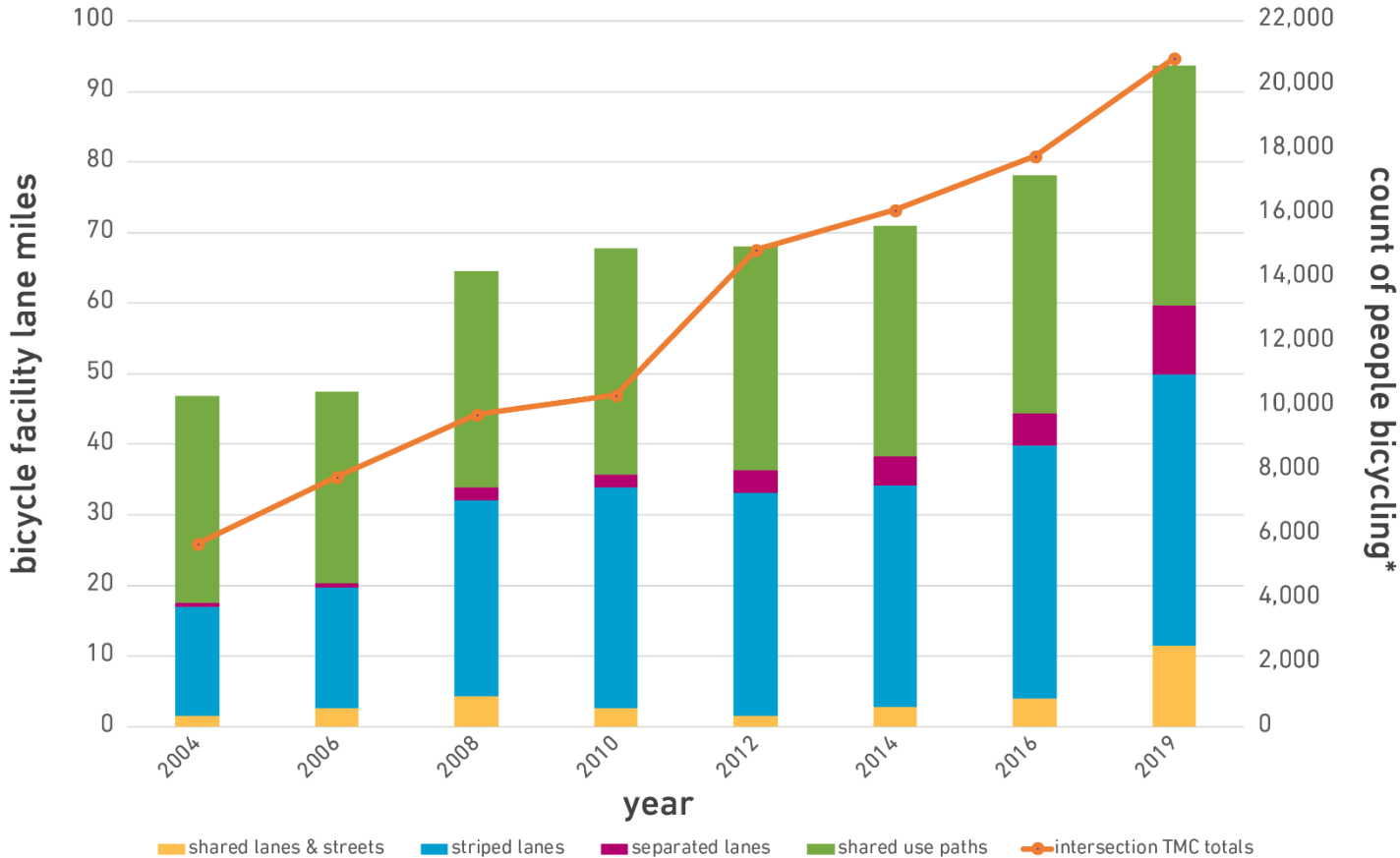
More people ride bicycles when we build more bicycle infrastructure.

A lack of safe and accessible routes and facilities for people of all ages and abilities prevents many people from biking.

As we've built more, we've enabled a wider variety of people to bike.



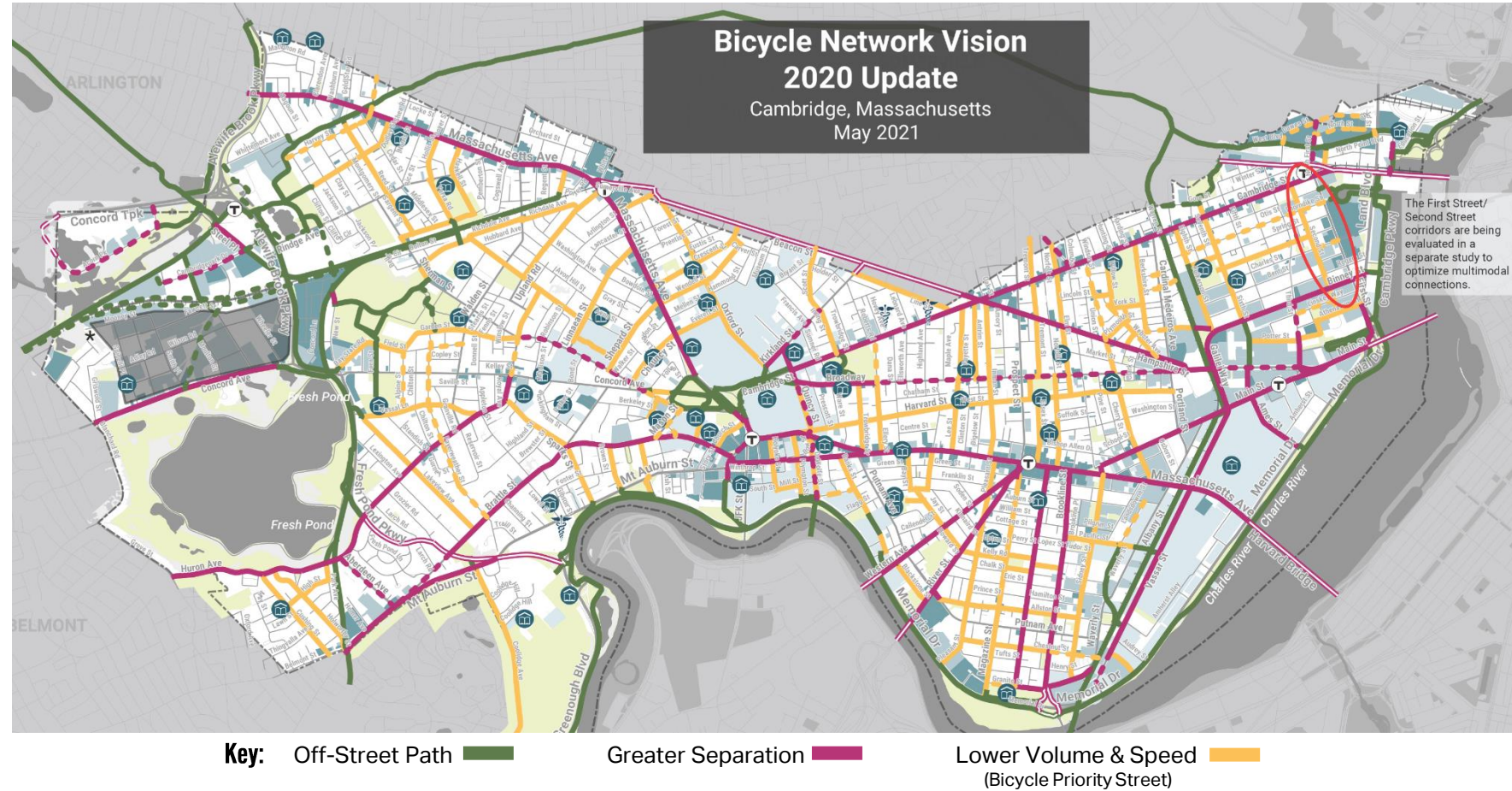
BICYCLE FACILITY LANE MILES AND NUMBER OF PEOPLE BICYCLING (2004-2019)



The Bicycle Network Vision

We are creating a network for biking that is safe, comfortable, connected, and people-centered.

A safe, comfortable network that connects important destinations throughout the City helps more people choose to bike if they would like to.



Cycling Safety Ordinance Overview

2019: City Council Passed the Cycling Safety Ordinance

- Requires construction of separated bike lanes when streets are being reconstructed as a part of the City's "Five-Year Plan for Streets and Sidewalks" and when they have been designated for "Greater Separation" in the Bicycle Network Vision

2020: City Council Passed Amendments to the Ordinance

- The amendments set ambitious requirements for the installation of approximately 25 miles of separated bike lanes within the next five to seven years.
- The location of these facilities is informed by both the Cambridge Bicycle Network Vision and specific requirements in the Ordinance.

Image: A separated bike lane on Brattle St;

Credit: Kyle Klein



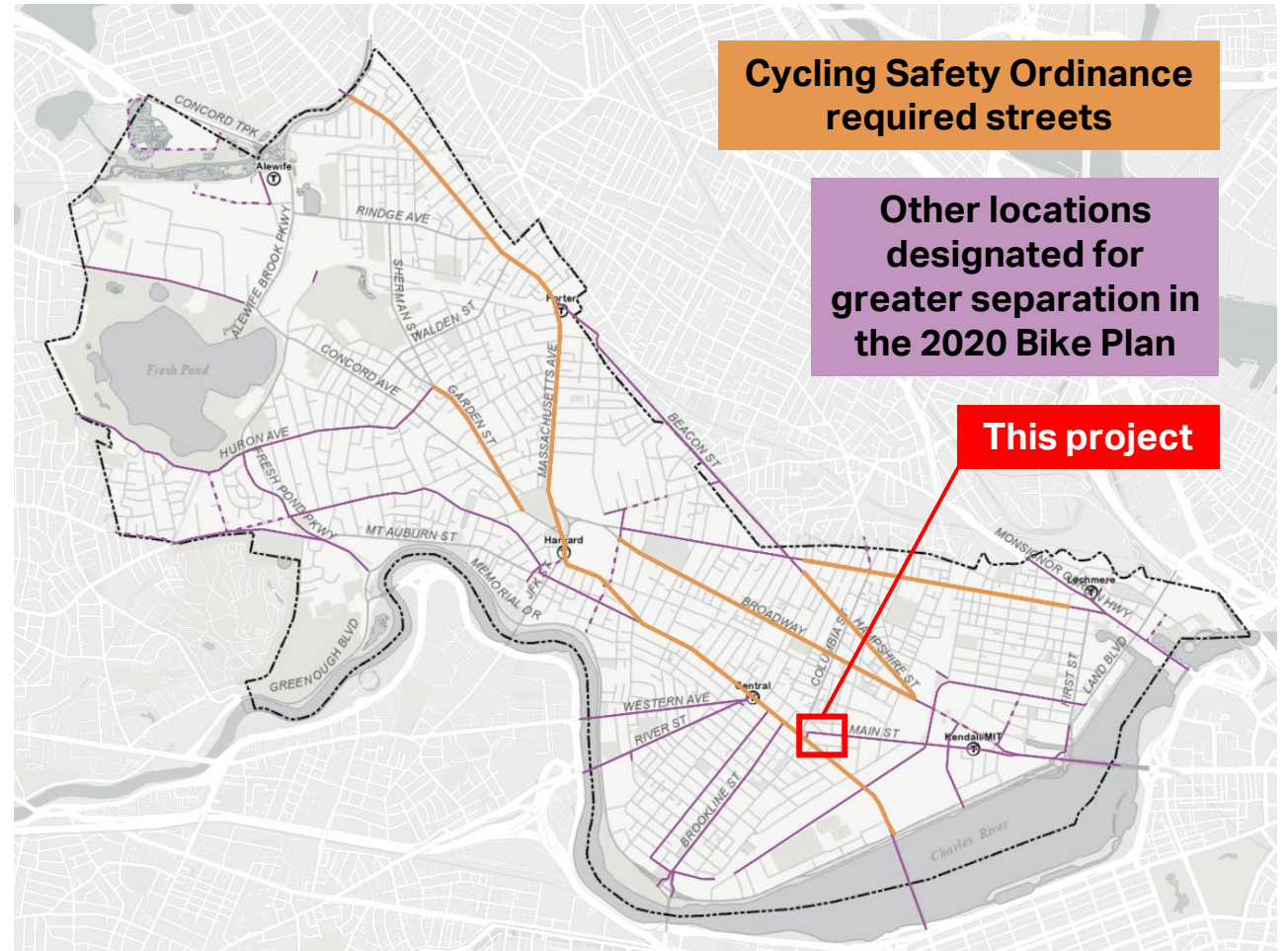
Cycling Safety Ordinance Overview- Continued

In general, the Ordinance requires the City to install separated bike lanes on:

- All of Massachusetts Ave;
- **Broadway** from Quincy St to Hampshire St;
- **Cambridge St** from Oak St to Second St;
- **Garden St** from Huron Ave to Berkeley St/ Mason St;
- **Hampshire St:** from Amory St to Broadway;

It also requires 11.6 miles of separated bike lanes in other locations from the 2020 Bicycle Network Vision.

- **Main St is part of these 11.6 miles**



Learn more at cambridgema.gov/cycling-safety-ordinance

Project Introduction

Context- Main Street in the Bike Plan

The entire length of Main Street is designated for “greater separation” to support people biking safely and comfortably.

Main Street is a priority:

- Key East-West corridor
- Connects to Boston via Longfellow Bridge
- Grand Junction Multi-Use Path
- Direct connection between Central Square and Kendall Square
- Connects residents and visitors to retail, jobs, parks, and squares

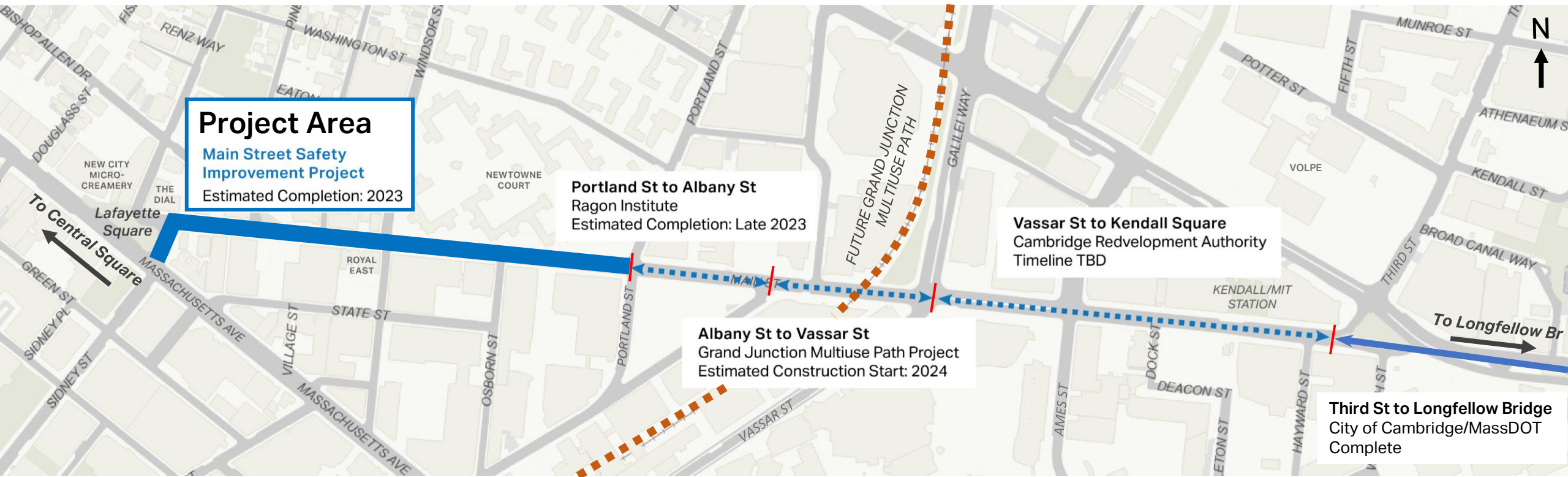


Image: 2020 Bicycle Network Vision

Key: Main Street ■ ■ Off-Street Path ■ Greater Separation ■ Lower Volume & Speed ■

[Learn more: cambridgema.gov/2020bikeplanupdate](https://cambridgema.gov/2020bikeplanupdate)

Context- Implementation Status

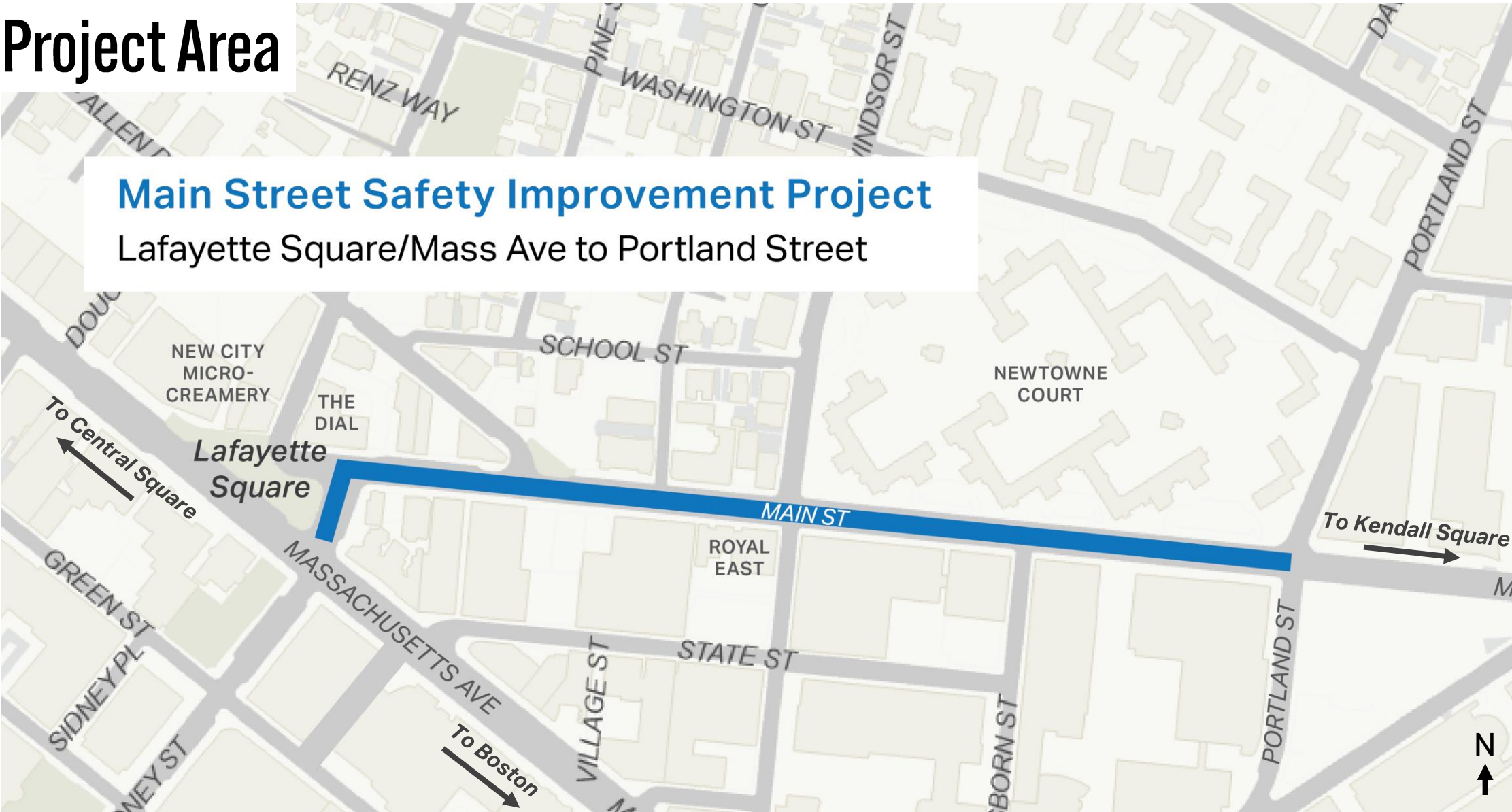


Separated bike lanes are being installed on the full length of Main Street as part of nearby projects and initiatives. This includes design and implementation by both the City and private developers. These lanes connect to separated bike lanes on the Longfellow Bridge.

Project Area

Main Street Safety Improvement Project

Lafayette Square/Mass Ave to Portland Street



Project Scope



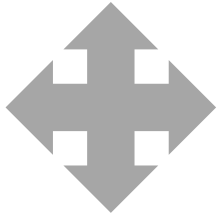
Install separated bike lanes



Improve crossing locations for people walking



Identify locations for curbside access (parking, loading)



Address safety 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



Image: Cambridge Street Separated Bike Lane (2017)

What is not a quick-build project?



Credit: pedbikesafe.org

Curb ramps and crosswalks



Credit: nyc.gov

Curbs, catch basins, and utilities

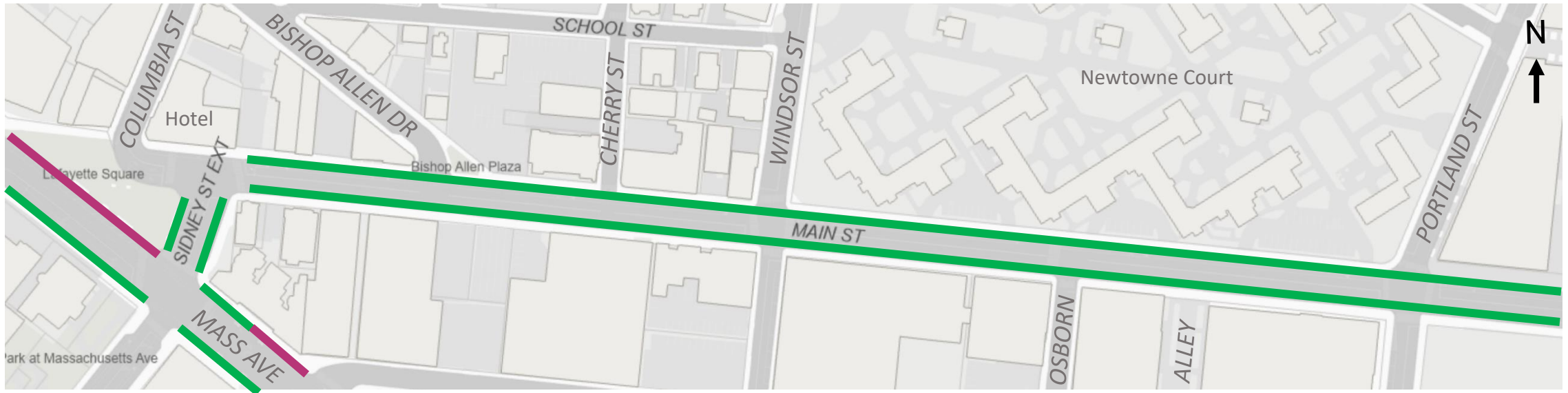
Quick-build vs Construction

- Quick-build projects can be installed significantly faster than typical construction projects. **Within months.**
- Capital Construction projects must be added to the City's Five-Year Sidewalk and Street Reconstruction Plan for funding and coordination with utilities. **Can take 2-5 years depending on the amount of work.**



Image: Cover page for the city's Five Year Sidewalk and Street Reconstruction Plan

Existing Bike Facilities



Main Street and Sidney Street Extension have conventional bike lanes for the full length of the project area.

- Located between the travel lane(s) and parking
- No physical separation provided between people biking and people driving or parking
- Designated using only pavement markings

- In-street bike lanes
- Separated bike lanes

What are your thoughts about the existing bike facilities? What works? What doesn't?

Existing Bike Facilities- Continued

- Biking experience does not meet the needs of people biking
- People biking are subject to additional conflicts with people driving
- Main Street is identified in the Bicycle Network Vision for greater separation
- Current bike facilities do not meet the requirements of the Cycling Safety Ordinance

What are your thoughts about the existing bike facilities? What works? What doesn't?



Image: Similar bike lane on Cambridge Street

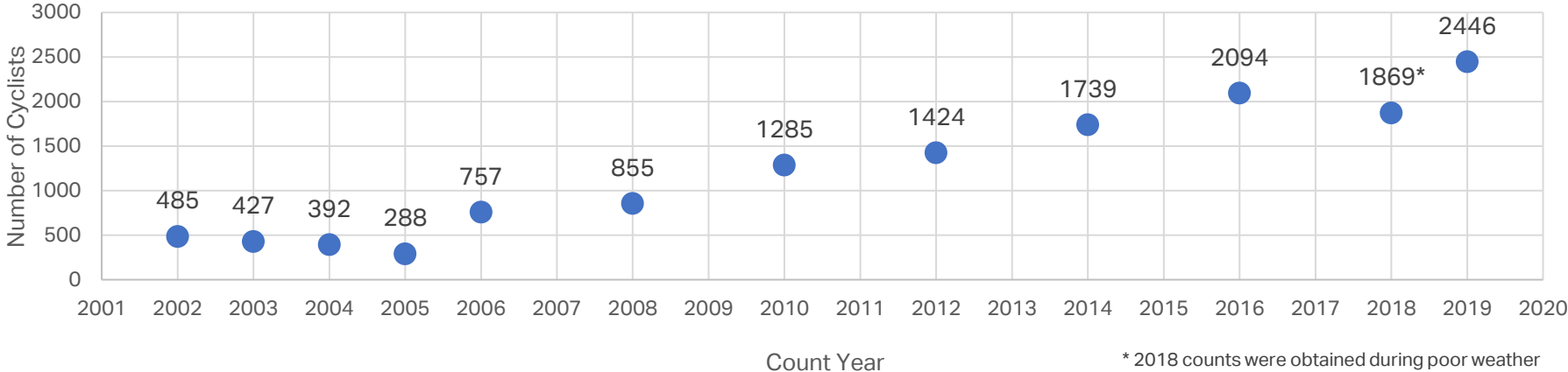


Image: Existing bike lane on Main Street. Credit: Dan Ryan, Boston Globe

Existing Bike Facilities- User Data

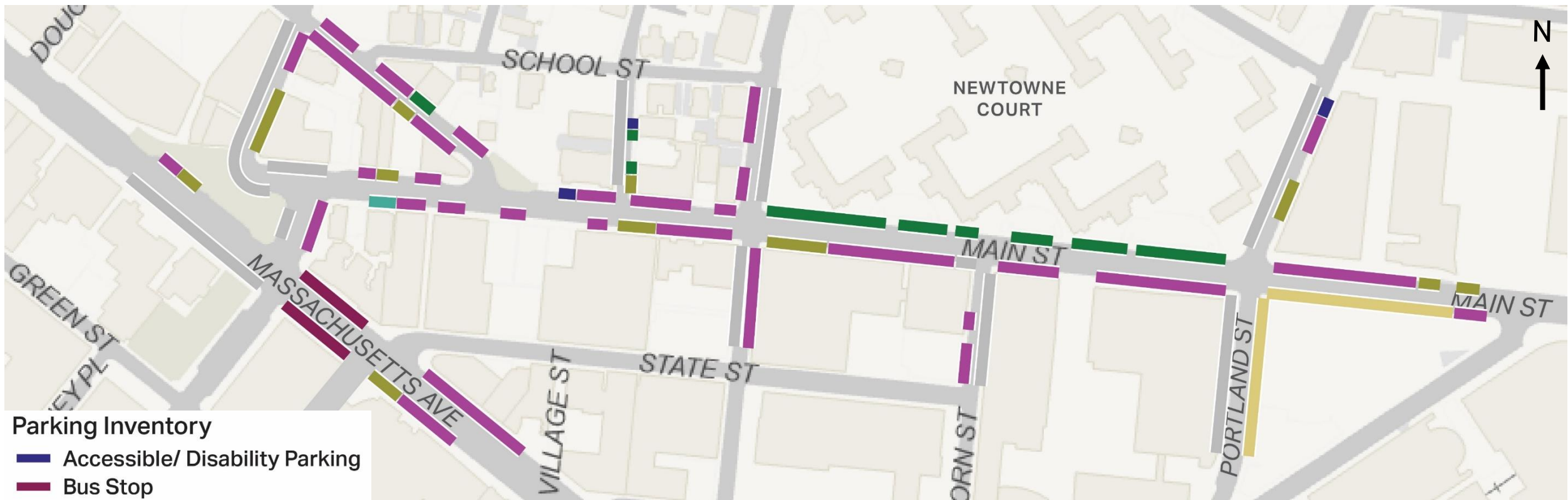
Massachusetts Ave at Sidney St/Sidney St Ext/Main St/Columbia St (Lafayette Square)

- One of 16 annual citywide bicycle counting stations
- 616 people on bikes used the intersection during a typical morning one-hour period (8:15am to 9:15am, September 11, 2019)
- 711 people on bikes used the intersection during a typical evening one-hour period (5:15pm to 6:15pm, September 11, 2019)
- On Main Street specifically, peak hour counts show more eastbound trips (toward Kendall Square) in the morning and more westbound trips (toward Central Square) in the evening.



Biking through this intersection has increased **five-fold** since counts began in 2002. [427 (2002) vs 2446 (2019)]

Considerations- Parking and Loading



Parking Inventory

- Accessible/ Disability Parking
- Bus Stop
- Loading
- Metered Parking
- No Stopping
- Reserved (Clergy)
- Permit Parking
- Temporary - Construction

- There are approx. 190 parking and loading spaces near the project area
- About 90 of the spaces are on Main Street and Sidney Street Extension

What types of parking and loading do you use along Main Street?

Considerations- Parking and Loading- Continued

- Most parking along Main Street and Sidney Street Extension is metered
 - ~ 52 metered spaces
- Permit parking is concentrated near residential buildings and homes
 - ~ 32 permit parking spaces
- To install the project, we will need to remove about half of the spaces (about 45-50)
 - We need the extra space to add the hatched buffer areas
- We need to know what type of parking is important and at what times during the day



Image: Main Street near Cherry Street (2023)

What types of parking and loading are important to keep?
Where should they be located?

Considerations- Trucks

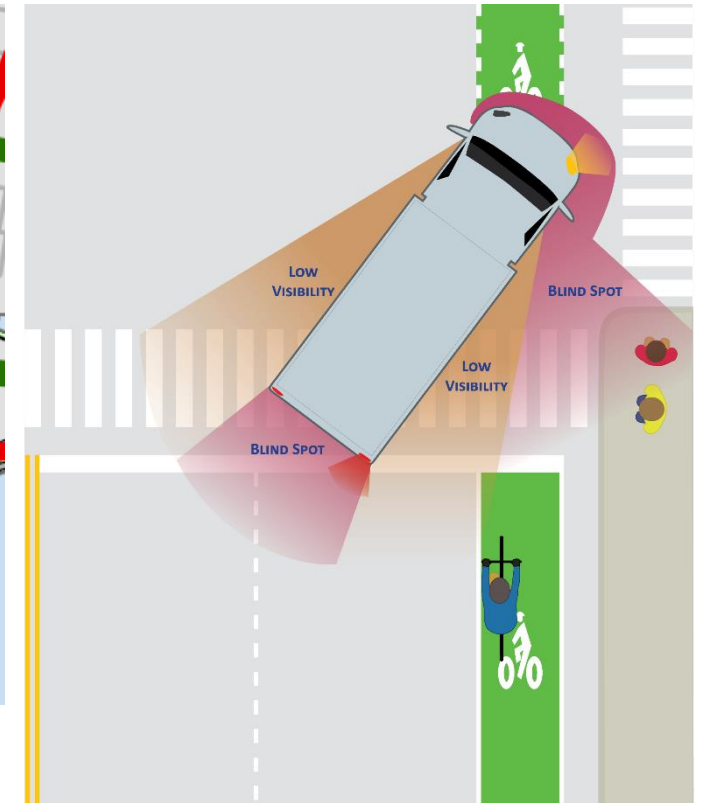
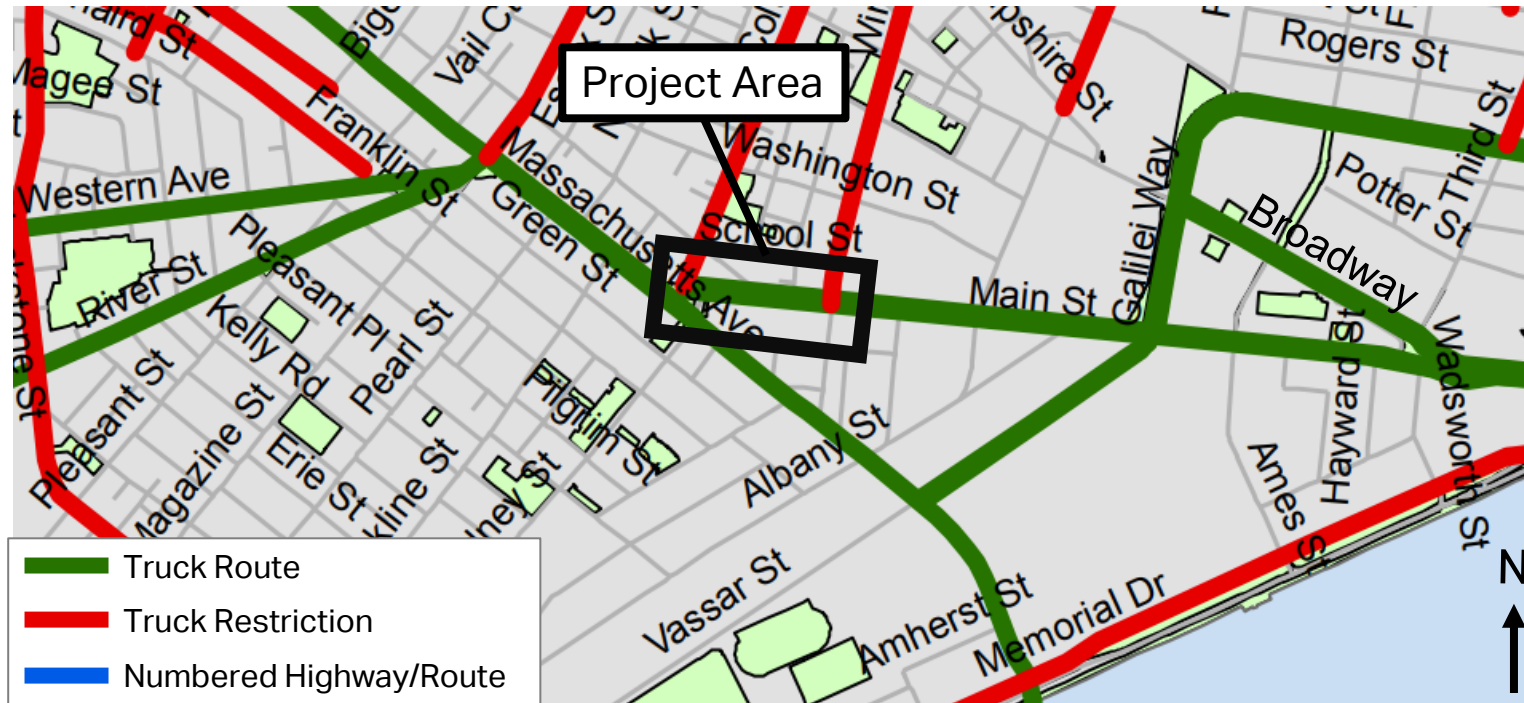
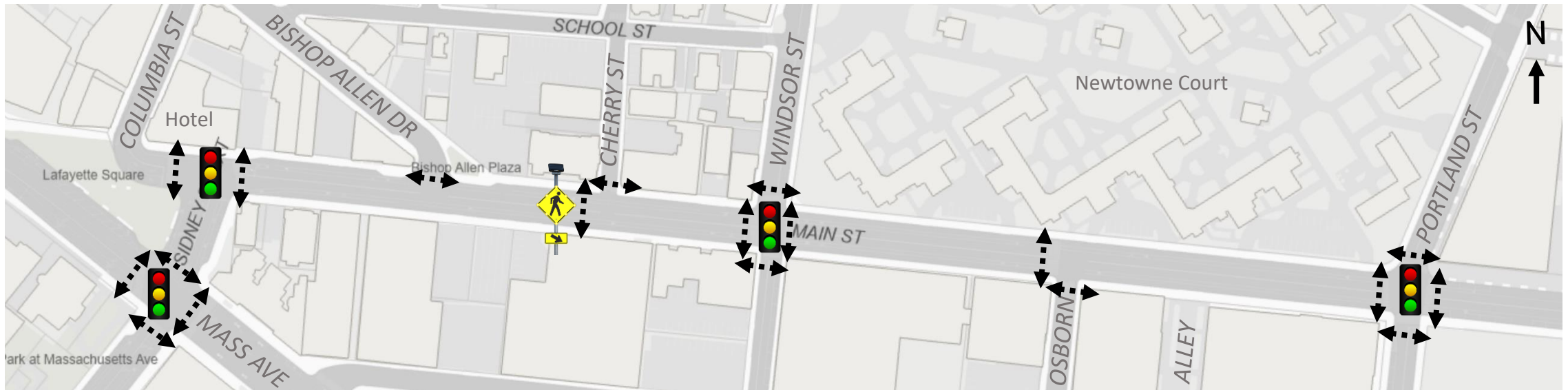


Image: Blind and low visibility spots for turning trucks

Main Street is a designated and signed truck route

- Many businesses rely on trucks to supply goods and materials
- Trucks make wide turns and have large blind spots
- Adding separation and improving sightlines helps move people walking and biking out of large vehicle blind spots

Considerations- Walking and Existing Crosswalks

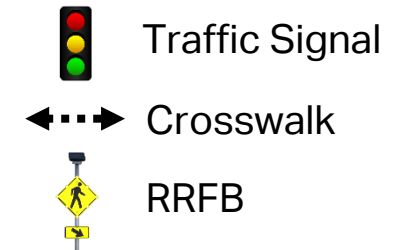


Signalized crosswalks

- Massachusetts Avenue/Sidney Street Extension/Sidney Street
- Columbia Street/Sidney Street Extension
- Windsor Street
- Portland Street

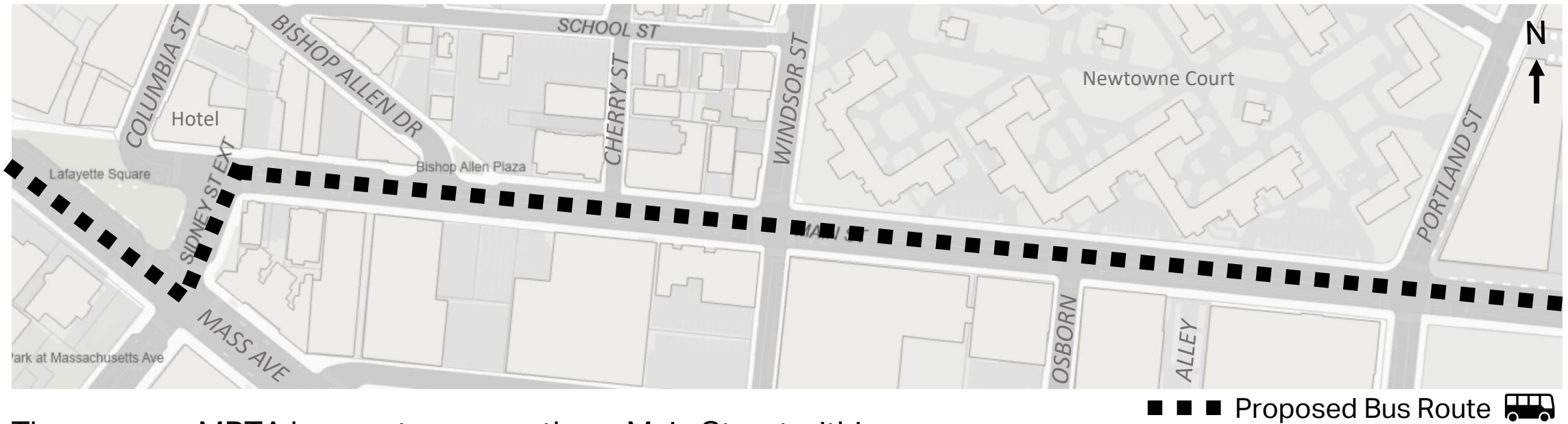
Unsignalized crosswalks

- Cherry Street
[Button-activated flashing crosswalk signs (RRFB)]
- Osborn Street



Which crossing locations work well?
Which do you have concerns about?

Considerations- Buses



There are no MBTA bus routes currently on Main Street within the project area.

MBTA's Bus Network Redesign proposes new high frequency bus service along Main Street within the next couple of years.

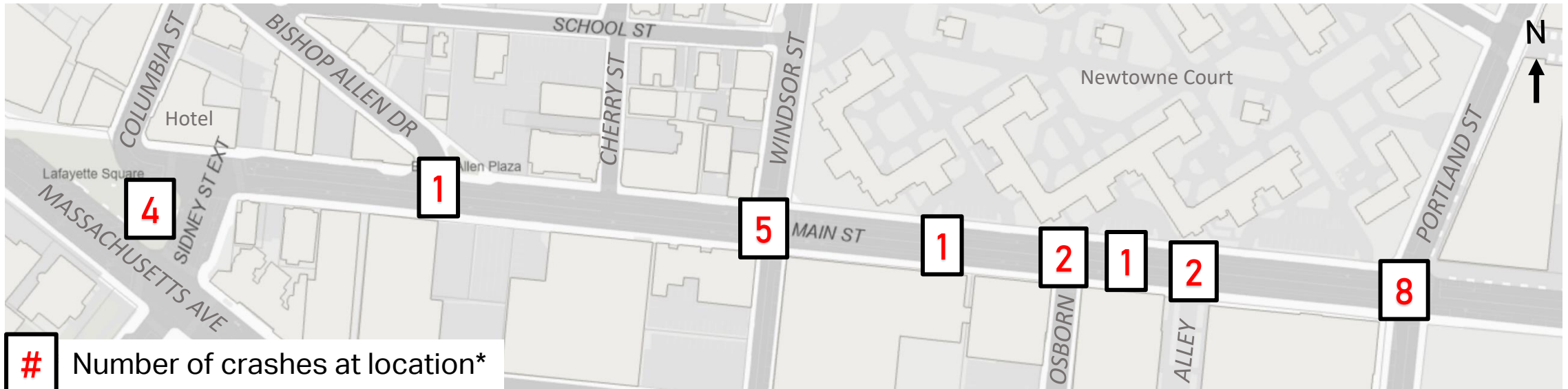
- Route 70 – Waltham to Kendall Square via Watertown
- 7-day service, every 8-15 minutes

More information: [MBTA.com/BetterBus](https://www.mbta.com/BetterBus)

Our design will need to accommodate bus stops when the route is finalized.

Where should future bus stops be located?

Considerations- Crash Data (2020 - 2022)



Involving	Number of Crashes	Injury Crashes
Driver & Driver	15	7%
Driver & Pedestrian	2	50%
Driver & Cyclist	7	71%
Driver & Object	10	0%
Cyclist & Pedestrian	0	N/A
Cyclist & Cyclist	0	N/A

An injury crash above is defined as a crash that resulted in a party being transported to a hospital.
 *Driver & Object crashes are not included in the above map.

Between 2020 and 2022 there were 34 reported crashes along the project area.

Data showed that people walking and biking were more vulnerable to injury when involved in a crash.

This project will seek to address the root causes of any crashes.

Outreach

Outreach- Next Steps

Tonight is the beginning of the feedback period, not the end

- We do not plan to make any decisions tonight
- Over the coming months, we welcome your feedback, whether online or in-person
- We'll post a recording of tonight's meeting online, including the presentation slides

www.cambridgema.gov/MainStreetSafety

Outreach- Community Meetings

We have many ways that you can ask us questions or give us feedback. You can send us email, call us, or use our online comment form at any time.

Virtual community meetings are held periodically to update the community on the project's status and to ask for specific feedback. They are recorded and posted online for those who did not attend. No decisions are made during these meetings.

Community Meeting 1: **Today**

- What works and doesn't work on Main Street currently
- Suggestions for design elements that we should include in the project

Community Meeting 2: **May**

- Design options presented for the street based on the feedback we hear today
- Feedback on those options to help determine and refine a final plan

Community Meeting 3: **June/July**

- Share one revised design based on previous feedback
- Gather specific comments on adjustments that still need to be made

Project Installation: **Late Summer**

- Final plans posted to project webpage reflecting final revisions

Outreach- Open Houses

Two open houses will be held along Main Street to help us reach community members who may not be able to attend a community meeting.



Image: Map with comments for the Hampshire Street Safety Improvement Project (2022)

We will print a large map or design plans for these open house meetings. Come to talk with us, ask us your questions, and add your comments and suggestions to the map or plans.

Community Open House 1: **March 22**

- Same information as presented at the first community meeting (today)
- What works and doesn't work on Main Street currently
- Suggestions for design elements that we should include in the project

Community Open House 2: **May**

- Same information as presented at the second community meeting
- Options presented for the street based on the feedback we heard
- Feedback on those options to help determine and refine a final plan

Outreach- Online Comment Map and Comment Form

Following this meeting, you can also submit comments to us using our online map or comment form.

Visit the project webpage to learn how. We will also include details in the meeting follow up email.



Image: Online map with comments for the Hampshire Street Safety Improvement Project (2022)

On the comment map, you will be able to add a pin to any location and tell us that you have a concern about driving, walking, biking, or other.

www.cambridgema.gov/MainStreetSafety

Outreach- Individuals + Groups

We are available for in-person and/or virtual meetings with community members and stakeholders. You can send us email, call us, or use our online comment form at any time to request a meeting. We anticipate discussions with many entities along Main Street, including but not limited to:

- Newtowne Court and Washington Elms
- DPW's The Port Infrastructure Improvements Project
- Cambridge Bicycle Committee
- Cambridge Joint Transportation Committee (Bike-Ped-Transit)
- Cambridge Commission for Persons with Disabilities
- Businesses
- Houses of worship
- and more, reach out!

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Questions + Feedback

Questions + Feedback



- We will take comment 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
- In order to allow everyone to speak, please try to limit your time to 1 minute
- Approximately every 15 minutes, we will provide answers to questions
- The meeting is scheduled to end at 8:00 p.m.
- You may also contact the project manager directly to provide written or verbal feedback

Contact Information

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Street Design Project Manager
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Questions + Feedback- Continued

We welcome all questions and feedback about the project. The online comment form and map are also available on the project website to gather additional responses.

Tonight, we'd like to hear:

1. How do you currently use Main Street?
2. Do you have safety concerns while walking, riding, or driving in this section?
3. What are your thoughts about the existing bike facilities? What works? What doesn't?
4. What types of parking and loading do you use here? What types are important to keep?
5. Which crossing locations work well? Which do you have concerns about?
6. Where should bus stops be located?
7. What can we do to improve traffic safety?

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