









## Welcome!

Cambridge Cycling Safety Ordinance Advisory Group Meeting 7: Tuesday, November 28

### **Agenda**

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4:00 p.m. Welcome
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- 4:10 p.m. City updates
- 4:40 p.m. Bicycling in Cambridge Data Report
- 5:10 p.m. Evaluation Criteria
- 5:40 p.m. Next Steps
- 5:50 p.m. Public Comment

### **Discussion Guidelines**

- Respect all participants (members, staff, public)
- Bring as much eagerness to listen deeply for understanding as to speak
- Be curious about and open to different perspectives and sources of information
- Keep the focus on what we can create together
- Do not stereotype groups
- Focus on the issues, including raising perspectives and concerns from relevant stakeholder groups
- \*\*Note\*\* Starting today, we will begin recording presentations (but not discussion) so that members who miss a meeting or want to revisit information can review them.



## **City Updates**

### Project Updates: Hampshire Street Safety Improvement Project

- This fall, we finished installing separated bike lanes on:
  - Hampshire Street between Inman Square and Broadway
  - One block of Broadway between Hampshire Street and Portland Street
- Project included:
  - 1.56 miles of separated bike lanes
  - Changes to bus stop locations. New locations had more typical stop spacing and make it easier to deploy boarding ramps.

Additional accessible parking spaces.
 Traffic pattern change at Hampshire/Broadway intersection:
 no right turns.
 Three online community meetings & two in-person open houses
 Comment map with 176 comments & design options survey with 545 responses
 www.cambridgema.gov/HampshireStSafety

## SEPARATED BIKE LANES & OTHER SAFETY IMPROVEMENTS ON CAMBRIDGE STREET

Inman Square to Second Street



This fall, learn about the project and tell us what we should think about.

Next year, we'll come back to the community with draft designs for review and feedback.

#### **Street Layout Changes**

In 2024, the City of Cambridge will add separated bike lanes and make related safety improvements on Cambridge Street. We will:

- Move bike lanes to the curb and add white flex post barriers.
- Shorten crossing distances for people walking.
- · Reconstruct existing curb ramps.
- Consider changes to improve reliability and accessibility of MBTA Route 69.
- Accommodate outdoor dining.
- Reduce on-street parking to one side of the street at a time.

#### **Upcoming Community Events**

Wednesday, November 29 4 p.m. - 6 p.m.

In-Person Open House #1 Valente Branch Public Library (826 Cambridge St)

#### Saturday, December 2 12 p.m. - 2 p.m.

In-Person Open House #2 Millers River Apartments (15 Lambert St)

#### Tuesday, December 12 6 p.m. - 8 p.m

Virtual Community Meeting Zoom



### CITY OF CAMBRIDGE | TRAFFIC, PARKING + TRANSPORTATION Safety Improvement Project on Cambridge Street cambridgestreet@cambridgena.gov

## **Project Updates: Safety Improvement Project on Cambridge Street**

- In mid-November, we launched a new safety improvement project on Cambridge Street. This street is specifically called out in the Cycling Safety Ordinance as an area to add separated bike lanes.
- Phase 1 engagement events:
  - Wednesday, 11/29 from 4 p.m. to 6:30 p.m. Open House at Valente Branch of Cambridge Public Library
  - Saturday, 12/1 from noon to 2 p.m. Open House at Millers River Apartments
  - Tuesday, 12/12 from 6 p.m. to 8 p.m. Virtual Community Meeting on Zoom
- Communications so far include:
  - Posters on signposts in the street
  - Large A-frame signs
  - Flyers handed out or dropped off at 128 businesses & institutions
  - Postcards sent to 6,254 addresses in the project area
  - News story on City website, emailed as part of Daily Email update

Website: www.cambridgema.gov/CambridgeStreetSafety

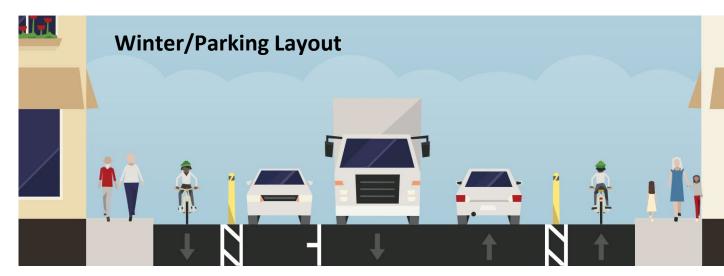
### **Project Updates**

- Harvard Square Mass Ave Improvements: Inspections of existing utilities, stormwater
- Huron Ave and Cushing Plaza Improvements: Roadway milling and paving in October.
- <u>Inman Square</u>: Project complete: official Inman Square reopening celebration held in October.
- Main Street Safety Improvement Project: Design options survey closes at the end of November. 1,062 responses with a 46% completion rate.
- <u>Mass Ave Partial Construction Project</u>: Design Open House on Tuesday, December 5 to discuss Linnaean Street to Waterhouse Street.
- Mt. Auburn Street at Aberdeen Avenue Intersection Safety Improvement Project: Signal going in this
  year, changes to add bus and bike lanes will be made next spring.
- River Street Infrastructure and Streetscape Project: Water main, drain, and test pit work continue

Learn more at <a href="https://www.cambridgema.gov/cso-projects">www.cambridgema.gov/cso-projects</a>.

### **Update: On-Street Dining and Separated Bike Lanes**

- In September 2023, <u>the City responded to</u> Cambridge City Council Order #147
- Plan to accommodate seasonal outdoor dining next to separated bike lanes.
- In the winter/when there is parking:
  - Separated bike lanes next to the curb, separated from a parking/loading lane by flex posts.
- In the summer/when there is dining:
  - Outdoor dining is next to the curb.
  - The bike lane will go around the outdoor dining setup, replacing floating parking.
  - Jersey barriers will separate the bicycle lane from the travel lane.
  - To make the transition work, one parking space on each side of the dining area is used to detour the bike lane.







### **City Updates Discussion**



# Bicycling in Cambridge: 2023 Data Report

### 2023 Data Report

- Released October 2023
- Updates data from the 2020 bike plan

Read the report: camb.ma/bikedata2023

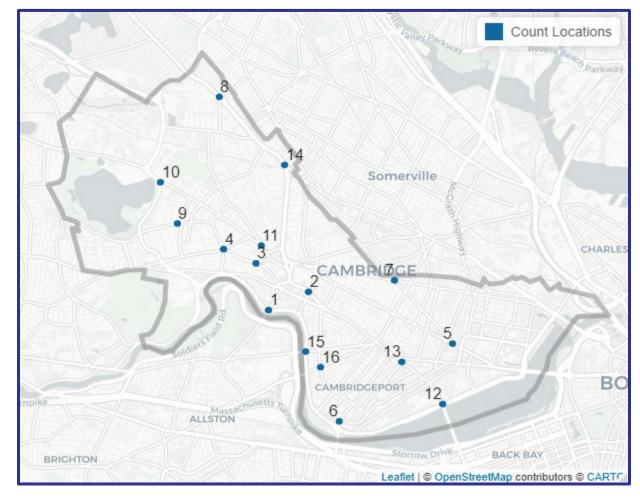






### **About Our Data: Citywide Bike Counts**

- Bike counts collected on weekdays in September:
  - 2002, 2003, 2004, 2005, 2006, 2008, 2010, 2012, 2014, 2016, 2018, 2019, and 2022
- 16 intersections have been counted consistently since 2003





### **About Our Data: Limitations**

Annual bike counts show trends over time – they don't show the total numbers of people biking in Cambridge.

- Peak hour counts focus on commute trips
- Only show certain intersections
- Does not capture how people may have changed their routes or times of travel

Other factors impacting our counts:

- COVID-19
- Construction



### **Data Limitations: Construction Impacts**

#### Impact of Construction on Bicycle Traffic

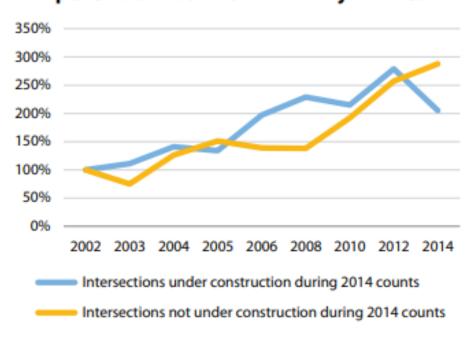


Figure 3.9: Net change in volumes at intersections with and without construction during 2014 counts.



When major road work is underway and bike facilities are closed, people may choose to alter their routes.

### **About Our Data: Other Sources**

- 24/7 automated counters:
  - Kendall Square 2016
  - Fresh Pond Reservation 2019
- Bluebikes
- Census Bureau's American Community Survey
- Cambridge Police Department Crash Reports
- Commercial District Customer Intercept Surveys
- Parking and Transportation Demand Management Reports



### **Related City Policies and Goals**

- Reduce single-occupancy vehicle trips and increase sustainable transportation trips
- Eliminate transportation-related fatalities and serious injuries
- Create safe and comfortable active transportation systems for people of all ages and abilities
- Build a connected network of separated bike lanes across the city





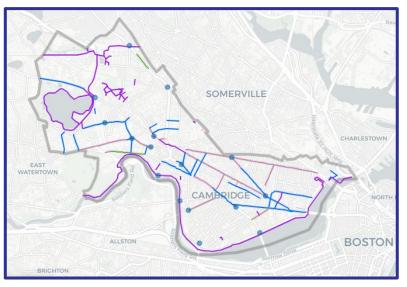
## Goal: Build a connected network of separated bike lanes across the City **Goal sources:**

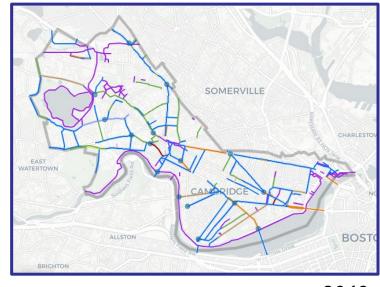
**Cycling Safety Ordinance** 

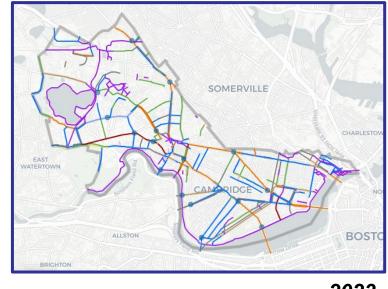
Cambridge Bicycle Plan

**Envision Cambridge** 

### **Bike Facilities Over Time**







Bicycle Facilities

Bike Lane
Bike Path/Multi-Use Path
Buffered Bike Lane
Bus/Bike Lane
Contra-flow
Edge Line
Grade-Separated Bike Lane
Separated Bike Lane
Separated Bike Lane
Separated Bike Lane
Shared Lane Pavement Marking
Shared Street

Two-way Separated Bike Lane

2004 2019 2023



### New Separated Bike Facilities

Since the City Council passed amendments to the Cycling Safety Ordinance in 2020, the City has installed or started construction on 13.1 miles of new separated bike lanes.





### Goals:

Achieve a shift away from single-occupancy vehicles
Safe and comfortable systems for active transportation
More people of all ages and abilities biking

#### **Goal sources:**

Cycling Safety Ordinance
Cambridge Bicycle Plan
Envision Cambridge
Climate Action Plan

Community Health Improvement Plan
Cambridge Public Schools' Wellness Policy
Vehicle Trip Reduction Ordinance

Parking and Transportation Demand Management Ordinance

### **Bicycle Counts**

Bicycle Facility Lane Miles vs. Total People Counted During Bicycle Counts, 2004 to 2023

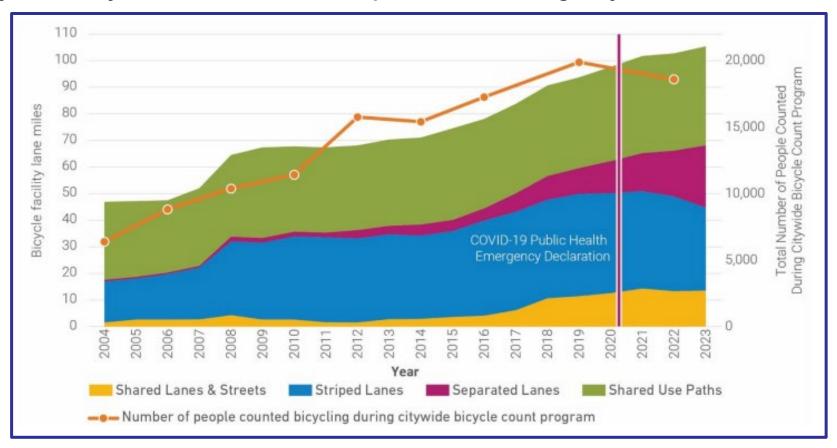
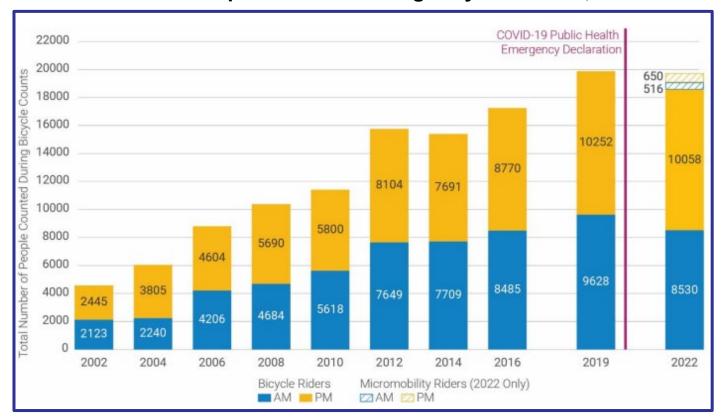


Fig 10



### **Bicycle Counts**

#### **Total Number of People Counted During Bicycle Counts, 2002 to 2022**



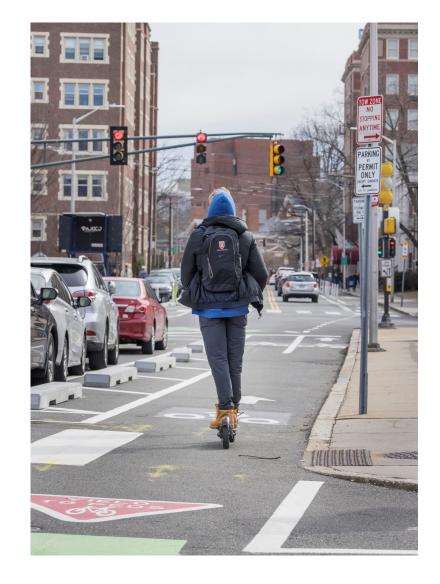


Fig 4



### **Bluebikes Counts**

#### Monthly Bluebikes Trips in Cambridge January 2015 – May 2023

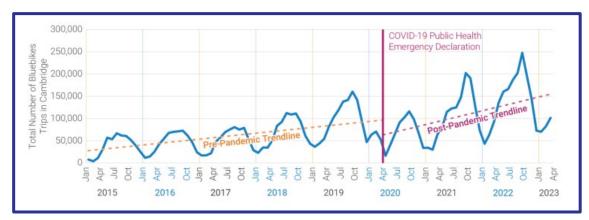


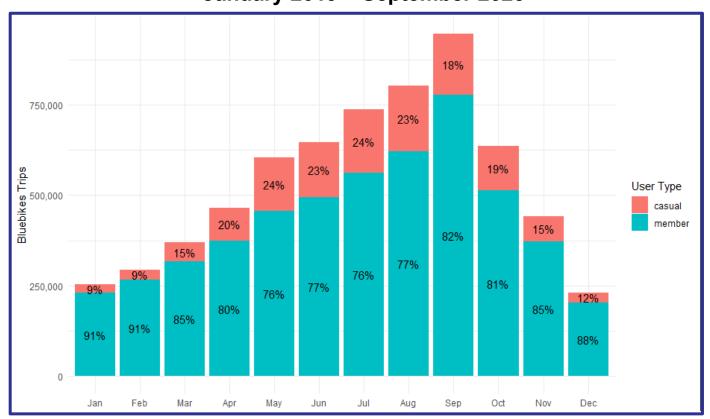
Fig 8



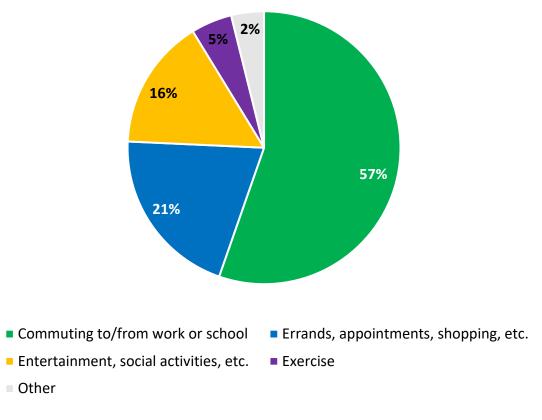


### **Bluebikes Counts**

### Bluebikes Trips Starting or Ending in Cambridge January 2019 – September 2023



#### What do you use Bluebikes for most often?



Source: Bluebikes annual member survey, 2022



### **Post-Project Bicycle Ridership**





#### Ridership on Mass Ave at Vassar Street (South Mass Ave)

Separated bike lanes installed nearby in 2019 and 2022

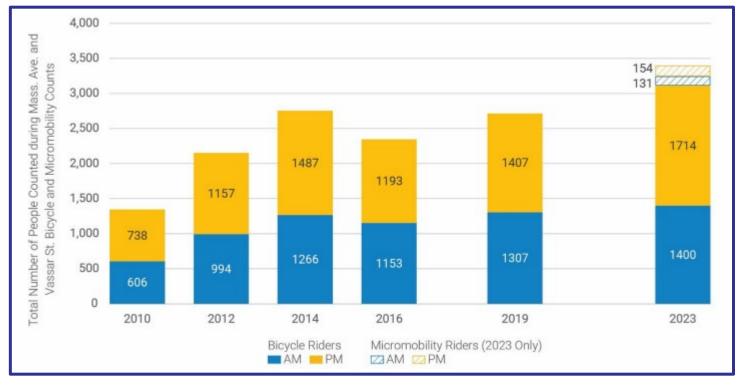
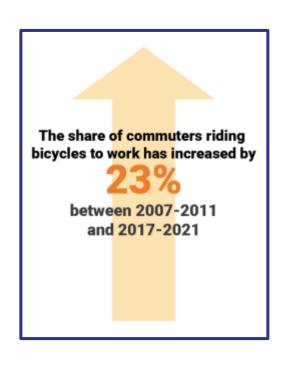


Fig 11



### **Work Commute Mode Split**



Cambridge Residents (age 16+) Work Commute 2017 - 2021

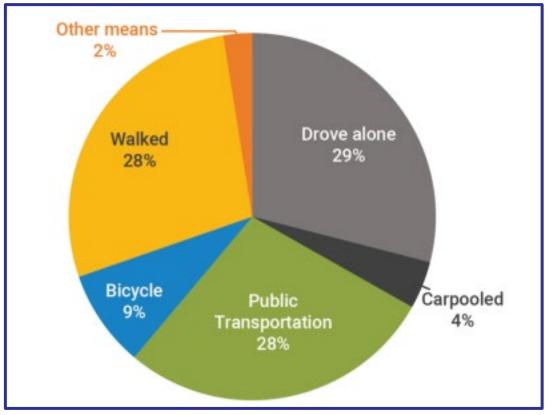
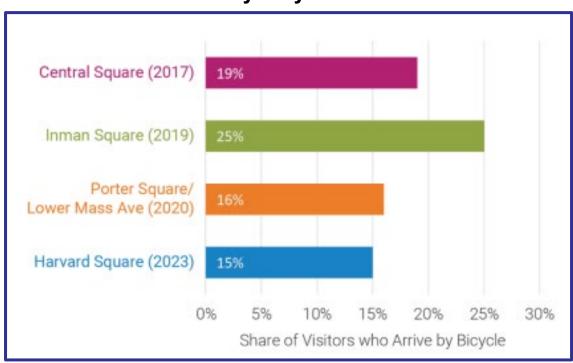


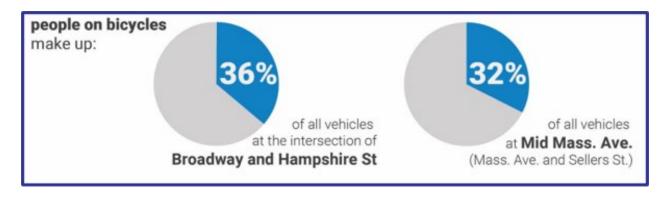
Fig 1



### **Getting around by Bike**

### Percent of Business District Visitors Who Travel by Bicycle





 People traveling by bike make up a high percentage of travelers on some corridors.





### **Bicycle Crash Data**

### Million Bicycle Miles Traveled and Number of Reported Bicycle Crashes

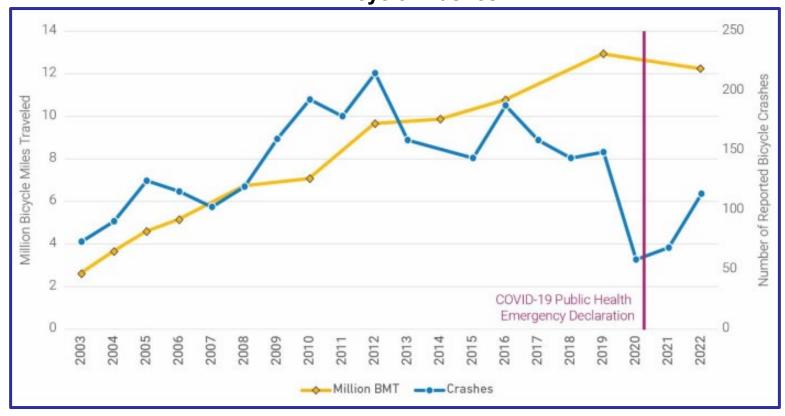


Fig 13



### **Bicycle Crash Rate**

#### Bicycle Crash Rate 2003 - 2022

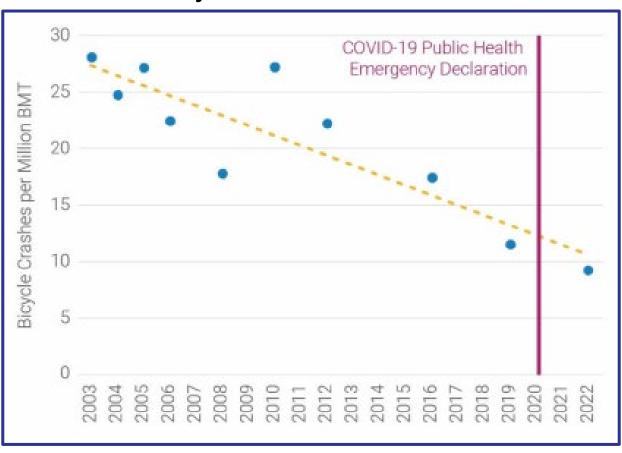
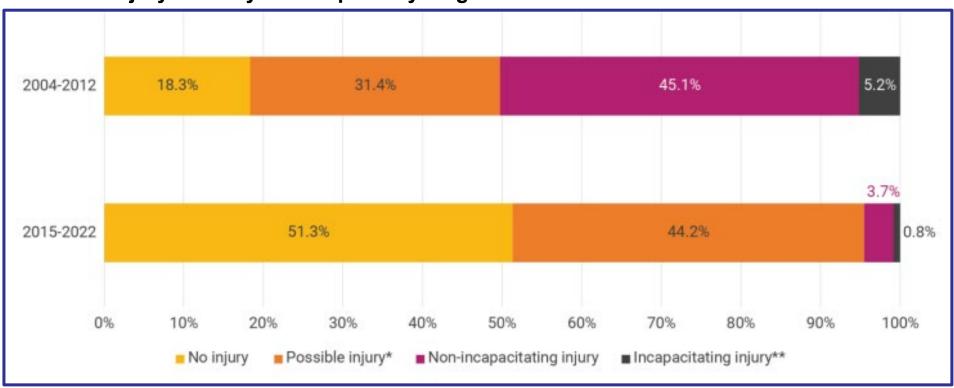


Fig 14



### **Injury Severity**

Injury Severity for People Bicycling in Crashes 2004 – 2012 and 2015 - 2022



<sup>\*</sup> The "Possible injury" category includes injuries that were unreported by people bicycling. This includes the following observations: no apparent injury, possible non-fatal injury, suspected minor injury, suspected serious injury, and unknown.

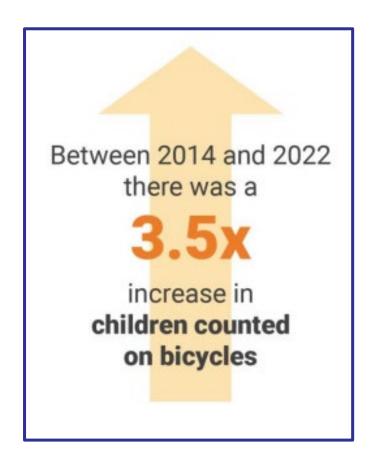




<sup>\*\*</sup> The "Incapacitating injury" category includes incapacitating non-fatal injuries and fatal injuries.



### **Child Cyclists**







### **Key takeaways**

- Crash rates and serious injuries declining
- Exciting findings on bike ridership, although we've seen a dip in the total riders at commuting hours since the pandemic
- People feel more comfortable when we build separated bike lanes

Still want to understand better:

- Micromobility
- COVID-19 impacts on travel patterns



### Resources

- 2023 Bicycling in Cambridge Data Report
- 2020 Cambridge Bicycle Plan
- Citywide Bicycle Counts Data Viewer
- Bluebikes System Data
- Broadway at Kendall Square Eco-Totem Automatic Counter





### Bicycling in Cambridge Data Report Discussion

- Clarifying questions?
- Does any of this data seem particularly relevant to include in communications and outreach going forward?
  - Anything surprising? Helpful? Compelling? Needing further context/explanation?
- Other questions?





\*\*Keep these data in mind as we move to discussing evaluation next!



# **Quick-Build Project Evaluation Framework**

### What data do we plan to report?

#### **Every Project:**

- Report introduction and project summary
- Crash data
- Number of people biking
- Motor vehicle counts
- Motor vehicle speeds
- Post-project survey results
- Report conclusion: takeaways and observations

#### **Optional Data:**

- Number of children on bikes and/or results from "Getting to School" surveys
- Number of people using other micromobility devices
- Sidewalk riding
- Transit rider counts
- MBTA travel time analysis
- Parking utilization
- Motor vehicle counts and speeds on surrounding streets
- Intercept survey results
- Business survey results



### Discussion and feedback on evaluation criteria

- Any questions you would have that would not be answered by these data?
- Any feedback on what should be highest priority to collect for the "every project" data sets?
- Any feedback on determining when to use additional data sources?

## **Next steps**

- Proposed topics for upcoming meetings:
  - Evaluation criteria
  - Phase 4/post-implementation
  - Following up on "design considerations" presentation adapting for community meetings or other venues?
  - O Suggestions or requests for other topics?
- Other next steps
- Upcoming meetings and schedule

Check out the CSOAdvisory Group website for resources and info: camb.ma/cso-advisory-committee

### **PUBLIC COMMENT**

#### **Public comments welcome**

- Share thoughts in Q&A or verbally
- To comment verbally, raise your hand (virtual or in-person) or signal interest in Q&A window
- Limit comments to 2 minutes; may need to adjust if many speakers

#### Please keep all comments...

- On-point
- Respectful
- Focused on issues (not individuals)