City of Cambridge Community Development Department

Bicycle Committee Meeting

March 10, 2021





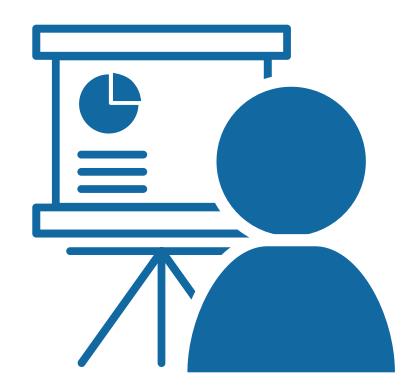






Meeting Agenda

- 1. Zoom meeting protocols, minutes
- 2. Transportation Data
- 3. Public Comment
- 4. City Updates
- 5. Development and Building Projects
- Committee Work
 - 1. Virtual Rides Update
 - 2. Subcommittee Check-in
- 7. Public Comment
- 8. Other Updates and Announcements



Committee Member Instructions

- Committee members may speak and show webcam video
 - Use "Raise Hand" button to help manage discussion
 - New location for "Raise Hand" for some users in "Reactions" button
 - *9 to Raise Hand by phone
- Please stay muted unless speaking
 - *6 to mute/unmute by phone





Public Comment Instructions

- Members of the public are muted and cannot show webcam video
- Public can write questions or ask for assistance in Q&A window at any time
 - Questions may be submitted at any time and will be addressed as time allows, during discussion/comment periods
- During the Public Comment period, use the "Raise Hand" button to signal you have a question/comment. A staff member will then enable you to unmute yourself.
 - *9 to Raise Hand by phone
 - *6 to Mute/Unmute by phone
- Please be respectful! Participants will be removed for inappropriate behavior

Bottom Panel of Zoom Screen



Minutes

Transportation Data



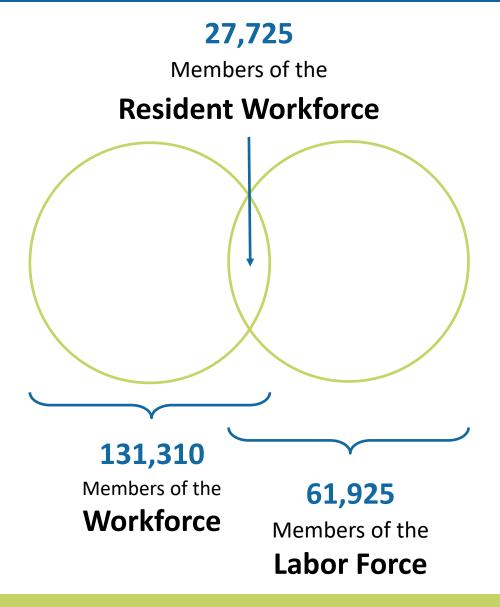
Important Note:

The report and this presentation is based on surveys and data that covers less than 20% of people's daily travel.

However, work commute trips are ones that have some of the biggest impacts on our transportation system.

Three groups of commuters:

- Cambridge Workforce: Everyone who works in Cambridge, regardless of place of residence.
- Cambridge Labor Force: All Cambridge residents who work, regardless of workplace location.
- Cambridge Resident Workforce: All Cambridge residents who work in Cambridge.



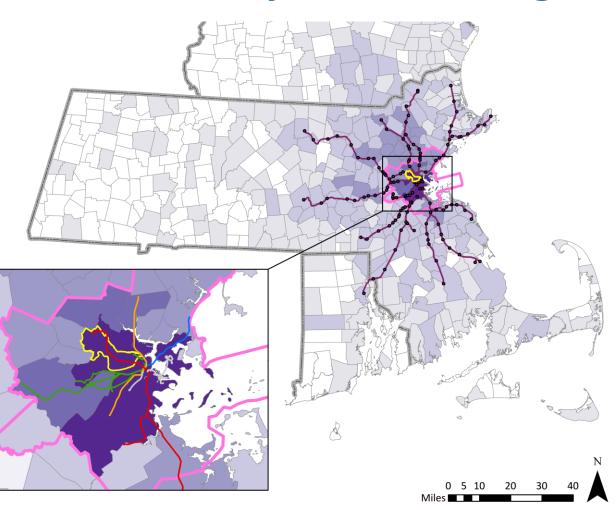
Cambridge Workforce

Everyone who works in Cambridge, regardless of place of residence.

Workforce by Town of Origin



- 1 50 workers
- 51 500 workers
- 501 2,500 workers
- 2,501 10,000 workers
- 10,001 27,725 workers
- MBTA Subway Line
- Commuter Rail Line
- Commuter Rail Station
- City of Cambridge Boundary
- Inner Core Boundary
- ---- State Boundary



70%

live in the Inner Core

21%

live in Cambridge

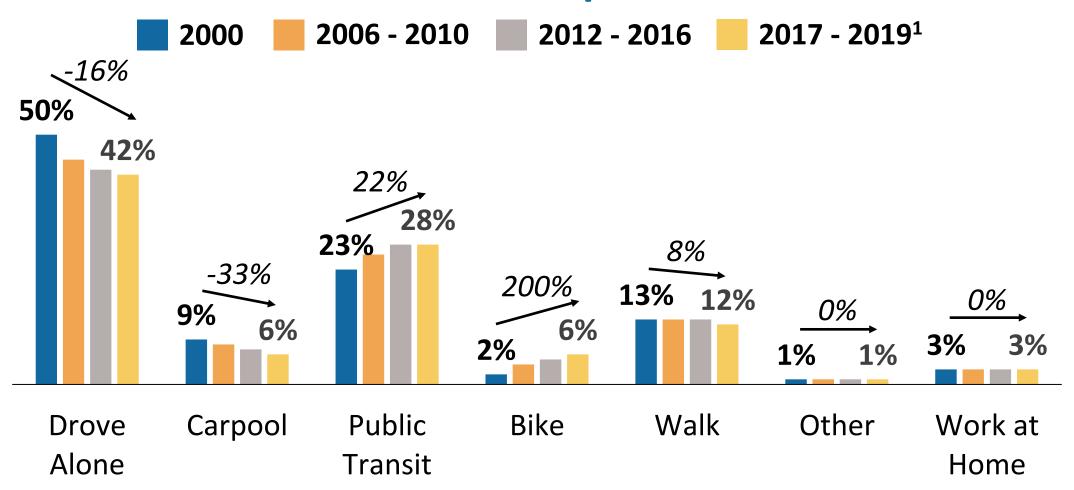
15%

live in Boston

8%

live in Somerville

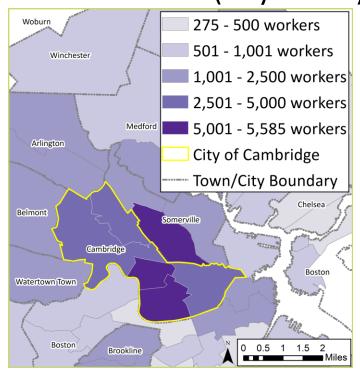
Workforce Mode Split Over Time



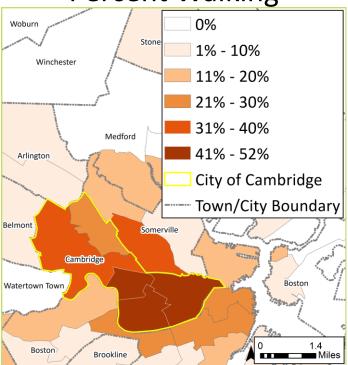
¹The 2017-19 data is derived from the American Community Survey and recompiled by the CDD. All other data on this slide is derived from the CTPP.

Workforce Walking and Biking

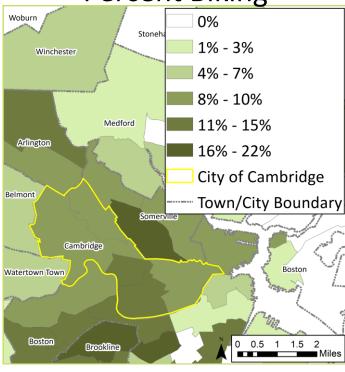
Total Workforce (Any Mode)



Percent Walking



Percent Biking

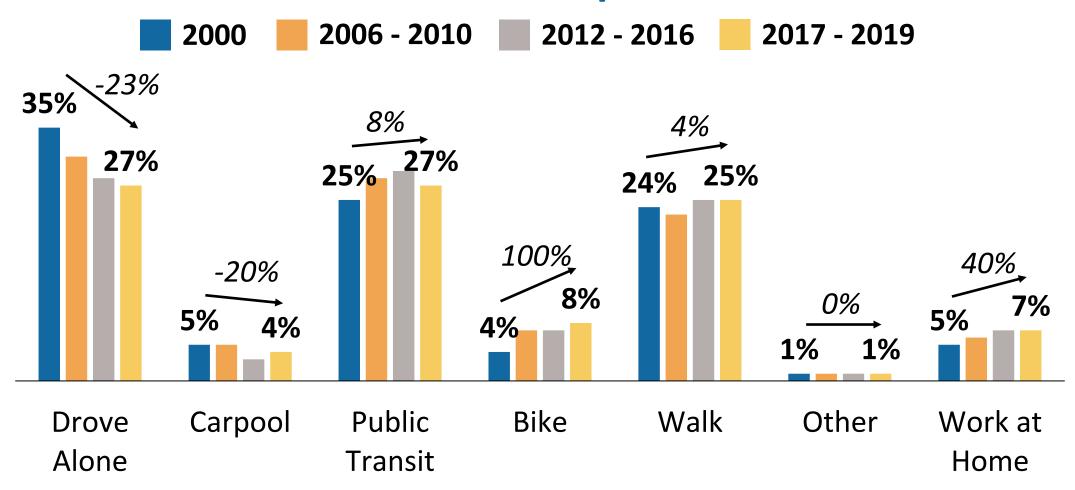


36% of the Cambridge Workforce that lives in Cambridge, Somerville or Boston walks or bikes to work.

Cambridge Labor Force

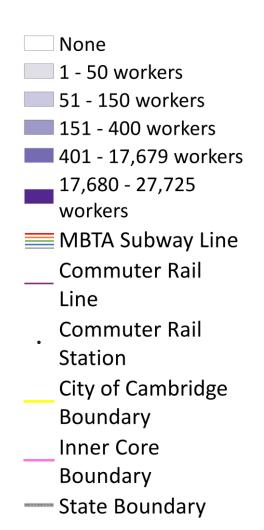
Everyone who lives in Cambridge and works, regardless of workplace location.

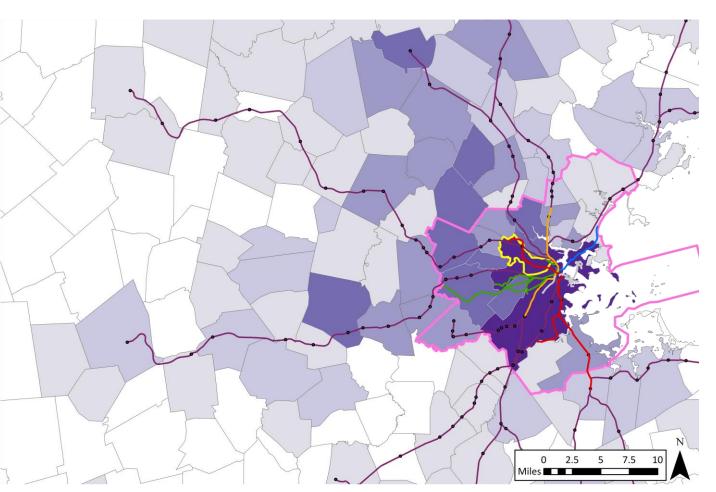
Labor Force Mode Split Over Time



¹The 2017-19 data is derived from the American Community Survey and recompiled by the CDD. All other data on this slide is derived from the CTPP.

Labor Force by Town of Workplace





86%

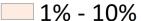
of employed Labor Force members work in the Inner Core

45% work in Cambridge

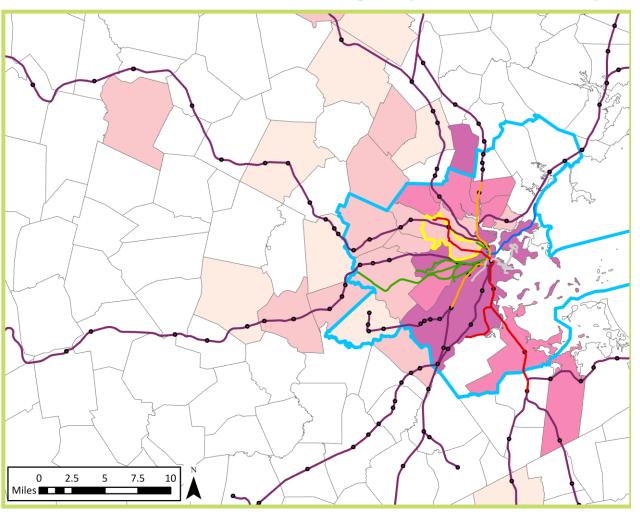
29% work in Boston

Percent of Labor Force Commuting by Transit by Town of Workplace





- 11% 25%
- 26% 50%
- 51% 75%
- MBTA Subway Line
 - Commuter Rail
 - Line
 - Commuter Rail
 - Station
 - City of Cambridge
 - Boundary
 - Inner Core
- Boundary
- State Boundary



29%

of employed Labor Force members take transit to work.

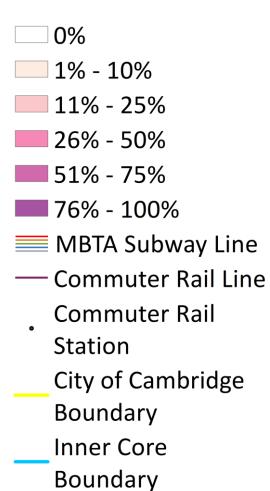
96%

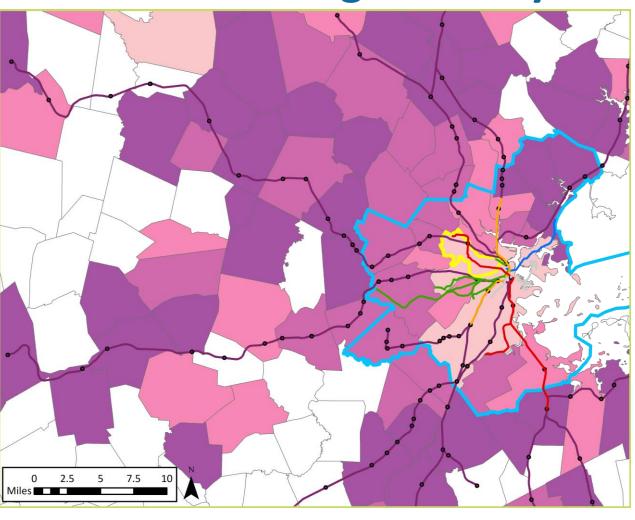
of those that use transit work within the Inner Core.

34%

of those that work in Cambridge, Somerville or Boston take transit to work.

Percent of Labor Force Driving Alone by Town of Workplace





28%

of employed Labor Force members drive alone to work.

68%

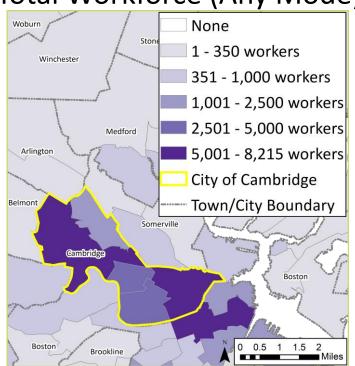
of those that drive alone work within the Inner Core.

18%

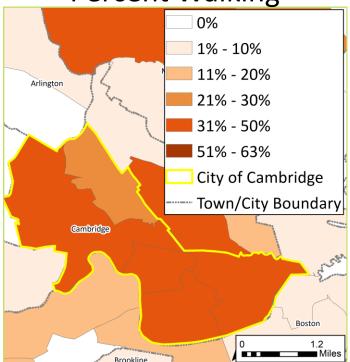
of those that work in Cambridge, Somerville or Boston drive alone to work.

Labor Force Walking and Biking

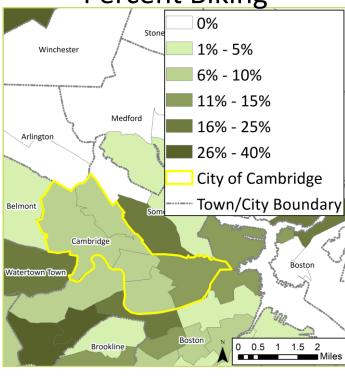
Total Workforce (Any Mode)



Percent Walking



Percent Biking

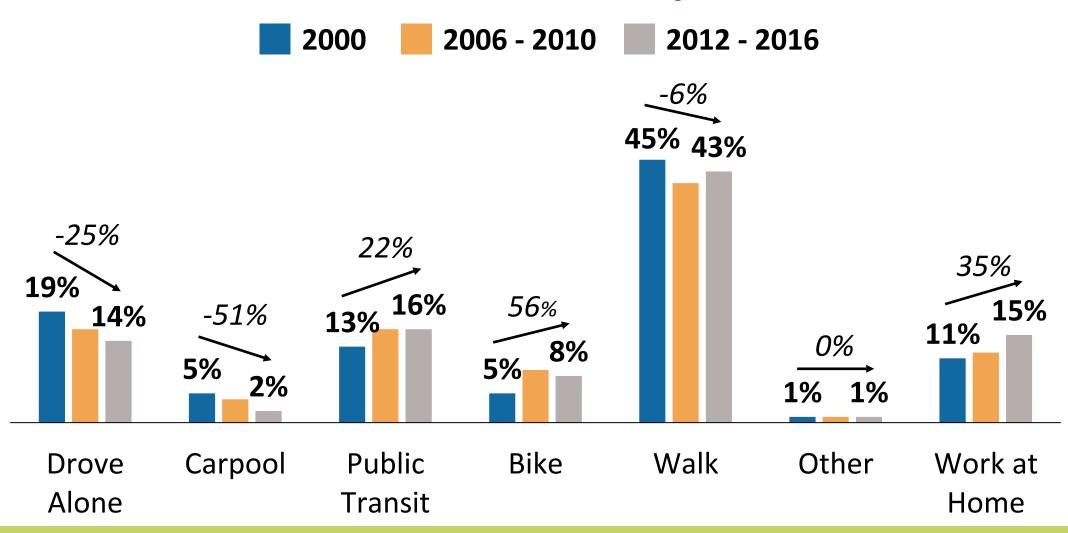


36% of the employed Cambridge Labor Force that works in Cambridge, Somerville or Boston walks or bikes to work.

Cambridge Resident Workforce

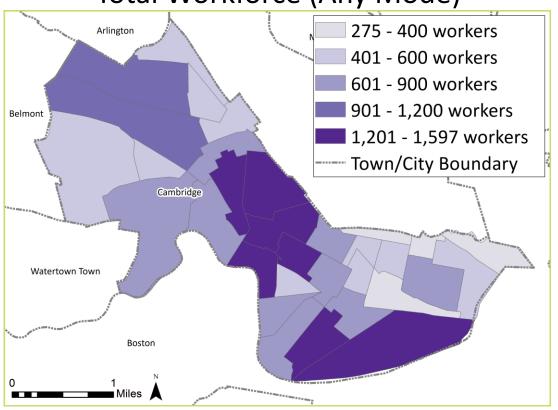
All Cambridge residents who work in Cambridge.

Resident Workforce Mode Split Over Time

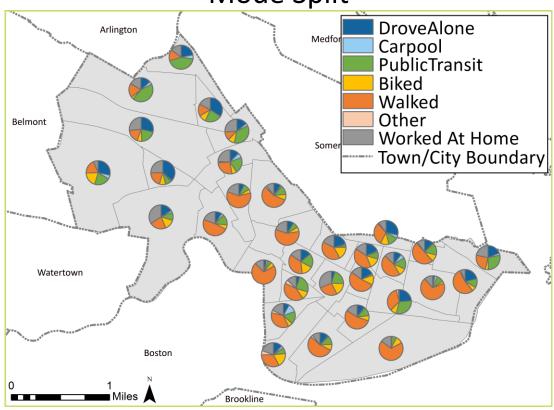


Resident Workforce by Census Tract of Home Location



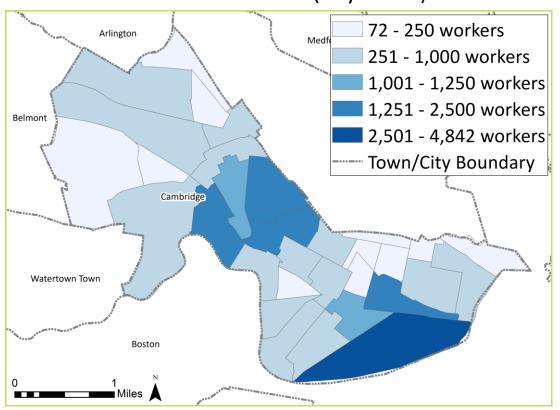




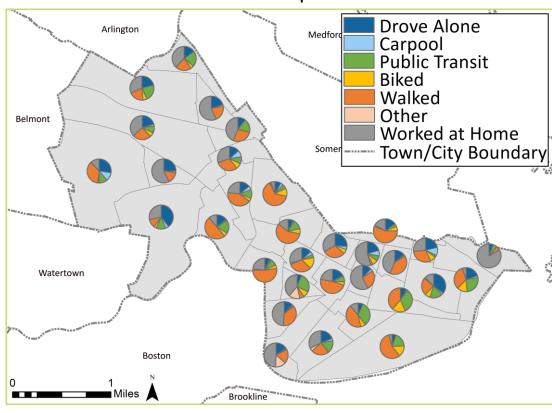


Resident Workforce by Census Tract of Workplace Location





Mode Split



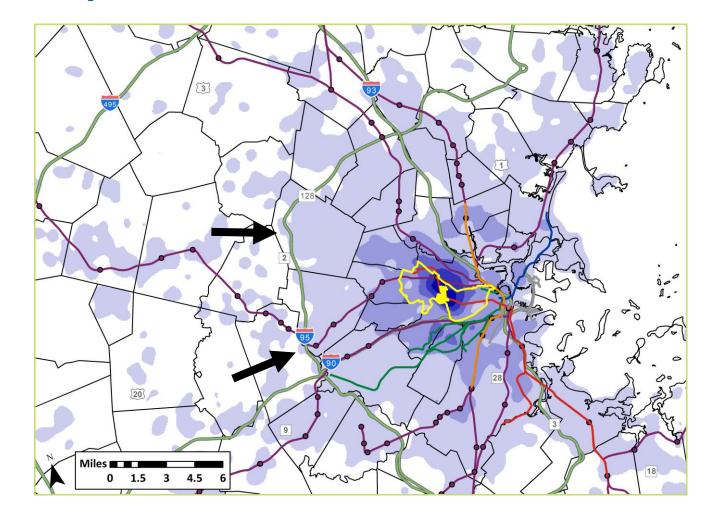
Cambridge Employment Centers

Harvard Square/University Workforce: 21,800 Total Workers

Workforce Home Location

Workers per Square Mile

- 5 73
- 74 279
- 280 622
- 623 1,102
- 1,103 1,720
- Commuter Rail Station
- Commuter Rail
- Subway Lines
- Limited Access Highway
- Cambridge Border
- Employment Center

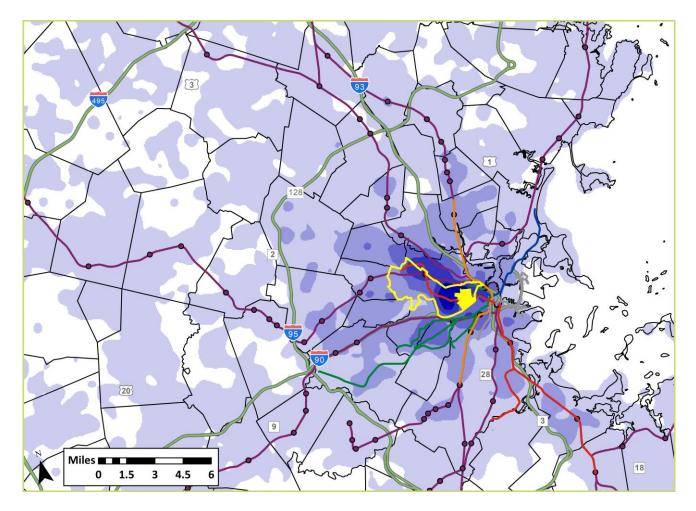


Kendall Square Workforce: 45,500 Total Workers

Workforce Home Location

Workers per Square Mile

- 5 83
- 84 319
- 320 712
- 713 1,262
- 1,263 1,970
- Commuter Rail Station
- Commuter Rail
- Subway Lines
- Limited Access Highway
- Cambridge Border
- Employment Center



Bicycle Committee Meeting

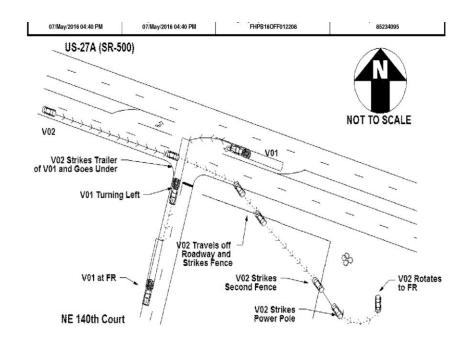
Crash Data Production and Analysis

Traffic Collisions and Crash Reports

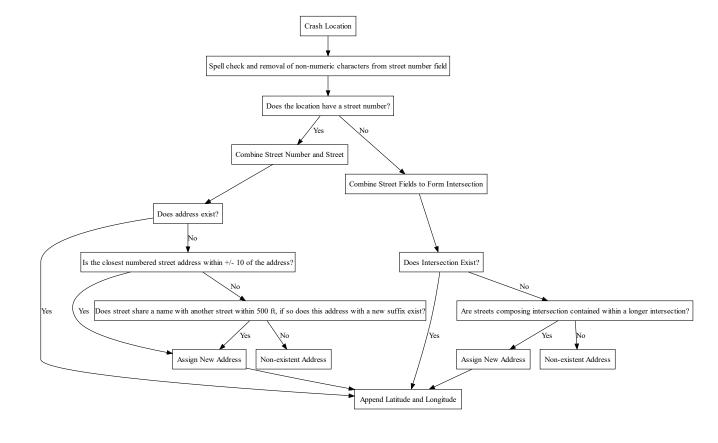
- A Crash Call for Service (CFS) is any instance when a person in Cambridge calls to request police assistance for a traffic collision.
- A responding officer will generate a crash report if:
 - Any person was injured
 - Damage in excess of \$1,000 to any one vehicle or other property.
- The Cambridge Police Department (CPD) is responsible for responding to Crash CFS on all city owned streets. Depending on jurisdiction Transit, University or State police will respond in place of CPD.

Geocoding

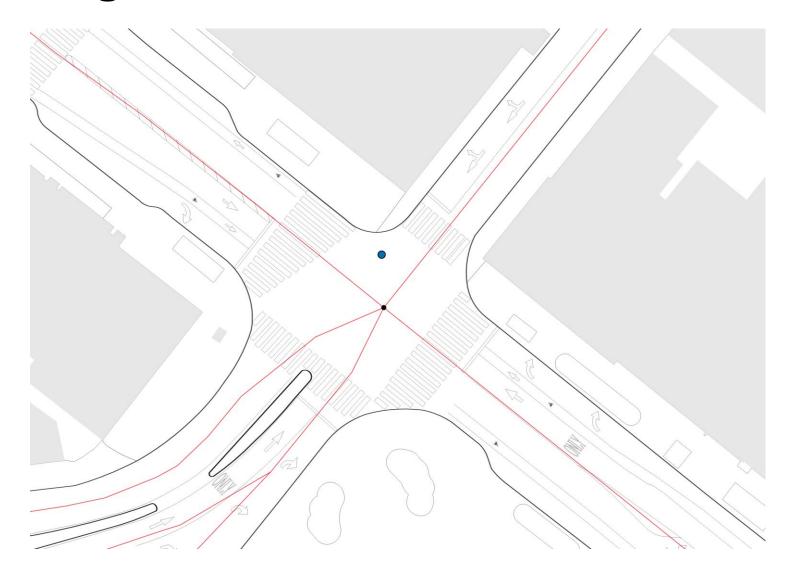
Non-motorist involved crashes



Motor Vehicle Only Crashes



Crash Diagrams



Classifying Crashes

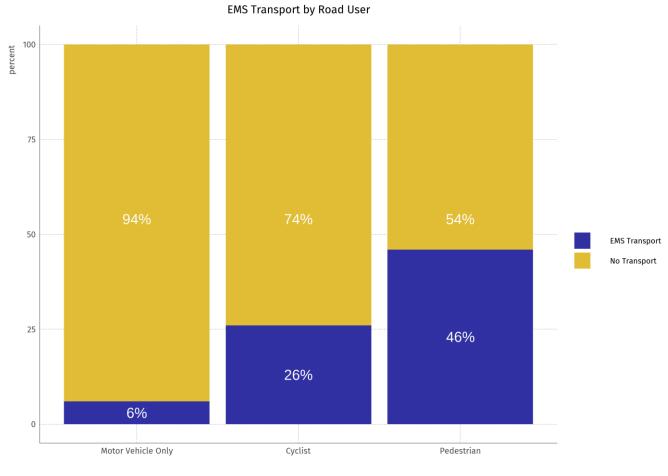
Crash reports contain several fields where officers can indicate
whether a non-motorist was involved in a crash, if any of these fields
indicates non-motorist involvement, they are manually validated
referencing crash diagrams and narratives.

Crash Narratives

- Area on crash report form where an officer describes what happened prior to, during, and after the crash.
- Helpful in validating the type of crash e.g., motor vehicle only, pedestrian, cyclist, cyclist vs. pedestrian etc.
- Can be referenced to determine common causes of crashes at a location e.g., 'dooring' crashes, poor visibility, traffic infrastructure issue etc.

Injury Severity

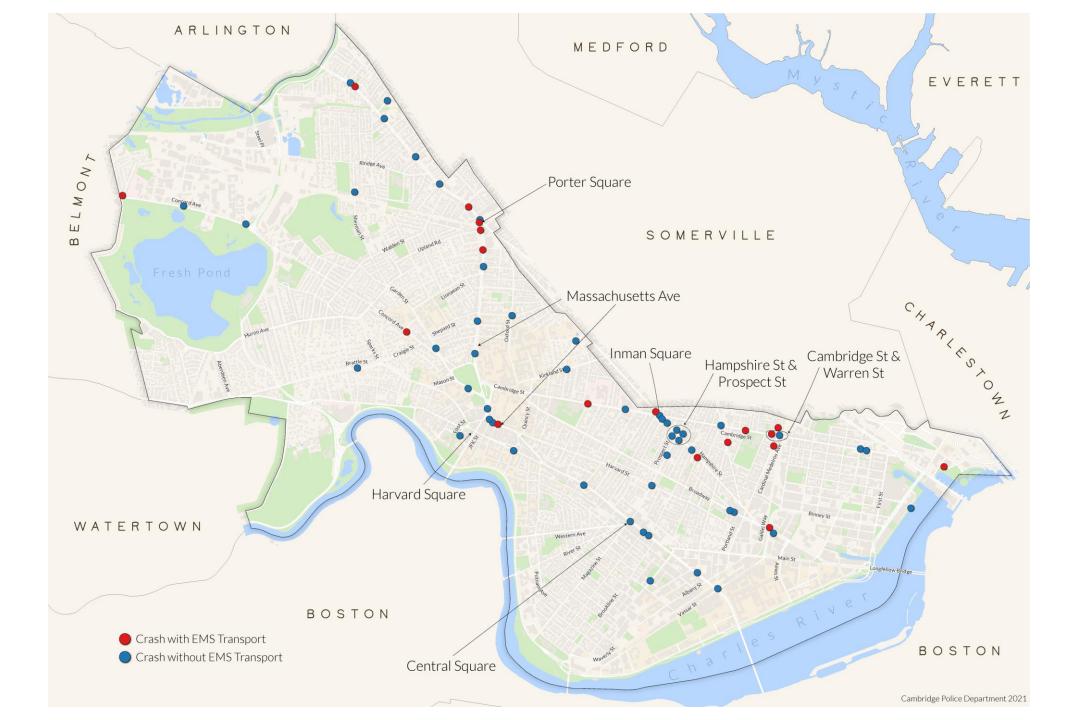
 A useful metric for understanding crash injury severity is whether an involved party required transport to the hospital by **Emergency Medical Services** (EMS Transport).



Cambridge Police Department 2021

Analyzing and Visualizing Crashes

- Geographic Attribution
 - By Address
 - By Intersection and Street Segment
 - By polygon e.g., neighborhoods, police sectors, grid cells, business districts etc.



Crash Rates, Normalization, and Weighting

- Raw crash numbers help in determining areas of high crash frequency, but do not establish the relative risk of being involved in a crash at a particular location. An intersection frequented by cyclists could have a high crash count but could be safer than another intersection with lower cyclist volume and crashes.
- Dividing crashes by vehicle, pedestrian, cyclist counts, or distance travelled can produce crash rates where risk at differing locations can be assessed on equal terms.
- Another way of determining risk is by introducing weighting, where crashes
 of a certain kind e.g., non-motorist crashes, crashes involving EMS
 transport, crashes resulting from 'dooring', are valued higher than other
 crashes.

Questions?

Public comment

Public Comment Instructions

- Use the "Raise Hand" button to signal you have a question/comment.
 A staff member will then enable you to unmute yourself.
 - *9 to Raise Hand by phone
 - *6 to Mute/Unmute by phone
- Questions can also be submitted using the Q&A button.

Bottom Panel of Zoom Screen



TP&T Updates



MID-MASS AVE SAFETY IMPROVEMENT PROJECT

Project Description

This quick-build project will improve safety for people biking and walking along Massachusetts Avenue between Trowbridge St to Inman St. Our toolbox includes pavement markings, signs, and flex posts. The primary goal of this project is to install separated bike lanes as required by the Cambridge Cycling Safety Ordinance. As we design and implement this project, we will also look for opportunities to enhance pedestrian safety at existing crosswalks and improve markings and signage at bus stops.

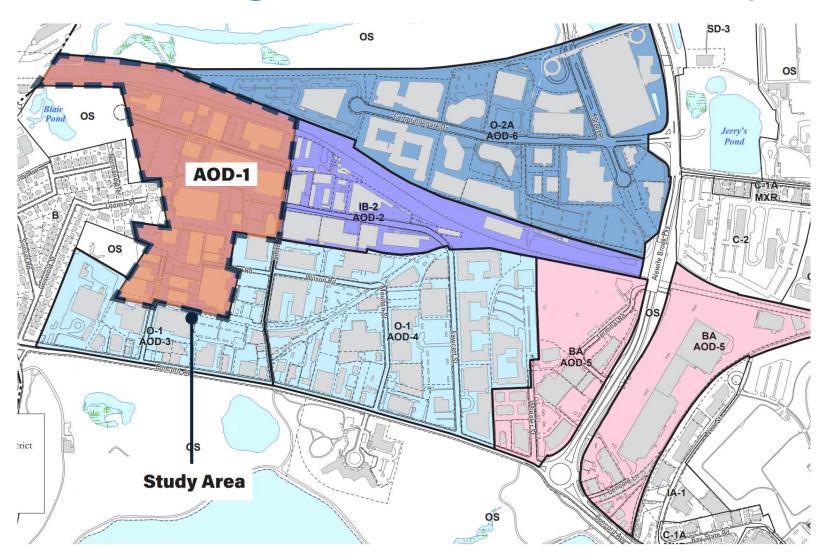
Visit Cambridgema.gov/mid-mass-ave to Share your Feedback on Current Conditions

DPW Updates

Grand Junction

Development and Building Project Updates

Alewife Quadrangle Northwest District (AOD-1)

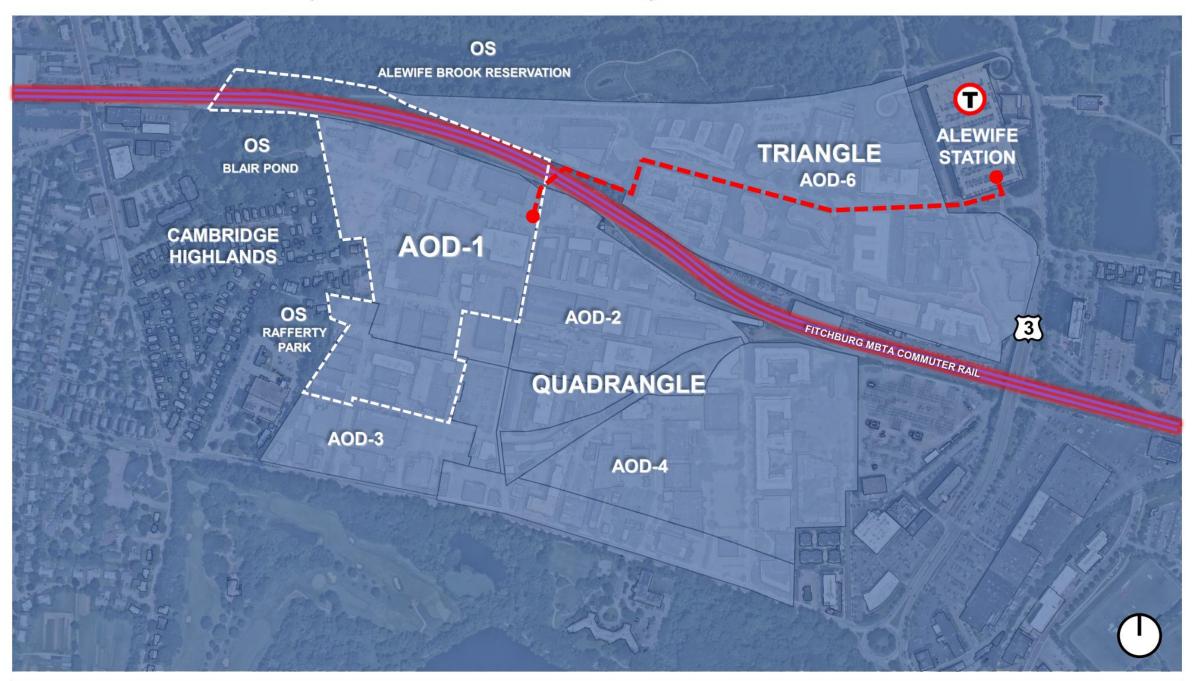


Overview of AOD-1 Site + Zoning Petition

Zoning Petition:

- On February 28, 2020, a zoning petition was submitted by over 10 registered Cambridge voters to amend zoning provisions in the Alewife Quadrangle Northwest Overlay District (AOD-1).
- O The petition is supported by Cabot, Cabot & Forbes Development Co., Inc. (CC&F), a major owner of approximately 16.3 acres of property in the district affected by the zoning change.
- O Among other changes, the petition would:
 - increase the maximum allowable height of any non-residential building from the existing fifty-five (55) feet to eighty-five (85) feet by special permit from the Planning Board;
 - allow an incremental increase in FAR of 0.25 for any lot in exchange for construction of a pedestrian/bicycle bridge crossing of the railroad tracks to the Alewife Triangle Overlay District (AOD-6), which is allowable in current zoning if the bridge connects from AOD-2 or AOD-4 but not from AOD-1;
 - authorize the above FAR increase for "contribution of funding towards the construction, operation, maintenance, or repair of this bridge connection" in addition to construction and conveyance of property interests for the bridge construction; and
 - exclude light industrial use(s) and/or consumer-facing business(es) on the ground floor of a non-residential building from the Gross Floor Area (GFA) calculations.

SITE ORIENTATION AOD-1 (ALEWIFE OVERLAY DISTRICT-1)





Pedestrian Committee Letter

The Pedestrian Committee works to create a more comfortable, safe, and pleasant environment for walking in Cambridge. A new pedestrian/bike bridge across the tracks in the Alewife area, thereby connecting the growing developments in the Quadrangle to the Triangle and to the MBTA station and beyond is a necessary addition to our current infrastructure.

The absence of a bridge creates highly circuitous walking routes that act as a deterrent to the city's vision of a walkable, transit-friendly community. This disadvantages walking, biking, and transit relative to automobile travel, and is thus inconsistent with the City's strategies for greenhouse gas reductions.

The Committee urges you to ensure that any zoning changes made in the Alewife Quadrangle are accompanied by a strong, binding commitment to construct a pedestrian/bike bridge across the tracks, bringing within reach a trip to the Alewife T station and the nearby multiuse paths.

March 17 Joint Committee Meeting

- Huron Ave/Glacken Field
- MIT Volpe
- Ragon Institute
- Mid-Mass Ave

Public comment

Public Comment Instructions

- Use the "Raise Hand" button to signal you have a question/comment.
 A staff member will then enable you to unmute yourself.
 - *9 to Raise Hand by phone
 - *6 to Mute/Unmute by phone
- Questions can also be submitted using the Q&A button.

Bottom Panel of Zoom Screen



Committee Work

2021 Virtual Bike Rides

- Highlighting Black-owned businesses in Cambridge (Qian)
- Health advances and discovery in Cambridge (Mark and Amy)

Subcommittee Check-in

Public comment

Public Comment Instructions

- Use the "Raise Hand" button to signal you have a question/comment.
 A staff member will then enable you to unmute yourself.
 - *9 to Raise Hand by phone
 - *6 to Mute/Unmute by phone
- Questions can also be submitted using the Q&A button.

Bottom Panel of Zoom Screen



Other Announcements

Thank You