

City of Cambridge
Community Development Department

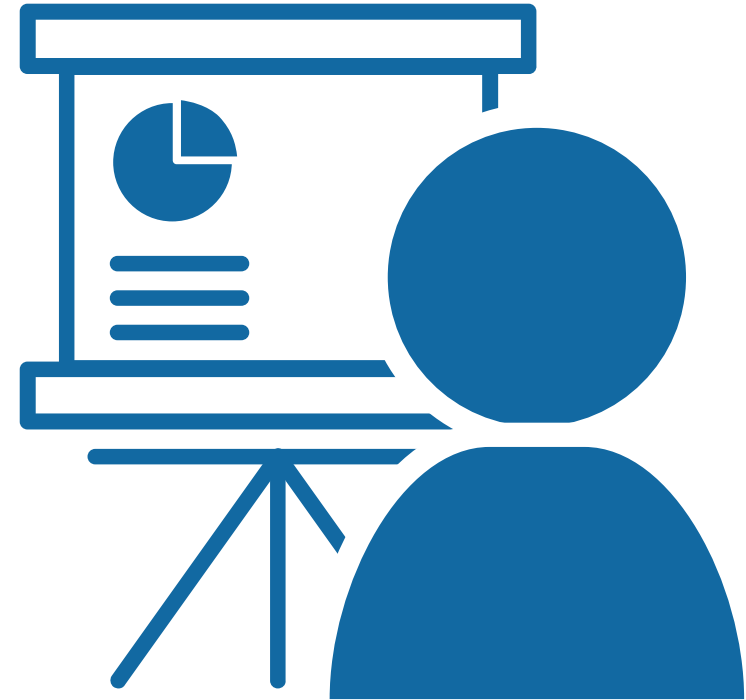
Pedestrian Committee Meeting

March 25, 2021



Meeting Agenda

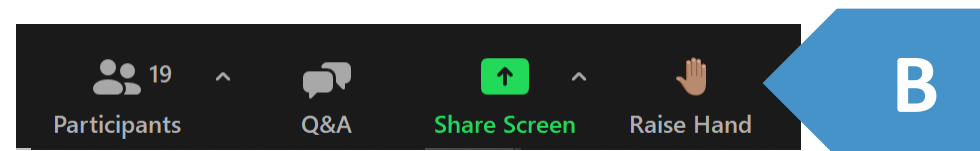
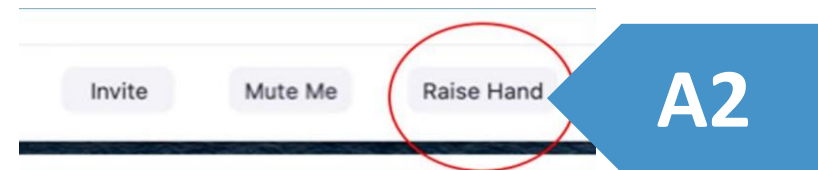
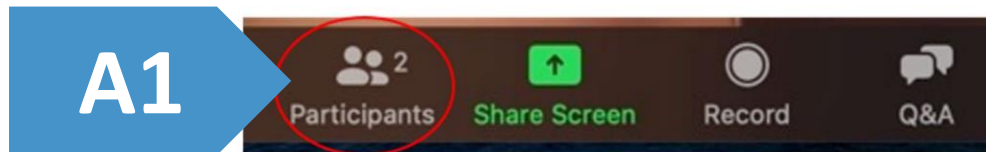
1. Zoom meeting protocols, minutes
2. Transportation Data
3. Public Comment
4. City Updates
5. Volpe Debrief
6. Committee Elections
7. Committee Work
8. Public Comment
9. Other Announcements



Minute taker: Helen Rose

Committee Member Instructions

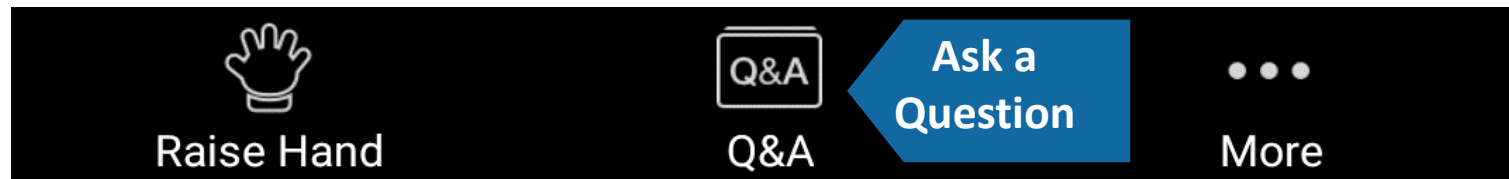
- Committee members may speak and show webcam video
- Use "Raise Hand" button to help manage discussion
 - Located at the bottom of the Participants panel (See A1-2 below) OR at the bottom of the screen (see B below)
 - *9 to Raise Hand by phone
- Please stay muted unless speaking
 - *6 to mute/unmute 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



Moving Forward 2020

Cambridge's Journey to Work



CAMBRIDGE
CDD@344

COMMUNITY DEVELOPMENT DEPARTMENT
344 Broadway

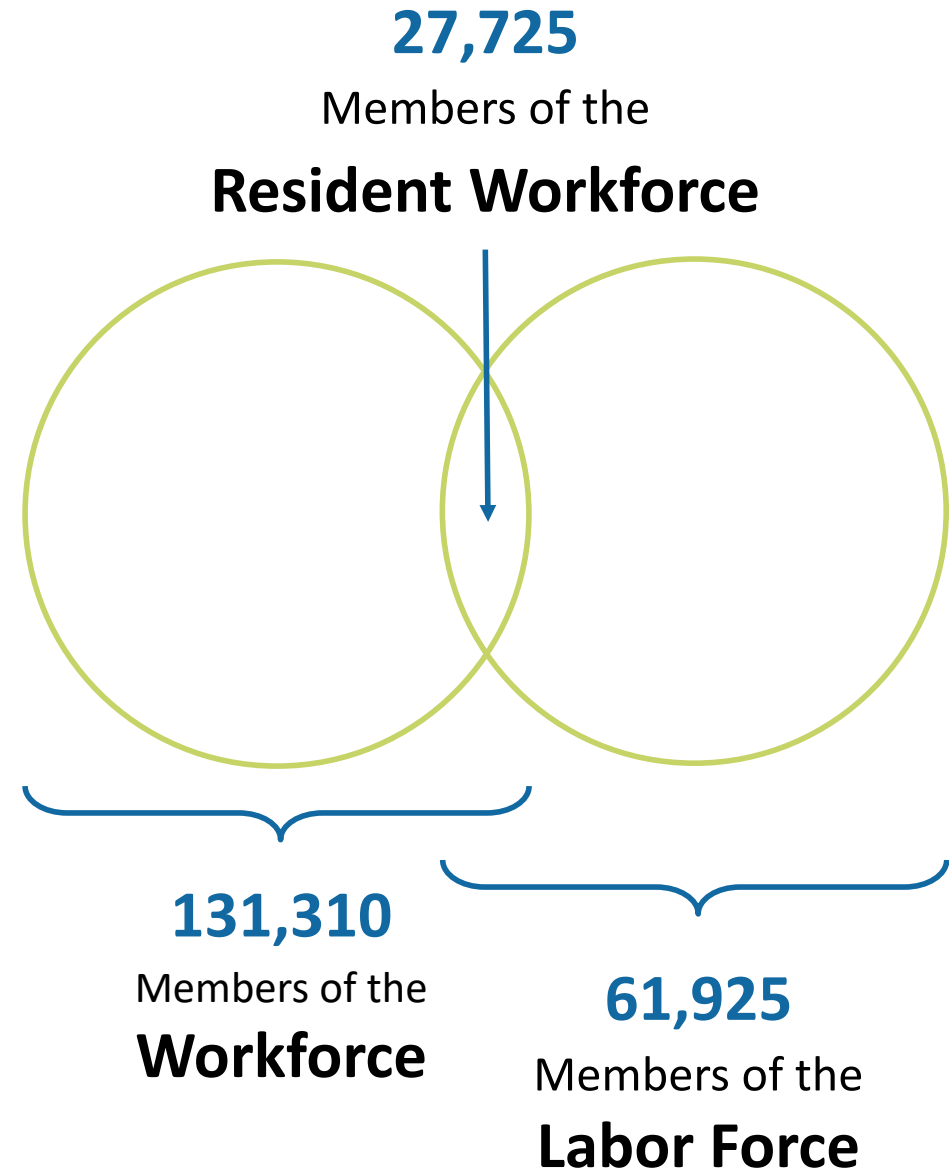
Important Note:

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.

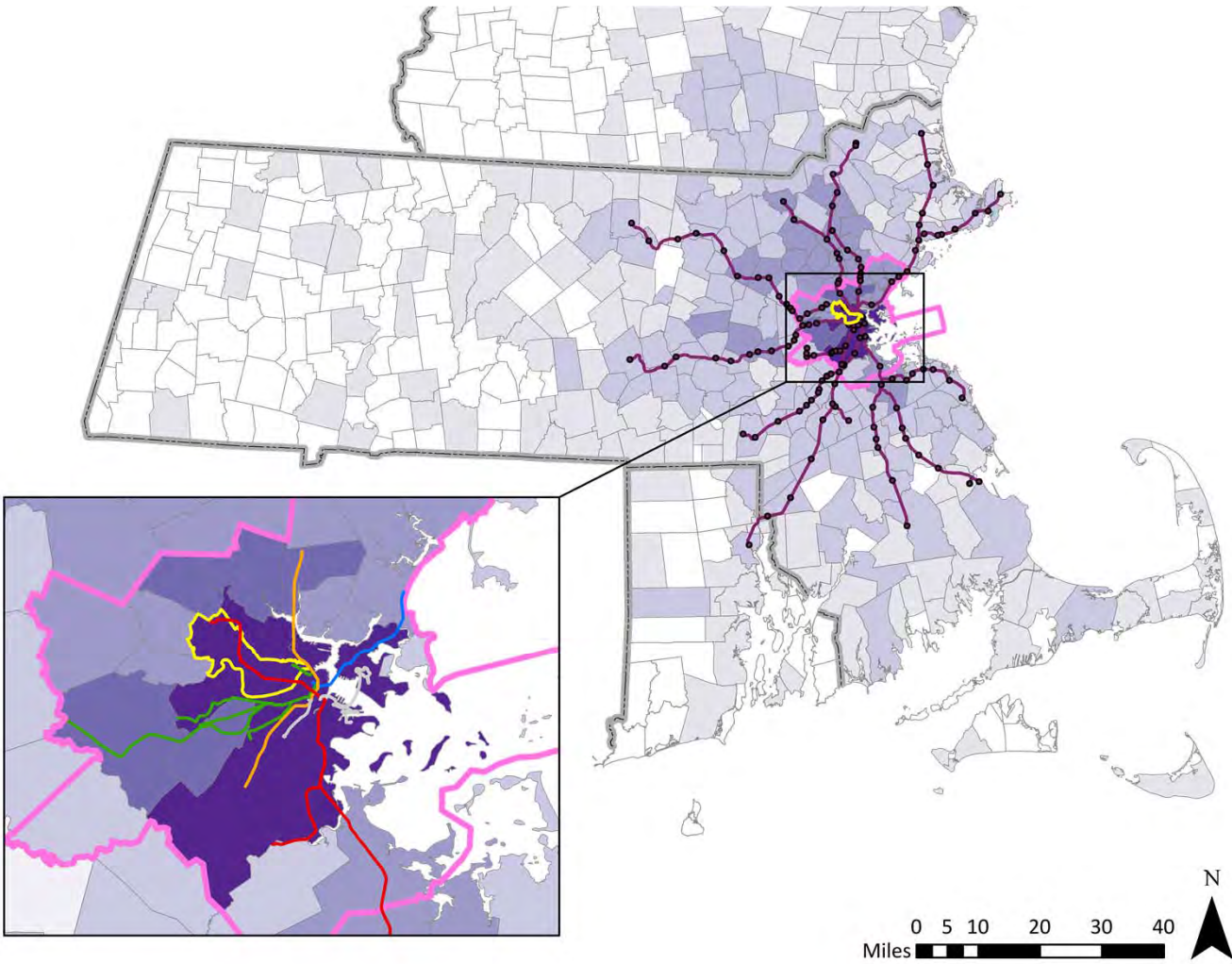


Cambridge Workforce

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

Workforce by Town of Origin

- None
- 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



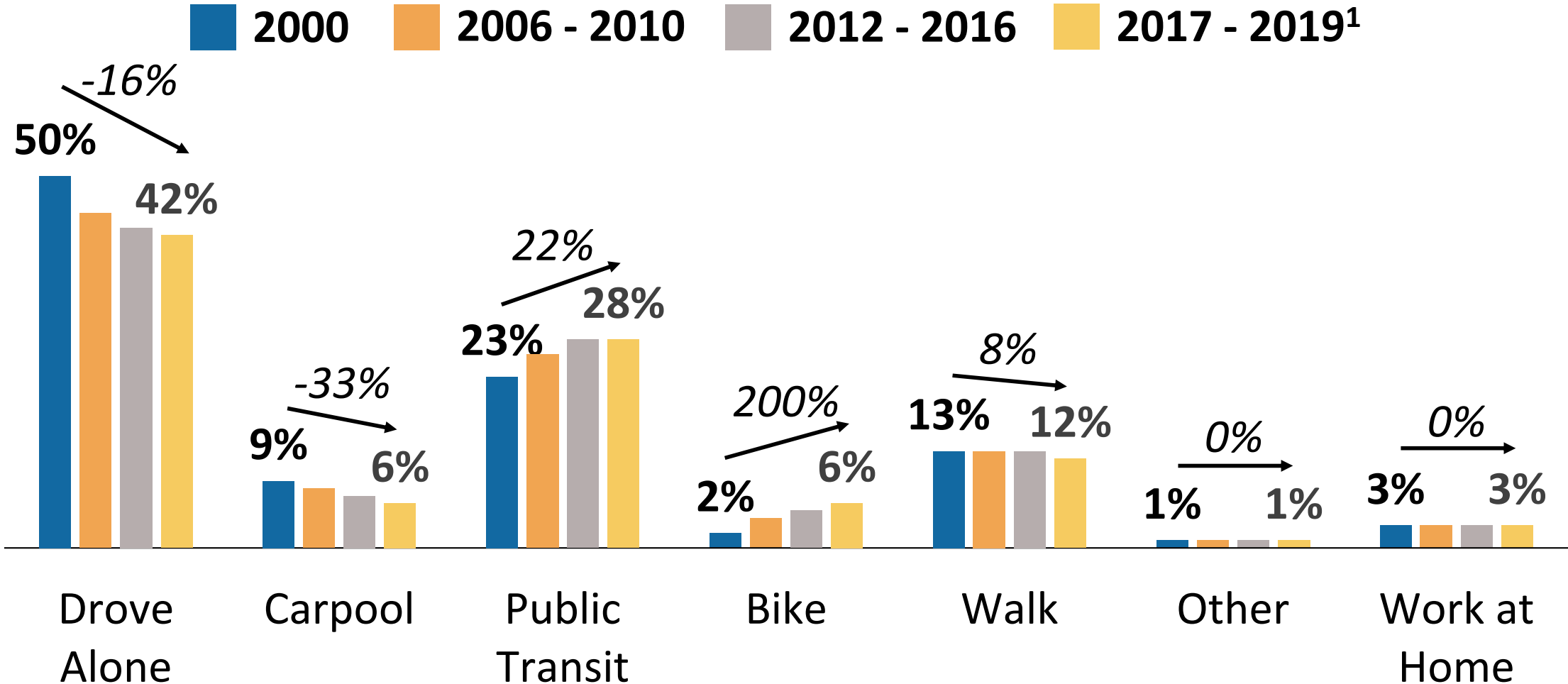
70%
live in the Inner Core

21%
live in Cambridge

15%
live in Boston

8%
live in Somerville

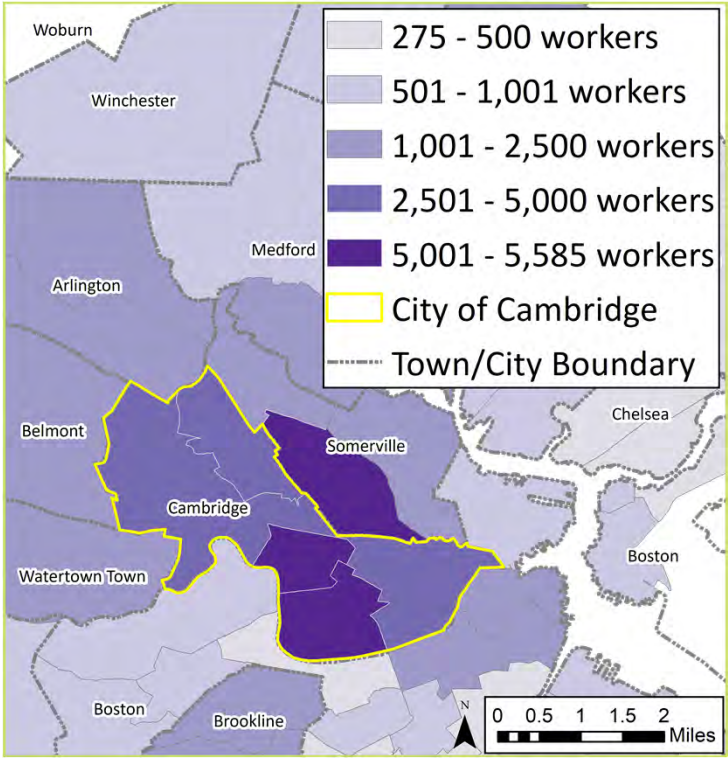
Workforce Mode Split Over Time



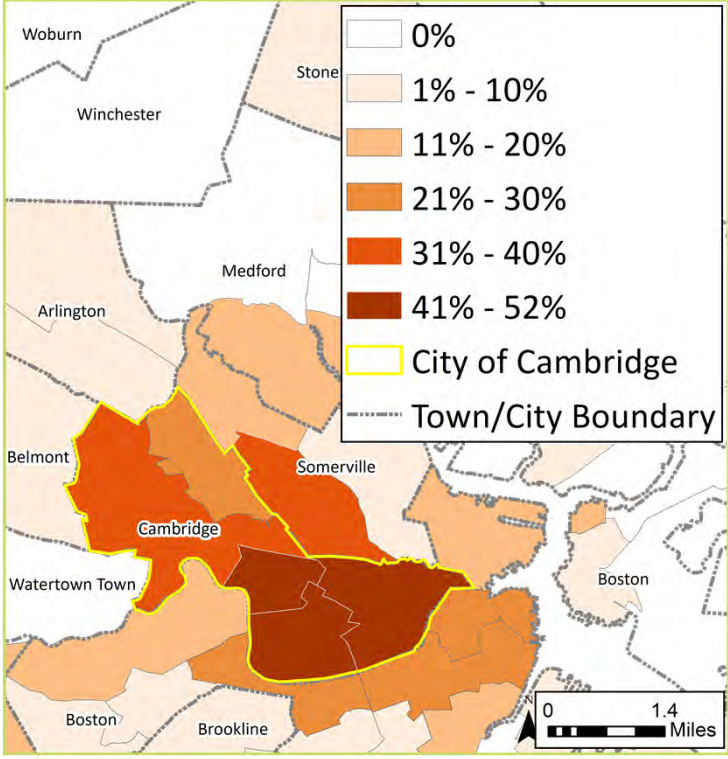
¹The 2017-19 data is derived from the American Community Survey and recompiled by the CDD. All other data on this slide is derived from the CTPP.

Workforce Walking and Biking

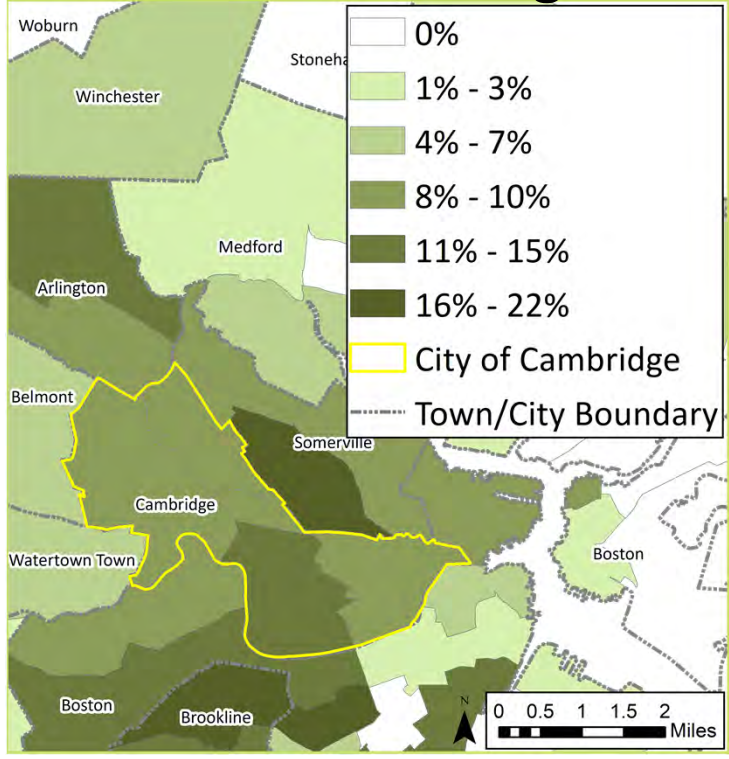
Total Workforce (Any Mode)



Percent Walking



Percent Biking



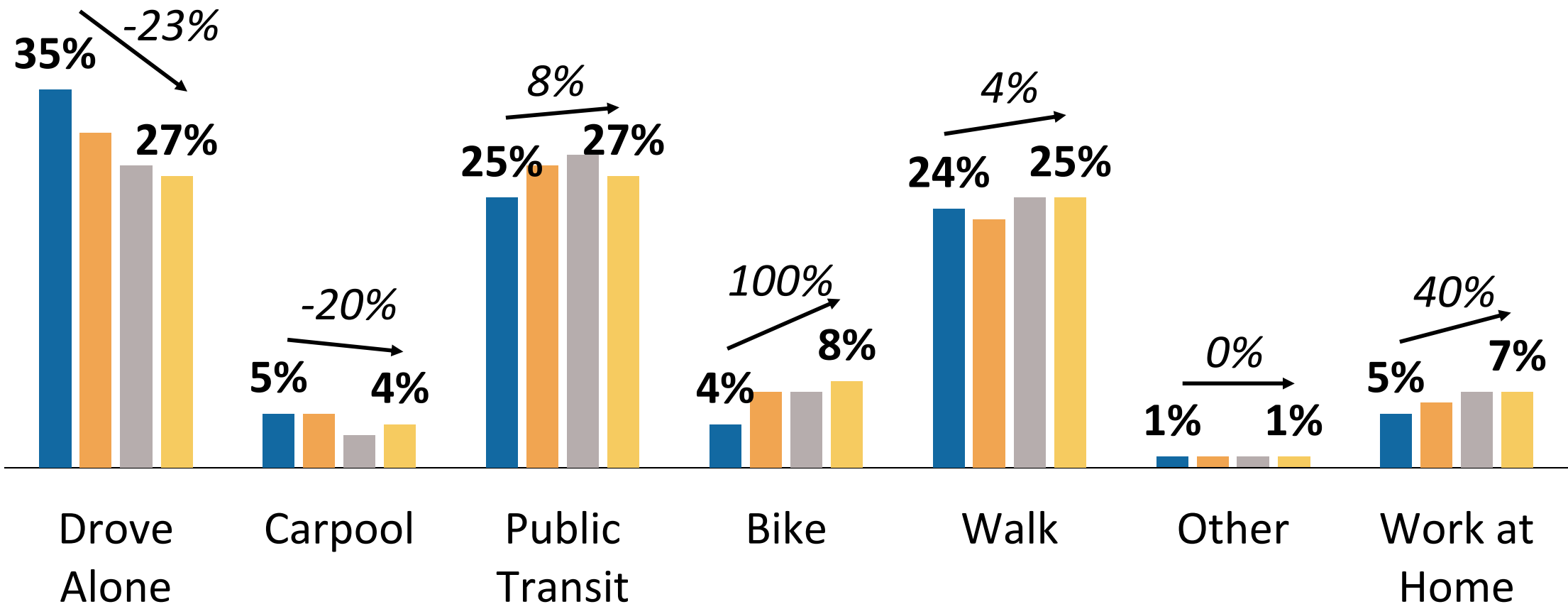
36% of the Cambridge Workforce that lives in Cambridge, Somerville or Boston walks or bikes to work.

Cambridge Labor Force

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

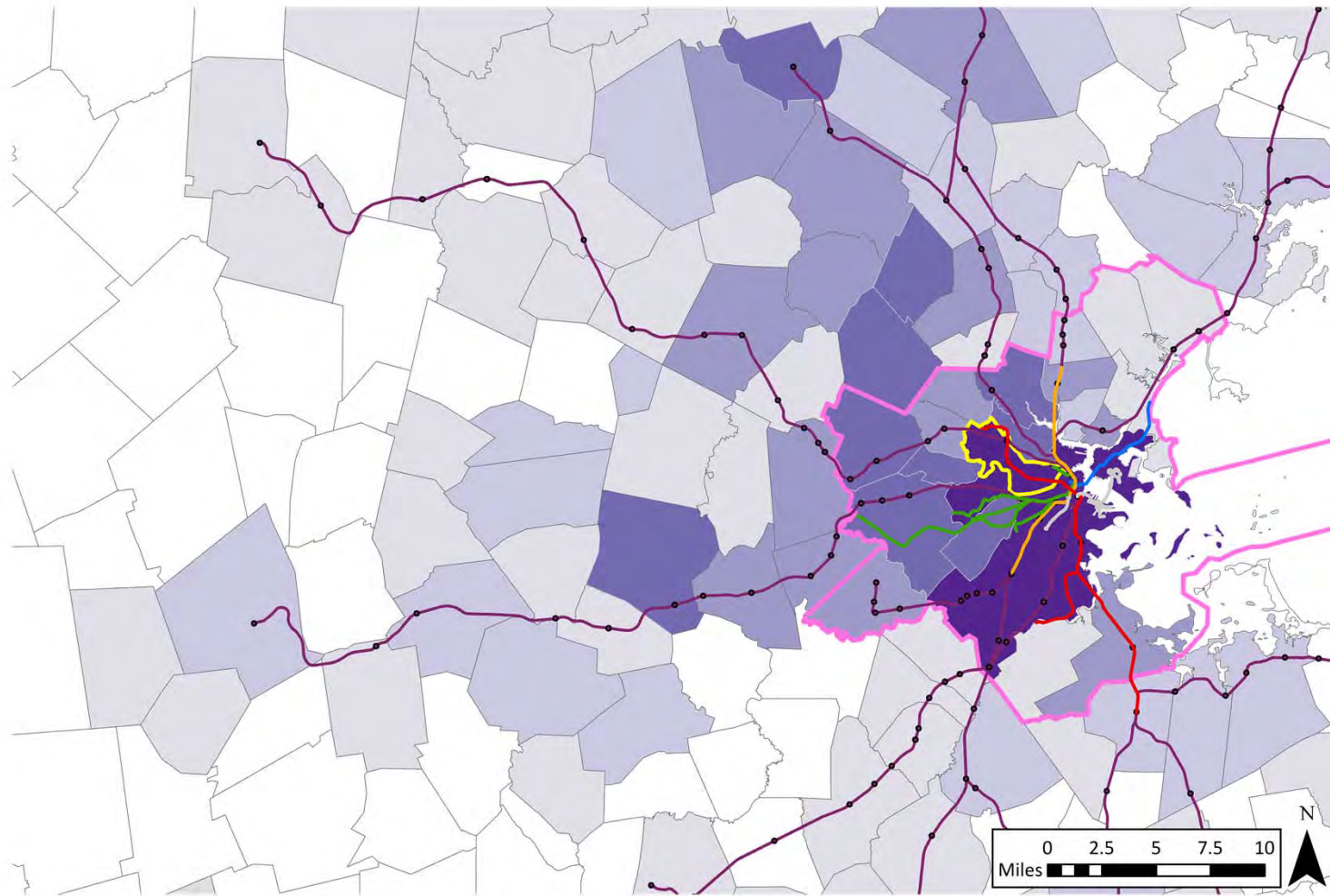
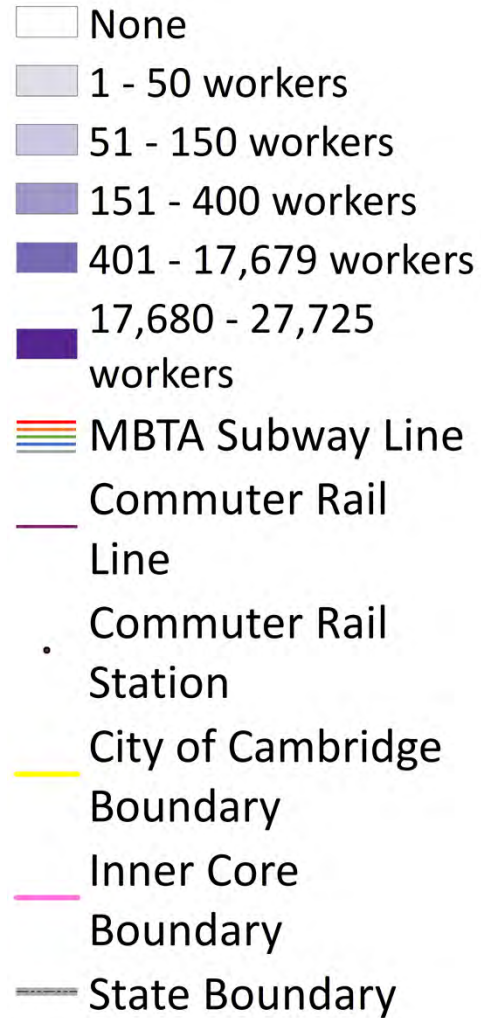
Labor Force Mode Split Over Time

■ 2000
 ■ 2006 - 2010
 ■ 2012 - 2016
 ■ 2017 - 2019



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



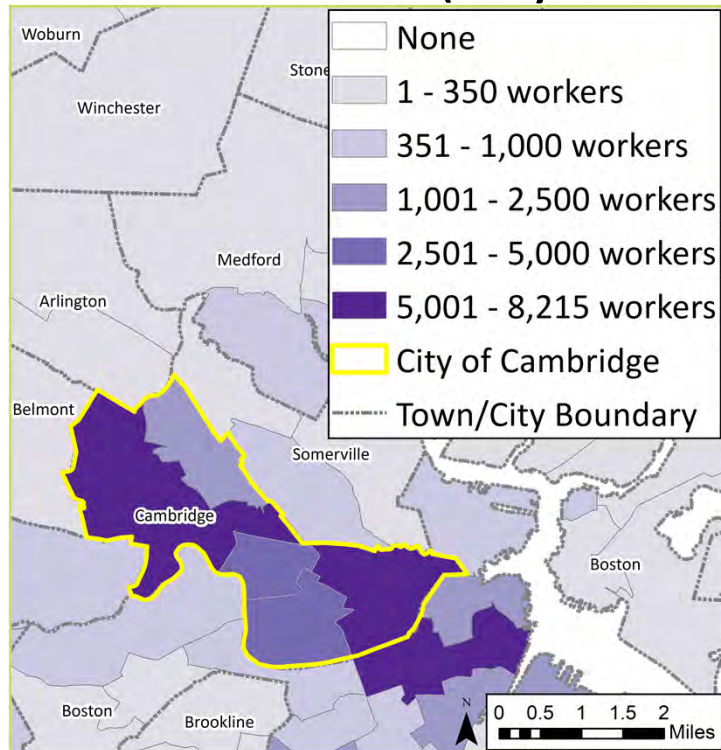
86%
of employed Labor
Force members
work in the Inner
Core

45%
work in Cambridge

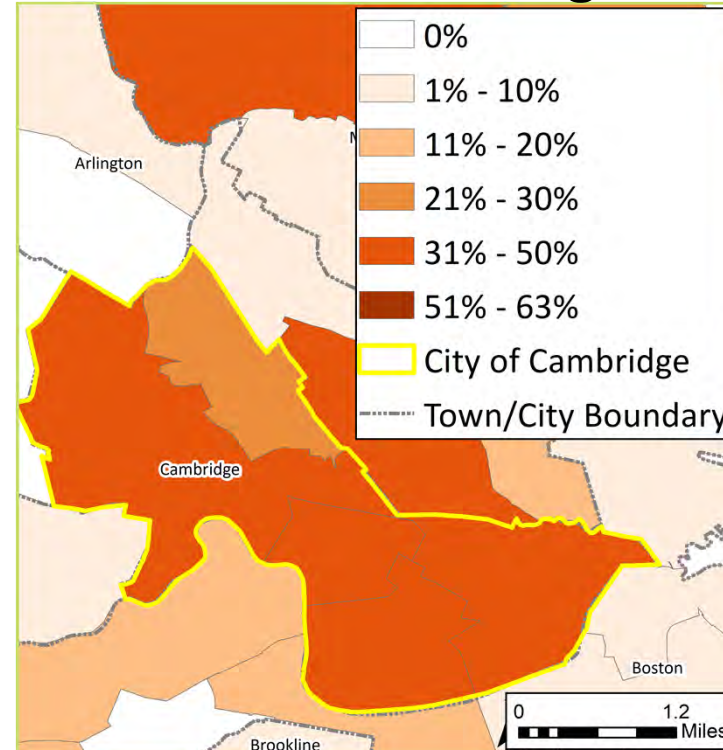
29%
work in Boston

Labor Force Walking and Biking

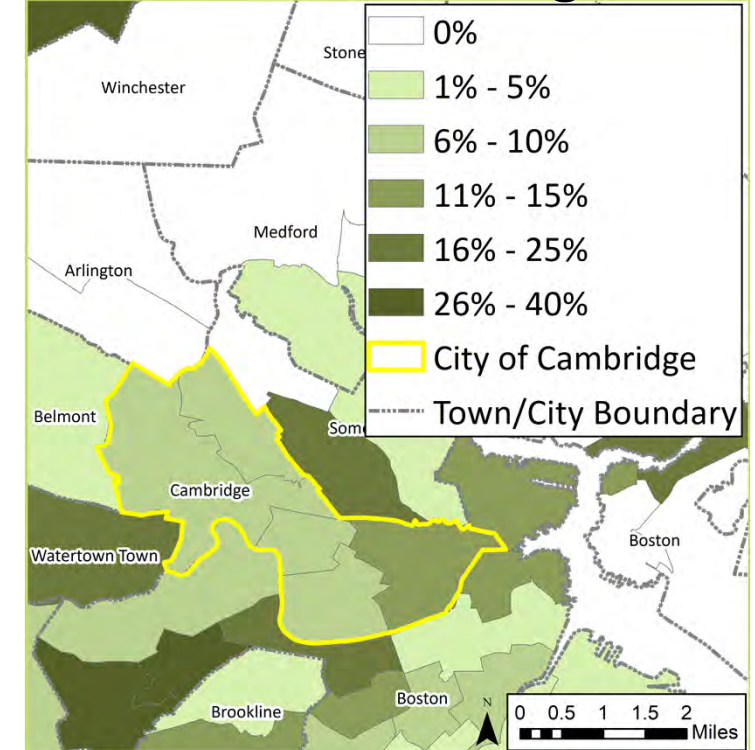
Total Workforce (Any Mode)



Percent Walking



Percent Biking



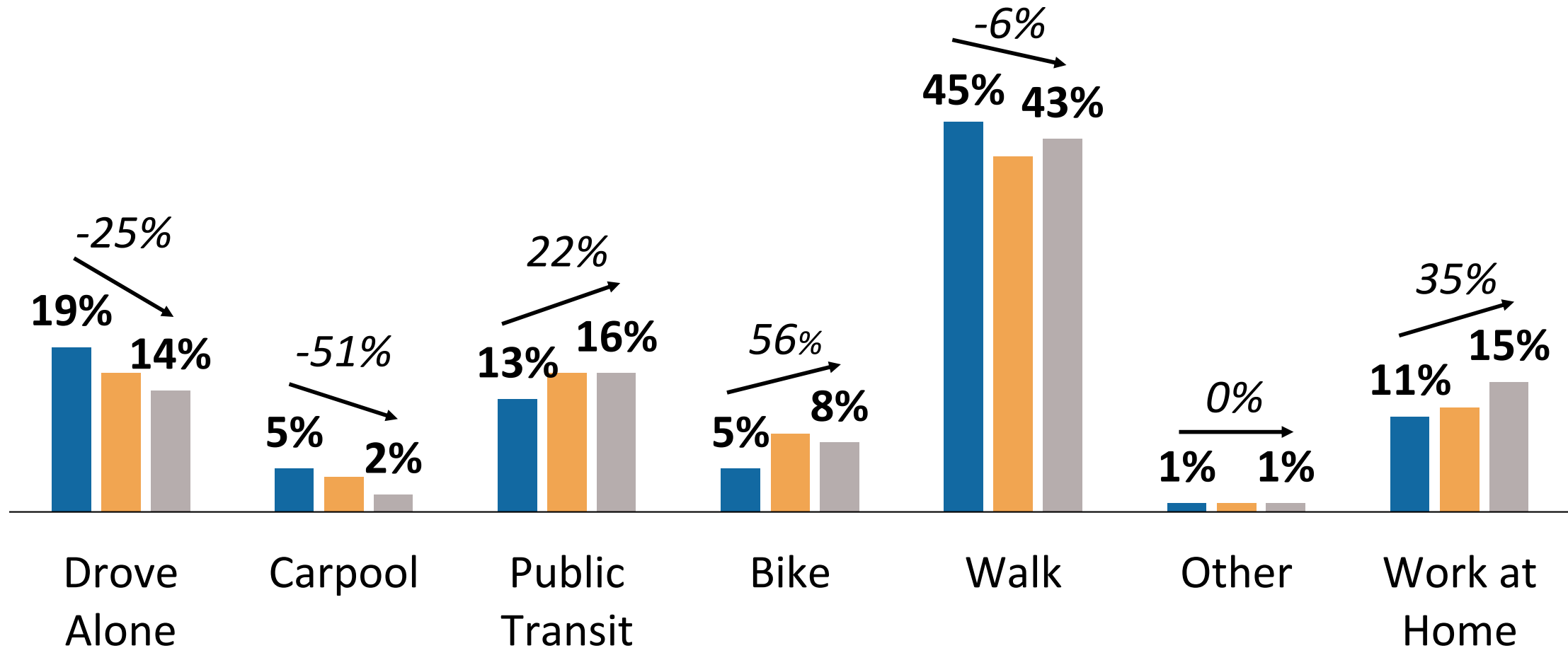
36% of the employed Cambridge Labor Force that works in Cambridge, Somerville or Boston walks or bikes to work.

Cambridge Resident Workforce

All Cambridge residents who work in Cambridge.

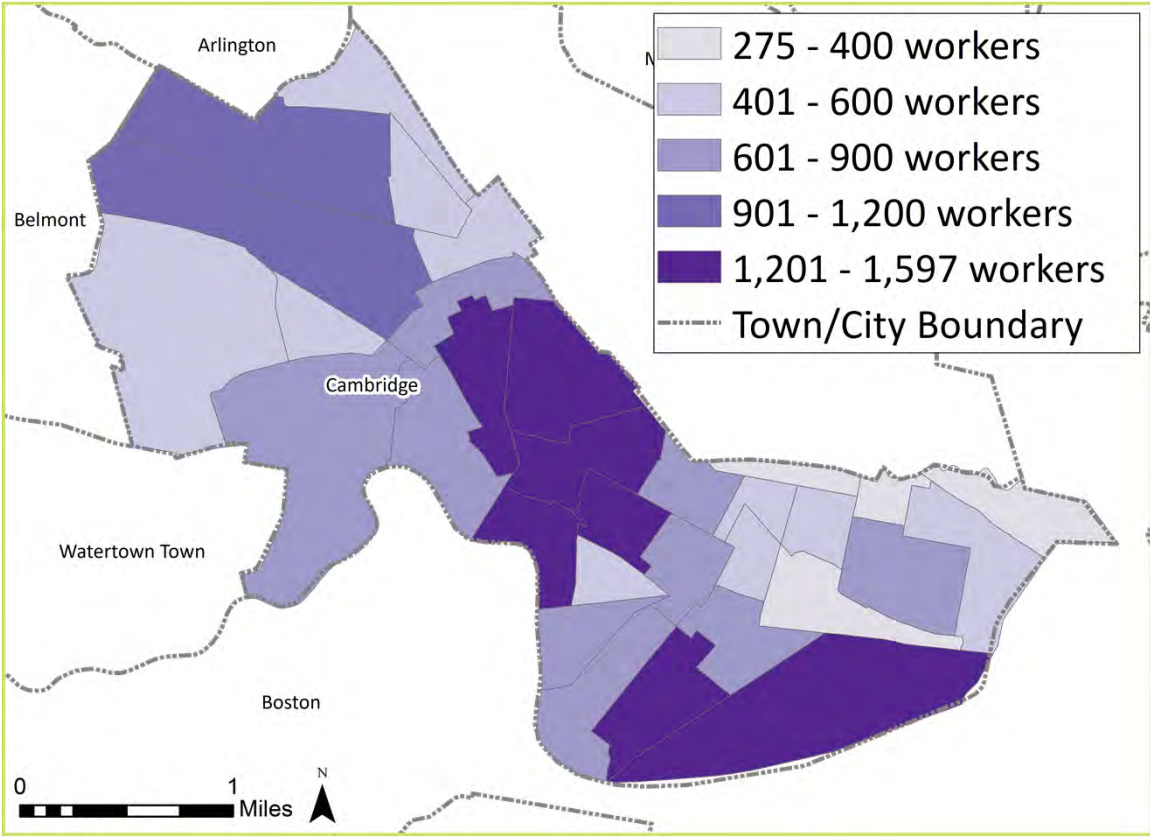
Resident Workforce Mode Split Over Time

■ 2000 ■ 2006 - 2010 ■ 2012 - 2016

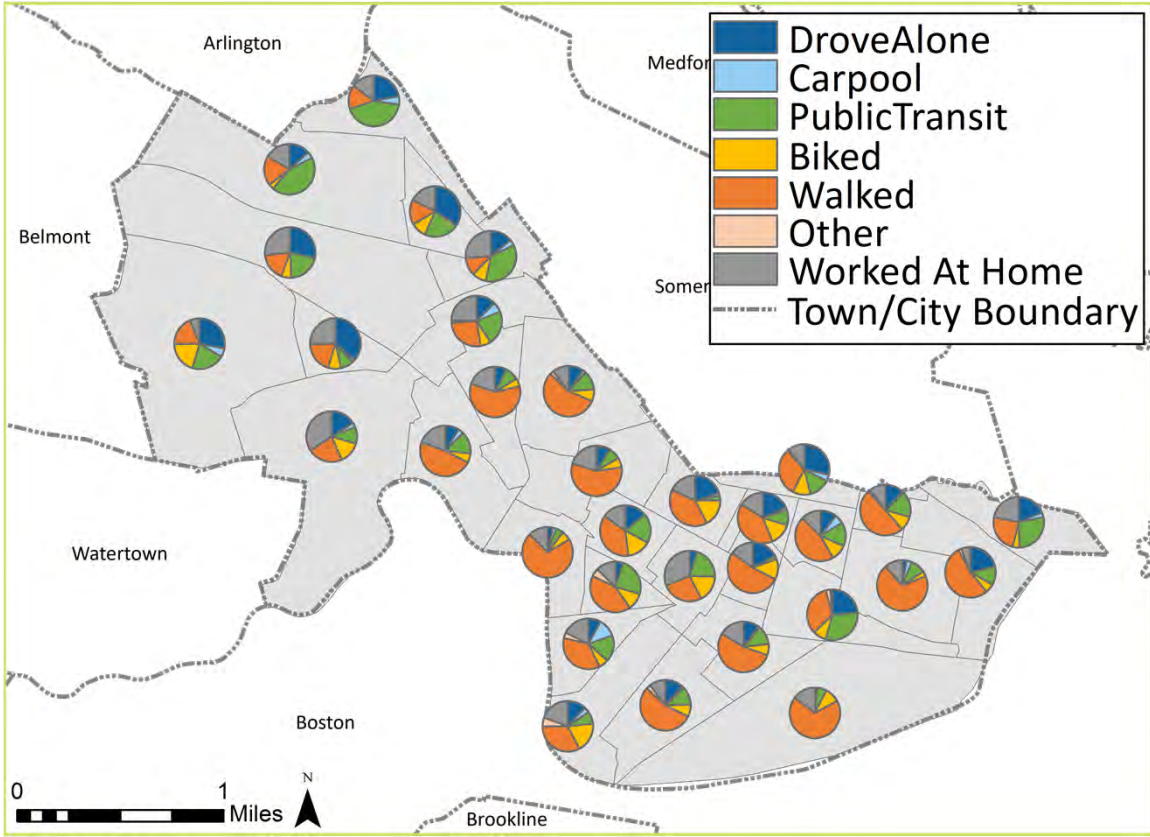


Resident Workforce by Census Tract of Home Location

Total Workforce (Any Mode)

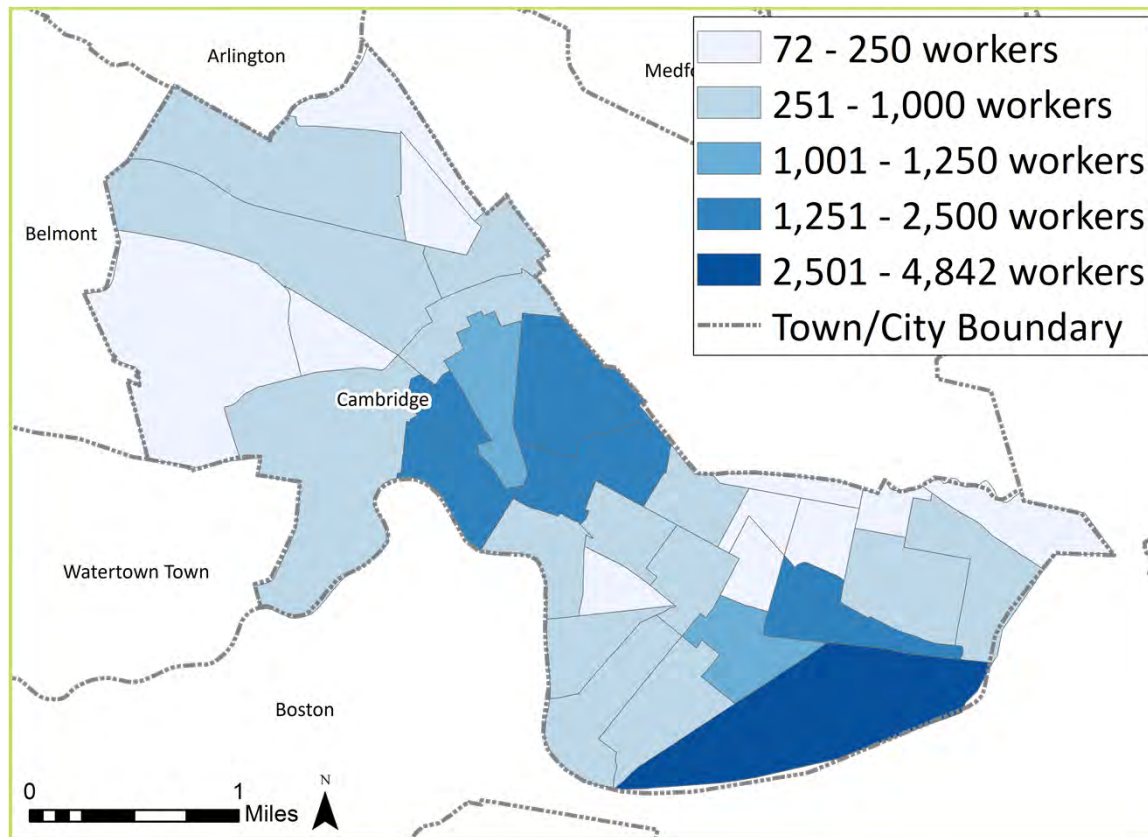


Mode Split

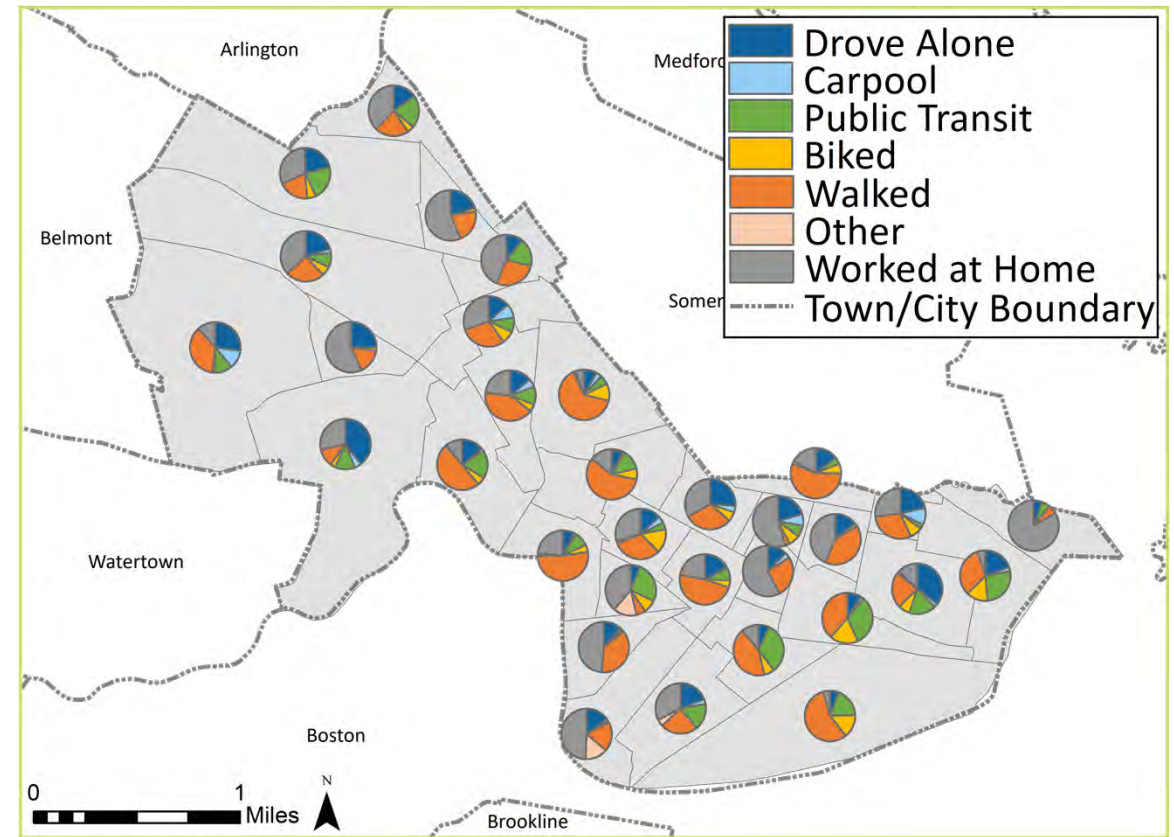


Resident Workforce by Census Tract of Workplace Location

Total Workforce (Any Mode)



Mode Split

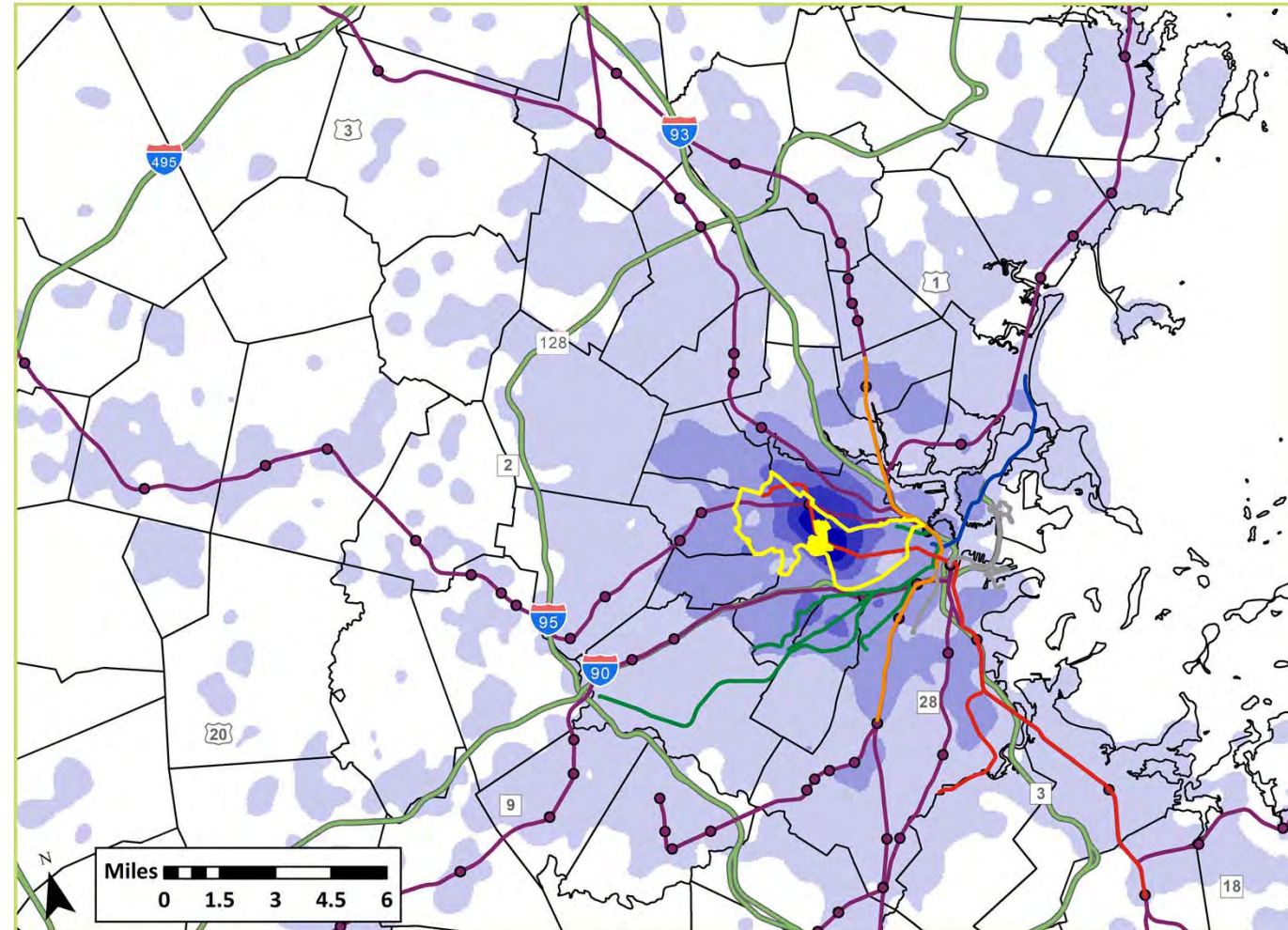
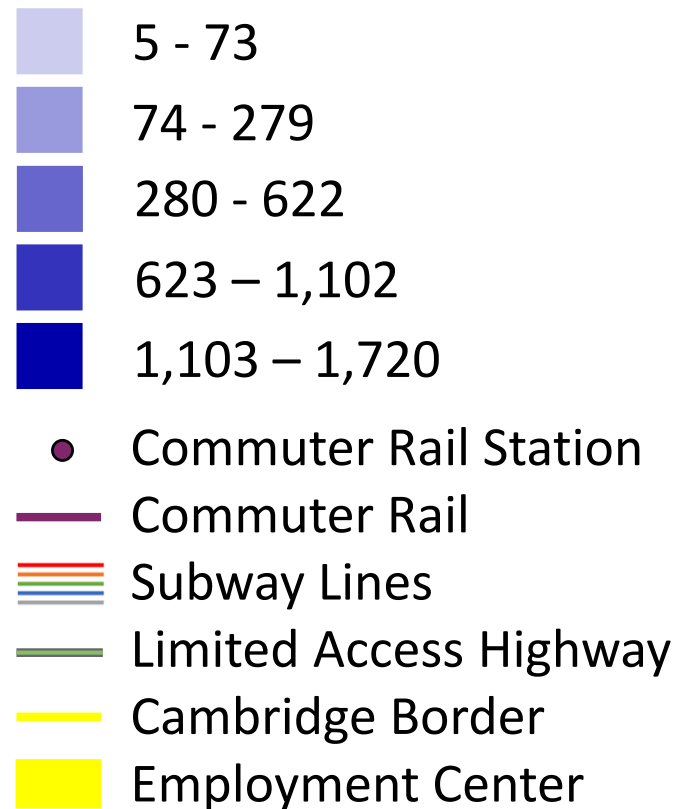


Cambridge Employment Centers

Harvard Square/University Workforce: 21,800 Total Workers

Workforce Home Location

Workers per Square Mile

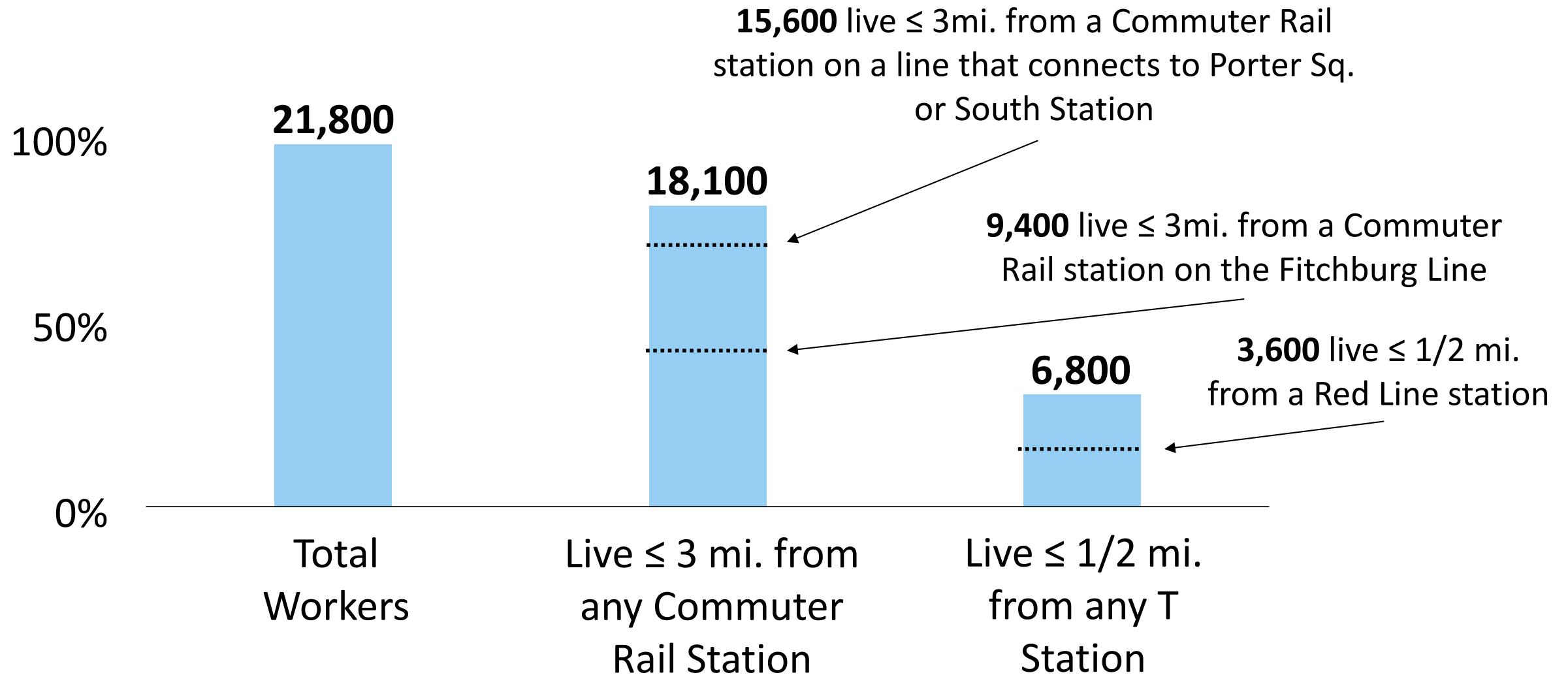


33%
Walked or Biked

32%
Took Public Transit

25%
Drove Alone

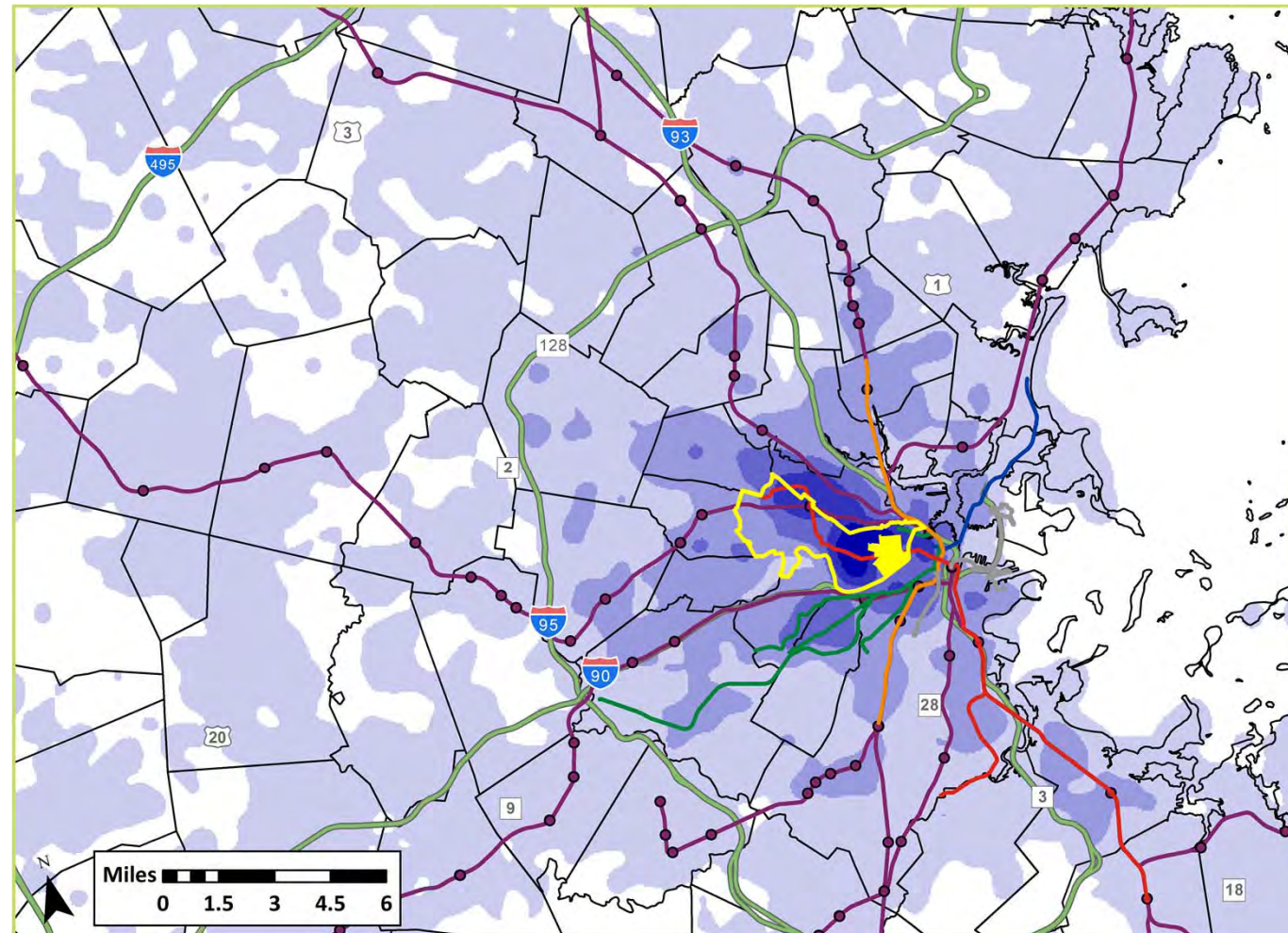
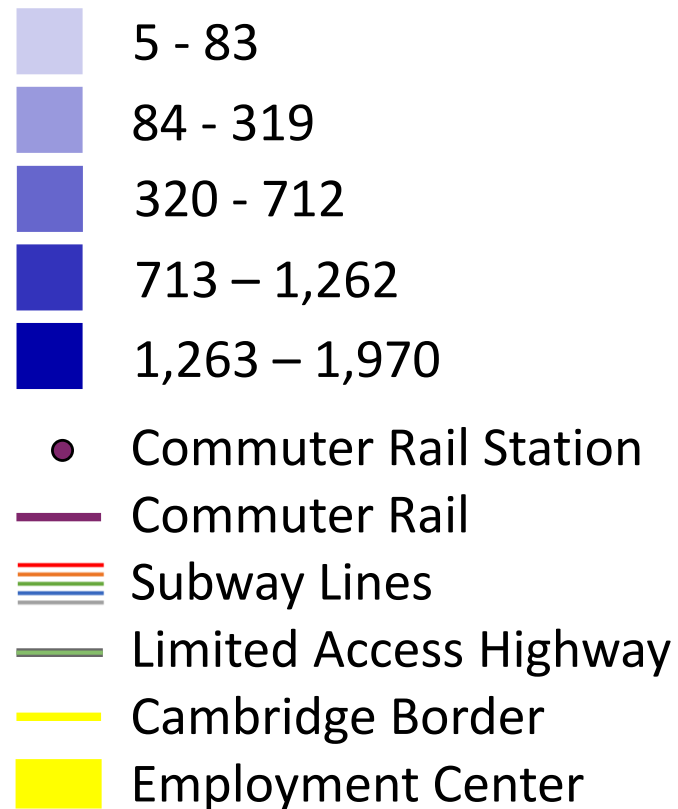
Harvard Square/University Workers by Transit Proximity of Home Location



Kendall Square Workforce: 45,500 Total Workers

Workforce Home Location

Workers per Square Mile

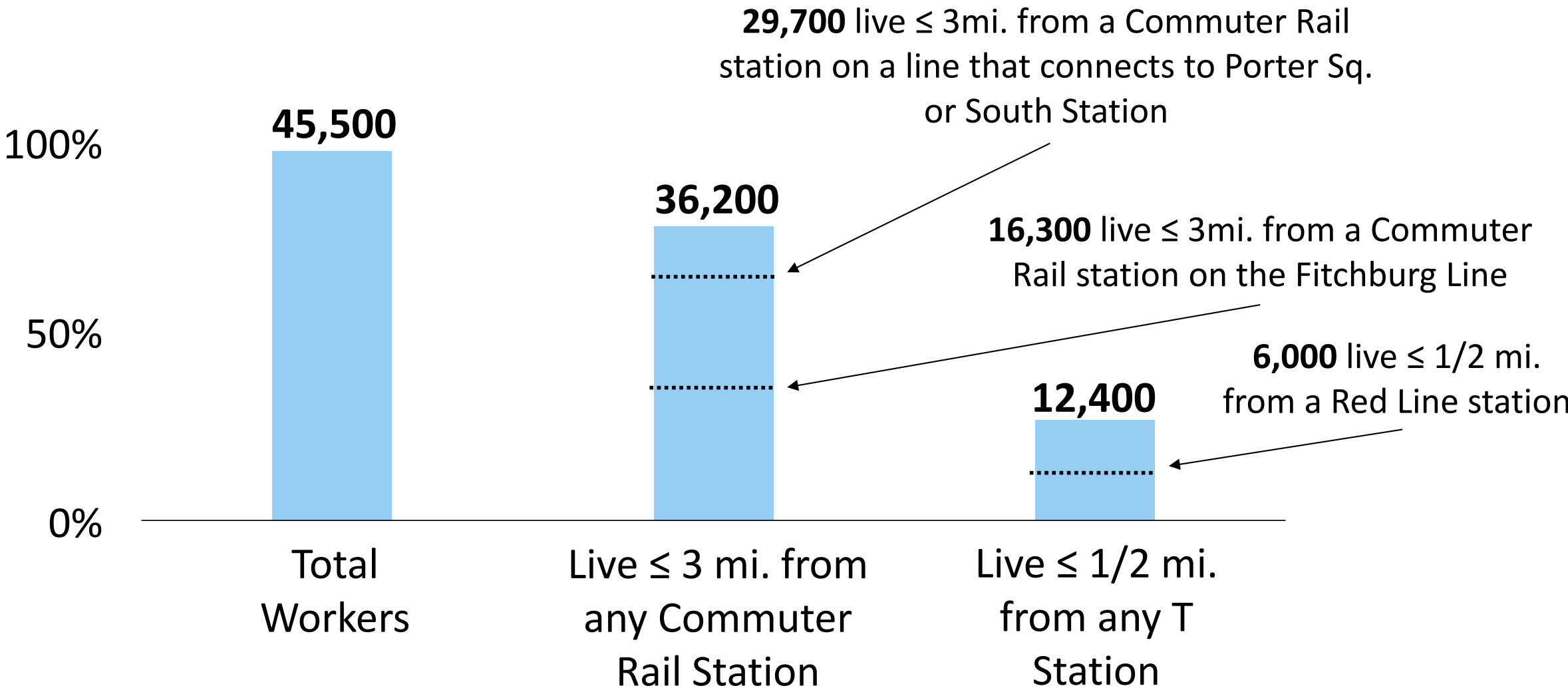


20%
Walked or Biked

33%
Took Public Transit

40%
Drove Alone

Kendall Square Workers by Transit Proximity of Home Location



Pedestrian Committee Meeting

Crash Data Production and Analysis

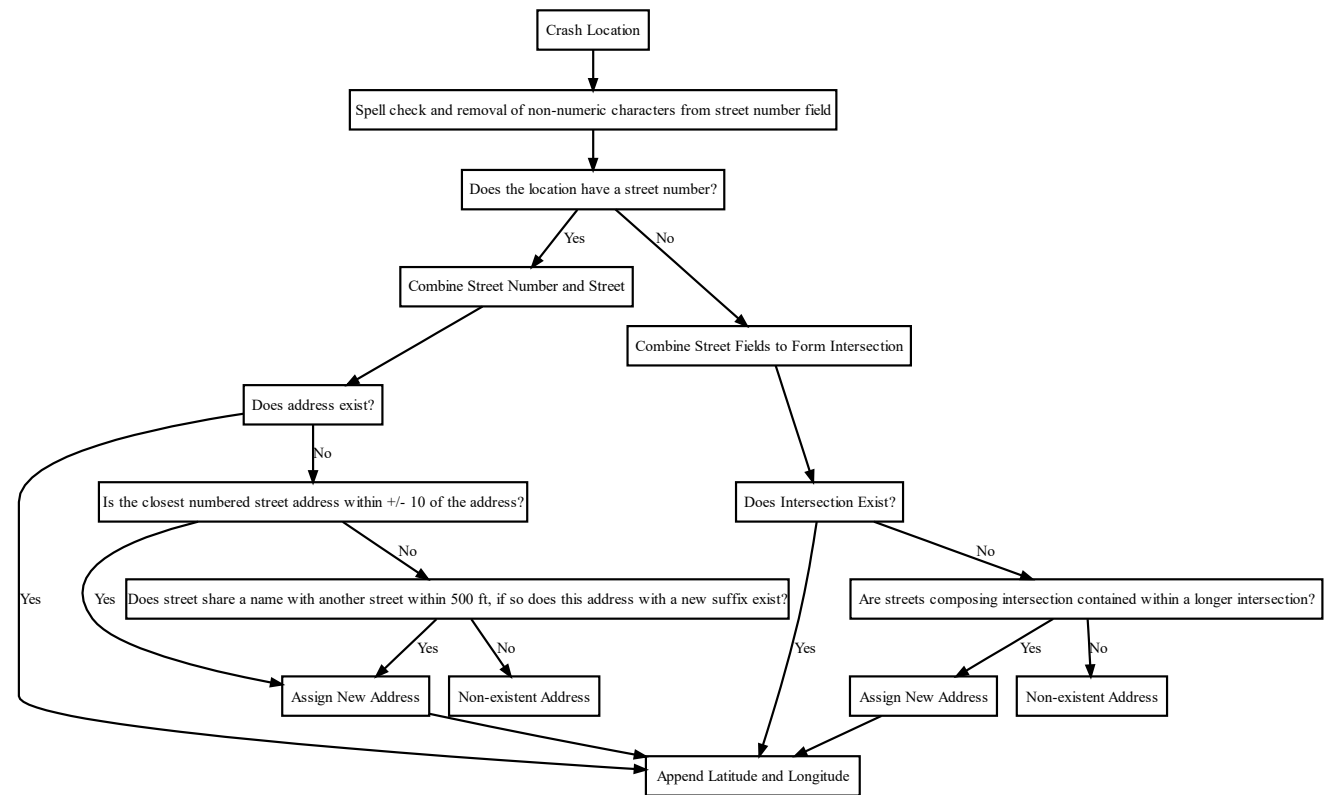
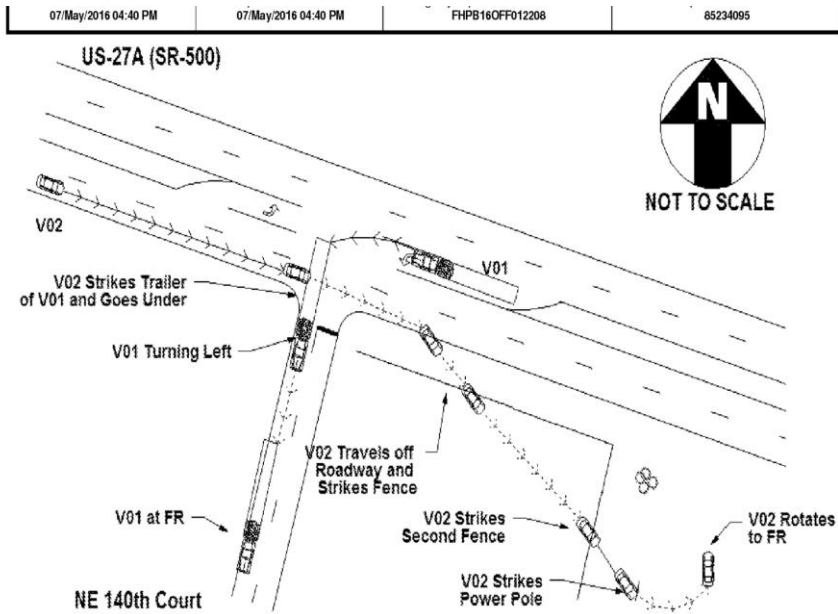
Traffic Collisions and Crash Reports

- 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.

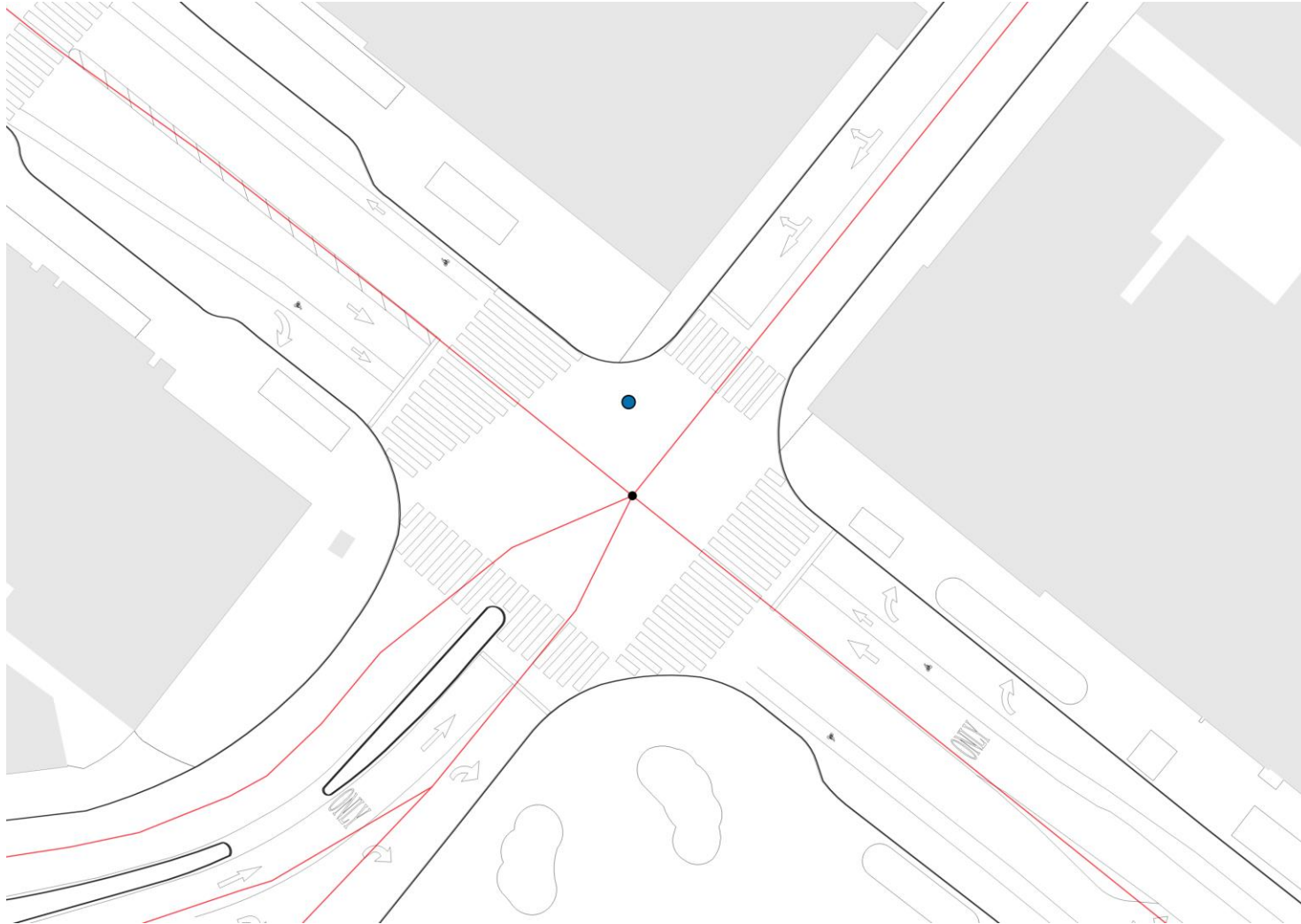
Geocoding

Non-motorist involved crashes

Motor Vehicle Only Crashes



Crash Diagrams



Classifying Crashes

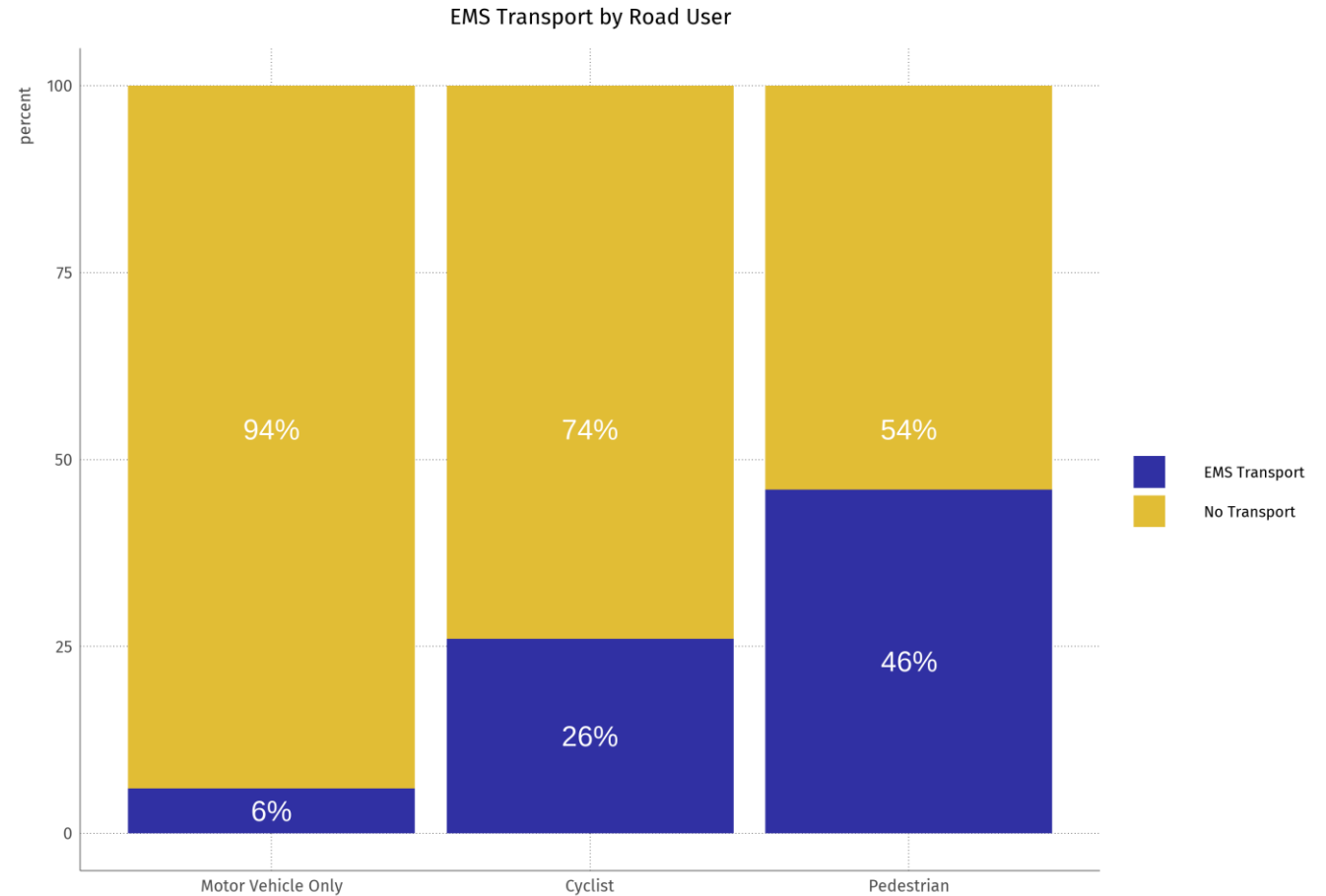
- Crash reports contain several fields where officers can indicate whether a non-motorist was involved in a crash, if any of these fields indicates non-motorist involvement, they are manually validated referencing crash diagrams and narratives.

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.

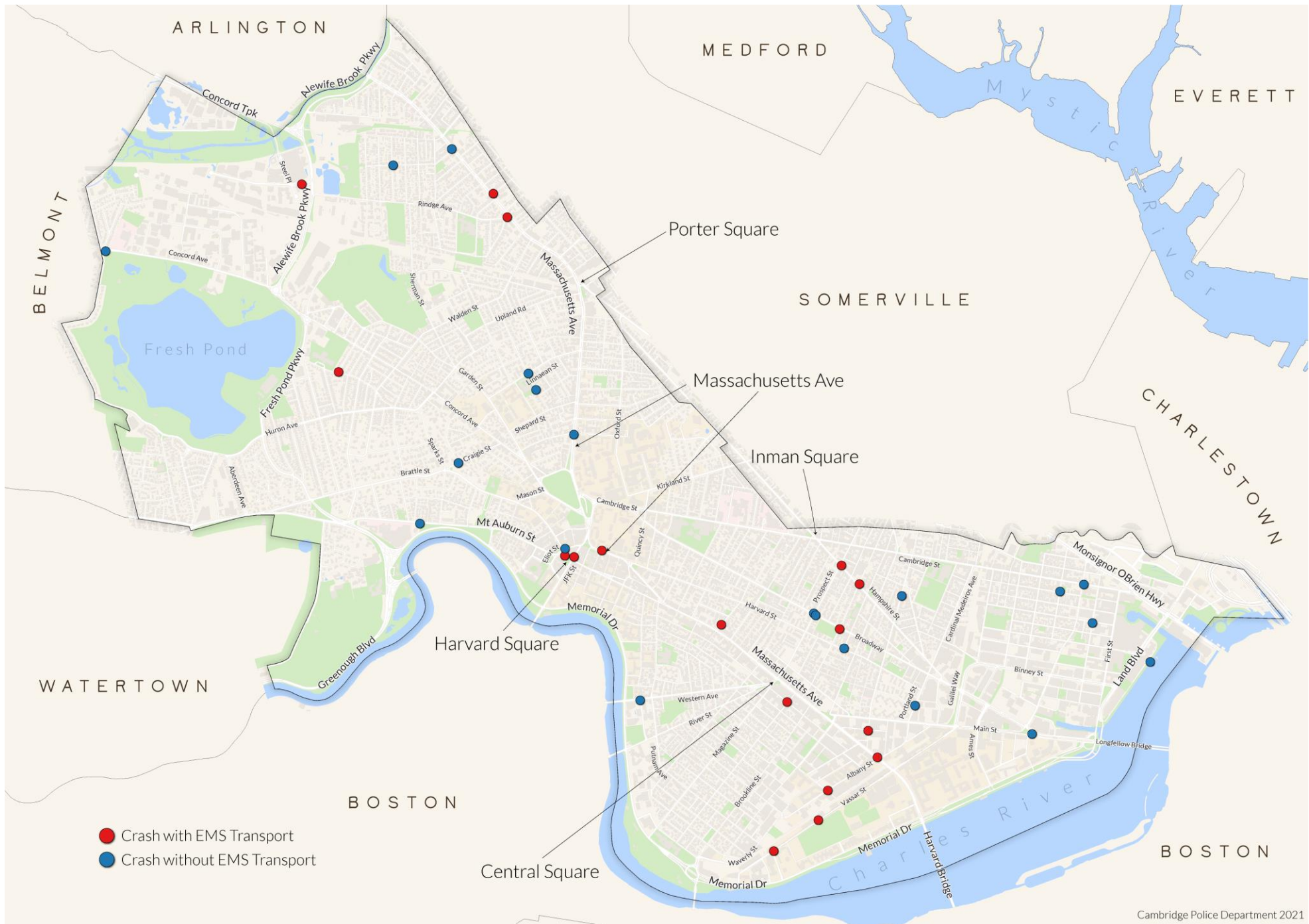
Injury Severity

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



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?

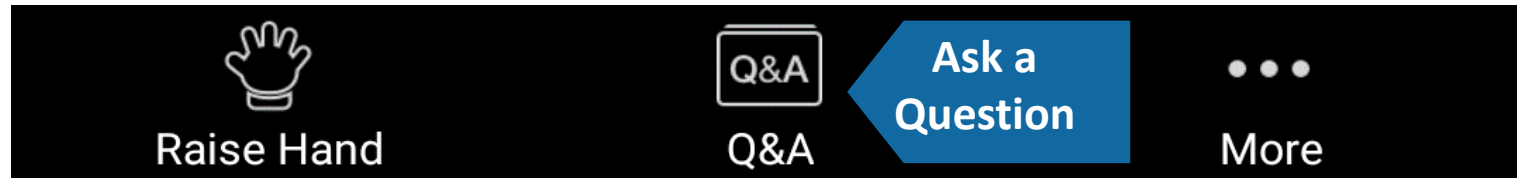


Public comment

Public Comment Instructions

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Bottom Panel of
Zoom Screen





TP&T Updates

- City will be installing Rapid Rectangular Flashing Beacons (RRFBs) at about 6 crosswalks
 - Bidding for contract opens April 1
- Majority of 20 MPH Safety Zone speed limit signs have been installed
 - Contract has been extended another month for the contractors to finish
- Working to procure and install speed feedback signs at key locations
 - Developing guidelines for where to deploy them
- Markings are being refreshed tonight on Cambridge St between Prospect and Hampshire (one-way section for outdoor dining)
- Bike corrals going out early- to mid-April

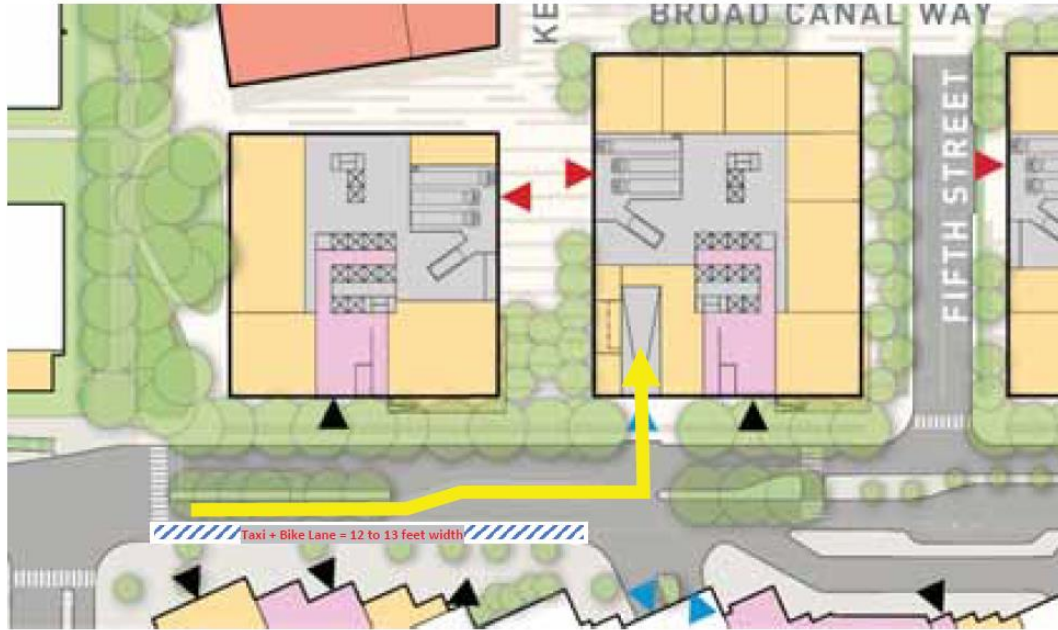


Other City Updates



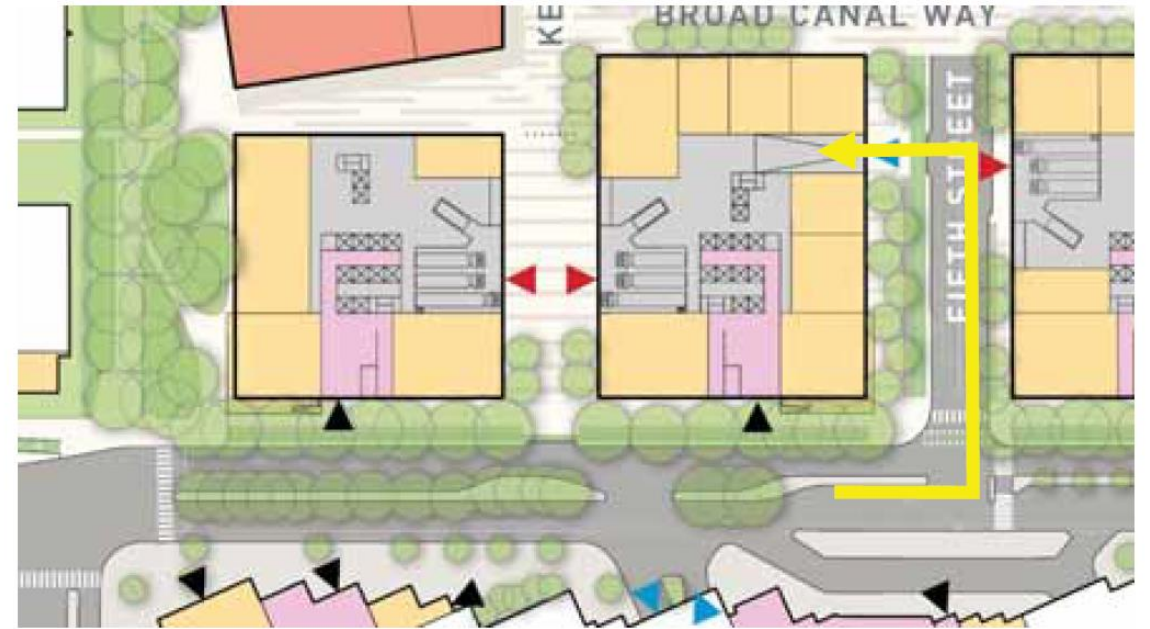
Volpe Debrief

Topic: Left-Turn into C2



1 – Baseline

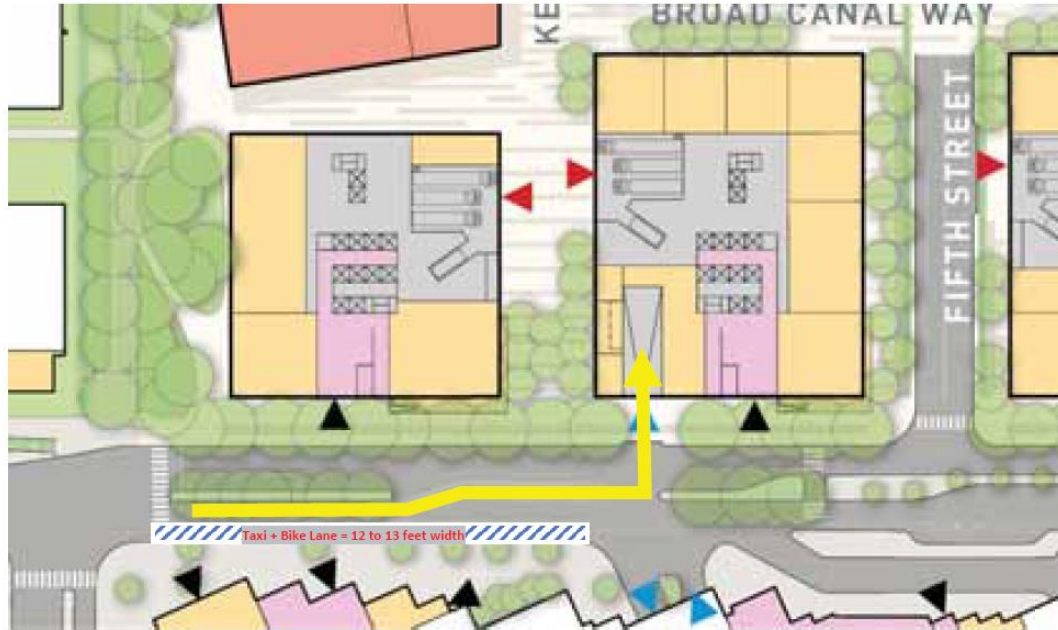
EB exclusive left-turn lane into C2 garage ramp, aligned with Green Garage driveway; Median island reduced.



2 – Proposed: Left-Turn at Fifth Street

Eastbound left-turn lane at Fifth Street intersection; New break in median island, crosswalk relocation.

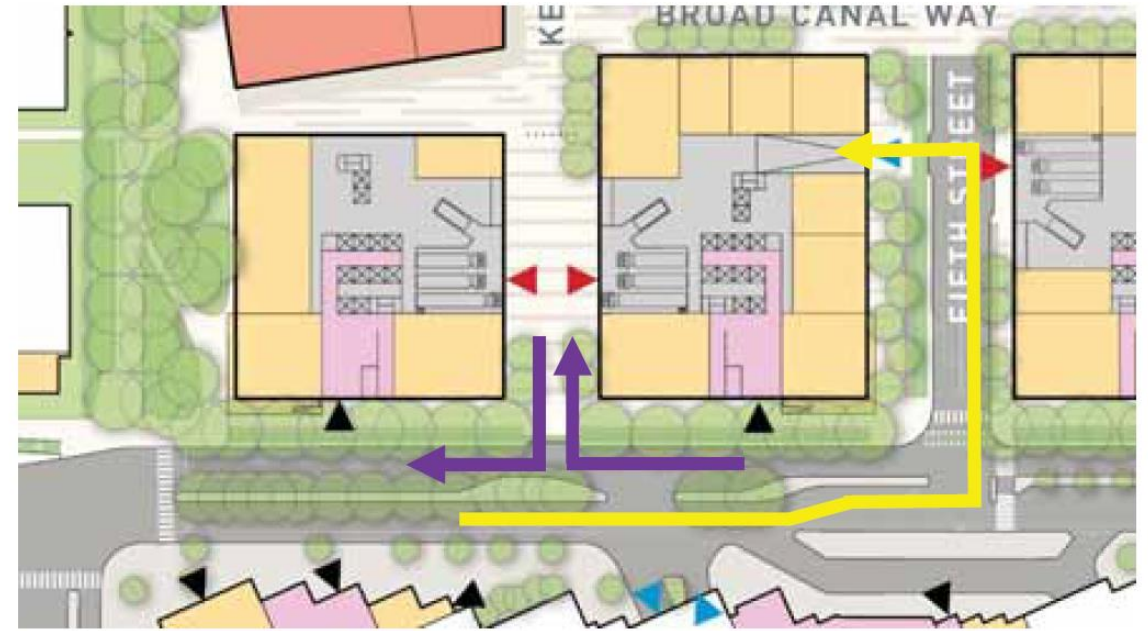
Topic: Kendall Way Connection to Broadway



1 – Baseline (Ped/Bike only)

Kendall Way connection to Broadway for peds and bikes only.

Parking ramp on Broadway.

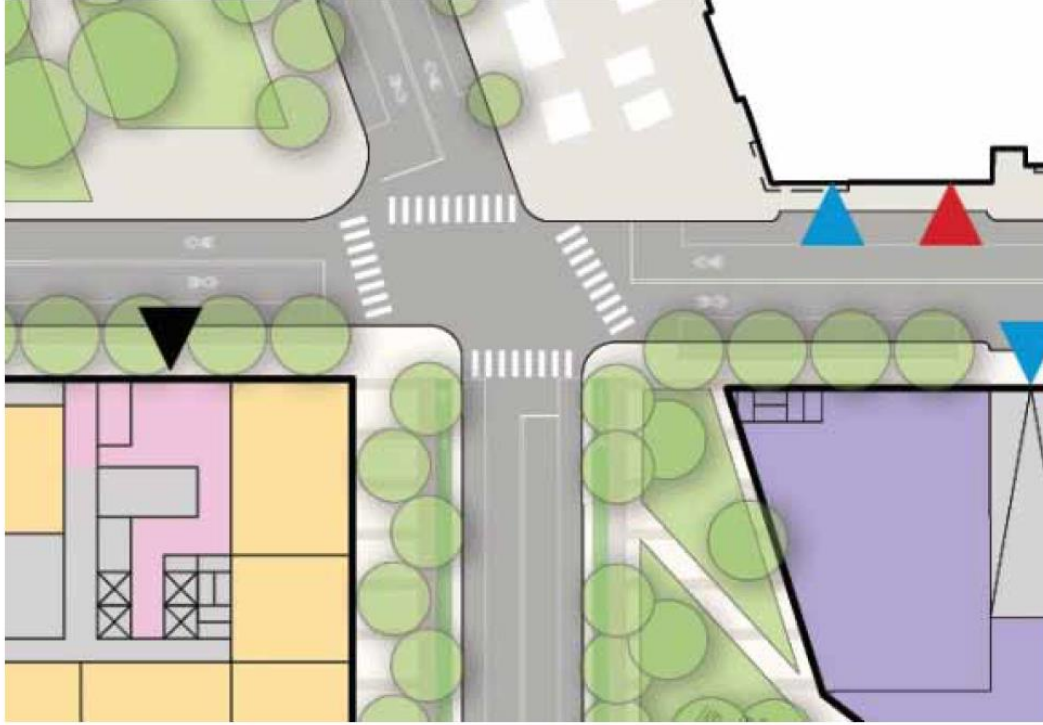


2 – Proposed: Limited Access

Right-in/Right-out for trucks only at Broadway/Kendall Way Intersection.

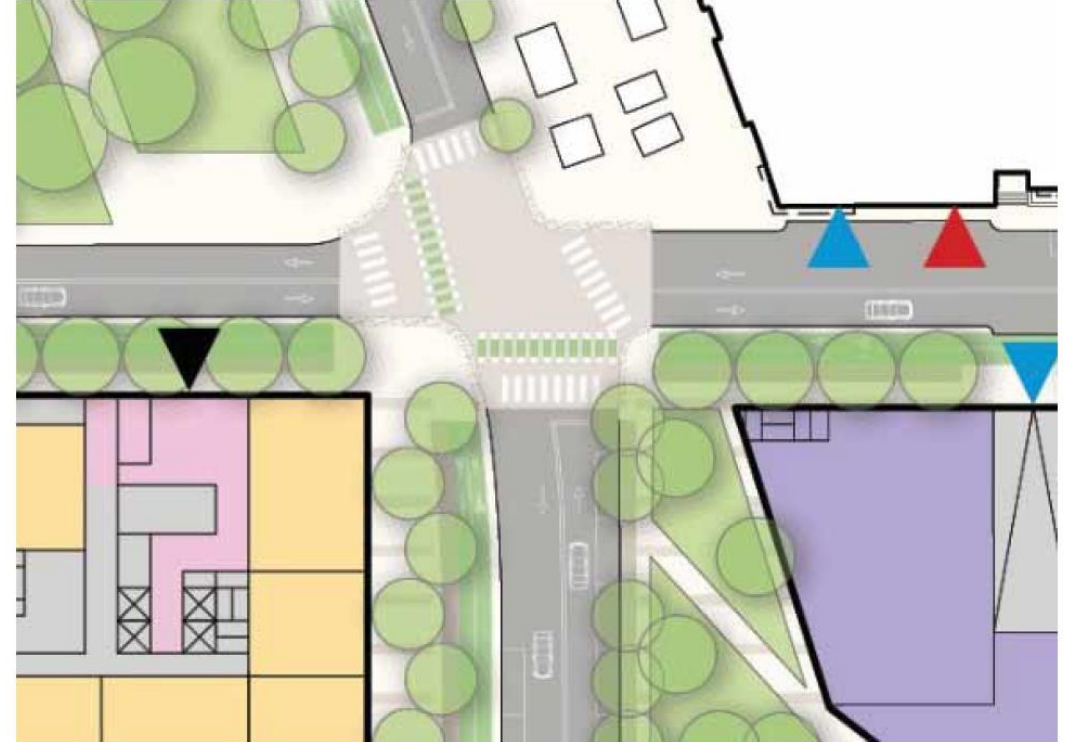
Parking ramp on Fifth Street.

Topic: Potter Street at Fifth Street Intersection Alignment



1 – Baseline

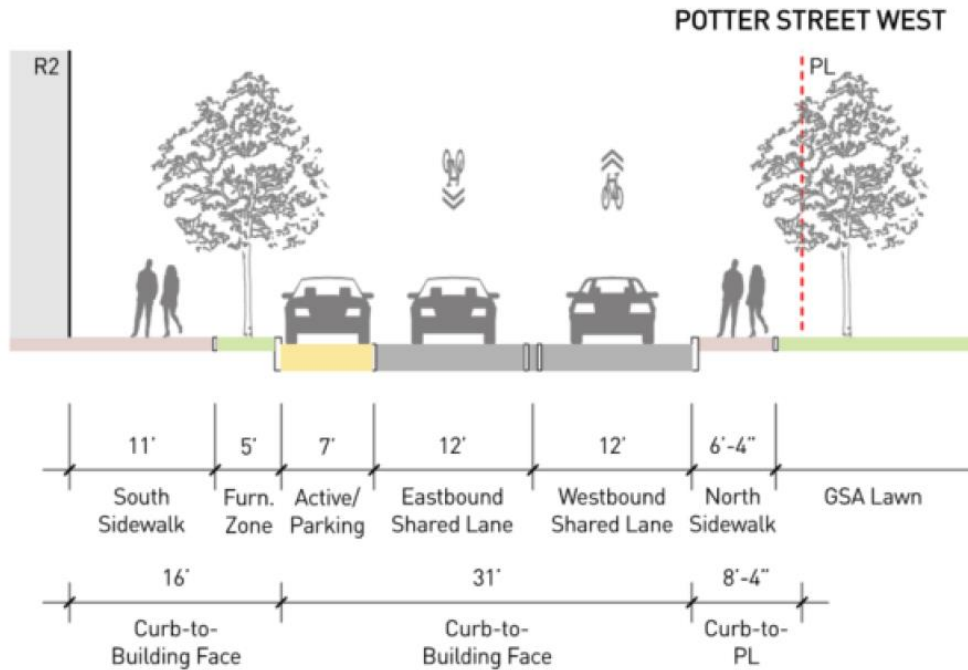
Fifth Street misalignment. Pedestrian/Bicycle crossings not visible at the intersection.



2 – Proposed

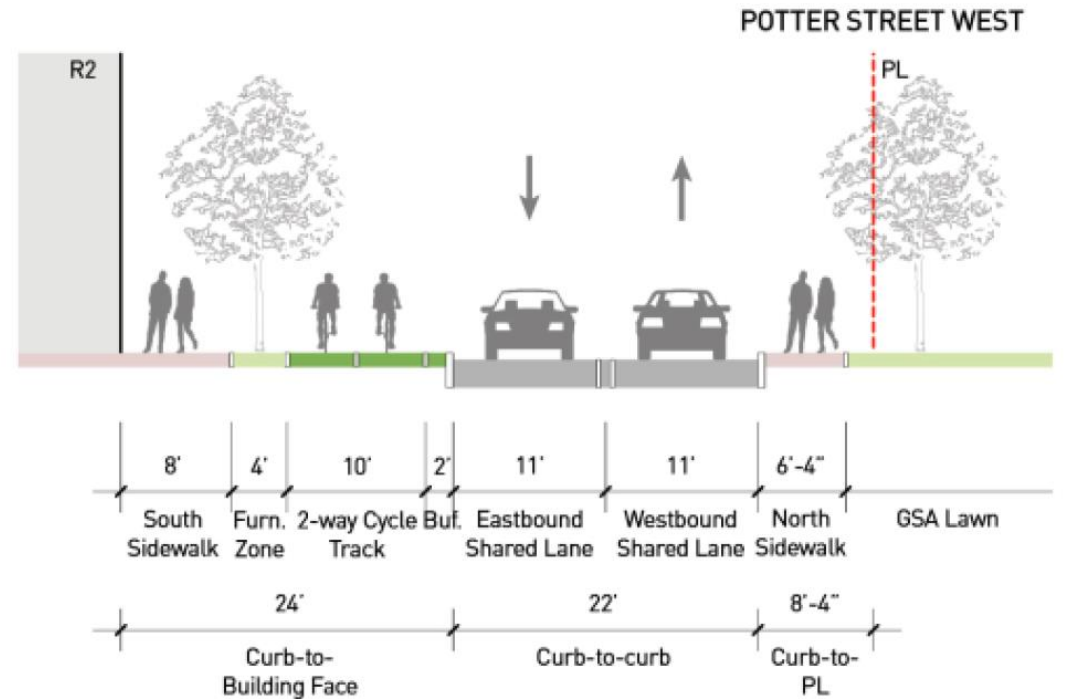
Introducing an arc / curve to Fifth Street south leg. Raised intersection treatment and all-way stop control for higher visibility of pedestrians and bicyclists and to slow down vehicles.

Topic: Potter Street Bicycle Accommodations



1 – Baseline

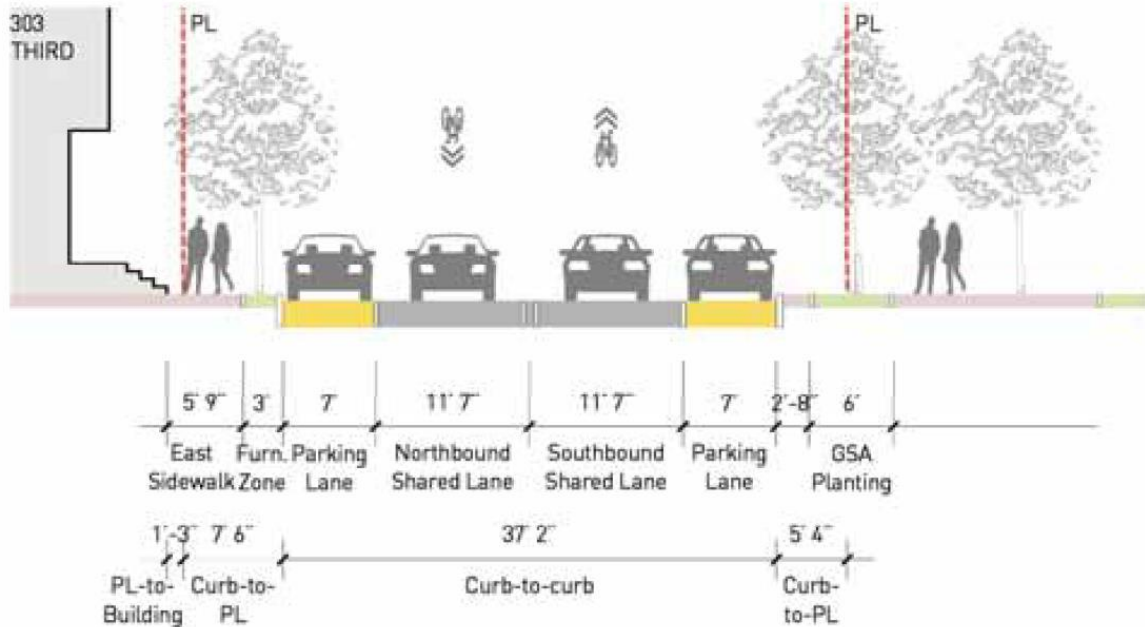
Potter Street with sharrows



2 – Proposed

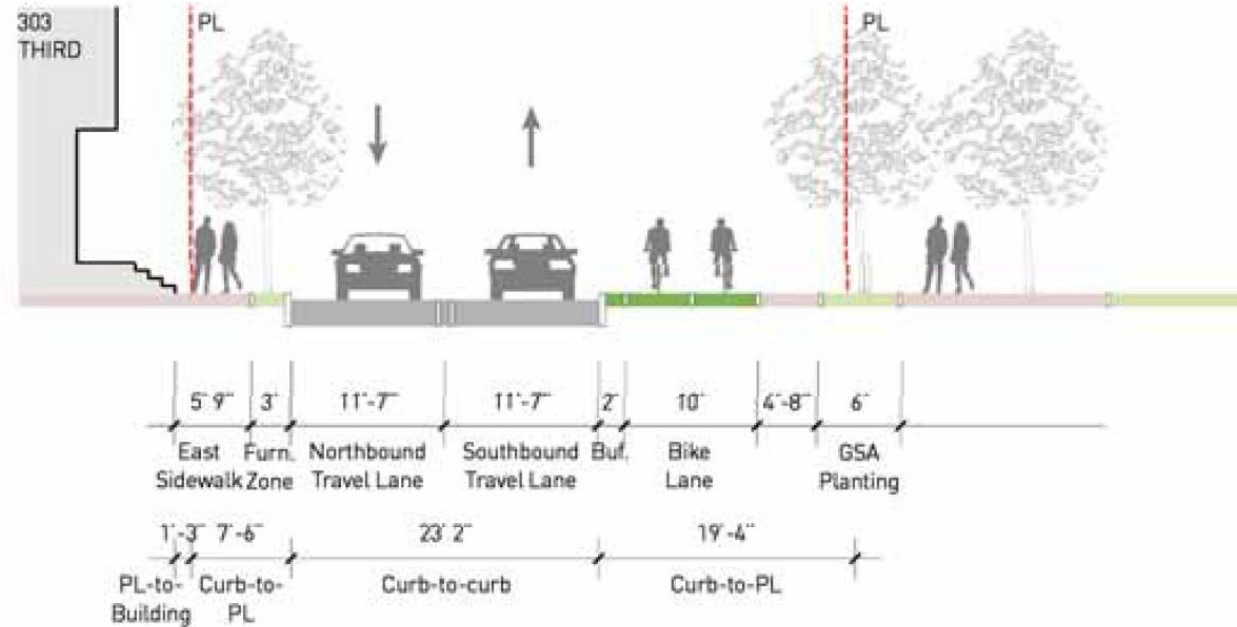
Potter Street with two-way cycle track

Topic: Fifth Street Bicycle Accommodations



1 – Baseline

Fifth Street with sharrows



2 – Proposed

Fifth Street with two-way cycle track

Figure 7

Topic: Curb Use Plan

- Legend:**
- On-Street Parking
 - Short-Term Loading
 - Active Curb

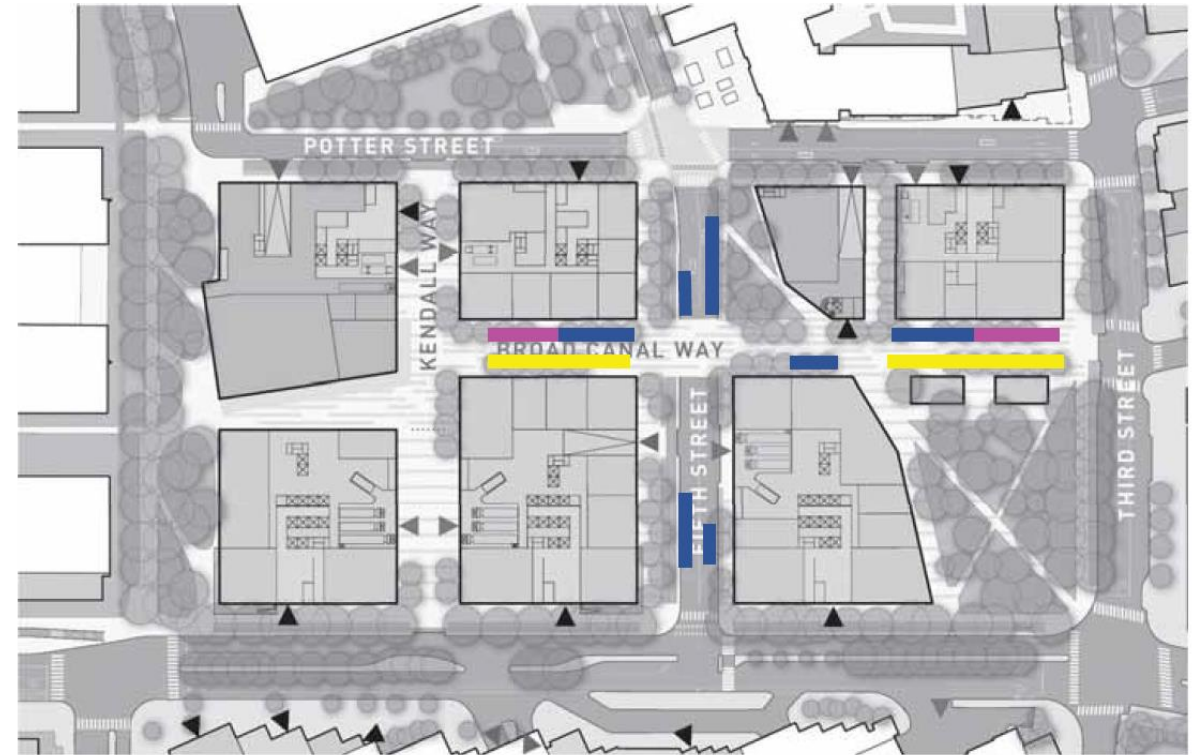


1 – Baseline

55 spaces for on-street parking

27 spaces for active curb

= 82 total street spaces



2 – Proposed

6 spaces for on-street parking

22 spaces for short term loading

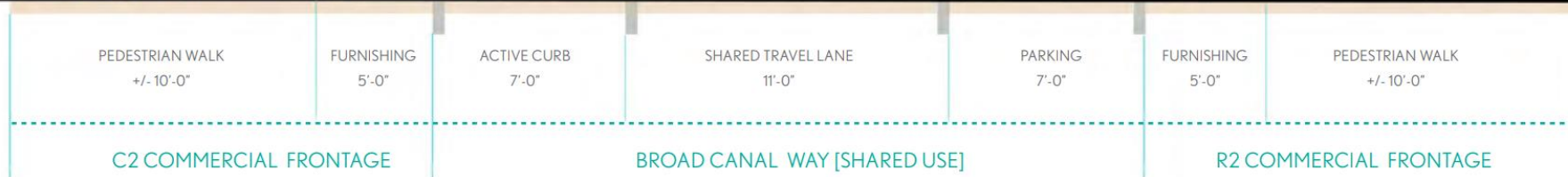
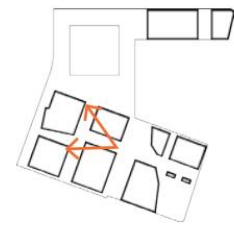
13 spaces for active curb

= 41 total street spaces



Figure 8

Updated Site Plan



*DIMENSIONS ARE APPROXIMATE

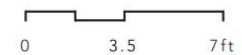
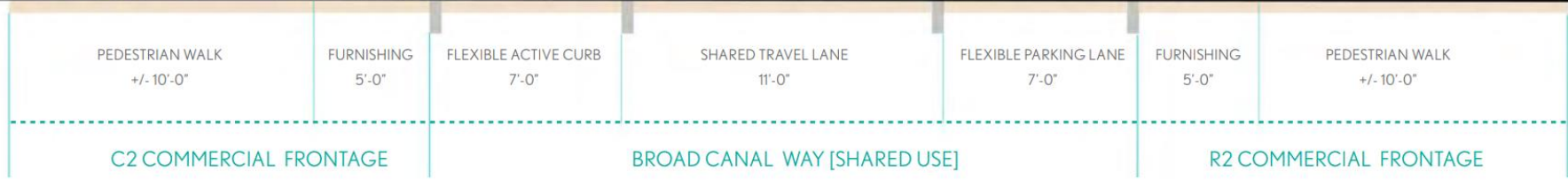
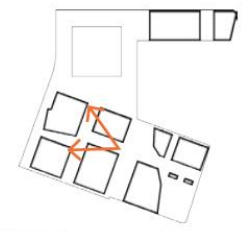


Figure D16: Street Section - Broad Canal Way West



*DIMENSIONS ARE APPROXIMATE

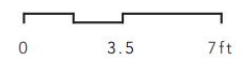


Figure D17: Street Section - Broad Canal Way West Alternative Layout

Broad Canal Way





Committee Officer Elections

- Chair
 - Helps set Committee agendas, takes a leadership role on the Committee
- Vice-Chair
 - Helps set Committee agendas, supports and fills in for the Chair
- Secretary
 - Helps set Committee agendas, takes meeting notes



Committee Work

- Subcommittee check-in

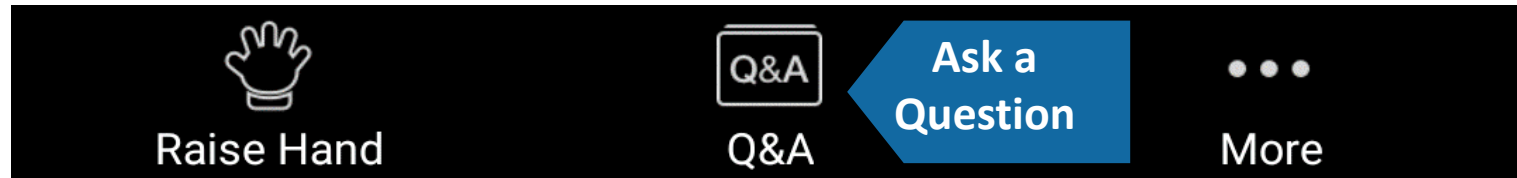


Public comment

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Bottom Panel of
Zoom Screen





Upcoming Meetings

- April Joint Meeting – Wednesday, April 21, 5:30-7:30
 - Mid-Mass Ave
 - DPW 5-Year Plan
 - Green Infrastructure
- April Pedestrian Committee – Thursday, April 29, 6 – 8 (5th Thursday)
 - Lighting → Specific questions/concerns for City Electrician?
 - Broadway/Third St



Other Announcements



Thank You