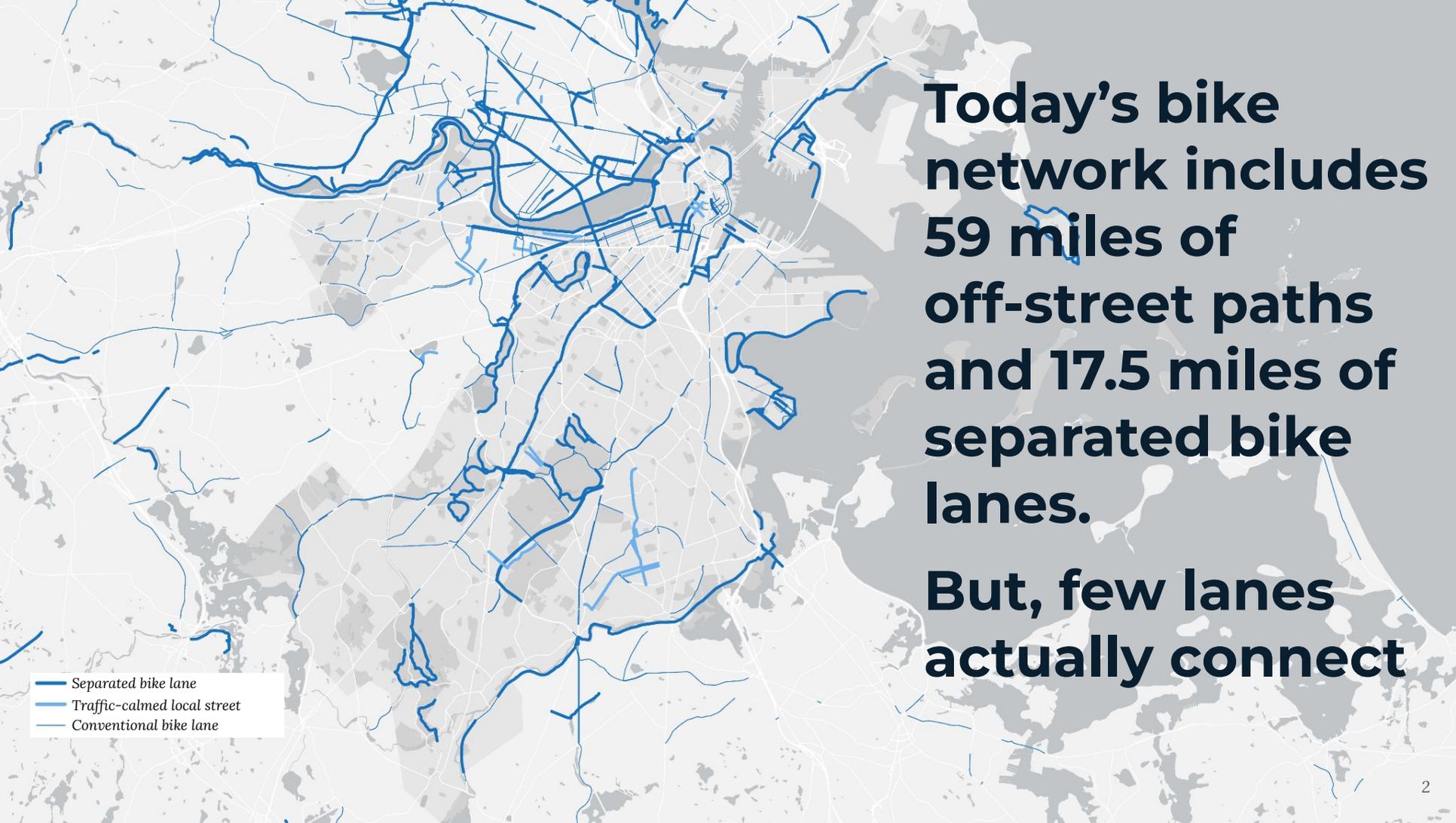




MILK STREET/ WASHINGTON STREET

*Stakeholder Presentation
Spring 2023*



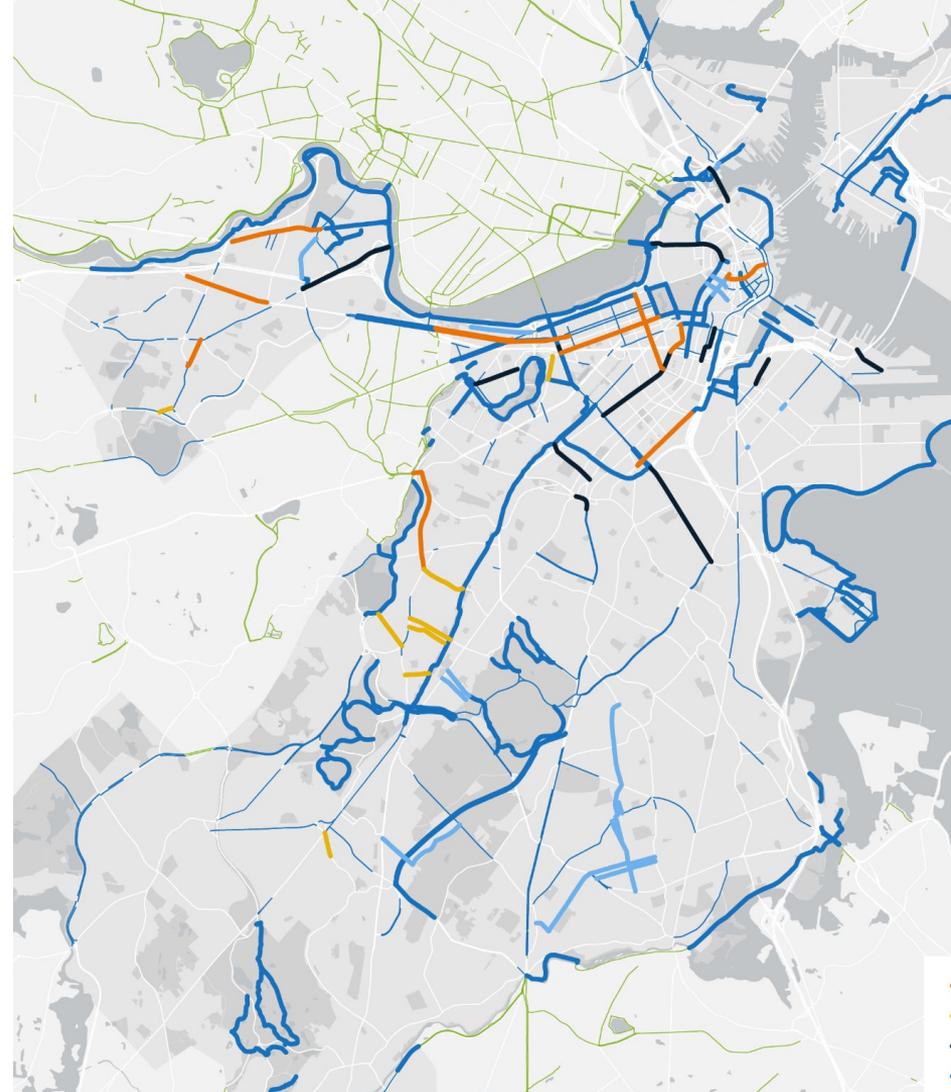
- Separated bike lane
- Traffic-calmed local street
- Conventional bike lane

Today's bike network includes 59 miles of off-street paths and 17.5 miles of separated bike lanes.

But, few lanes actually connect

This year, we're working with residents and stakeholders to design and install new bike lanes on just over 9 miles of streets.

boston.gov/bike-lanes



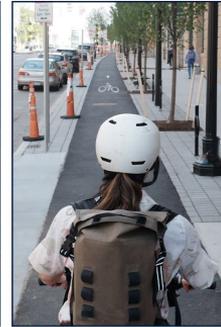
We'll focus on safe, comfortable streets

- ▶ These are types of bike facilities that make the most people feel comfortable
- ▶ They also provide safety benefits for people walking, driving, and rolling.



**QUICK
BUILD**

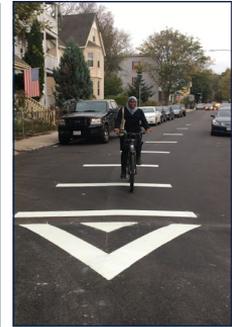
SEPARATED BIKE LANES



FULL-BUILD



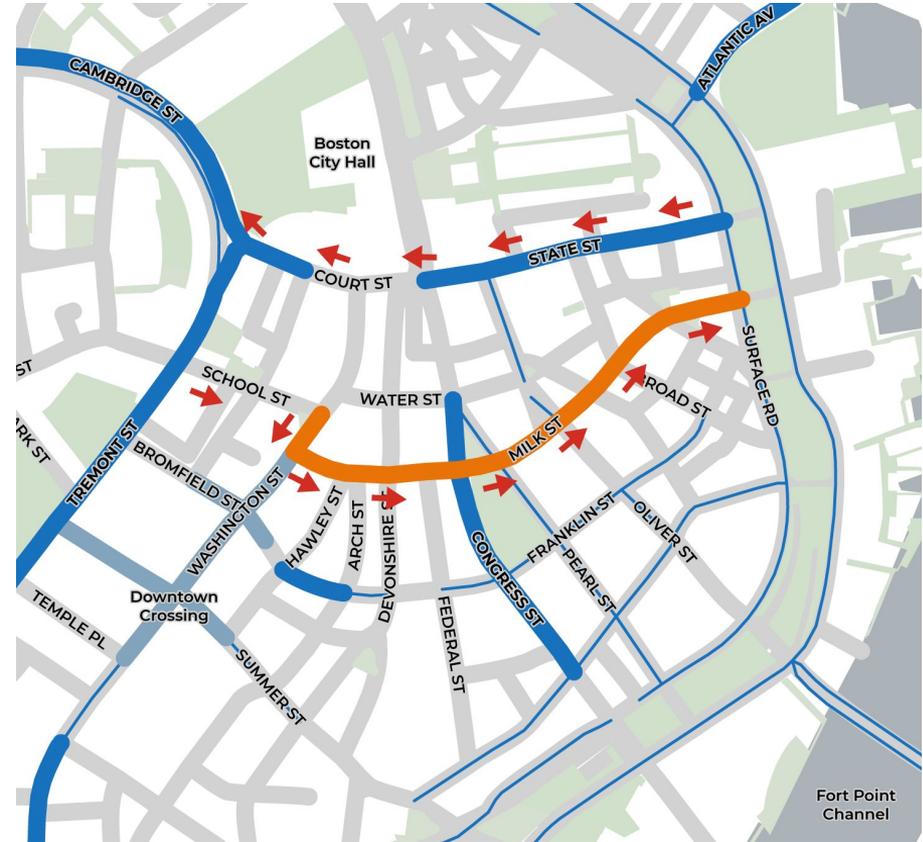
**CONTRAFLOW
BIKE LANES**



**TRAFFIC-
CALMED
LOCAL
STREETS**

Project goals

- ▶ Priority bike network expansion project
- ▶ Provide an eastbound pair to State Street in the bicycle network
 - Bicyclists get to Milk Street via School Street and Washington Street
- ▶ Enhance Downtown Crossing as the walkable hub of the Boston region
- ▶ Create legal space for deliveries and pickup/dropoff activity



Outreach to date

- ▶ Presentation to Downtown BID public realm working group (Sep 2022)
- ▶ Postcards (~2,000) (Dec 2022)
- ▶ Business walks (~ 30 ground-floor businesses) (Dec 2022)
- ▶ One-on-one conversations with stakeholders
- ▶ Ongoing coordination with Downtown BID

Data inputs

Traffic counts (Fall 2022)

- ▶ Turning movement counts (TMCs) at most intersections along Milk Street
 - Counts the number of vehicles turning at or going through an intersection
 - Used to calibrate traffic signals and inform design
- ▶ Automatic traffic recording (ATRs) at key locations
 - Volume data by road user class
 - Speed data for motor vehicles

StreetLight data

- ▶ “Big data”: anonymized smartphone data
- ▶ Shows us a % breakdown of where drivers on a given block are going
- ▶ Protects user privacy:
 - Only percentages and not raw numbers
 - Trips are grouped by Census Block Groups, not by individual start and end points

Usage patterns

People walking are the dominant users along the entire corridor

- ▶ At Milk & Washington, **85.5%** of intersection movements were pedestrians

Milk Street is a primary commuting route for people bicycling

- ▶ Bicyclists are **25% - 30%** of all traffic during the AM peak. Around **12%** of all day traffic throughout the project area

Curbside demand is significant, especially close to Washington Street

Motor vehicle speeds and volumes are relatively low

- ▶ **2,500 - 3,500**: daily motor vehicle volumes along Milk Street
- ▶ **19 - 23 mph**: 95th percentile motor vehicle speeds



**Design goal:
enhance the
pedestrian realm
and reduce the
impact of motor
vehicles**



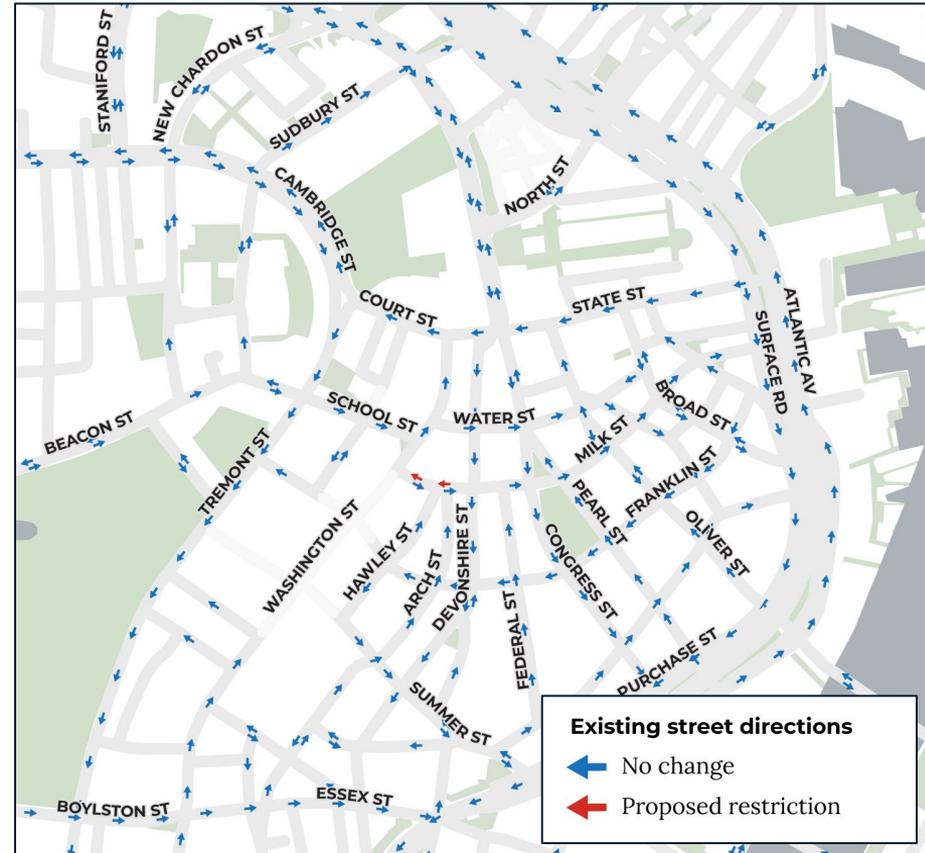
Design goal: protected space for biking

- ▶ Because of intense curbside demand, the existing unprotected bike lanes do not work.
- ▶ Our project goals of a continuous protected bike lane *and* legal space for short-term parking are **only possible if we make Milk Street one way for general traffic**



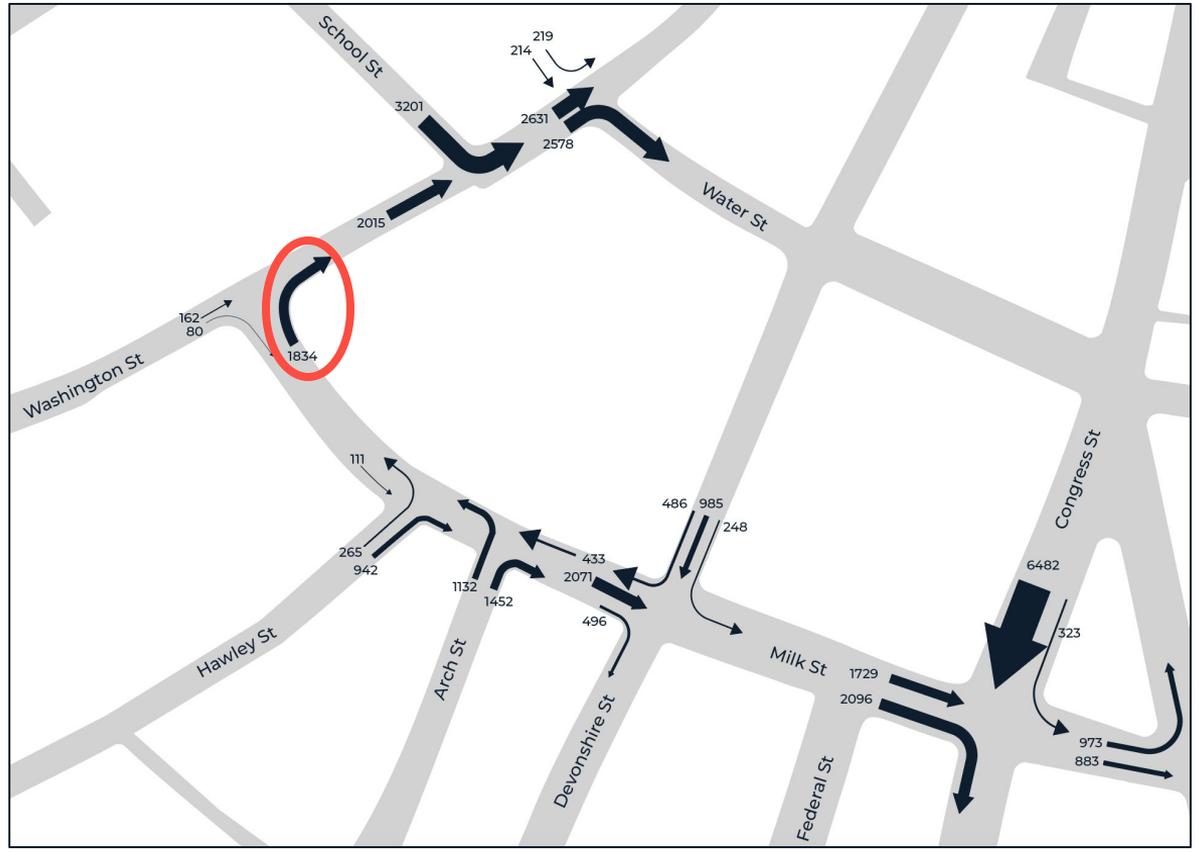
Circulation option 1: eastbound Milk St.

- ▶ Restrict westbound traffic on Milk St between Devonshire St and Washington St
- ▶ Maintain eastbound flow east of Devonshire Street
- ▶ Opens up possibilities to expand the downtown pedestrian zone
- ▶ Impacts around 2,000 vehicle movements



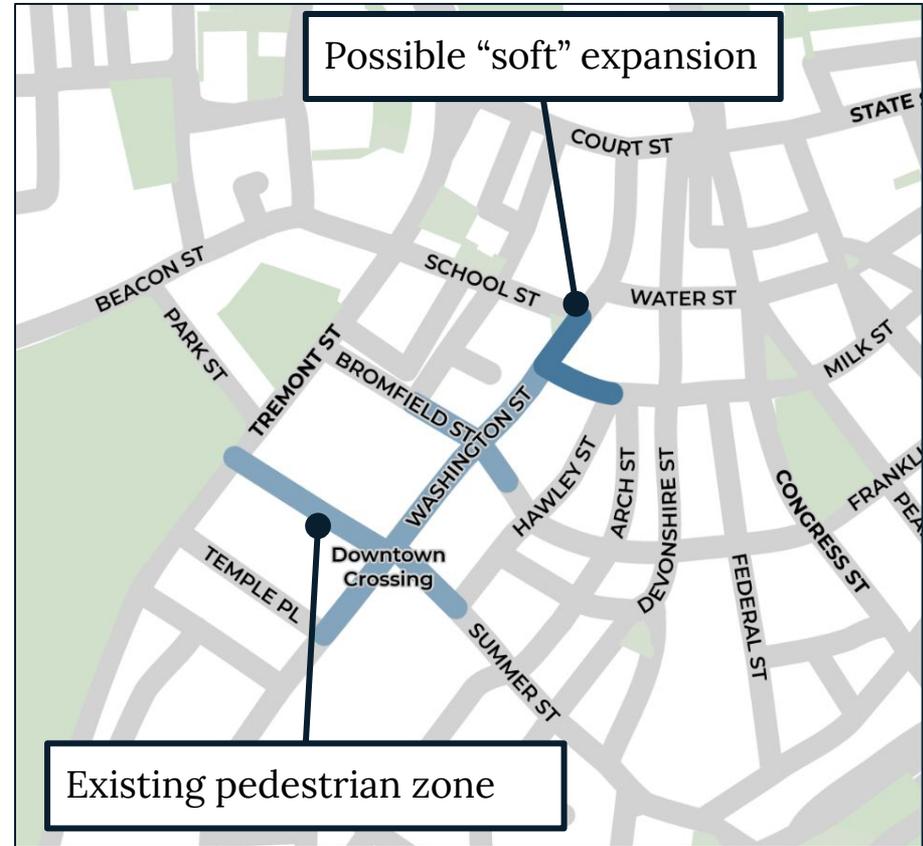
Reduces vehicle volumes on Washington Street

- ▶ Removes about 2,000 vehicles per day that enter Washington Street from Milk Street
- ▶ Only vehicles already on Washington St can access these blocks



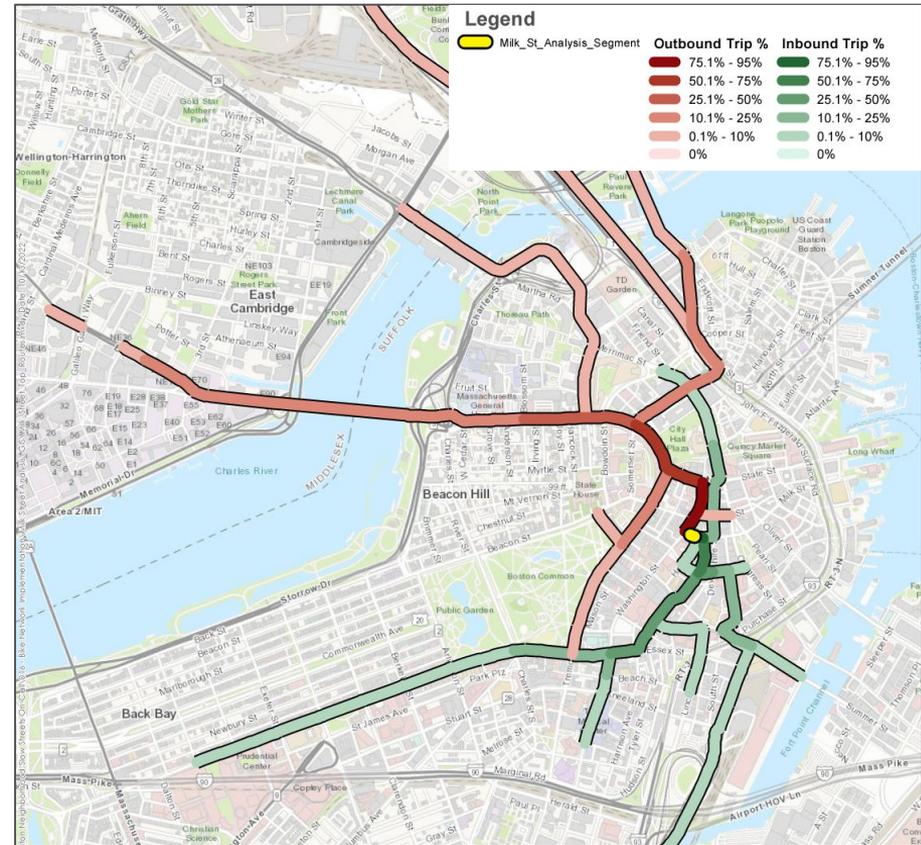
Pedestrian zone “soft” expansion possible

- ▶ Expands the pedestrian zone without any heavy construction using street direction changes
- ▶ Reduce pedestrian/vehicle conflicts at several busy crosswalks and pinch points



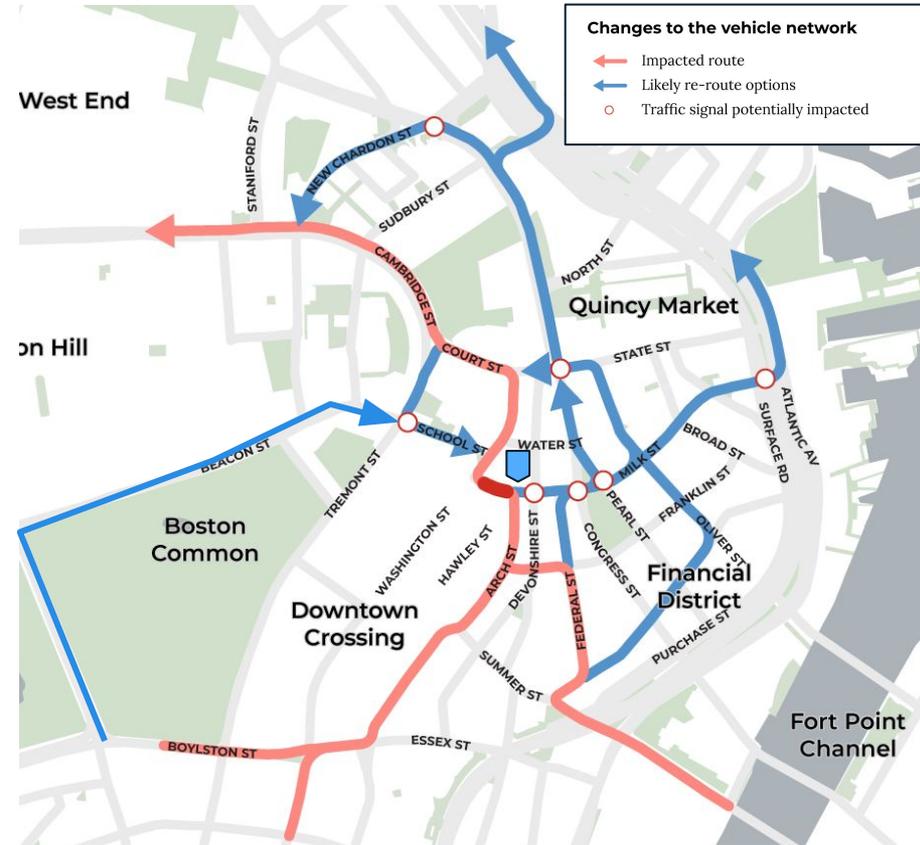
Some vehicle routes would be impacted

- ▶ We used StreetLight to look at the top inbound and outbound routes for the affected block.
- ▶ The change would remove one westbound link in the downtown street network



Vehicle access is still possible

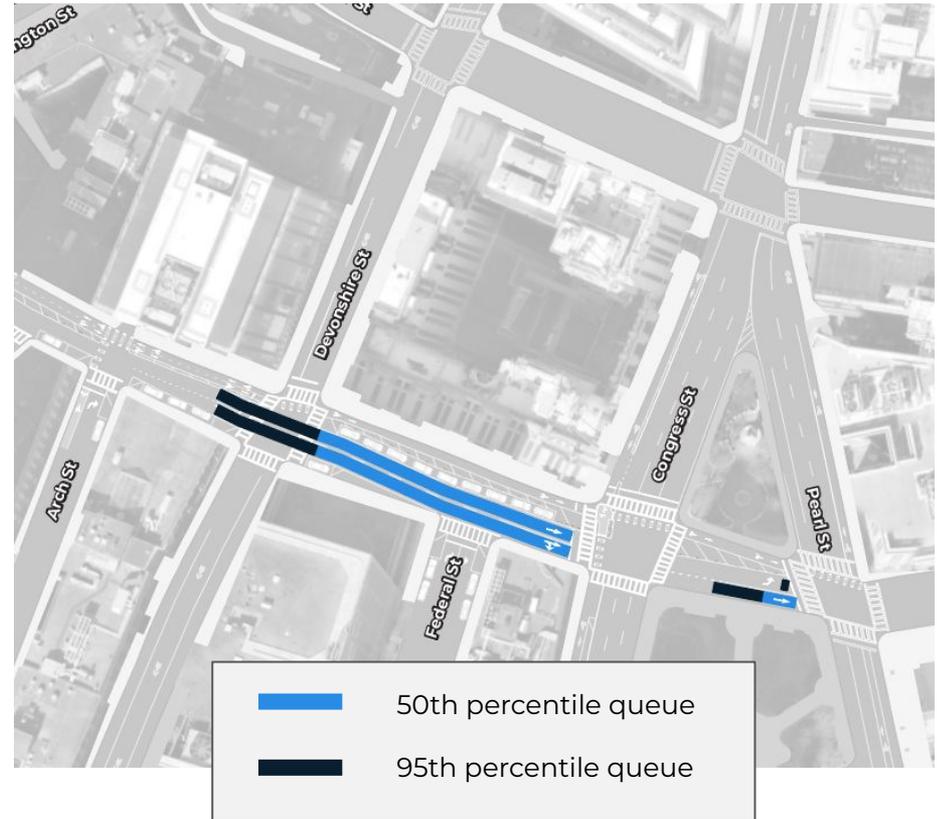
- ▶ Drivers will still be able to access destinations in the area, including garages.
- ▶ We can expect changes to vehicle volumes at nearby intersections as drivers reroute
- ▶ We'll look closer at these and make changes to signal timing where needed.



Worst-case vehicle queue impacts

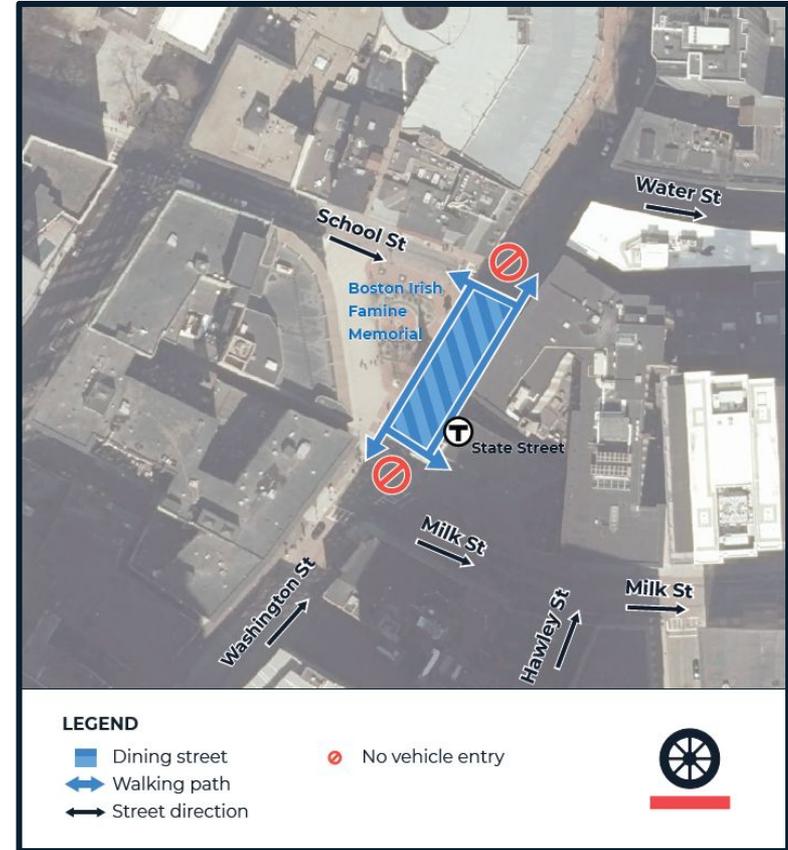
- ▶ Reassigning trips across the network is imprecise. We don't know who will take a different route.
 - We reassigned *all westbound* movements on Milk Street as *eastbound* movements.
 - We did not assume any reduction in trips or dispersion throughout the network.
- ▶ Peak vehicle queues at Congress Street could exceed the capacity of the block.

Any impacts to queues should be weighed against expanding pedestrian space on Washington Street and Milk Street



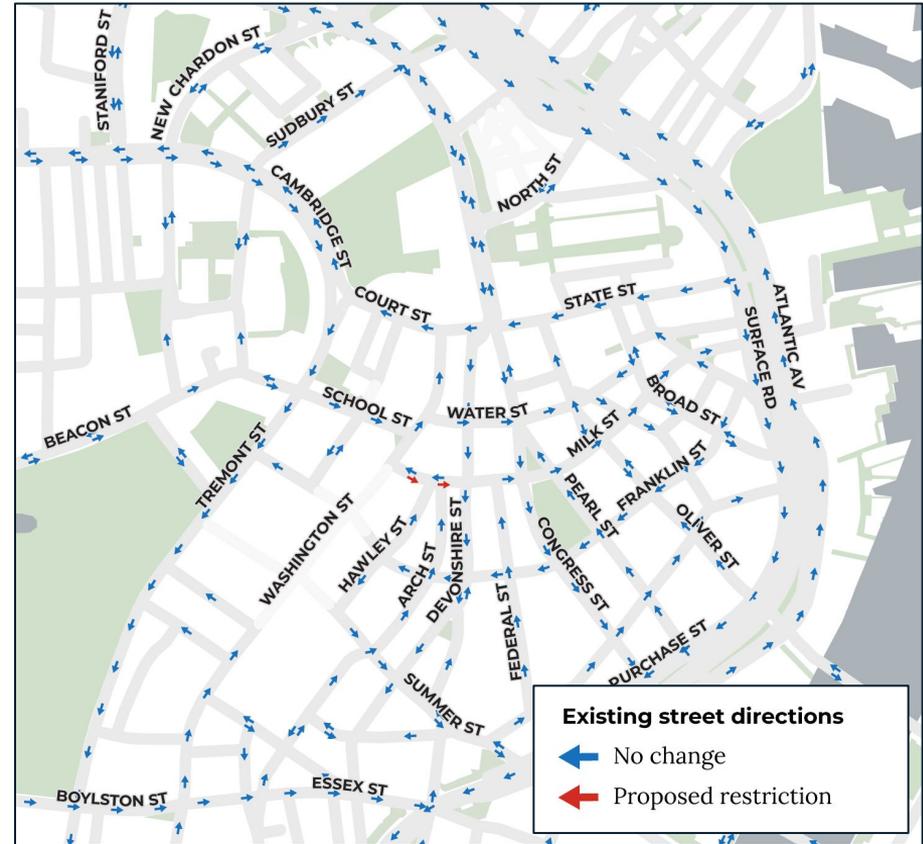
Possible future “quick-build” pedestrian plaza

- ▶ Lead by Public Realm team
- ▶ Separate from, but complementary to, the bike lane project
- ▶ Program a unique space for downtown Boston
- ▶ Made possible by converting Milk Street to one-way eastbound



Circulation option 2: westbound Milk St.

- ▶ Restrict eastbound traffic on Milk St between Devonshire St and Washington St
- ▶ Pedestrian zone stays its current size with this option.
- ▶ Impacts around 80 vehicle movements (as compared to ~2,000 for Option 1)
- ▶ No changes to preferred design east of Devonshire Street



Eye-level view of the concept



Next Steps

- ▶ Finalize design approach
- ▶ Continue with stakeholder engagement
- ▶ Work on an updated curb regulation proposal
- ▶ Design work
- ▶ Moving towards installation in 2023

