

TREMONT ST SAFETY IMPROVEMENTS

(Melnea Cass Blvd to Herald St)

Thursday, April 12, 2018
Castle Square Community Center



Boston Transportation Department
Gina N. Fiandaca, Commissioner

AGENDA

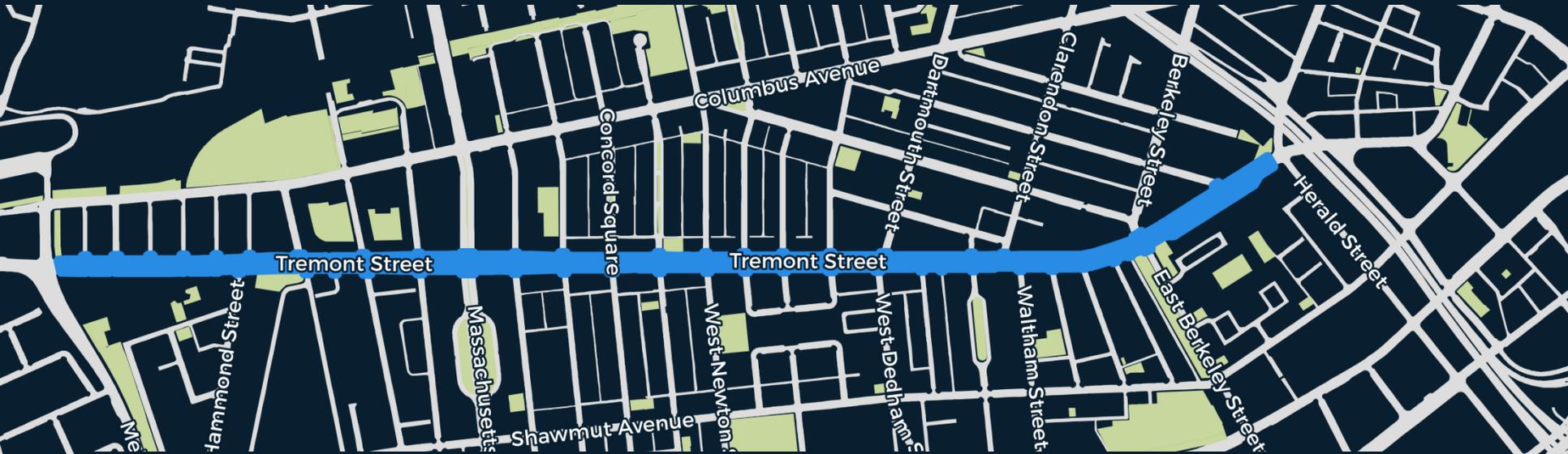
- Share the safety improvements coming this spring
- Discuss the existing conditions
- Develop and share your goals for the project
- Discuss potential changes and offer your ideas for each block

VISION ZERO

- Commitment to eliminate all fatal and serious injuries by 2030
- Designing for the most vulnerable benefits everyone

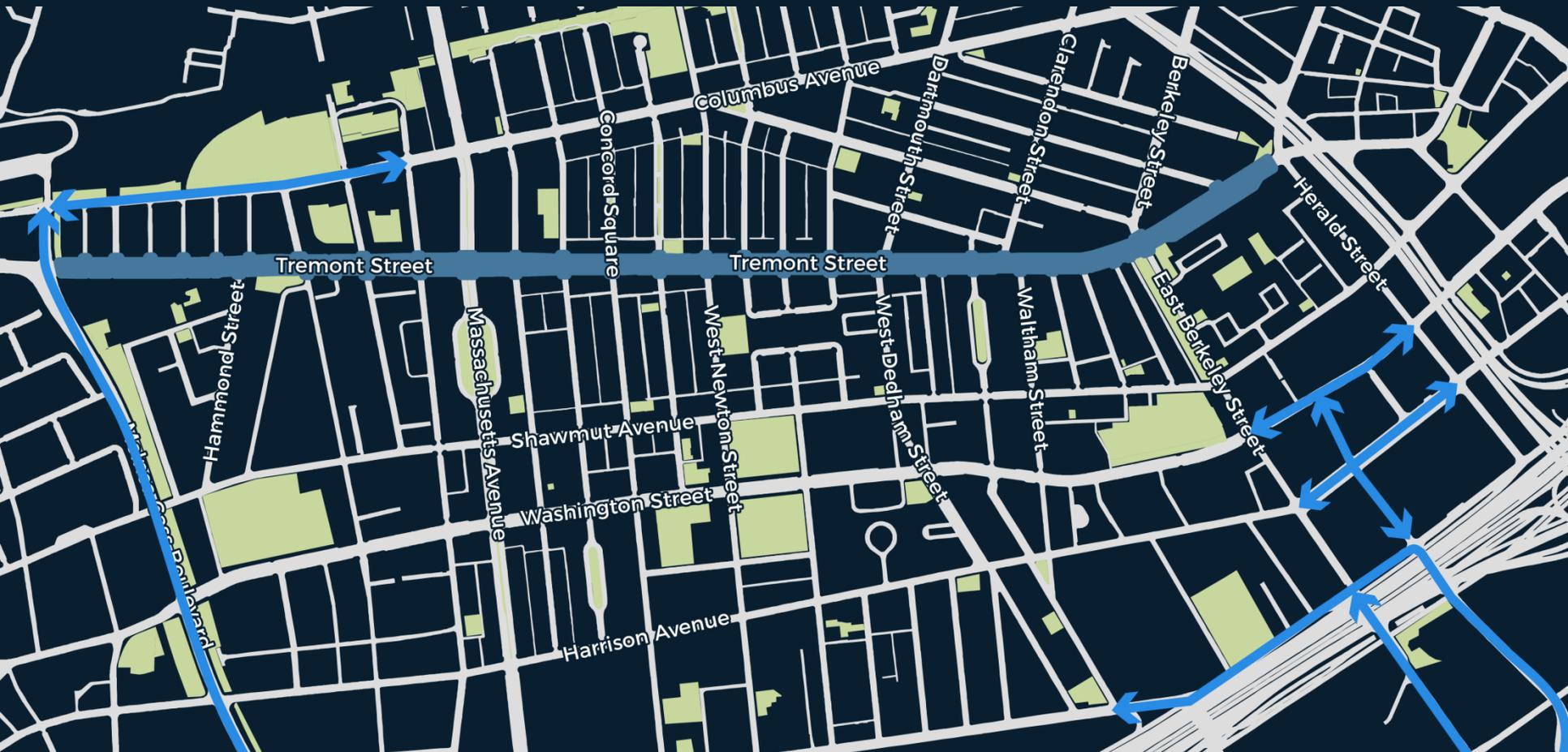


PROJECT LIMITS

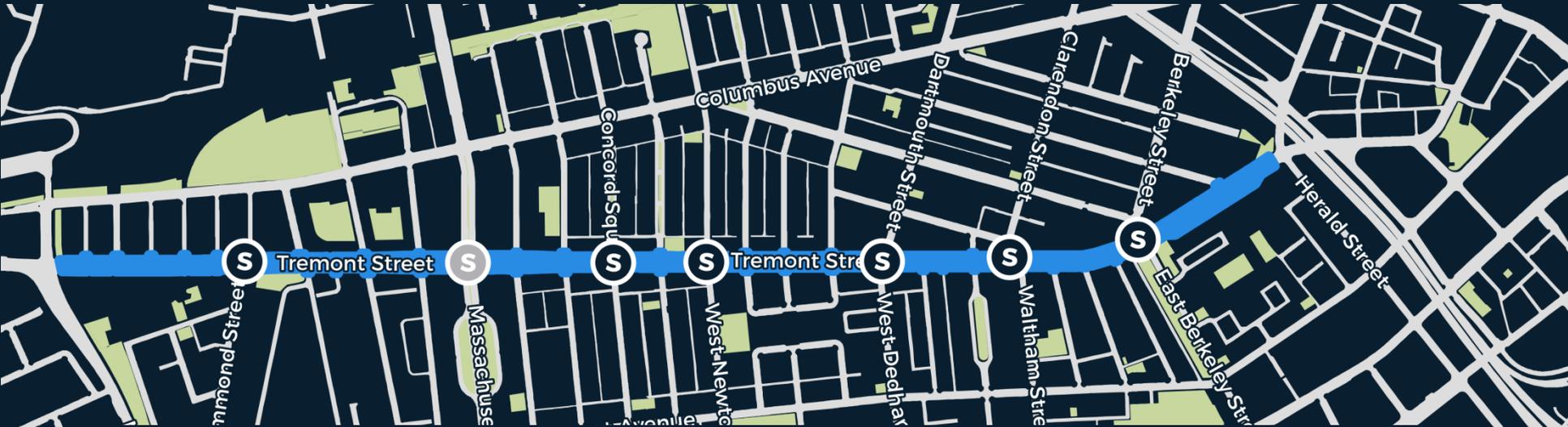


- Focus on **Tremont St** between Melnea Cass and Herald St
- Understand **impacts and possibilities** along the broader corridor (e.g., Warren, Shawmut)

NEARBY PROJECTS



INTERSECTIONS IN PROJECT LIMITS



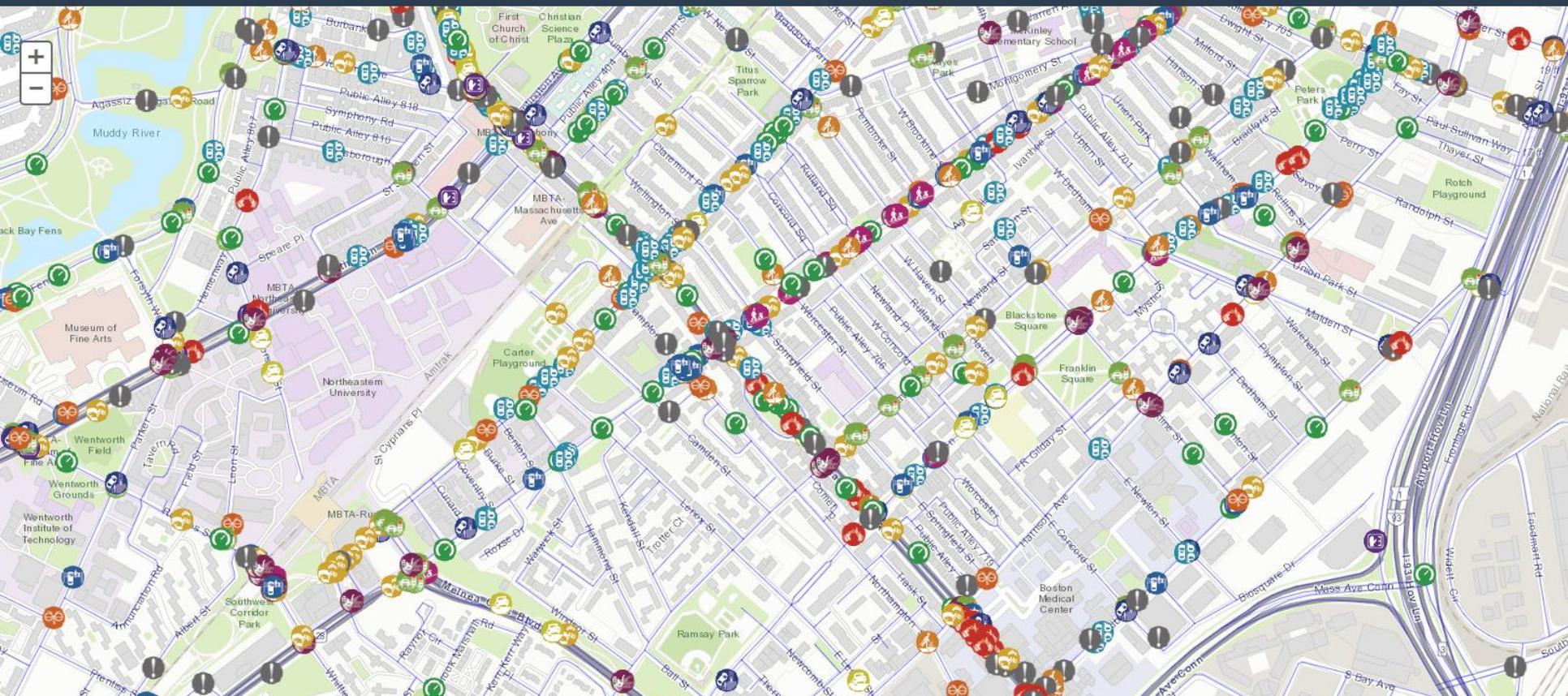
- 6 signalized intersections
- 20 unsignalized intersections

BUS ROUTES



YOUR REPORTED CONCERNS

Vision Zero Boston Safety Issues



YOUR REPORTED CONCERNS

Vision Zero Boston Safety Issues

So far, we've heard about:

- Too many lanes to cross at once
- Long wait at signals
- Drivers not yielding to people crossing
- Double-parking
- Concerns about speeding drivers
- Uncomfortable bicycling
- Maintenance of pavement markings and crosswalks

IMPROVEMENTS COMING THIS SPRING

DAYLIGHTING:

PEDESTRIANS: Better visibility where curb extensions do not exist.

DRIVERS: Restricting parking at crosswalks improves sight lines to pedestrians crossing the street.

TREMONT STREET

FLEXPOSTS:

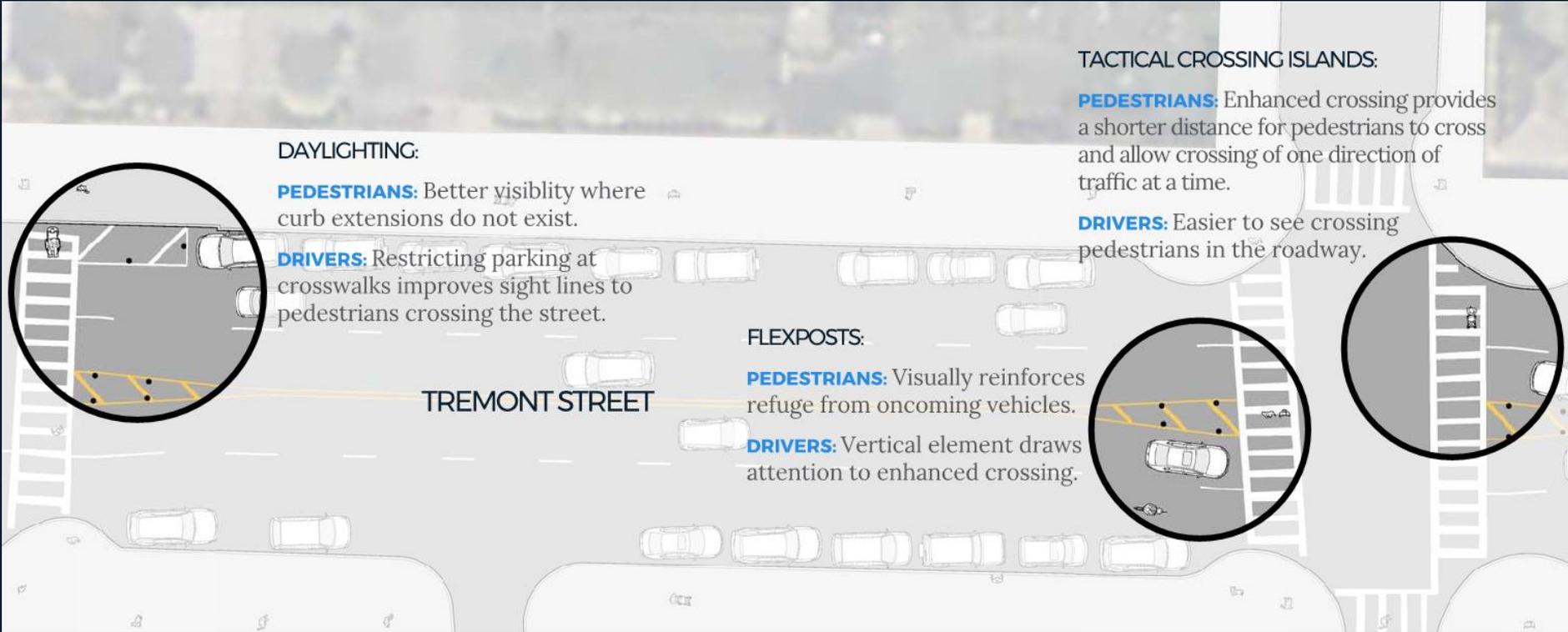
PEDESTRIANS: Visually reinforces refuge from oncoming vehicles.

DRIVERS: Vertical element draws attention to enhanced crossing.

TACTICAL CROSSING ISLANDS:

PEDESTRIANS: Enhanced crossing provides a shorter distance for pedestrians to cross and allow crossing of one direction of traffic at a time.

DRIVERS: Easier to see crossing pedestrians in the roadway.



EXAMPLE: CROSSING ISLAND



EXAMPLE: DAYLIGHTING



LOOKING AHEAD: SCOPE

- Potential changes could include things like:
 - Signal timing and phasing
 - Lane allocation
 - Curbside uses
 - Relocating bus stops
 - Curb ramps
 - Potentially more, as determined through the process!
- Scope doesn't include major changes to curb lines

A blue-tinted photograph of a city street intersection. In the foreground, a crosswalk with white stripes is visible on the asphalt. In the middle ground, a man and a child are walking across the street. Several cars are parked along the curb, and a white utility truck is also present. In the background, there are multi-story buildings, including one with a large mural of a stylized figure. The text "EXISTING CONDITIONS" is overlaid in large, white, bold, sans-serif capital letters across the center of the image.

EXISTING CONDITIONS

WALK & BIKE COMMUTERS



WALK, BIKE & TRANSIT COMMUTERS



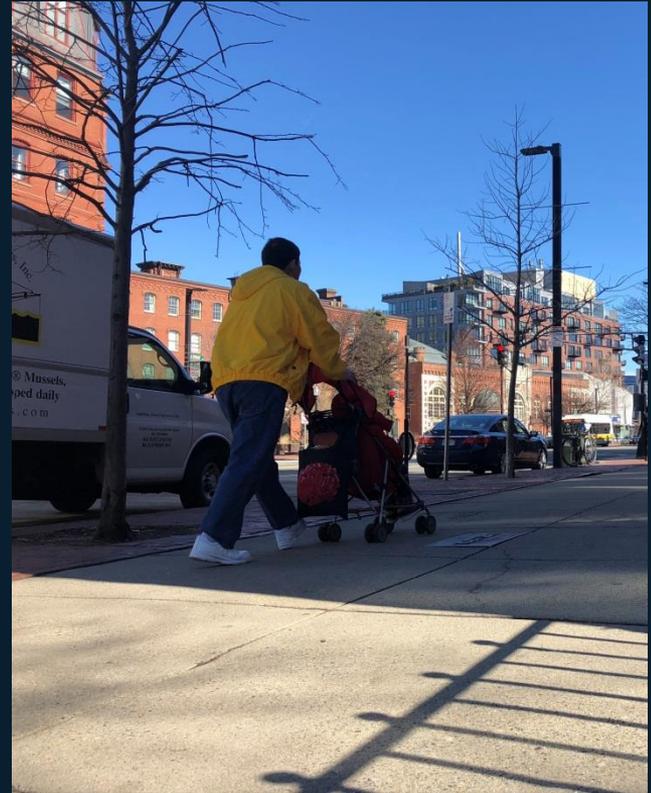
HOUSEHOLDS WITHOUT VEHICLE



DATA: PEOPLE ON TREMONT ST

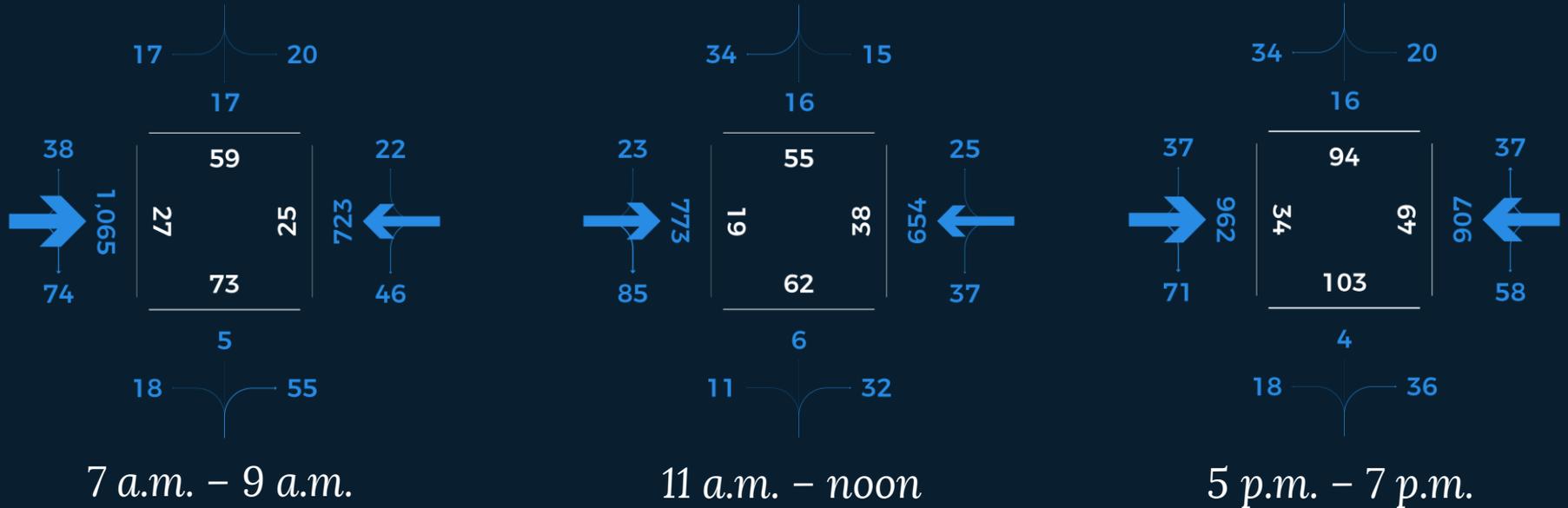
Understanding how people use the corridor informs potential safety improvements.

- Where are people crossing?
- How many people are turning at intersections?



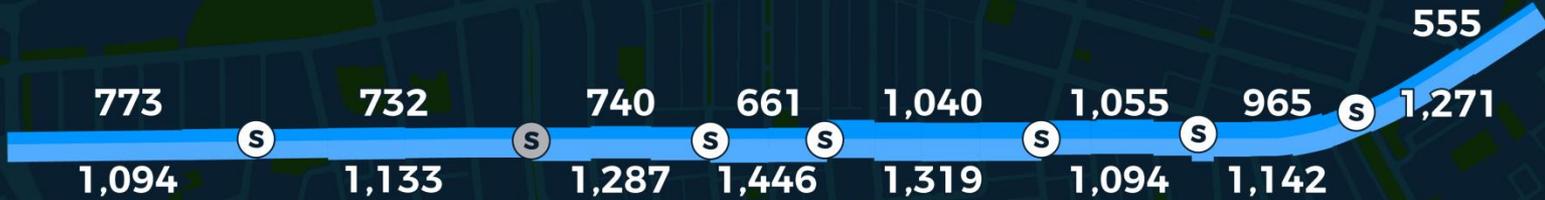
DATA: PEOPLE AT INTERSECTIONS

INBOUND →

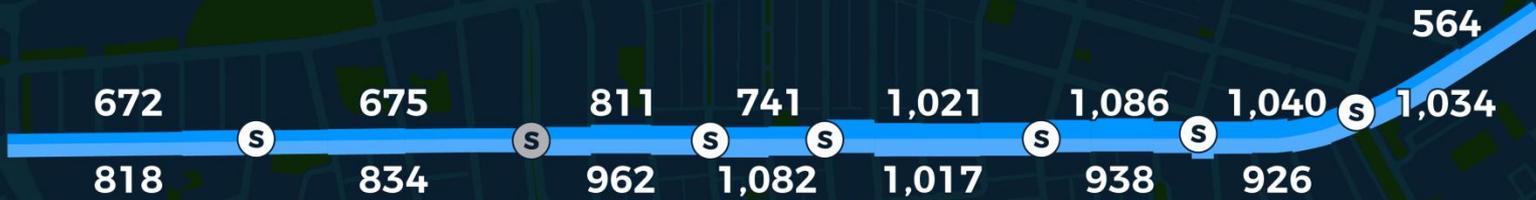


Information for all intersections is available to review after the presentation.

DATA: VEHICULAR VOLUMES 7 AM- 9 AM



DATA: VEHICULAR VOLUMES 11 AM - 1 PM

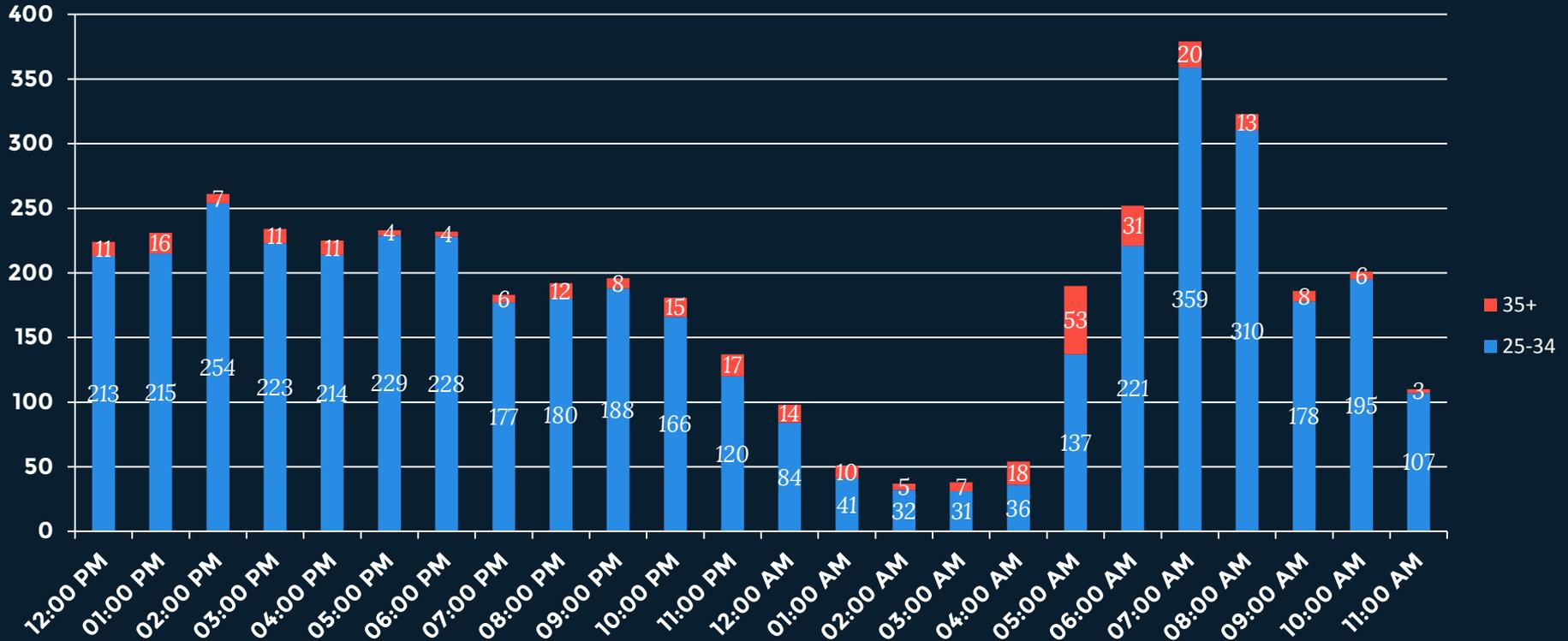


DATA: VEHICULAR VOLUMES 4 PM - 6 PM



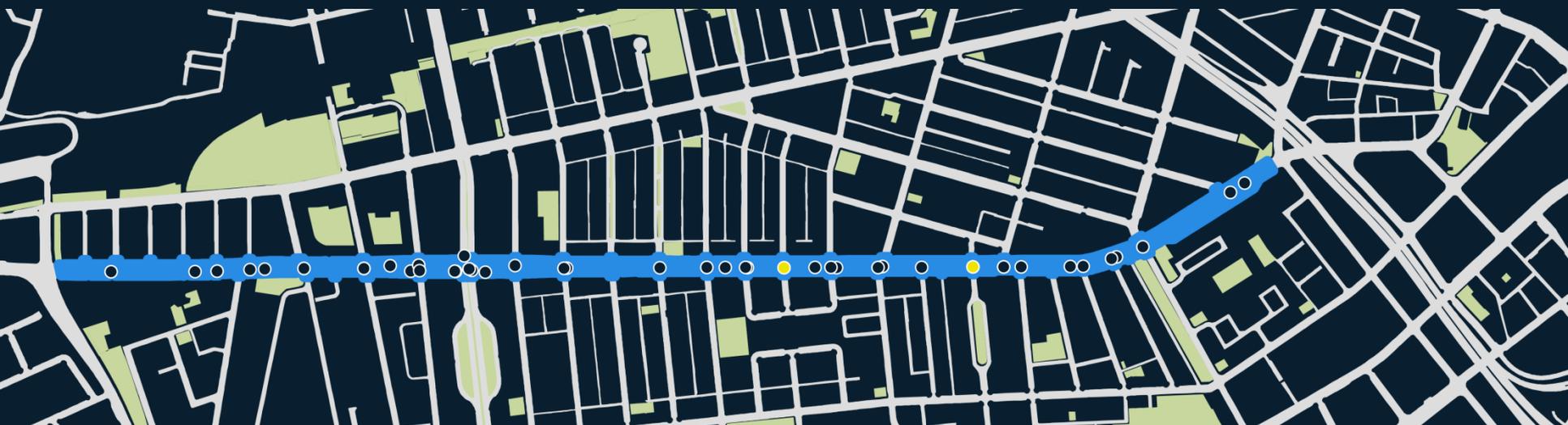
DATA: VEHICULAR SPEEDS

NUMBER OF DRIVERS EXCEEDING 25 MPH ON TREMONT ST NORTH OF BURKE ST



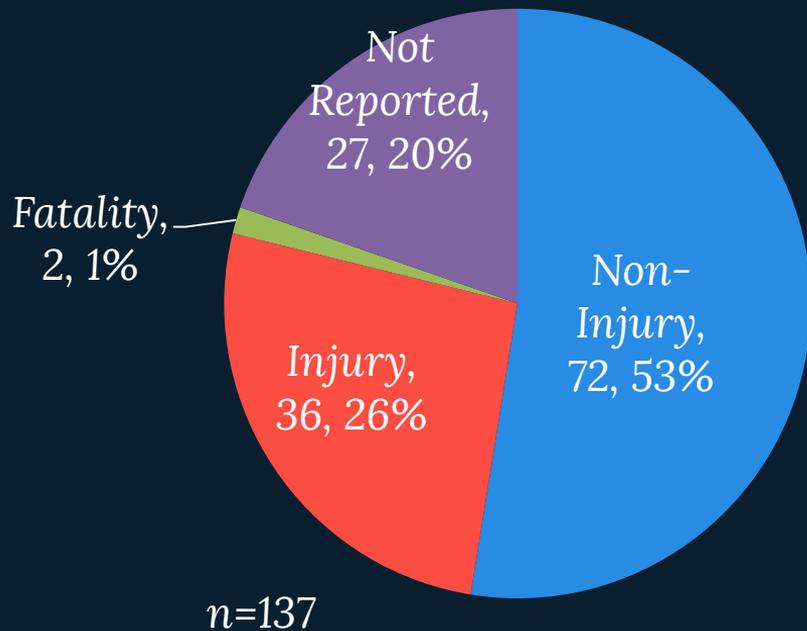
Noon on Dec 4, 2017 through noon on Dec 5, 2017

DATA: CRASHES WITH EMS RESPONSE

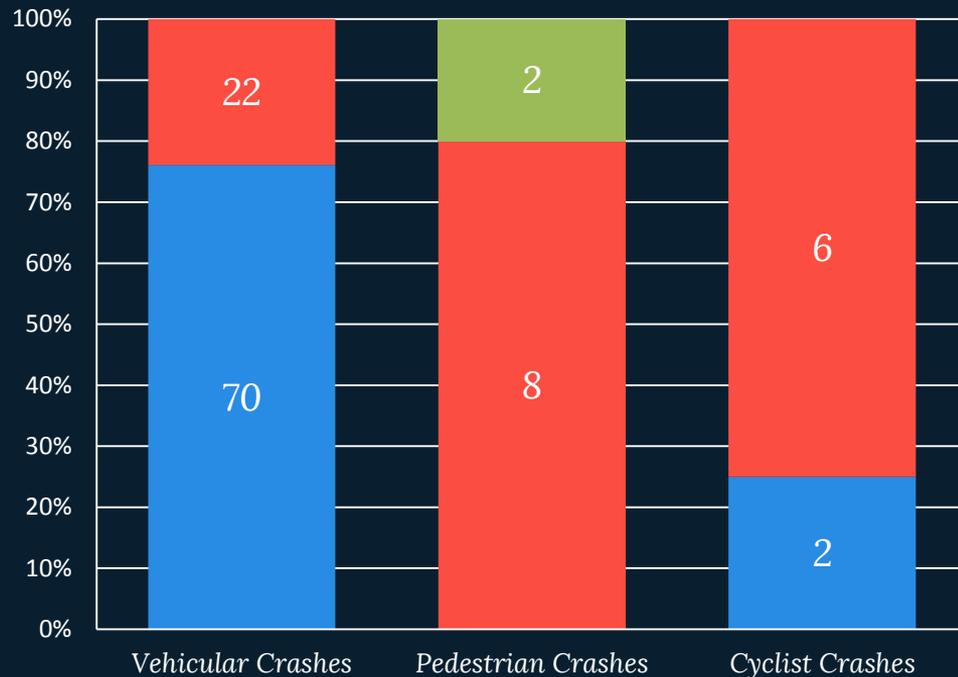
- 
- The map displays a street network with a prominent blue line highlighting a specific street. Along this blue line, there are 53 small circular markers representing crash locations. Most markers are white with a black outline, but two are solid yellow. The background is a dark blue map with light green and white street outlines.
- 53 injury crashes 2015-2017, including 19 that involved a person walking and 9 with a person bicycling
 - 2 fatalities, both people walking

BPD: CRASH RESPONSE DATA (2015-17)

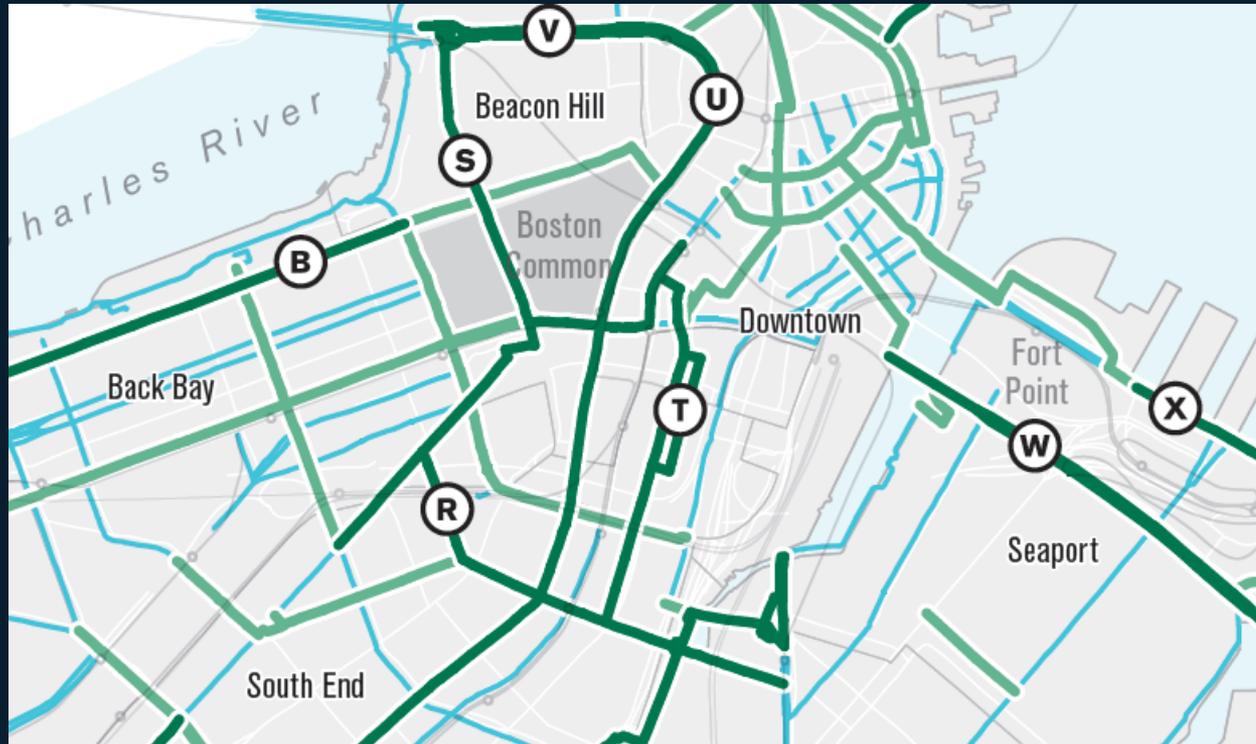
INJURY SEVERITY



INJURY AND FATALITY BY MODE



PRIORITY BIKE CORRIDORS



Boston Bike Network

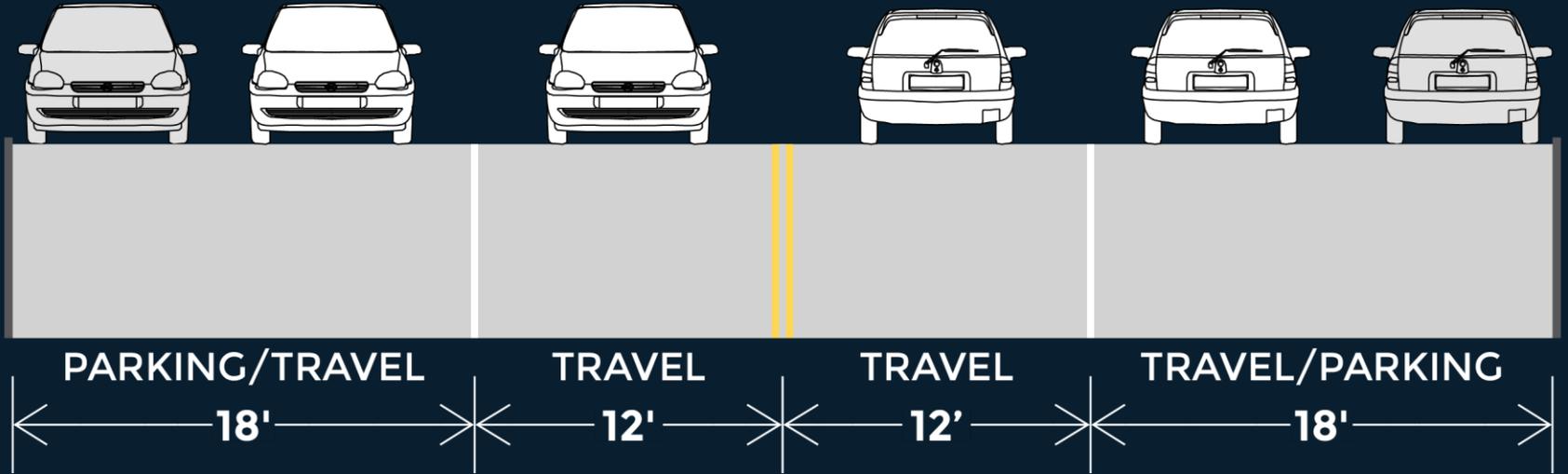
Phase

Priority Projects

15 Years

Existing Bike Network

TYPICAL MID-BLOCK BETWEEN CURBS



WHAT ARE OUR COMMON GOALS?

Talk with someone seated near you. What are your shared goals for any design changes? Write down your top two or three.

WHAT ARE OUR COMMON GOALS?

Talk with someone seated near you. What are your shared goals for any design changes? Write down your top two or three.

Some ideas to get you started:

- Improve traffic safety
- Shorter pedestrian crossings
- Improve vehicle traffic flow
- Provide more space for deliveries, loading, pick-up/drop-off
- Better bus stops
- Dedicated space for bicyclists
- Walk-friendly public realm with space for cafes
- Longer hours/more hours for metered and visitor parking
- Longer hours/more areas for resident-only parking
- Dog-only crosswalks

POSSIBLE DESIGN TOOLS

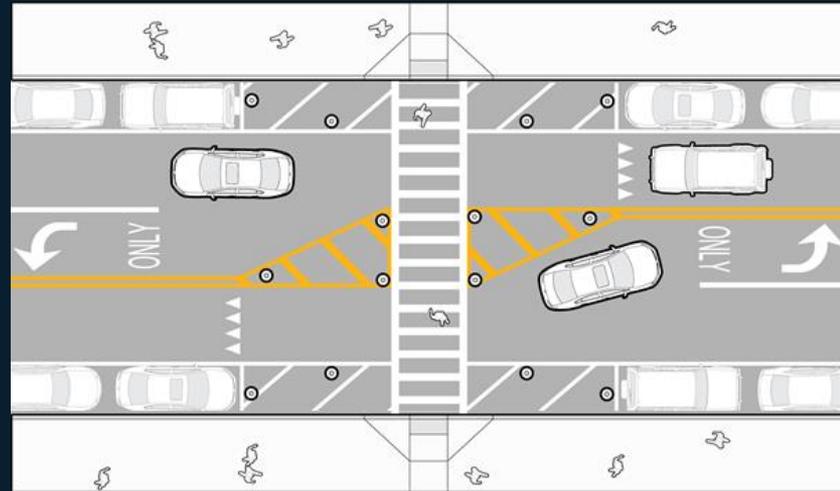
A blue-tinted photograph of a city street intersection. In the foreground, a bus is stopped at a crosswalk, with the destination '43 PARK & TREMONT' visible on its front. Several cars are parked or moving in the background. The street is lined with multi-story brick buildings. A 'ONE WAY' sign is visible on the left, and a 'SLOW' sign is on the right. The overall scene is captured in a clear, bright blue light.

EVIDENCE-BASED SAFETY COUNTERMEASURES

- We will explore engineering improvements related to:
 - Unsignalized crossings
 - Signalized crossings
 - Along the street/non-crossing locations
- We can support non-engineering measures

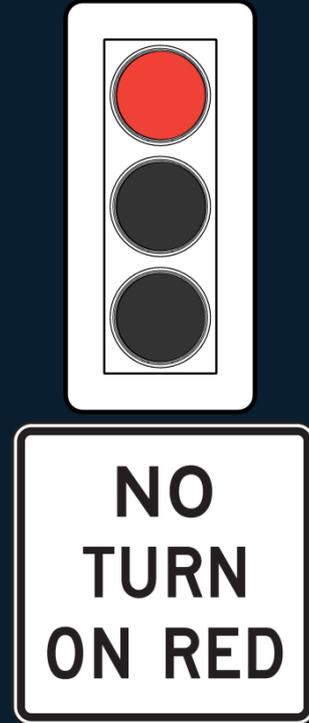
LANE ALLOCATION

- Proven safety countermeasure
- Analyze capacity at intersections and along the street before advancing options
- Strategic lane reduction can:
 - Eliminate multiple-threat crash risk
 - Decrease crash severity
 - Improve speed limit compliance



SIGNALIZED CROSSINGS

- No Turn On Red



SIGNALIZED CROSSINGS

- *No Turn On Red*
- Shorter phases and cycles
 - People on foot are unlikely to obey signals when faced with long delay
 - Concurrent phasing reduces delay for everyone



SIGNALIZED CROSSINGS

- *No Turn On Red*
- *Shorter phases and cycles*
- Pedestrian head-start crossing
 - Drivers are held for 4 to 6 seconds while people can begin walking



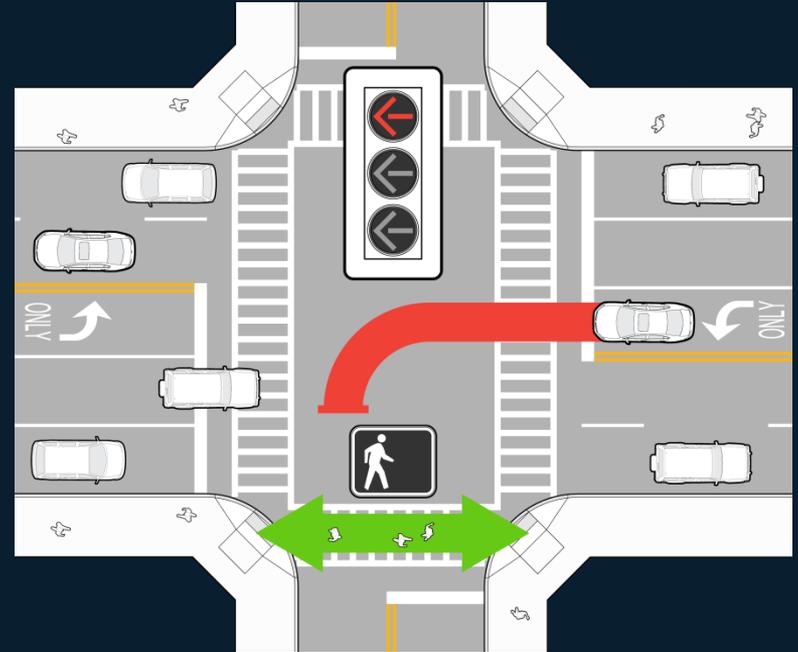
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SIGNALIZED CROSSINGS

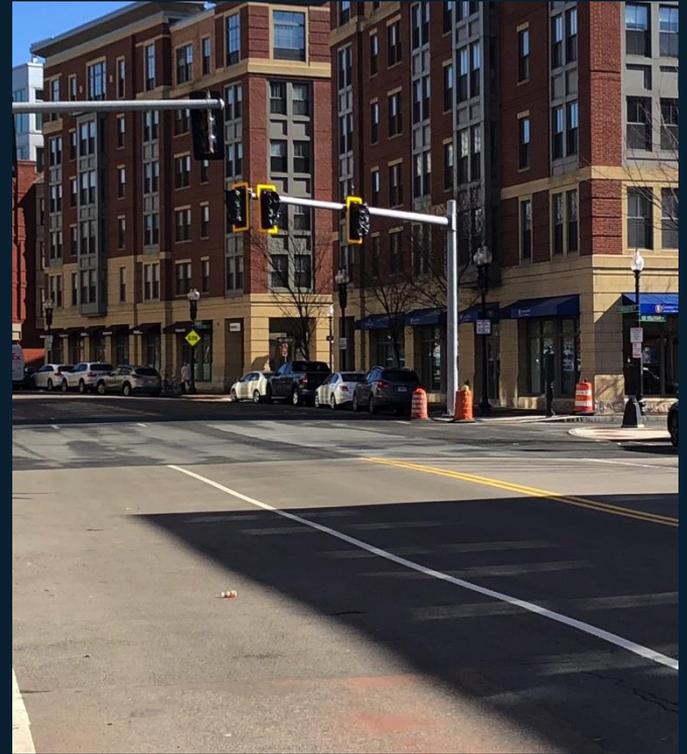
- *No Turn On Red*
- *Shorter phases and cycles*
- *Pedestrian head-start crossing*
- “Protected” left turns
 - Left turns are not allowed while thru movement happens
 - Further crash reduction at end of light cycle



CAN WE SIGNALIZE MORE CROSSINGS?

Full signalization will depend on data analysis and engineering observation

- Full signals should be no closer than 300 ft
- May have to be a long-term discussion



Washington/Waltham

REFUGE ISLANDS

- Proven safety countermeasure
 - Can reduce pedestrian crashes by 32%
 - Often used with curb extensions and other visibility enhancements



New York City DOT

REFUGE ISLANDS

- *Proven safety countermeasure*
- Standard size is 6' wide by 20' long
 - Similar size to tactical crossing islands being installed this spring
 - Unlikely to require lane reduction



New York City DOT

REFUGE ISLANDS

- *Proven safety countermeasure*
- *Standard size is 6' wide by 20' long*
- *Can be wider!*
 - *Opposing side to a left-turn lane*
 - *More comfortable for multiple people, people in wheelchairs*
 - *Requires lane reduction*



New York City DOT

RAISED TRAFFIC-CALMING DEVICES

Effective in managing driver speeds on **local** streets

Not well-suited across larger, multi-lane streets:

- ✘ Speed humps
- ✘ Speed tables
- ✘ Raised intersections



Paul Gore St, JP

RAISED TRAFFIC-CALMING DEVICES

Not well-suited across
larger, multi-lane streets

BUT

Effective in managing
turn speeds onto local
streets



Cambridge, MA

DEDICATED SPACE FOR BICYCLISTS

- Standard bike lane
 - Allocates an area *between driving lane and parking lane* for bicyclists
 - Generally 5 or 6 feet wide
 - Challenges with driver0-side door opening into lane and with double-parking
 - Requires lane reduction



Commonwealth Ave

DEDICATED SPACE FOR BICYCLISTS

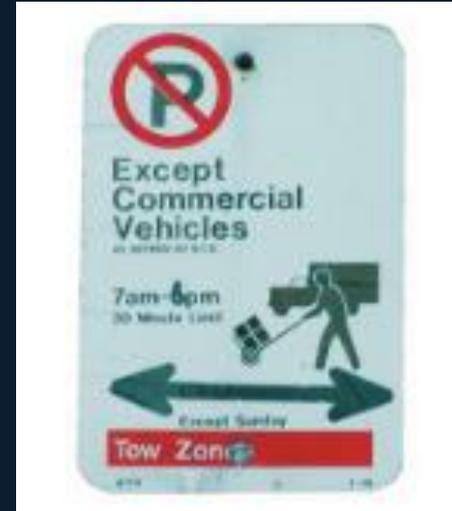
- *Standard bike lane*
- Separated bike lane
 - Allocates an area ***between the curb and parking lane*** for bicyclists
 - Generally 4 to 6 feet wide with a 3 or 4 buffer
 - Buffer allows for opening car doors
 - Requires significant lane reduction



Beacon St

CURB MANAGEMENT

- Loading zones
 - Longer hours, longer spaces needed?
 - Scheduling walk with businesses to understand needs
 - Will change available space for visitors, residents
 - Potential to ask TNCs to use loading zones for passengers



CURB MANAGEMENT

- *Loading zones*
- Meters
 - Longer hours?



CURB MANAGEMENT

- *Loading zones*
- *Meters*
- Parking enforcement officers
 - Opportunity to ask for targeted efforts
 - Coordinate when design changes are made

POTENTIAL SUPPORTIVE STRATEGIES

- Public education campaigns
- Police enforcement

Most effective when paired with engineering changes



WalkUP Roslindale

PROPOSED NEXT STEPS

FALL 2017	<i>Collect data, begin observations</i>
TONIGHT	<i>Review existing conditions and set shared goals</i>
MAY 2018	<i>Install short-term safety improvements (weather dependent)</i>
SUMMER	<i>Develop draft designs</i>
SEPT. 2018	<i>Discuss options, select preferred concept</i>
FALL-WINTER	<i>Prepare final design</i>
SPRING 2019	<i>Share design for finishing touches</i>
SUMMER 2019	<i>Begin construction phases</i>

BLOCK-BY-BLOCK IDEAS

- Every block is displayed in the back of the room.
- Share your *specific* ideas, concerns, and comments about specific blocks and intersections.
- Use comment sheets for longer thoughts or write on sticky notes for quick ideas.



THANK YOU

*boston.gov/transportation/tremont
visionzero@boston.gov*