South Boston Transportation Action Plan

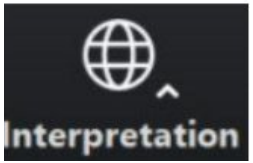
Public Meeting #2: Transportation Toolkit

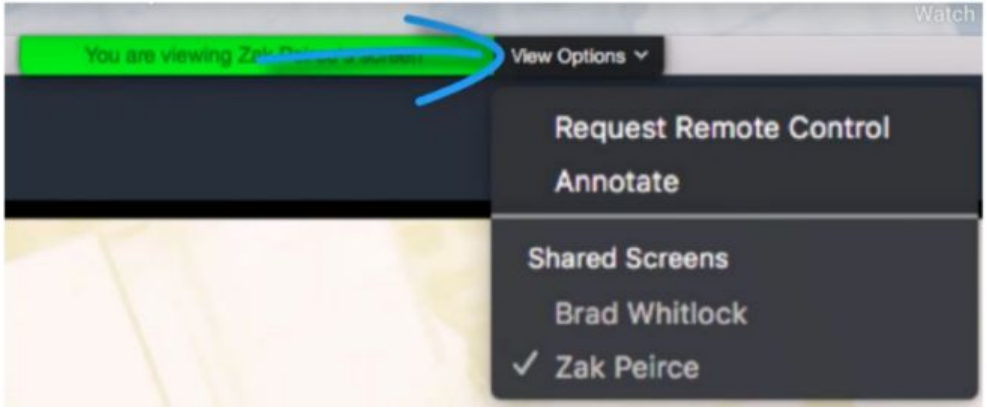
boston planning & development agency

June 2023

Welcome! ¡Bienvenidos!

- Si hablas español y prefieres escuchar la reunión en esta lengua utiliza el botón de “Interpretation” (Interpretación) para acceder al canal de audio en español.



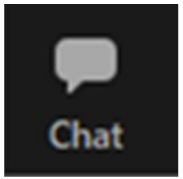


Meeting Recording

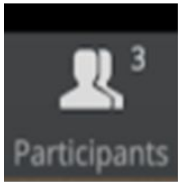
The BPDA will be recording this meeting and posting it on the South Boston Transportation Action Plan project webpage for those who are unable to attend the Zoom meeting live. The recording will include the presentation, Q&A, and public comments afterwards. Also, it is possible that participants may be recording the meeting with their phone cameras or other devices. **If you do not wish to be recorded during the meeting, please turn off your video camera and leave your microphone muted.**

Zoom tips

Your controls are at the bottom of the screen:

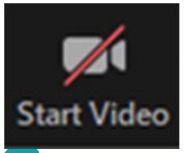


Use the chat to type a comment or ask a question at any time – Mark McGonagle from the project team will moderate the chat



To raise your hand, click on “Participants” at the bottom of your screen, and then choose the “Raise Hand” option in the participant box

Mute/unmute – Participants will be muted during the presentation – you may unmute during discussion if you raise your hand and it is your turn to talk



Turns your video on/off

Meeting Format

- We will present the content of the Guide to South Boston's Transportation Planning and the Development Review Process. We will have time for Q&A at the end of the presentation.
- To ask a question during the Q+A discussion, raise your hand and the presenter will ask you to unmute your microphone
- You can also ask a question or make a comment during the Q + A by using the chat function

Our Project Purpose

This plan will address safety concerns in the South Boston study area. We have heard your concerns. Our goal is to dig into these areas of concern and consider holistically how to improve safety and access between the South Boston study area and the rest of Boston (and beyond)

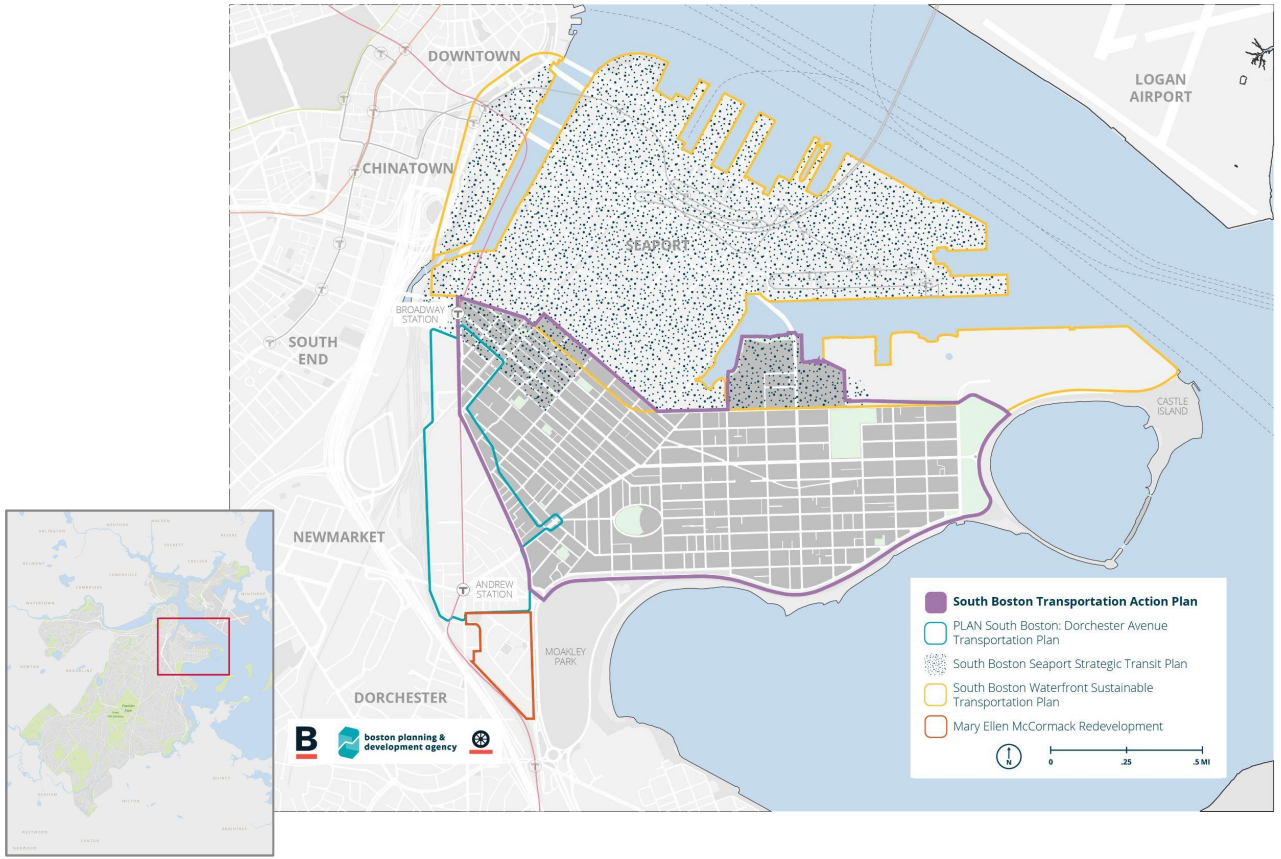
NOTE: South Boston Transportation Action Plan is shortened to **SBTAP** throughout this presentation

Our Meeting Purpose

South Boston is currently getting more attention towards transportation planning through the SBTAP, and has many development proposals. This meeting seeks to help the residents better participate in these initiatives and understand the process involved.

- An Overview of:
  - Transportation Planning
  - Street Design
  - the Intersection of Development Review and Transportation Improvements
- Questions & Answers, Next Steps

SBTAP Study Area and Context



Project Team

Boston Planning and Development Agency (BPDA)

- Jim Fitzgerald – Transportation & Infrastructure Planning
- Sam Roy - Transportation & Infrastructure Planning
- Eileen Michaud – Neighborhood Planning
- Mark McGonagle - Community Engagement
- Prataap Patrose - Neighborhood Planning
- Adam Johnson – Urban Design
- Chris Busch – Climate Change & Environmental Planning
- Travis Anderson – Climate Change & Environmental Planning
- Amber Galko – Climate Change & Environmental Planning
- Mike Christopher – Development Review

Boston Transportation Department (BTD)

- Pat Hoey – Transportation Planning
- Matt Moran – Transit Team
- Stefanie Seskin – Active Transportation
- Amy Cording - Engineering

Mayor's Office of Neighborhood Service (ONS)

- Anna White – South Boston Liaison

Boston Water & Sewer Commission (BWSC)

- Irene McSweeney
- Charlie Jewel

Boston Public Works Department (PWD)

- Jeff Alexis – Engineering Division

Consultant Team

NELSON NYGAARD

TOOLE DESIGN

Agency Partners

massDOT Massachusetts Department of Transportation

dcr Massachusetts

massport

boston planning & development agency

Project Schedule

What is Transportation Planning?

Generally, planning creates a vision for the future and outlines steps to achieve the vision.

Here's an example of how that could look in a transportation plan.

What Are The Planning Priorities Of Boston?

Which priorities are most important?

Boston's main transportation priorities are to expand access to transportation options, improve safety, and ensure reliability. Each priority has a primary goal:

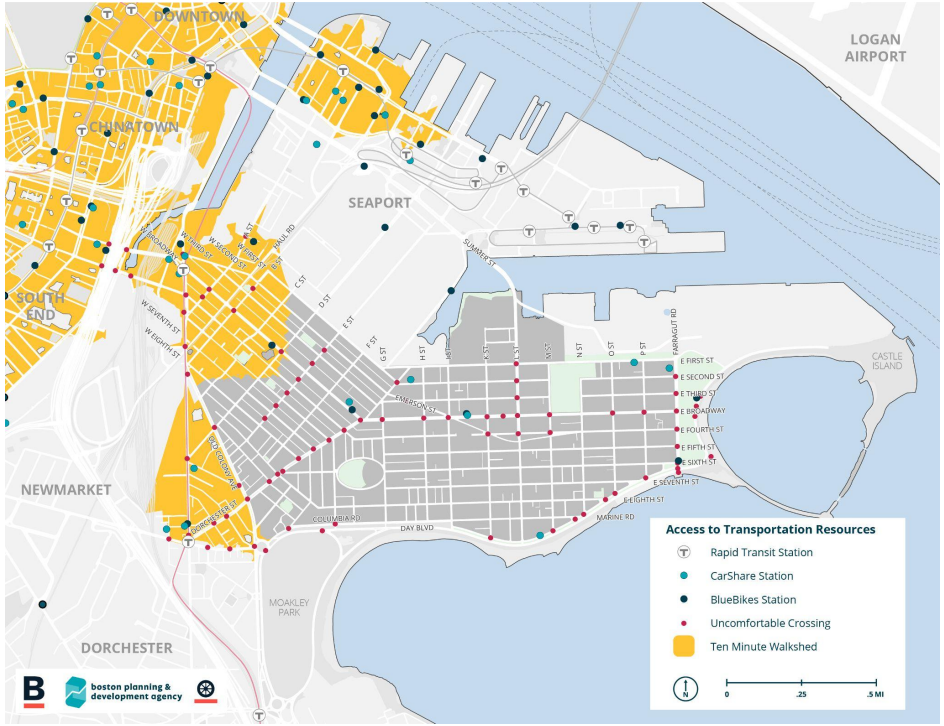
Are there other priorities?

Go Boston 2030 defines other priorities that make travel more equitable, foster economic opportunity, and respond to a changing climate. Example goals include:

What Are The Issues For The Study Area?

SBTAP uses Go Boston 2030 priorities as a lens to discover opportunities to improve travel in the Study Area. For example:

- In the Study Area, only 17 percent of residents are within a comfortable 10-minute walk of a rail station or Key Bus route stop, bikeshare, and carshare.
- Despite the close proximity to Downtown, 48% of South Bostonians have a commute that is 30+ minutes.
- South Boston's streets experience speeding and many crashes



Goals and Priorities

Safety of All Modes

Design for slow speeds, safe crossings, and safe turns at intersections.

Access to Transportation

Connect all parts of the neighborhood to the city.

Comfort and Reliability

Make sustainable modes of transportation a feasible option.

Equitable Distribution of Space and Access

Serve all ages, abilities, and modes of transportation.

Resilience

Proactively plan and implement a resilient transportation system.

Accountability

Provide updates on implementation.

How Are Streets Designed?

Boston's approach to street design is centered on people, whether they walk, bike, take transit, or drive.

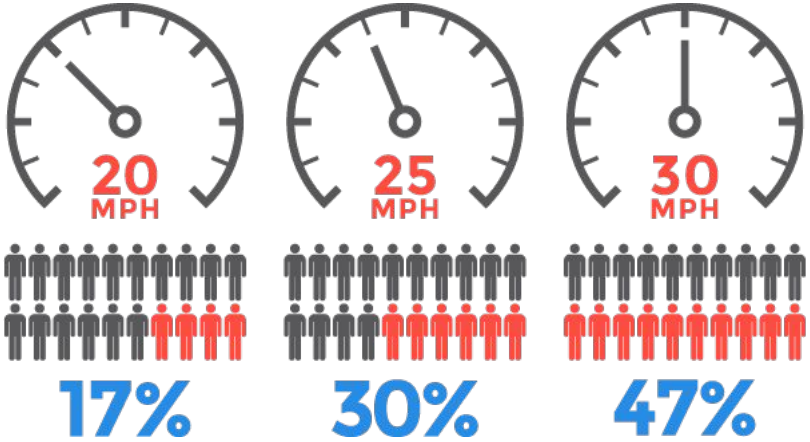
Designers use proven tools to address specific transportation needs identified during planning.

Complete Streets is a design approach that considers walking, biking, and transit as options that are equally as important as driving. Complete Streets also considers the surrounding land use and context, so that design tools are tailored to their surroundings.

How Can Streets Be Made Safer?

Boston uses many design tools to improve safety and comfort on City streets. They help enforce the City's 25 mph speed limit.

Our design tools result in safer speeds, safer turns, or safer crosswalks. Some tools help target more than one safety outcome.



Likelihood of *fatal or severe injury* for pedestrians struck by drivers traveling at these speeds.

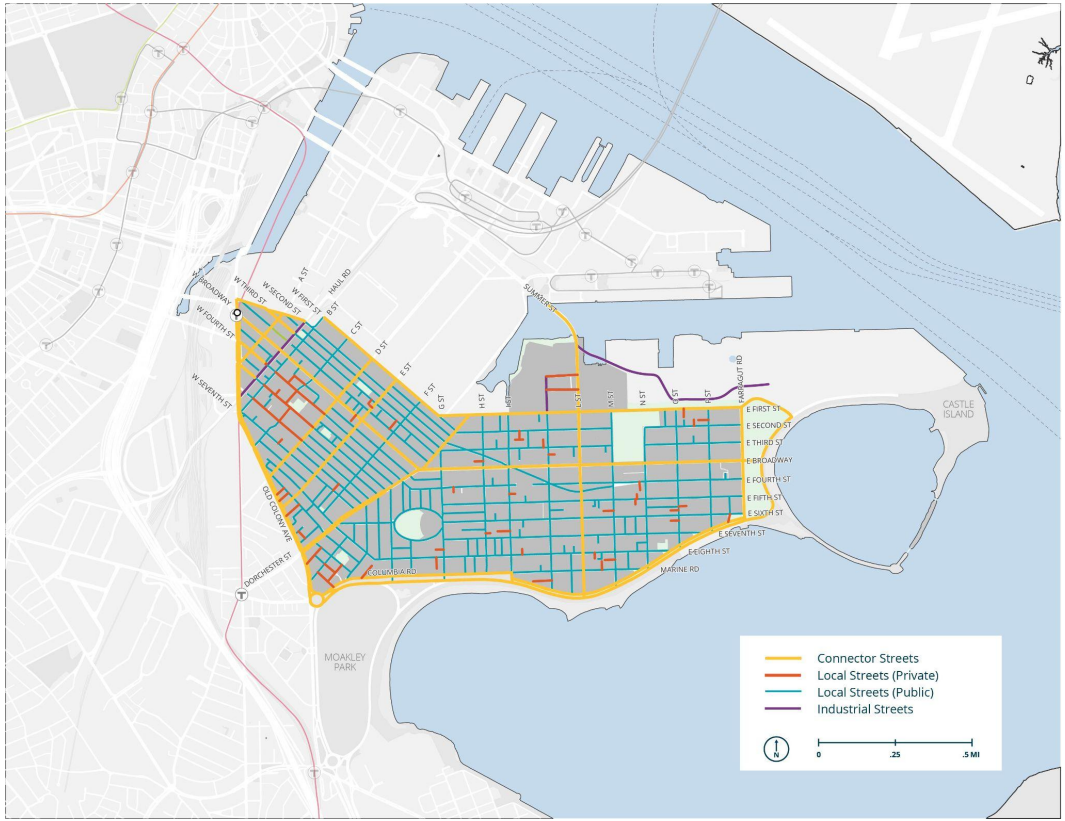
Source: *Sources: Tefft, Brian C. Impact Speed and a Pedestrian's Risk of Severe Injury or Death, AAA Foundation for Traffic Safety, Washington DC, September, 2011*

Where Can Safety Design Tools Go?

Not every design tool works on every street. “Neighborhood streets” and “connector streets” have different roles, and those roles help identify where certain design tools are appropriate.

Neighborhood, or local streets provide access to homes, schools, and parks. They tend to be narrow, lined with homes, and have less traffic.

Most streets in South Boston are neighborhood streets.

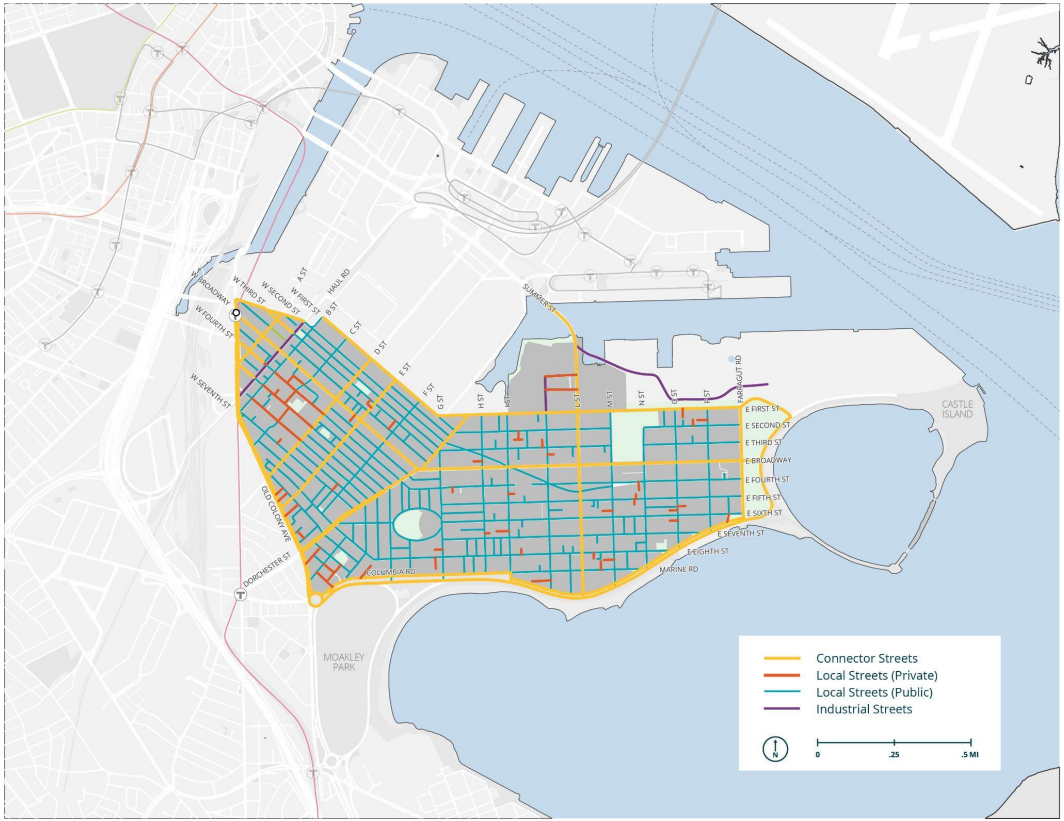


Where Can Safety Design Tools Go?

Connector streets facilitate travel between two places. They tend to be wider, have more traffic, have traffic signals, and buss tops.

Drivers of large vehicles, like buses, trucks, and emergency responders, rely on connector streets, instead of neighborhood side streets, to move between neighborhoods and cities.

The presence of large vehicles mean that tools like speed humps are only appropriate on neighborhood streets. Raised crossings are generally not appropriate across these streets, either.



What is a High-Visibility Crosswalk?

"Ladder" style crosswalks, with thick white bars and parallel lines, are the most visible type of crosswalk marking.

- Crosswalks that have bricks or other decorative elements are not as easily seen by oncoming drivers, especially in the dark. They are also not great for people with disabilities, some of whom rely on the crosswalk markings to navigate.
- High-Visibility Crosswalks are used on all types of streets. They are the standard design for all new or newly restriped crosswalks.

A high-visibility crosswalk over East First Street in South Boston.

What is a Pedestrian Warning Sign?

Pedestrian warning signs notify drivers that a crosswalk is ahead. They are used crosswalks without traffic signals.

- Signs are only effective if drivers observe the signs and change their behavior.
- In some locations, we add 24/7 flashing LED lights. These signs do not have significant research demonstrating their effectiveness.
- Pedestrian warning signs can be used on many types of streets.

What is a Stop Sign?

Stop signs are used to regulate flow of people through an intersection. They are not used to slow traffic.

- Drivers must come to a full stop, look, and yield to other people in the intersection.
- Usually, stop signs are installed on a less busy road when it meets a busier road.
- Where three or four streets meet, we may install stop signs on all streets if they are equally as busy or there are many people crossing the street.

A stop sign in the South End.

What is a Speed Feedback Sign?

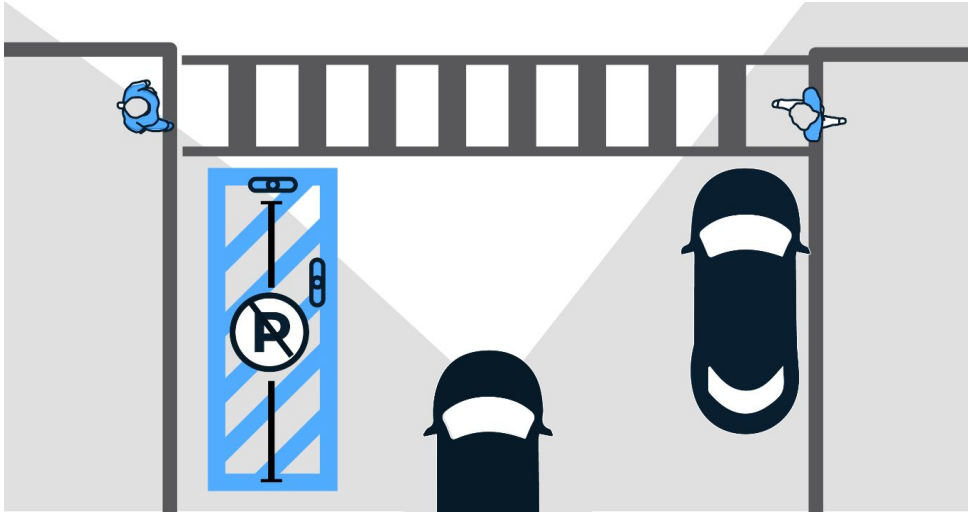
A speed feedback sign is a speed limit sign combined with a digital sign that displays a driver's speed. If drivers are speeding, the digital sign flashes. Speed feedback signs can help reduce the number of drivers going very fast.

- The long-term effectiveness of these signs is not known.
- Speed feedback signs are usually installed on collector streets.

What are “Clear Corners”?

We restrict some parking at intersections to make it easier for people driving, walking, and bicycling to see each other.

- Parked vehicles or other obstructions can block views of other people waiting to cross, driving, or bicycling.
- They give more room for fire trucks and other larger vehicles to to turn.
- Clear corners can be installed on many types of streets.



What is a Curb Extension?

A curb extension extends the sidewalk out into the parking lane. They make crosswalks shorter and make it easier for people walking, driving, and bicycling to see each other.

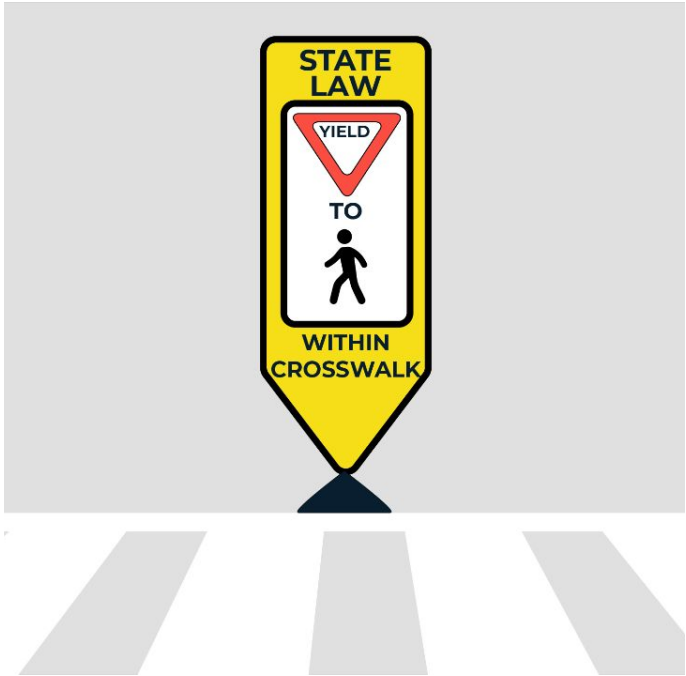
- We have more space to build curb ramps that are better for people in wheelchairs or those who are blind or low vision.
- Curb extensions can be used on many types of streets.

Curb extension in Dorchester.

What is an In-street Yield to Pedestrian Sign?

These signs are placed on the street at crosswalks without traffic signals. They remind drivers to yield to pedestrians.

- We only install them where there is room for larger vehicles to travel without hitting them.
- In-street yield-to-pedestrian signs are used only on connector streets.



What is a Hardened Centerline?

A row of flexible bollards installed on the yellow centerline discourages drivers from cutting turns at higher speeds.

- Drivers have to turn a bit slower. They can only turn into their intended lane.
- Hardened centerlines are used on connector streets.

Hardened centerline in Chinatown.

What is a Speed Hump?

Speed humps are gradual, 3”-high mounds of asphalt in the street.

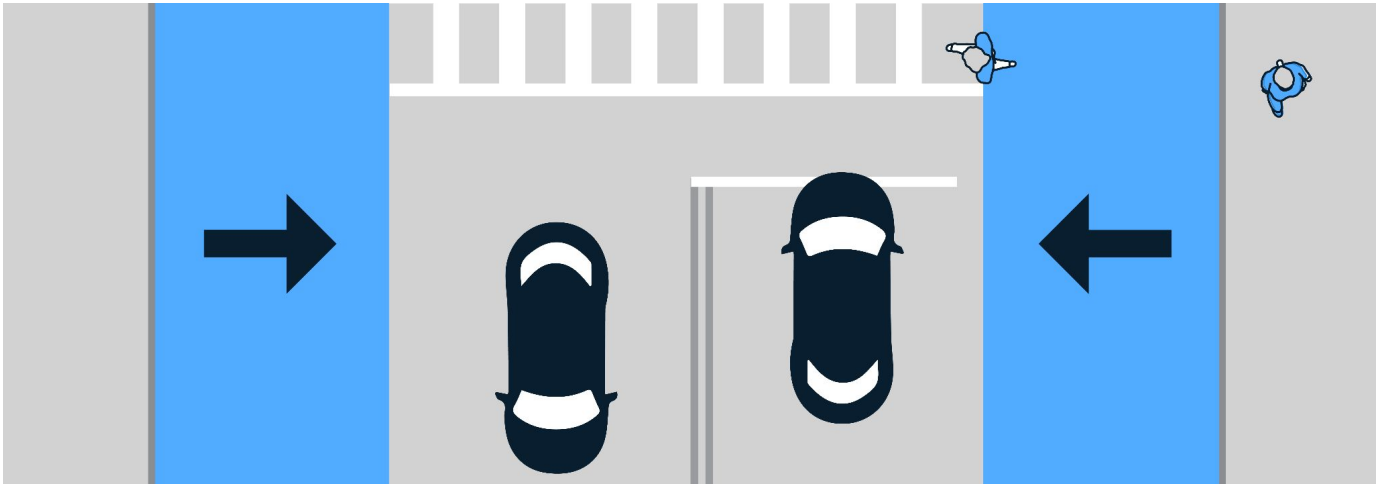
- Speed humps are comfortable to drive over at 20 miles per hour or less. They are not like speed bumps in parking lots.
- We build speed humps every 150’ - 250’ to prevent drivers from speeding between them.
- Speed humps do not impact drainage, street sweeping, snow removal, or street parking.
- We only use speed humps on streets that are relatively flat, straight, and are one or two lanes wide.
- Speed humps are used only on neighborhood streets.

A speed hump in Jamaica Plain.

What is “Road Right-Sizing”?

There are many different possibilities for the way space is used on a street. Thoughtful reallocation of space on our streets can calm speeding traffic, create safer crossings, add dedicated bike lanes, or more.

- We consider right-sizing on connector streets.



What is a Crossing Island?

A crossing island gives space in the middle of a crosswalk for people to pause while crossing multi-lane streets.

- We can create crossing islands with pavement markings and vertical flexible bollards. With more time and resources, we can also build them with concrete and granite.
- Crossing islands are used on connector streets.

A crossing island on Washington Street in Roxbury.

What is a Raised Crosswalk?

A raised crosswalk is about six inches tall, the same height as the sidewalk. They slow drivers and improve yielding to pedestrians in crosswalks.

- They make crossings more comfortable for people who use wheelchairs and other mobility aids.
- The design of a raised crosswalk often includes curb extensions.
- Raised crosswalks can be used on neighborhood streets or along connector streets.

Raised crosswalks are one of the more intensive safety tools to build. Often, we must build new drains or move utilities. As a result, designing them can take a lot of time.

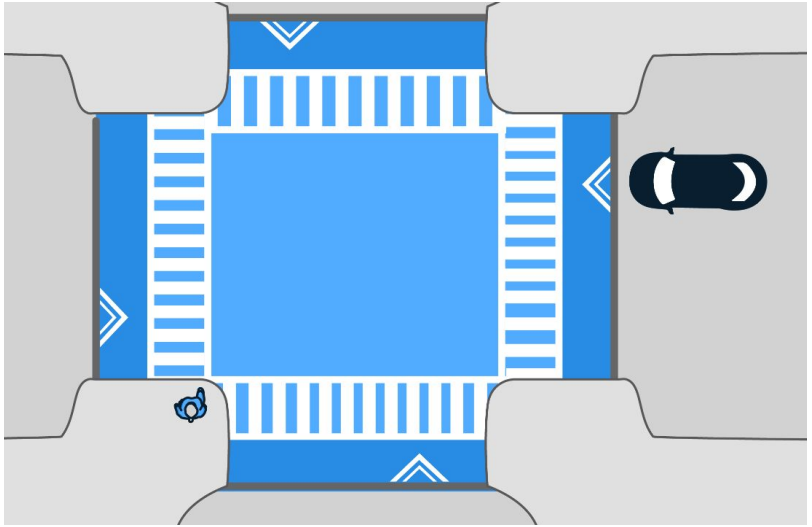
A raised crosswalk in Roxbury.

What Is a Raised Intersection?

A raised intersection is flush with the sidewalk. They reinforce slow speeds and encourage drivers to yield to pedestrians.

- Raised intersections can be used with stop signs, but are never used at intersections with traffic signals.
- Raised intersections are used only on neighborhood streets.

Raised intersections are one of the more intensive safety tools to build. Often, we must build new drains or move utilities. As a result, designing them can take a lot of time.

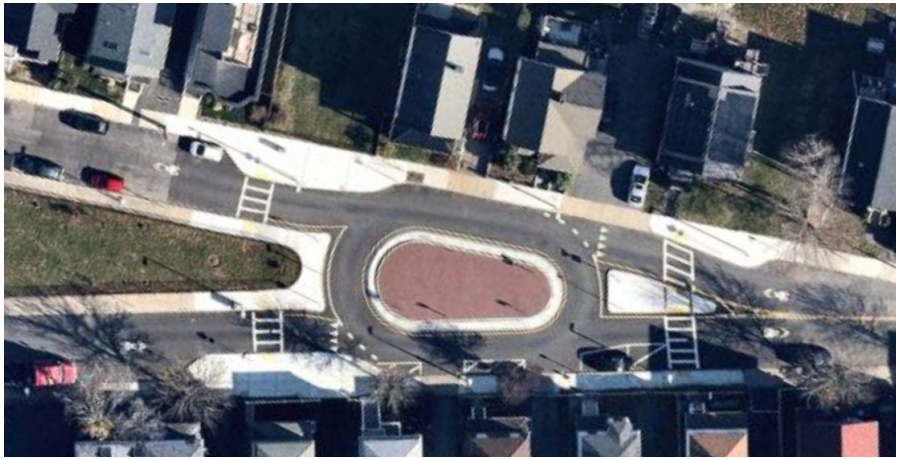


What is a Roundabout?

A roundabout has a center island, crossing islands, and curb extensions. They are designed to slow speeds and reduce serious crashes.

- The crossing islands and curb extensions slow and direct drivers as they enter the roundabout.
- Drivers must pause and watch for people crossing on foot first. Then, they look for oncoming vehicles. This makes it safer for people on foot and simplifies things for drivers.

Roundabouts are a type of circular intersection. However, they are different from rotaries and traffic circles. Roundabouts feature much smaller circles and are designed to promote slow entry and circulating driving speeds. Drivers do not change lane.

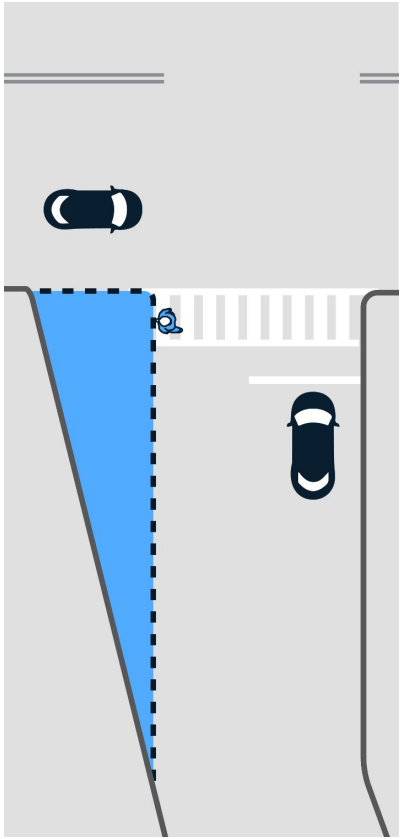


A roundabout in Dorchester.

What is a T-ing Intersection?

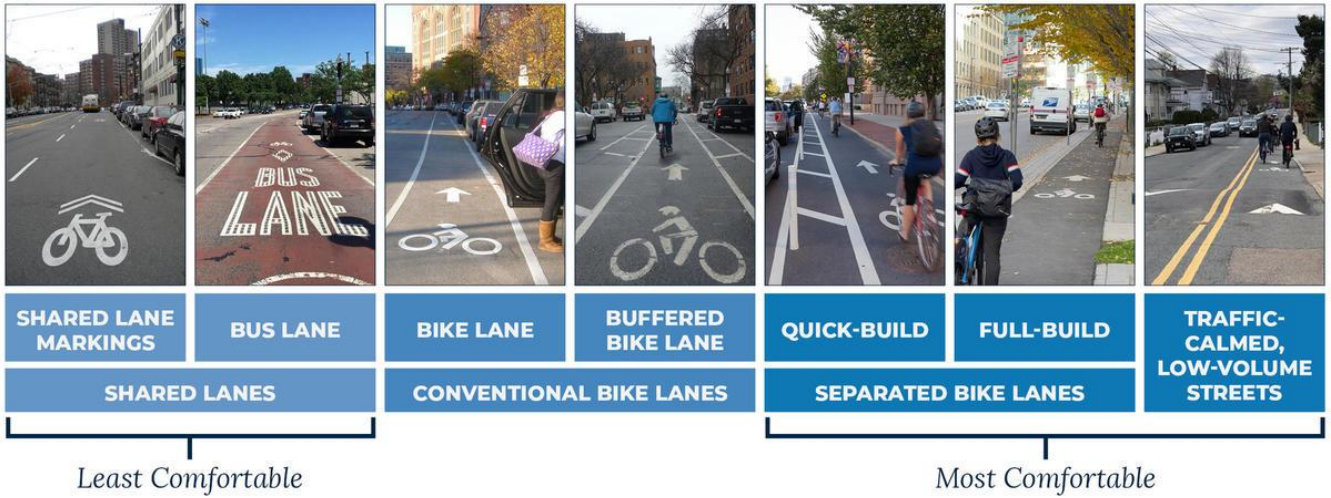
We can build curb extensions to fill in extra space at wide or irregularly-shaped intersections. We design the curb extensions to create a “T” in the intersection instead.

- Intersections that are wide or V-shaped can:
  - be confusing
  - empower drivers to turn fast, or
  - make it difficult to safely cross the street on foot.
- When we make a T intersection, everyone can better see each other and it is clear who has the right-of-way.



How Can Biking Be Made Safer?

- Many Bostonians already bike, and many more want to bike but don't feel comfortable in traffic. We need to make sure our streets are safe for .
- That's why the City is designing neighborhood streets that calm traffic and bike lanes that better separate drivers and bicyclists.
- Bike lane designs can vary depending on each street's unique conditions, but the City strives to provide the most comfortable conditions for each project. These designs are shown below.



What are Separated Bike Lanes?

Separated bike lanes are safe and predictable places for people to ride bikes. Separated bike lanes provide more space and vertical separation between people on bikes and people in cars.

- These bike lanes are only for people on bikes or other low-speed vehicles, like scooters.
- If you're in a vehicle, you know where to expect people on bikes.
- A 13-year study of a dozen U.S. cities found that separated bike lanes make streets safer for everyone, whether they are walking, driving, or biking.
- Separated bike lanes are used mostly on connector streets and on some neighborhood streets with higher volumes of vehicle traffic.

A separated bike lane in Fort Point.

What are Traffic-Calmed Local Streets?

Traffic-calmed local streets are designed for people. They discourage unnecessary through-traffic by drivers, while making useful connections for people walking or bicycling.

- People bicycling share the road with people driving. We add shared lane markings to help guide people on bikes.
- Bike connections on local, traffic-calmed streets make it easier and safer to:
  - travel within your own neighborhood,
  - get to train stations or bus stops, and
  - connect with the city-wide bike network.
- We use this type of bike facility on neighborhood streets only.

A traffic-calmed street in Jamaica Plain.

What are Contraflow Bike Lanes?

Contraflow bike lanes are a type of bike lane that allow people biking to go both ways on a street that is one-way for motor vehicles.

- We might want to allow people to bike in both directions on a one-way street to:
  - avoid an obstacle, like a major hill or busy street without a separated bike lane or
  - Connect to a major destination, park, or trail access point.
- On connector streets, contraflow bike lanes are usually separated from traffic with vertical barriers like flexible bollards.
- On neighborhood streets, we use just paint and signage. If appropriate, we can add speed humps too.

A contraflow bike lane in Roslindale.

How Can We Improve the Bus?

While the MBTA runs buses and sets the schedules, the City still has a large role to play in the bus experience. The City manages most bus stops within the City and can modify sidewalks and streets to help buses run better and safer.

The next few slides describe some of the ways the City can improve the bus rider experience.

Additionally, the MBTA has plans to increase frequencies of some buses in the Study Area through Bus Network Redesign.

Bus Shelter at D Street and West Broadway

Bus Lanes

Bus lanes provide dedicated space for buses to travel separate from other traffic. They are often found along the sides of the road or in the center.

- Center-running can decrease bus travel times by up to 30%
- Side-running can decrease travel times by up to 20%.
- Center-running bus lanes especially can help make sure bus stops or bus lanes do not get parked in
    - When cars are parked in bus stops and the bus can't pull up to the sidewalk, people with strollers, wheelchairs, or grocery carts can have trouble getting off the bus.

Queue Jump

Queue jumps are short, separate, bus-only lanes leading up to an intersection that get their own signal. The bus can then get a green light first, meaning the bus can skip the line of traffic.

- Queue jumps can save buses up to 2.5 minutes per intersection.
- They can be set to only operate during certain times of day based on need.

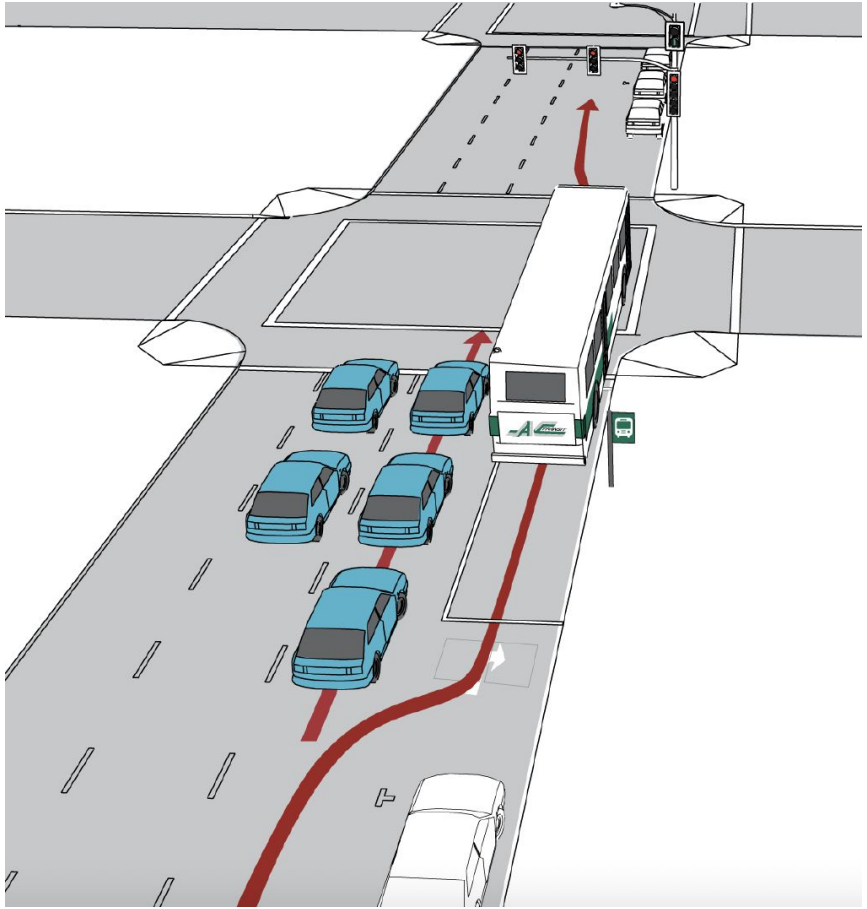


Image source: AC Transit

Transit Signal Priority

Transit signal priority (TSP) allows a bus to communicate its location information to the traffic signal it is approaching.

- With TSP, a traffic light can know to hold the green light for an additional time when the bus is approaching, if needed, to get the bus through the intersection.
- This allows the bus to avoid having to stop at red lights and reduces wait times at intersections

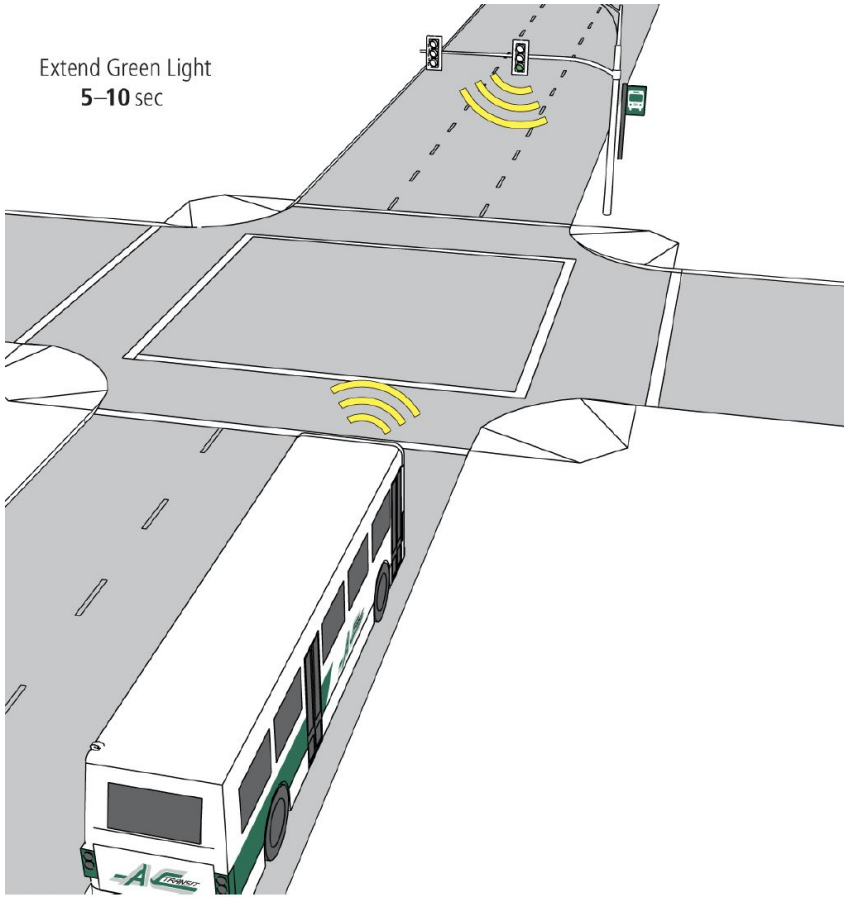


Image source: AC Transit

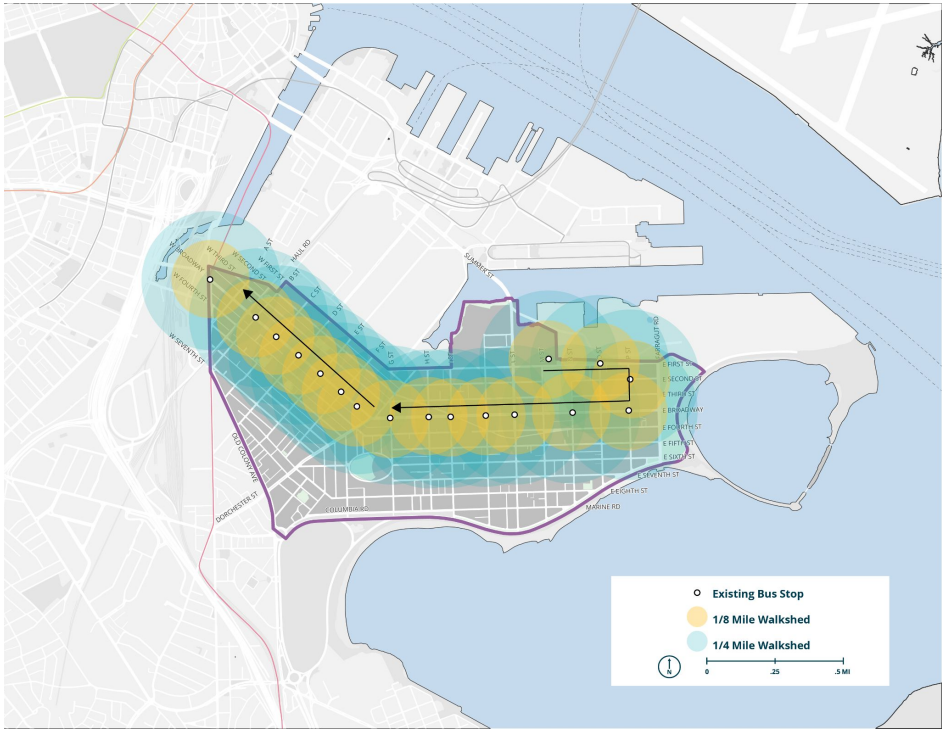
Bus Stop Spacing

Greater spacing and fewer stops:

- Shortens trip times and improves reliability
- Less interference with traffic that is impacted by buses pulling into and out of bus stops
- Reduces risk for pedestrians and cyclists
    - The location of the bus stop on the street intersections can help with bus movements, and create safer crossings.

The MBTA Stop Spacing Guidelines suggest spacing should be between 750-1,300 feet for the Study Area.

- The SBTAP has bus stops that are closer than recommended.
- For example, the MBTA Route 9 has an average stop spacing of 425 feet



MBTA Route 9 Inbound ⅛ and ¼ mile Walksheds for Bus Stops

Bus Stop Bump Out

Bus stop bump outs help with bus rider time savings and accessibility.

- With a bus stop bump out, the curb extends up to the lane that the bus is traveling in. This allows the bus to pick up and drop off riders without leaving the travel lane.
- Bus stop bump outs increase public space and pedestrian visibility, improving safety. They also improve the boarding experience and accessibility so there is less of a gap between the sidewalk and the bus when it pulls into the stop.
- Bus stop bump outs save 5 to 20 seconds per stop.

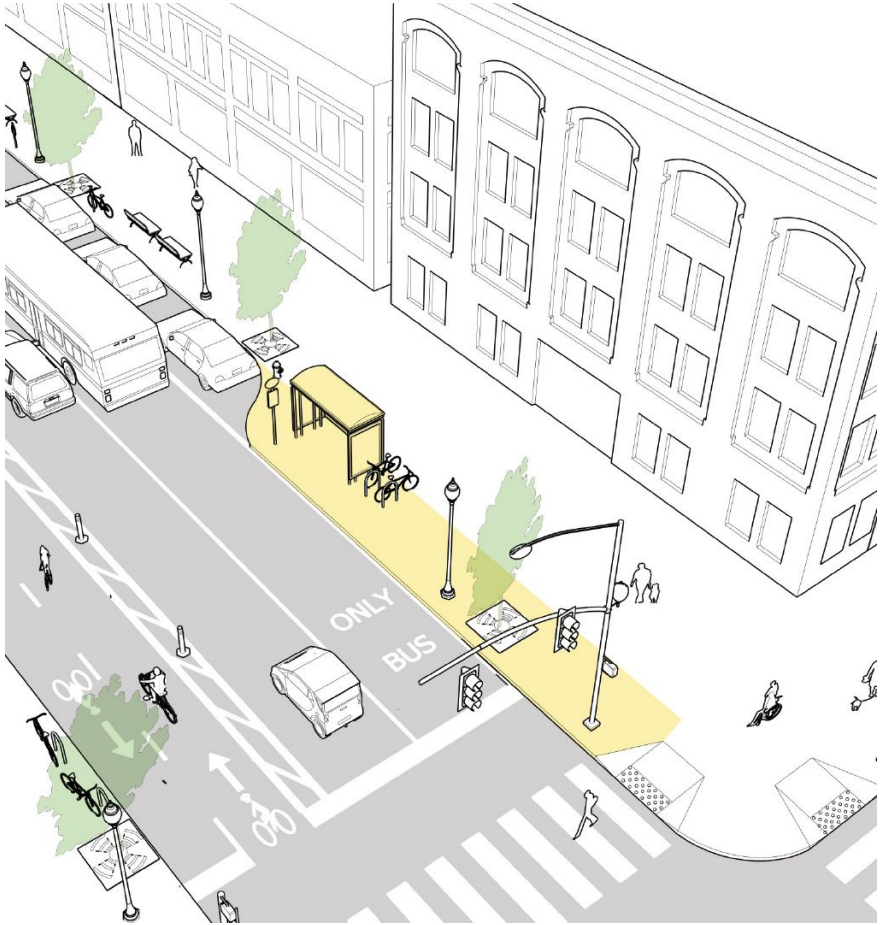


Image source: NACTO

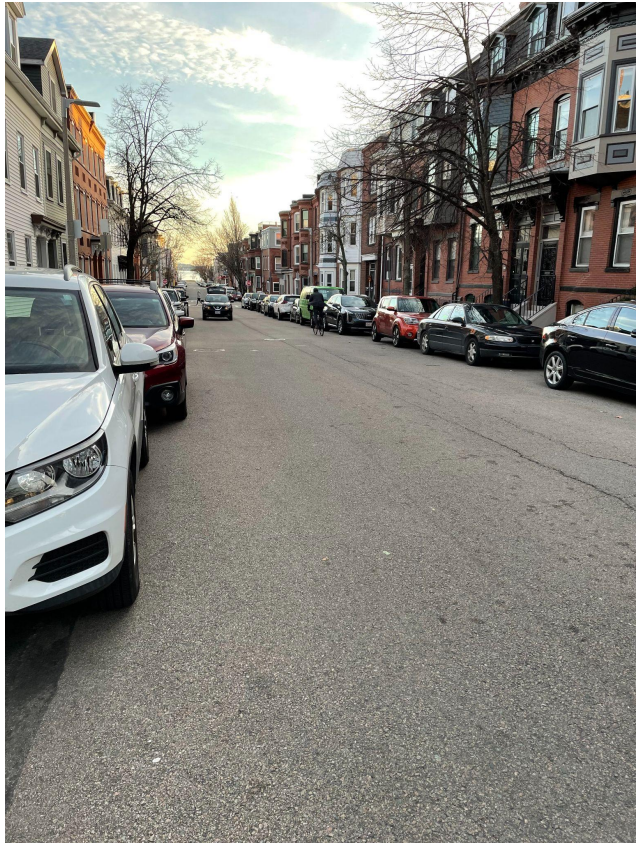
How Can Streets Be Places?

- Movement of people and goods is the primary use for streets, but streets are fundamentally a public space.
- Boston is creating new public spaces on streets through experimental design approaches.
- Streets can create more socially connected and economically resilient communities.
    - The COVID-19 pandemic has shown that streets should have a broader role than just transportation.

Outdoor dining at Worden Hall on West Broadway

Why Do We Manage Our Curb Space?

- Parking is a highly contentious issue especially in dense neighborhoods like South Boston where off-street parking supply is limited and competition for on-street spaces on weeknights is high.
  - Curb space is limited and has many competing needs
  - South Boston's population is growing faster than Residential Parking Permits
    - 60% of South Boston households have more than one parking permit and 2,287 addresses (17%) have at least four vehicles permitted.
    - This rate of vehicle ownership and permit demand contributes to the high ratio of permits per on-street parking space.
  - A mismatch of parking regulations and needs leads to double parking



Development Review

Role in the Agency

The Development Review Department is responsible for facilitating the evaluation of **design, density, use, and physical and social impacts** for Small and Large development projects, Institutional Master Plans and Planned Development Areas pursuant to Article 80 of the Boston Zoning Code.

The team is led by a team of Project Managers who assemble and work closely with **Planners and Urban Design staff, relevant City and State Agencies, local elected officials, and the community** to ensure that the impacts of each project are identified and mitigated and that the design of the project is one that relates to and enhances the surrounding area.

Who we work with

Internal project review team

External stakeholders

Developer
Project proponent; work with stakeholders to address needs and/or issues

City of Boston
Manage the public and regulatory process associated with urban planning and development review

Community Members
Provide feedback on the proposed project; offer suggestions relative to impact mitigation

BPDA Transportation Planners

Planners in the BPDA's Transportation & Infrastructure Planning Department work closely City departments, State agencies, and developers to thoroughly evaluate a project's transportation impacts.

Large projects require a more detailed review process. The BPDA partners with BTD to review "large" projects.

How Is Transportation Reviewed?

- City planners propose plans to lessen the impact of development on the safety, access, and reliability of the transportation system.
- Developers then refine their proposed project. This can be a back-and-forth process.
- The goal of the transportation review is to prioritize safety, manage parking demand, and improve conditions for walking, biking, taking public transit.
    - Boston aspires to reduce drive-alone rates in half.

Like the planning and design of City streets, City planners rely on Go Boston 2030 and the Boston Complete Streets Design Guidelines to review:

- Building access for people walking, biking, or driving
- Connections to nearby streets
- Sidewalk width, curb ramps, and crosswalks
- Bike route safety and comfort
- Impacts to nearby intersections and transit
- Bike parking and vehicle parking spaces, including access to bikeshare, carshare, and electric vehicles

How Much Parking Is Needed?

- Off-street parking can be convenient for some, but its availability is linked to more driving, higher housing costs, and more greenhouse gas emissions.
- The number of spaces a development can provide is defined by zoning or City policy.
    - For all projects, the South Boston zoning code sets the **minimum** number of parking spaces required for each type of use, like residential or commercial.
    - For large projects, BPDA and BTD recommend a **maximum** number of parking spaces, requiring fewer spaces near train stations.

BEFORE

AFTER

Did you know that the Boston region overbuilds residential parking by about 30 percent? That space could instead be used for more affordable housing, open space, or other uses.

How Does The Community Participate?

- Community members are encouraged and able to give feedback in a variety of forums during the development review process.
- You can participate in any of the three main steps of development review.
    - Community planning is the foundation for all conversations with developers. In this way, the SBTAP will help equip the community with the tools to shape development proposals.

How Does The Community Benefit?

- The BPDA works with developers to address the impacts of development projects by providing mitigation.
- Mitigation can include transportation-related improvements such as:
  - Safety tools identified on previous pages
  - Wider sidewalks and new seating
  - New or upgraded crosswalks and curb ramps
  - New or relocated bus stops and shelters
  - New bike racks, bikeshare, or bike lanes
  - New trees, including their maintenance
  - Design services to advance infrastructure projects
  - New or modified traffic signals
  - A transportation study or plan.

Did you know that transportation-related benefits are only one type of community benefit? Developers can also contribute to new or improved public spaces, affordable housing units, community retail spaces, etc.

Thank you!

Appendix

Outline of Mayor Wu's Vision for the BPDA + What's Coming

May 2023

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The need for change

Mayor Wu charged the BPDA with improving how planning and development are done in Boston to make the process more predictable for both community members and developers.

Our Goals

Address today's challenges: **resilience, affordability, equity**

Lead with **planning** to set a **citywide vision**

Embrace growth while creating a **predictable process**

Build **trust** with communities through **transparency**

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Our Approaches

- Implement a new charter and mission
- Legally end Urban Renewal and replace it with modern tools
- Ensure public land serves public good

- Plan for growth and the future through neighborhood and citywide initiatives, such as our Design Vision
- Establish new Planning Advisory Council

- Update Article 80 code and process for staff, developers, and community members
- Update and modernize our zoning code to be more predictable

- Improve coordination and communication across agencies and with Boston residents
- Create community process for Article 80 that is consistent, inclusive, and predictable

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Upcoming changes + engagement

2023

Winter-Spring

- Home Rule Petition passed Council and sent on to State House
- Two RFPs issued for analysis of Article 80 operations and community engagement

Summer

- Lead public engagement efforts for -
  - Design Vision
  - Article 80 process improvements
  - Opportunity to weigh in on city's progress towards resilience, affordability & equity

Fall-Winter

- Kick off Planning Advisory Council
- Continue public engagement
  - Share early findings from Article 80 analysis
  - Finalize City Design Vision

2024 and on

- Move staff to become a City agency
- Update approach to planning through increased coordination across departments and focus on city-wide efforts
- Kick off efforts to update city-wide zoning code

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Learn more here:
https://www.bostonplans.org/about-us/mayor-wu-vision-for-the-bpda

Stay updated by signing up for our newsletter. Receive emails with our progress and opportunities to be part of shaping the future of Boston.

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