

ACTION PLAN PROPOSAL

January 18, 2017







Agenda







Process Review

- Outreach
- Shared Goals
- ExistingCommitments
- Action Items
- Feedback
- Action PlanProposal



Project Timeline (Adjusted)







JUNE – JULY Existing Conditions and First Public Meeting

JULY – SEPTEMBER Goals and Vision

SEPTEMBER – NOVEMBER

Develop and Analyze Potential Improvements

OCTOBER – FEBRUARY Incorporating Public Feedback into Action Plan, including design for top 1 to 3

FEBRUARY
Draft Action Plan for Public Comment

MARCH Final Action Plan

Overview of Public Meetings (Adjusted) 5 2 1818





Late June: Define the Problems and Share Your Visions and Ideas

July-September: Establish Shared Goals, Develop Strategies, and Vision

September: Review Future Conditions and Brainstorm List of Potential Action Items and Gather Feedback

October - November: Prioritize Options using Shared Goals (Benefits), Feasibility and Cost

TODAY: Approve Action Item Mix, Discuss One to Three "Immediate Design" Alternatives

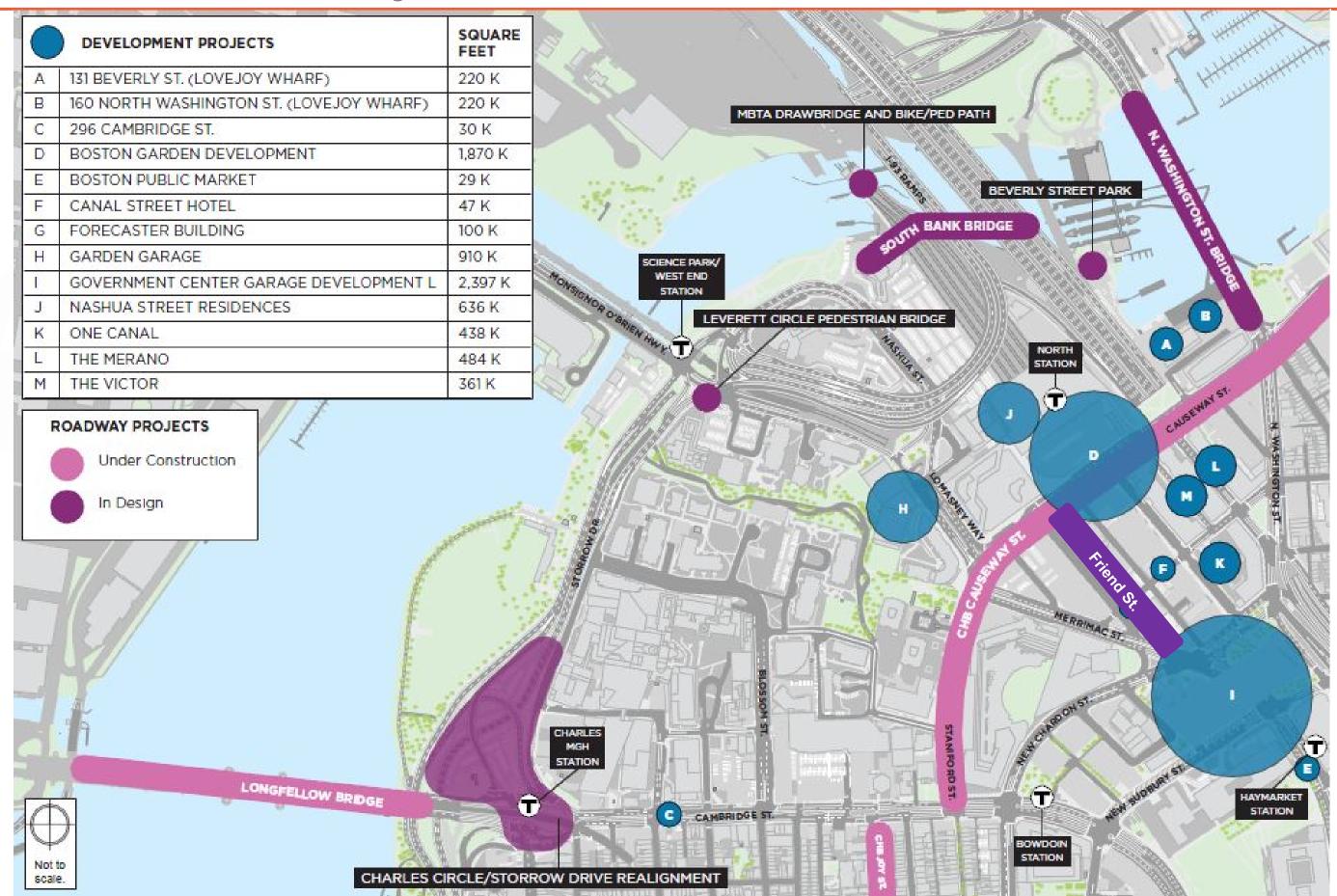
February: Introduce Draft Action Plan and Collect Feedback

Development and Infrastructure Projects







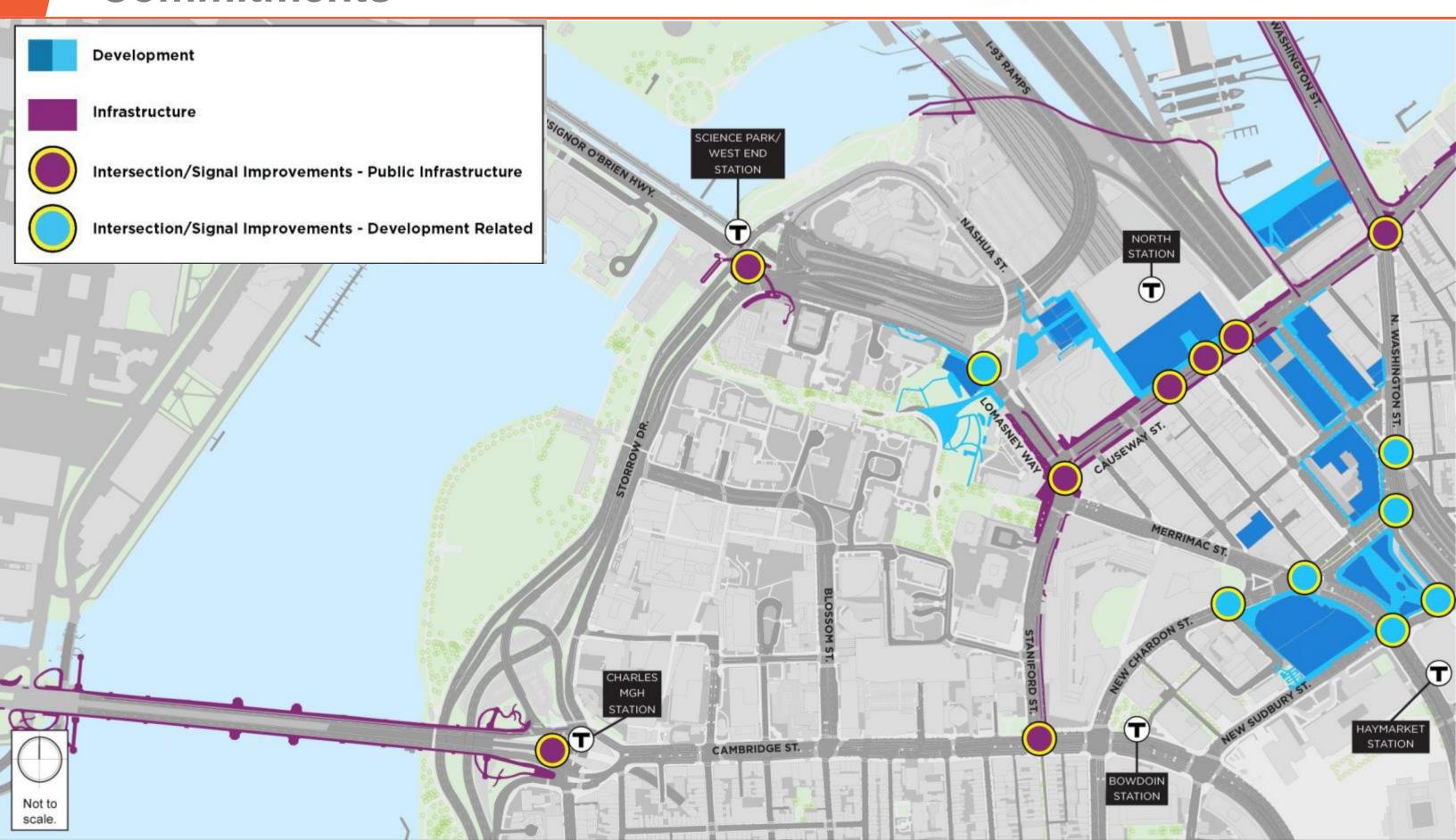


Infrastructure Improvement Commitments









Action Plan





















Develop a variety of improvements for all modes, identify community priorities, and prioritize projects for implementation based on vision, feasibility, and cost

Project Team







City Team

- Boston Planning and Development Agency
- Boston Transportation Department
- Office of Neighborhood Services
- Public Works Department

Consultant Team

- Howard Stein Hudson Transportation Engineering
- NBBJ Urban Design and Visioning
- Marlene Connor Associates Transit

Updates







- Pedestrian Tunnel North Station to Orange Line
 - Current Estimated Completion date is 11/1/18



Multiple Methods of Outreach















June: Public Meetings – Begin Collecting Ideas and Problems







Feedback Categories

- Enforcement of existing rules
- Improve wayfinding during construction
- Reduce demand for driving
- Manage high pedestrian volumes
- Reduce confusion across modes



August: Pop Up Sessions – More Ideas and Problems







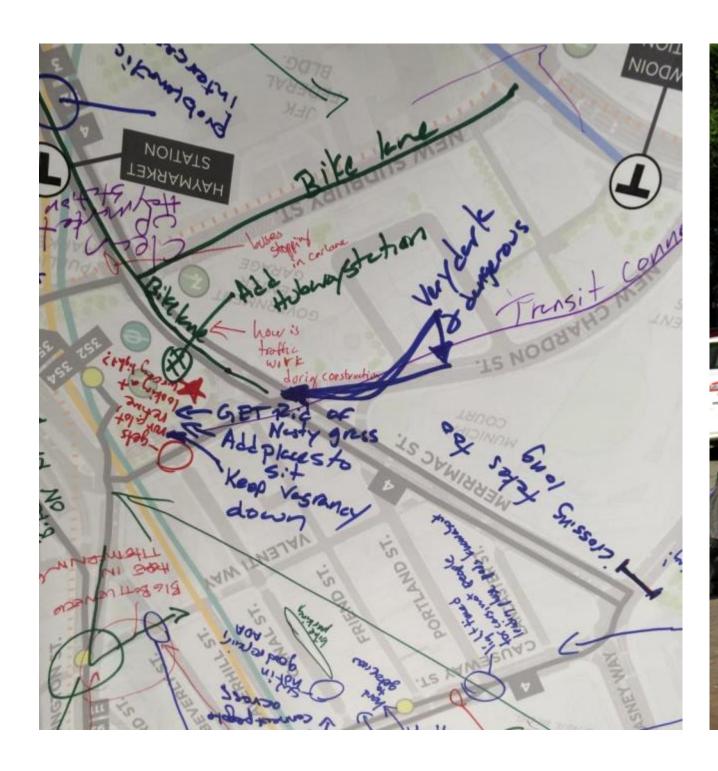


August: Pop Up Sessions – Ideas and Problems









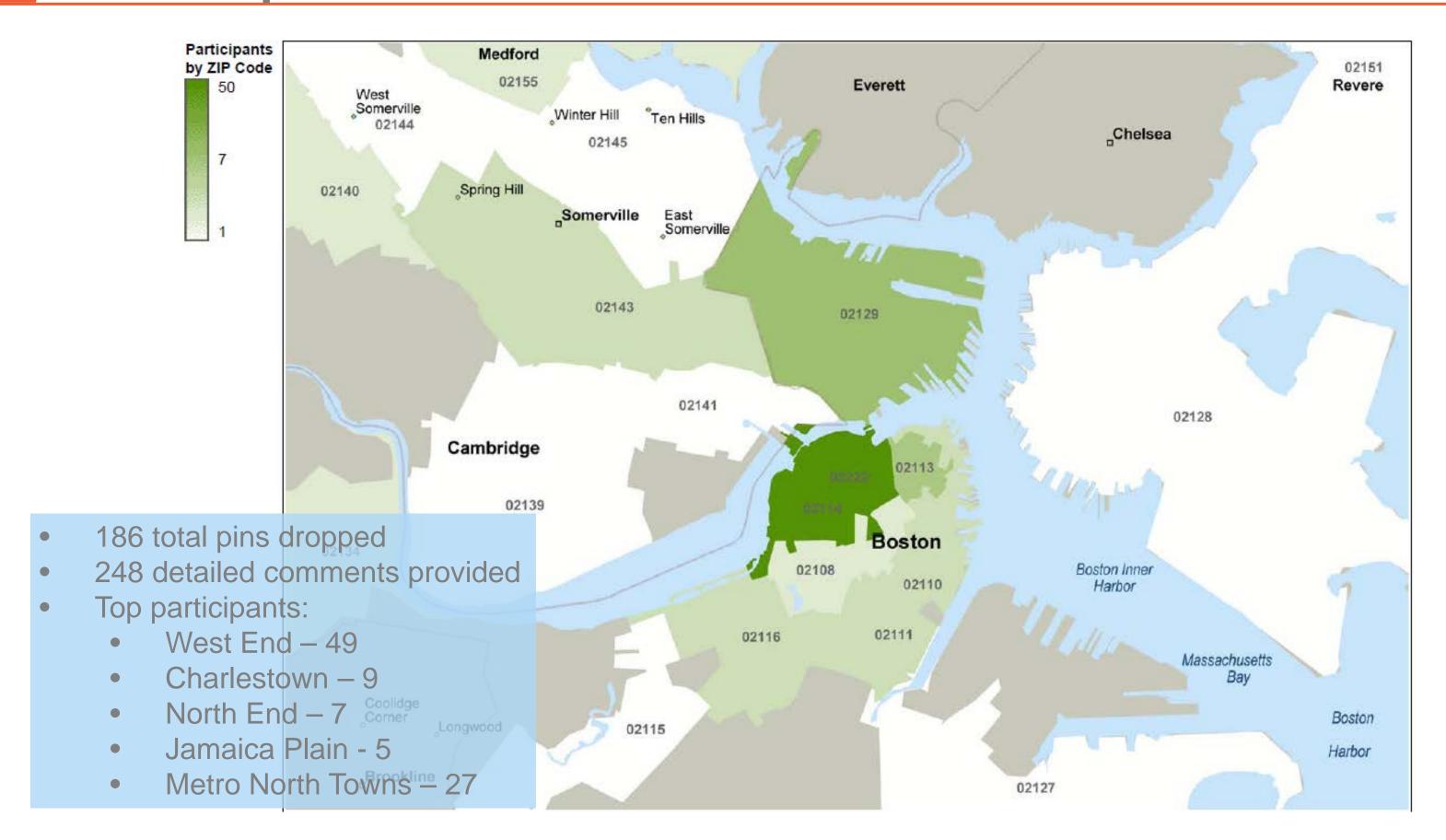


August-October: Wikimap – Ideas and Problems







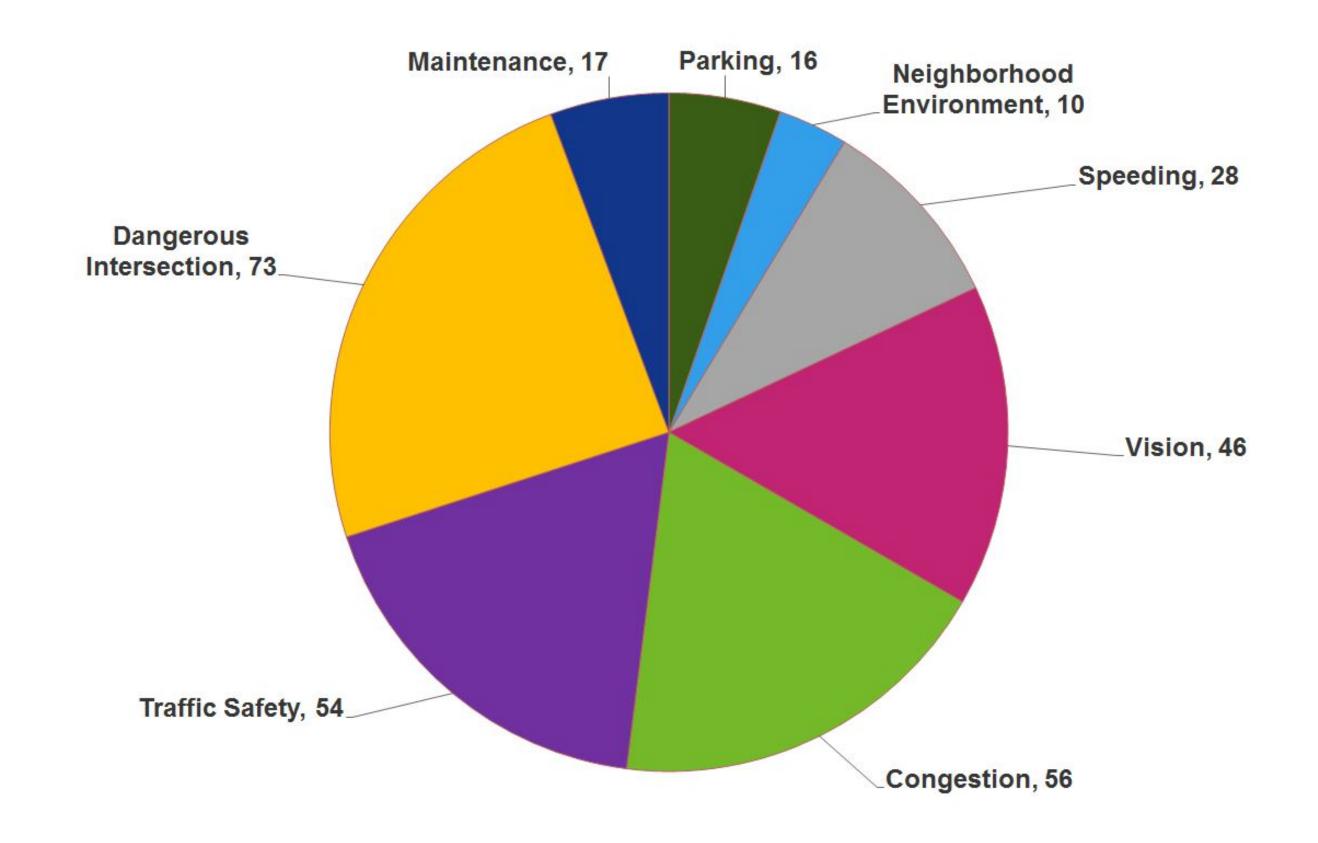


August-October: Wikimap – Ideas and Problems









September: Shared Goals Created









Safety



More Understandable



More Choices



Less Congestion

Concept – Change Behavior and Reduce Congestion







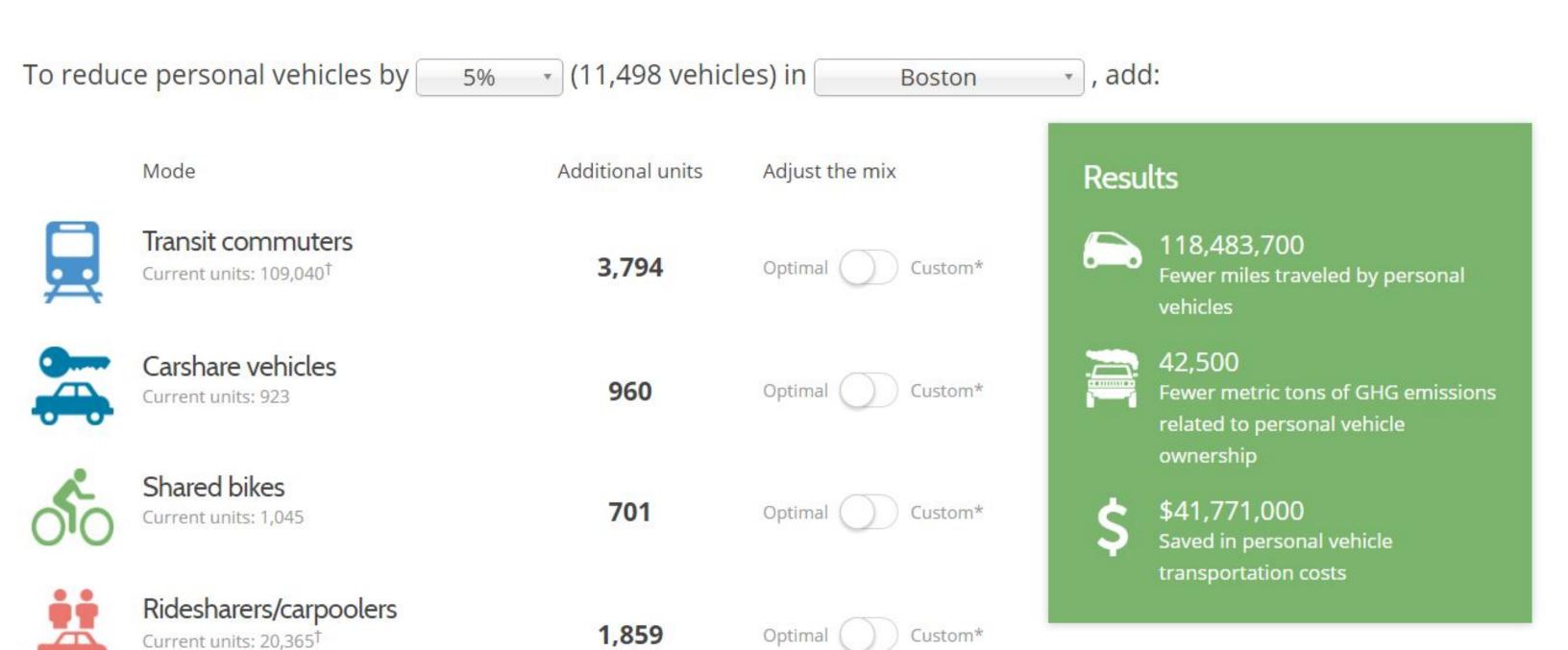
- Fix Local Circulation Problems
- Offer More Choices
- Make Other Choices More Attractive
- Make Driving Less Necessary

Example – Shared Mobility Benefits Calculator









Source: http://calculator.sharedusemobilitycenter.org/#

Recent Shared Mode Findings







- The more people use shared modes, the more likely they are to use public transit, own fewer cars, and spend less on transportation overall.

 —Shared Use Mobility Center (Interviews)
- The availability of bikeshare reduces congestion traffic congestion upwards of 4% within a neighborhood. —Hamilton and Wichman, August 2015, data from Capital Bikeshare, Washington D.C.

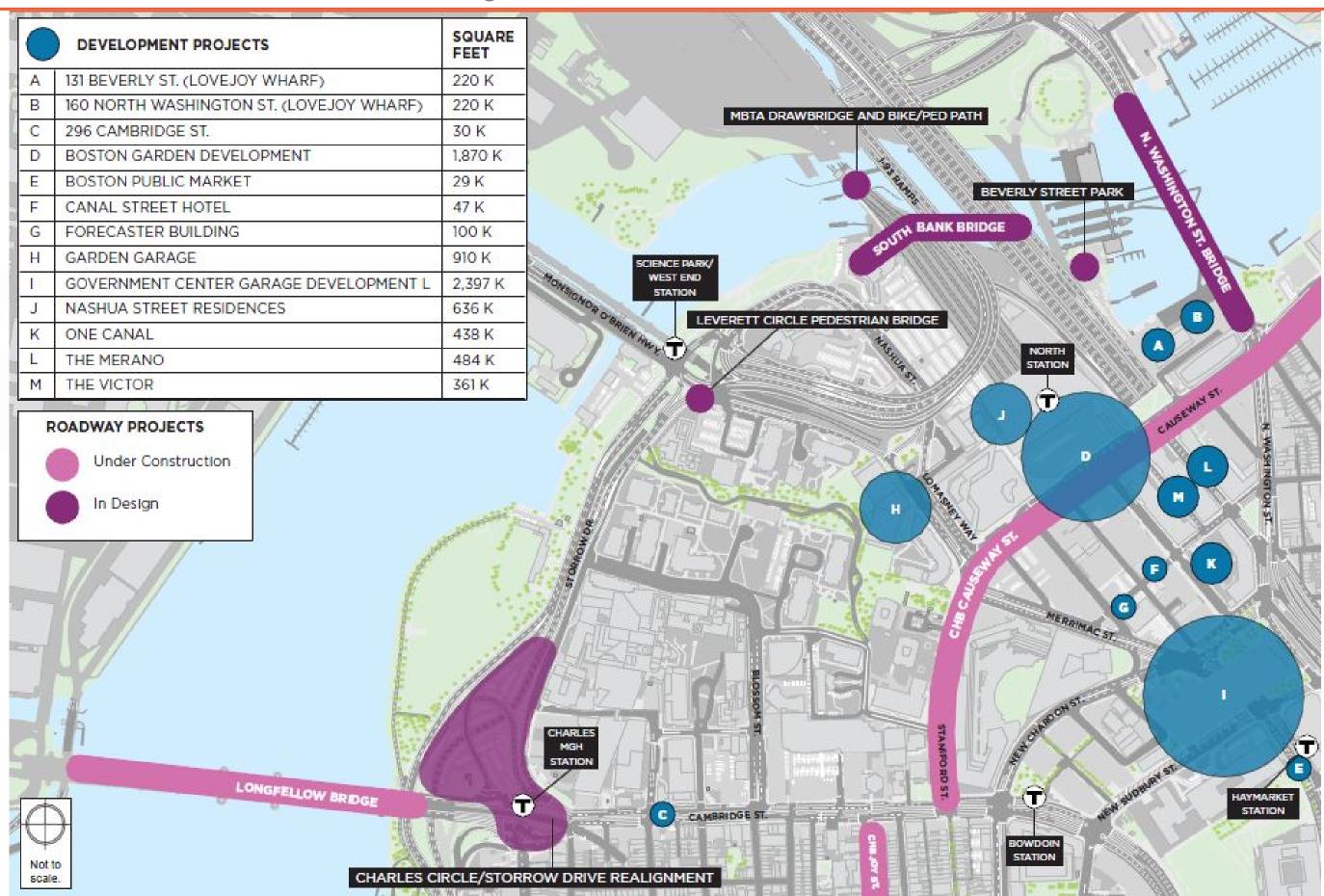


September: Existing Development and Infrastructure Projects







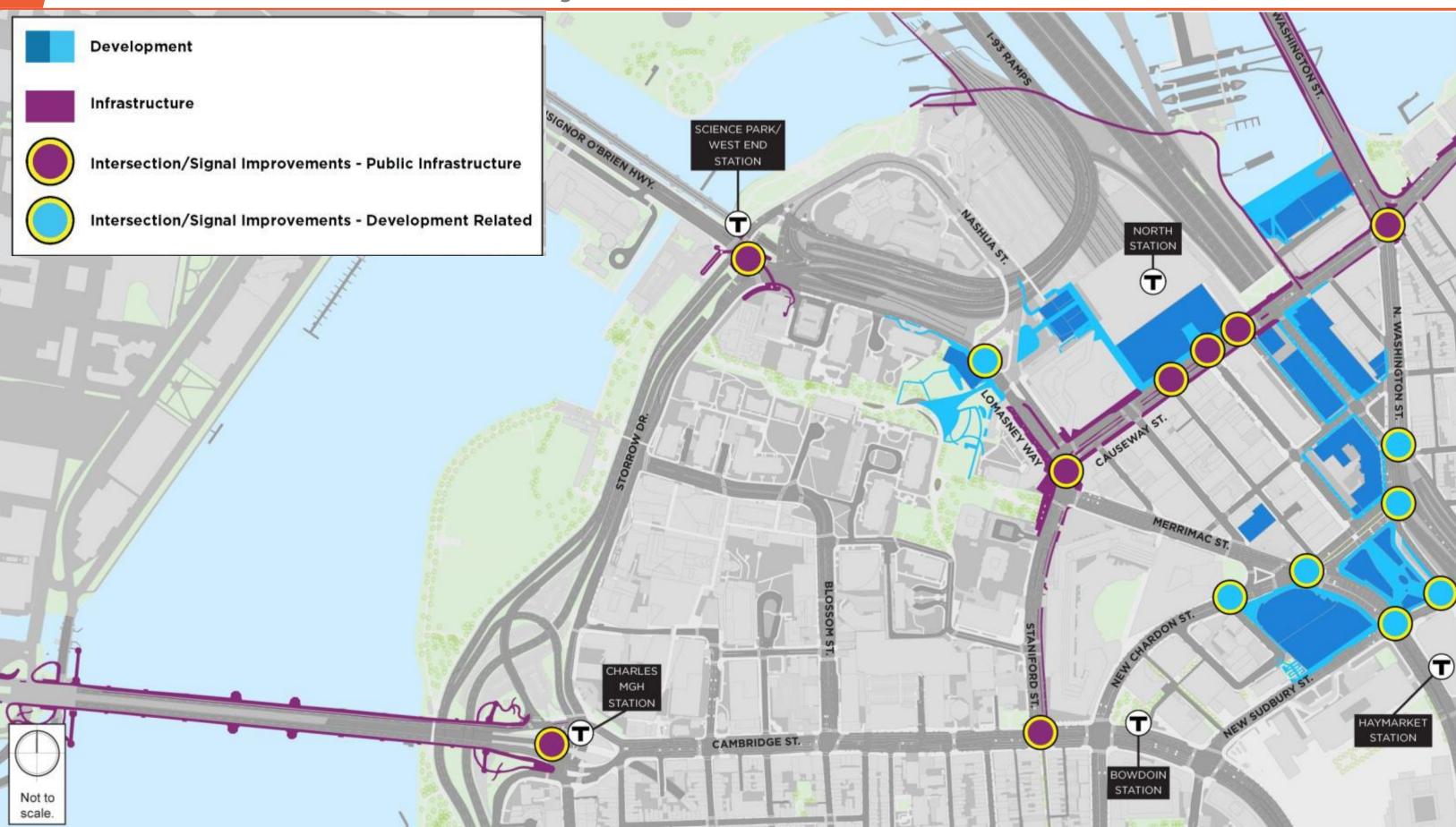


September: Existing Development and Infrastructure Projects







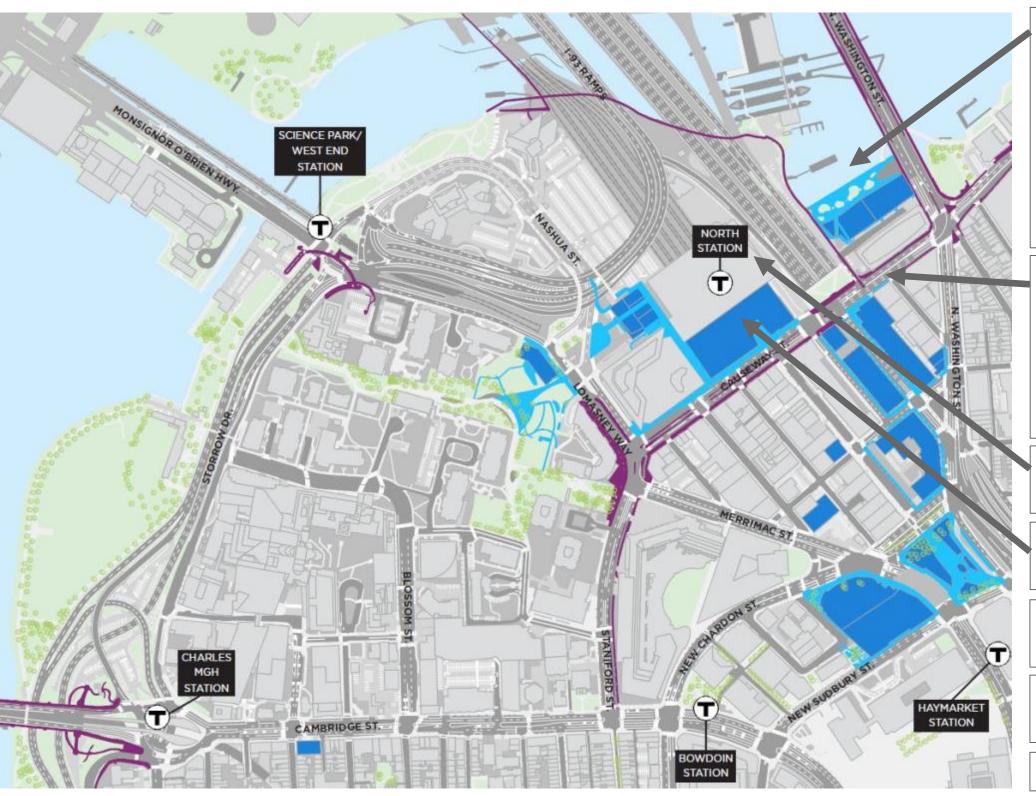


Over \$9 Million in "Off-Site" Transportation Mitigation*









Lovejoy Wharf - \$2.5M +

- Water Shuttle Dock/Operations/Planning
 - \$1.5M 131 Beverly/160 N. Wash.
 - \$1M Boston Garden
- Water Taxi Dock
 - 131 Beverly/160 N. Wash.
- Harborwalk & Connection to N. Wash. Bridge
 - 131 Beverly/160 N. Wash.

Causeway Street - \$2.4M (Part of \$12M+ Project)

- \$437K One Canal
- \$350K Nashua St Residences
- \$300K The Merano
- \$1M Boston Garden
- \$300K The Victor (Simpson)

Pedestrian Improvements to the Charles River

• Boston Garden

North Station to Orange/Green Lines Connector

• Boston Garden

Pedestrian Wayfinding

• \$250K - Boston Garden

Public Art & Open Space

• \$2.6M - Boston Garden

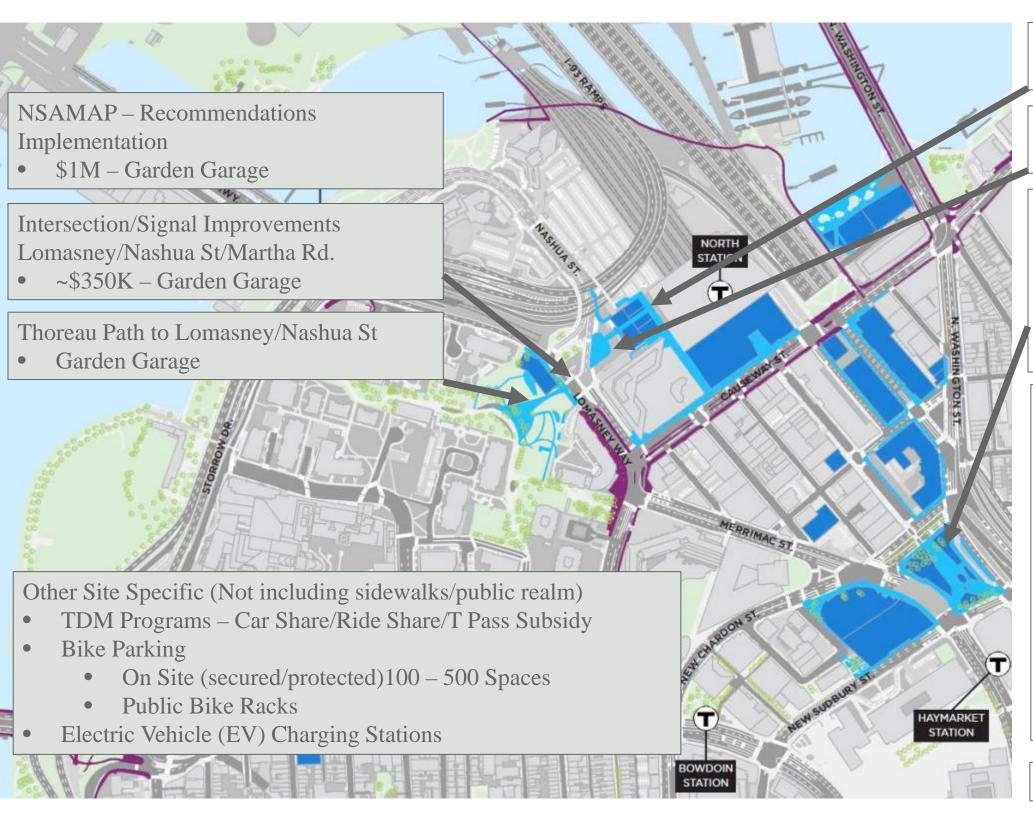
*Not Including Unknown \$ or Gov't Center Garage

Over \$9 Million in "Off-Site" Transportation Mitigation*









Nashua St. Public Ped. Connection to N. Station

• Nashua St Residences

Nashua St. "Triangle" Pedestrian Improvements

Nashua St Residences

Haymarket Station Improvements Gov't Center Garage

- Headhouse & Station
- Busway
- Bus Stop Improvements on Congress St
- Ped. Connections

Other Gov't Center Garage Improvements

*Draft Master TAPA Under Review

*Each Project Phase Will Have Separate TAPA

*Proposed Draft "Framework" of Improvements:

- 7 Intersection Improvement Locations
- 5 Signalization Improvement Locations
- Ped. Crossing Improvements at New Chardon/Bowker Streets
- Evaluate/Implement Bike Accommodations
 - Congress St
 - New Chardon St
 - New Sudbury St

*Not Including Unknown \$ or Gov't Center Garage

November: Creation of Action Items







Existing Projects

Community-Suggested Action Items (from Ideas & Problems)

Other **Jurisdictions**

Feasibility Test

Combine Remaining Items

Addition of Emerging Best Practices

Estimate Costs

Estimate **Durations**

Impacts

NSAMAP **Action Items**

Estimate

November: Polling on Action Items









Nov - Dec: Online Ranking of Action Items







North Station Area Mobility Action Plan







Welcome to the North Station Area Mobility Action Plan (NSAMAP) poll. NSAMAP is City of Boston project conducted through the Boston Planning and Development Agency (BPDA) that seeks to create a list of implementable action items to improve mobility in the area surrounding North Station.

Please rank the projects based on your priority for the area. Projects are separated into seven categories, (1) Pedestrian Improvements, (2) Placemaking Improvements, (3) Flex Zone (Curb Space) and Parking Improvements, (4) Bicycle Improvements, (5) Transit Improvements, (6) Shared Mobility Improvements and (7) Motorized Improvements. Answers are randomized and may appear out of order.

Select your top priority using the drop down bar to the left of each image until a response is selected for each answer. Your responses will help create priorities as projects move forward. Answers are required for all seven categories.

For background and further information, please visit the project website, available here.

* 1. Rank (from 1-7) the following Pedestrian related improvements from most desired (#1) to least desired (#7).



Charles Circle Pedestrian Improvements

Access to the Charles/MGH MBTA Station in the middle of Charles Circle is described as difficult to dangerous by pedestrians of all ages

Feedback - Motorized Traffic







Public Meeting Poll Results	Pts	
Lomasney Way/Nashua St/Martha Rd Intersection Improvements – Near, Long Term	1275	
Don't Block the Box Markings and Signage at Key Locations	825	
Bulfinch Triangle Traffic Circulation Improvements	650	
West End Signal timing Improvement Project	600	
Adaptive Signal Technology Study	425	
Residential Permit for Neighborhood Access During TD Garden Events	425	Ž
Encourage Employers to form Partnerships for TDM, Perform Annual TDM Reporting	425	
New Signal for Left Hand Turn into Charles River Plaza	150	

	Online Ranking Poll Results	Rank	
	Adaptive Signal Technology Study	3.79	
1	West End Signal Timing Improvement Project	3.83	
	Encourage Employers to form Partnerships for TDM, Perform Annual TDM Reporting	4.11	1
n	Don't Block the Box Markings and Signage at Key Locations	4.22	
	Lomasney Way/Nashua St/Martha Rd Intersection Improvements – Near, Long Term	4.23	
	New Signal for Left Hand Turn into Charles River Plaza	5.36	
	Bulfinch Triangle Traffic Circulation Improvements	4.64	
	Residential Permit for Neighborhood Access During TD Garden Events	5.83	

Feedback - Transit

Lovejoy Wharf Ferry



4.52

4.53

5.08





A Co.	Public Meeting Poll Results	Total Points	.2Ma	
	Lovejoy Wharf Ferry	2100	X March	
	Consolidation of local MBTA routes, shuttles, tourist bus loop/shuttle stop consolidation study	950		
	North Washington Street Inbound Transit Lane to Haymarket	900	A	
22.2	Airport Shuttle from North Station	600	1	
	Bus Priority Lane Connections N. Station Area to S. Boston	575		
	North Washington Bus Stop Improvements Project	450	1	
	Create Public Transit App Kiosks at Major MBTA Stations	375	-	
	Online Ranking Poll Results	Avg. Rank		
* / Donk /	Bus Priority Lane Connections N. Station Area to S. Boston	2.77		frama
* 4. Rank (Airport Shuttle from North Station	3.55	ents	from
most des	North Washington Street Inbound Transit Lane to Haymarket	3.57		
	Consolidation of local MBTA routes, shuttles, tourist bus loop/shuttle stop consolidation study	3.97		

North Washington Bus Stop Improvements Project

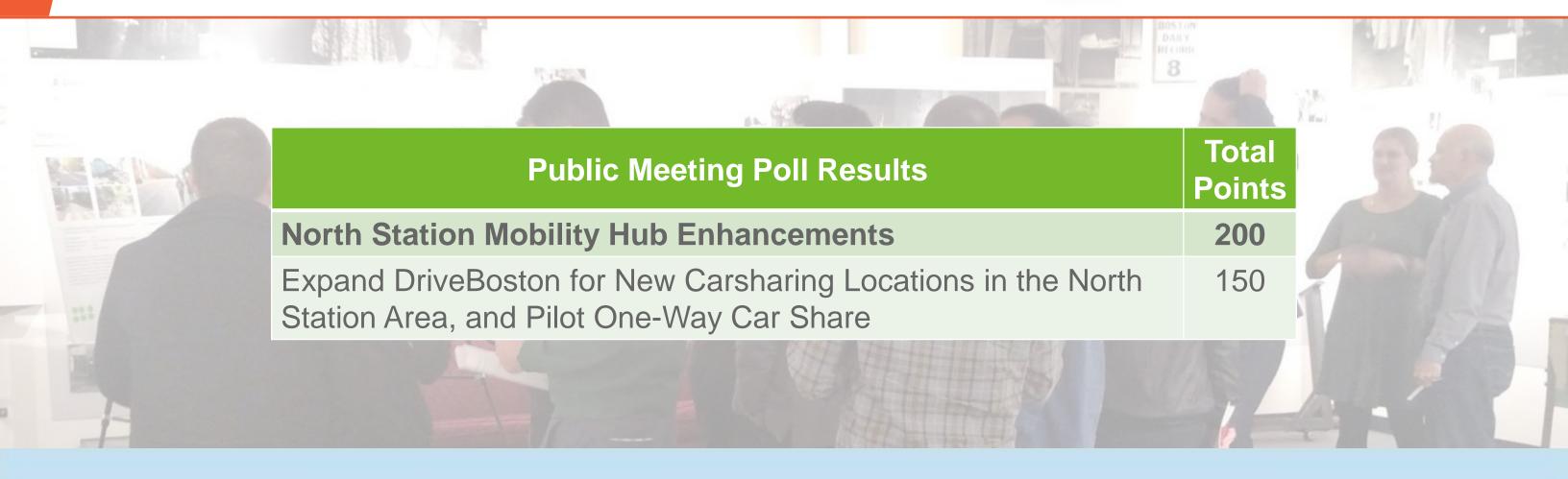
Create Public Transit App Kiosks at Major MBTA Stations

Feedback – Shared Mobility









*	4. Rank (Online Ranking Poll Results	Avg. Rank	ents from
	most des	North Station Mobility Hub Enhancements	1.42	
		Expand DriveBoston for New Carsharing Locations in the North Station Area, and Pilot One-Way Car Share	1.58	

Feedback – Pedestrian Environment

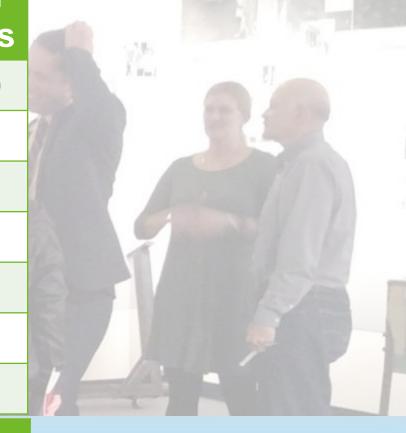








Public Meeting Poll Results	Total Points
Canal Street Pedestrianization	2100
Charles Circle Pedestrian Improvements	950
West End Sidewalk Improvement Project	675
West End Signal Timing Improvement Project	450
West End Pedestrian Crossing Improvements	350
West End Wayfinding Project	325
Cardinal O'Connell Way Shared Street	200



* 4. Rank (from most desired

	Online Ranking Poll Results	Avg. Rank	
	Charles Circle Pedestrian Improvements	2.74	
1	Canal Street Pedestrianization	3.05	/e
	West End Pedestrian Crossing Improvements	3.19	
	West End Sidewalk Improvement Project	4.15	
	West End Signal Timing Improvement Project	4.59	
	Cardinal O'Connell Way Shared Street	4.81	
	West End Wayfinding Project	5.48	

ements from

Feedback – Placemaking









*	4.	Ra	nk	(fro
	m	ost	de	sire

)	Online Ranking Poll Results	Avg. Rank
	Bulfinch Triangle Tactical Urbanism Pilot	1.56
	West End Chair Placements, Seating Improvements	2.13
	Parklet on Blossom Street	2.31

ments from

Feedback – Flex Zone (Curb Use)







The state of the s	8
Public Meeting Poll Results	Total Points
West End Dynamic/Increased Parking Pricing Pilot	575
Permitted Shuttle Stop Network	350
West End/Bulfinch Triangle Curb Use Reorganization	350
Parking Garage Wayfinding & Occupancy Data	175
Open data on Downtown Boston Parking Freeze	100

*	4.	Ra	nk	(fr
	m	ost	de	sir

C	Online Ranking Poll Results	Avg. Rank	ments from
	Permitted Shuttle Stop Network	2.42	
E	West End Dynamic/Increased Parking Pricing Pilot	2.8	
	West End/Bulfinch Triangle Curb Use Reorganization	2.93	
	Parking Garage Wayfinding & Occupancy Data	3.37	
	Open data on Downtown Boston Parking Freeze	3.48	

Feedback - Bicycles







1 1 1 1 1	Public Meeting Poll Results	Pts
	Cambridge Street Protected Bike Lane	2100
	Lomasney Way/Nashua Street Protected Bike Lane	950
	Merrimac/Congress Street Protected Bike Lane	900
10 20	Connect both sides of Longfellow Bridge to Esplanade via Existing Tunnel	600
	Charles Street Protected Bike Lane	575
222	Blossom Street Road Diet & Bike Lane	450
	West End Hubway Expansion	375
	West End Expansion of Boston's Bicycle Wayfinding System	325
	Bike Parking in the Bulfinch Triangle	100
	Online Ranking Poll Results	Rank
	Cambridge Street Protected Bike Lane	3.43

3.71 **Merrimac/Congress Street Protected Bike Lane** 4.01 **Lomasney Way/Nashua Street Protected Bike Lane** most de Charles Street Protected Bike Lane 4.08 Connect both sides of Longfellow Bridge to Esplanade via Existing Tunnel 4.7 Blossom Street Road Diet & Bike Lane 5.81 6.27 West End Hubway Expansion West End Expansion of Boston's Bicycle Wayfinding System 6.68 Bike Parking in the Bulfinch Triangle 6.31



Short Term – Motorized Traffic

STATION

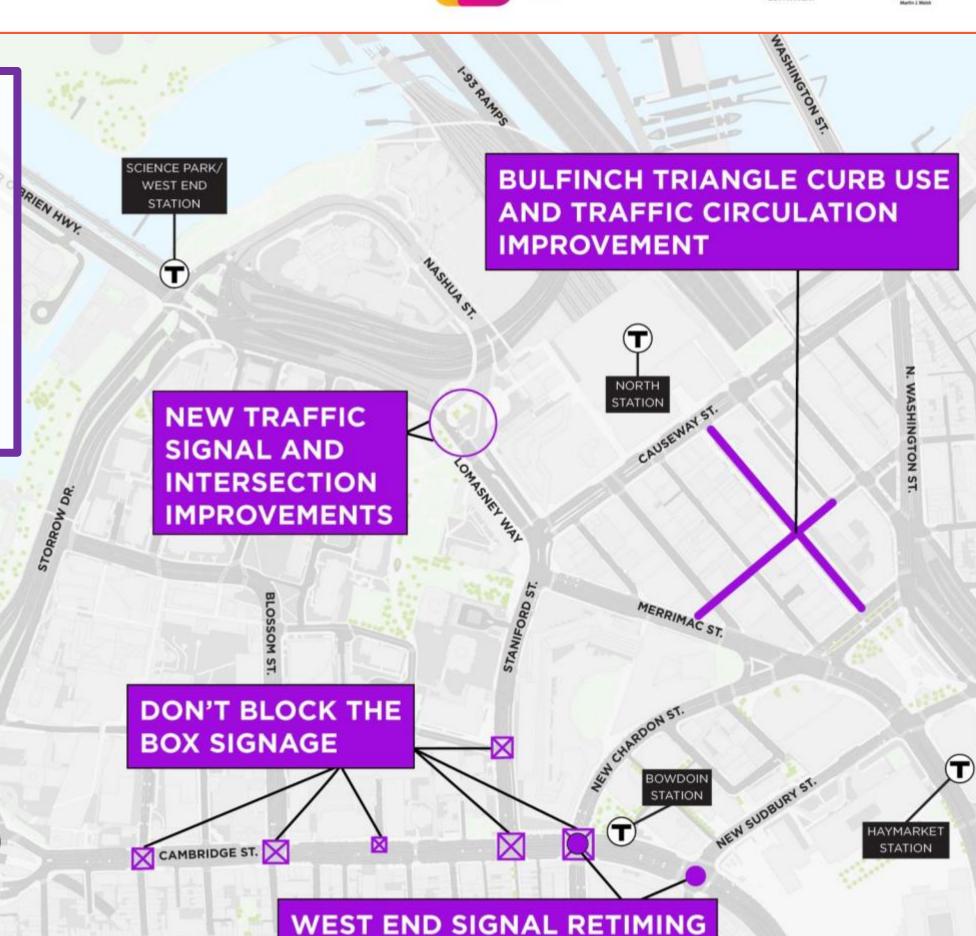


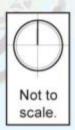




 Encourage Local Employers to Report Annually on their own TDM Goals

Adaptive Signal Technology Study



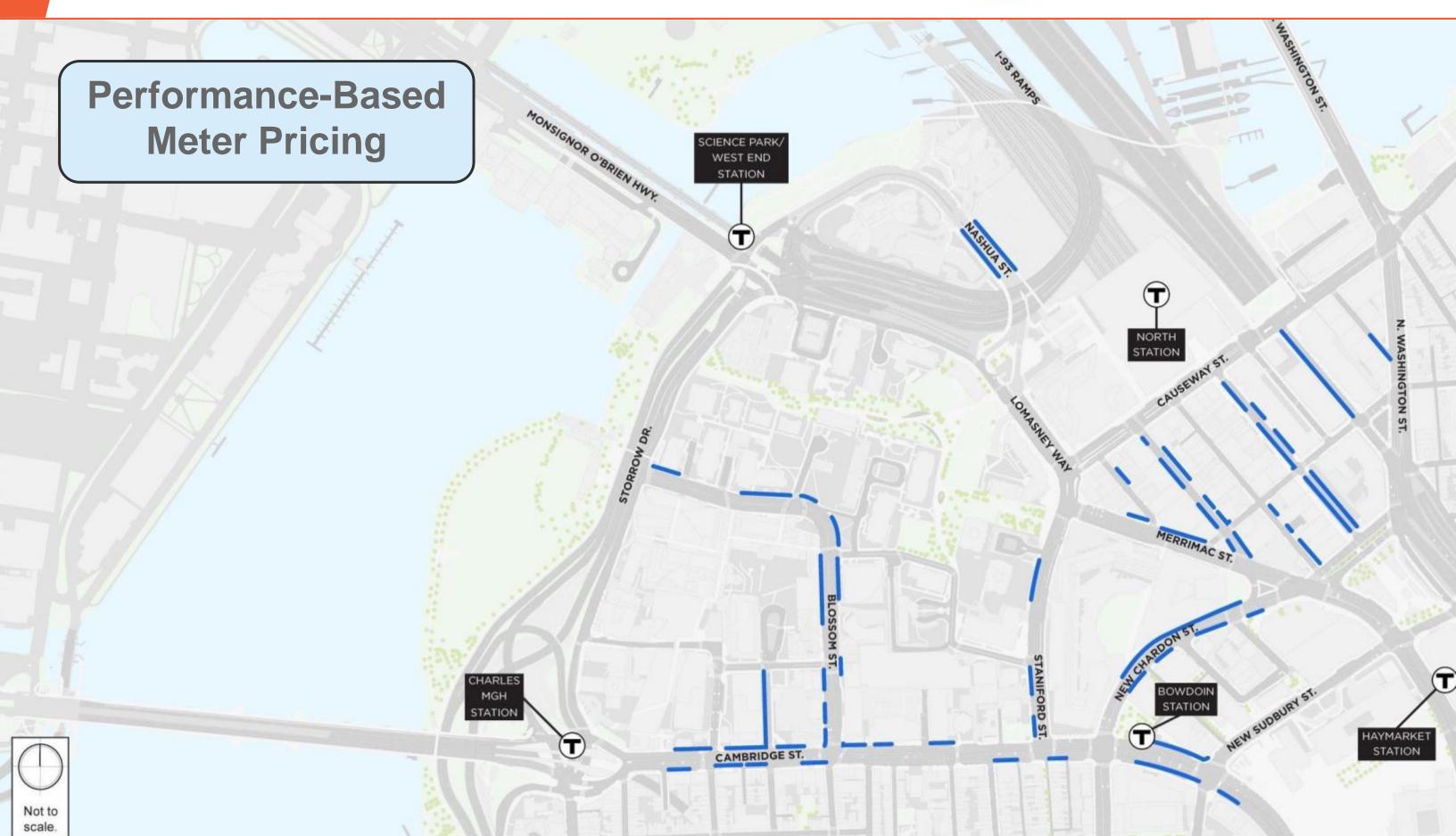


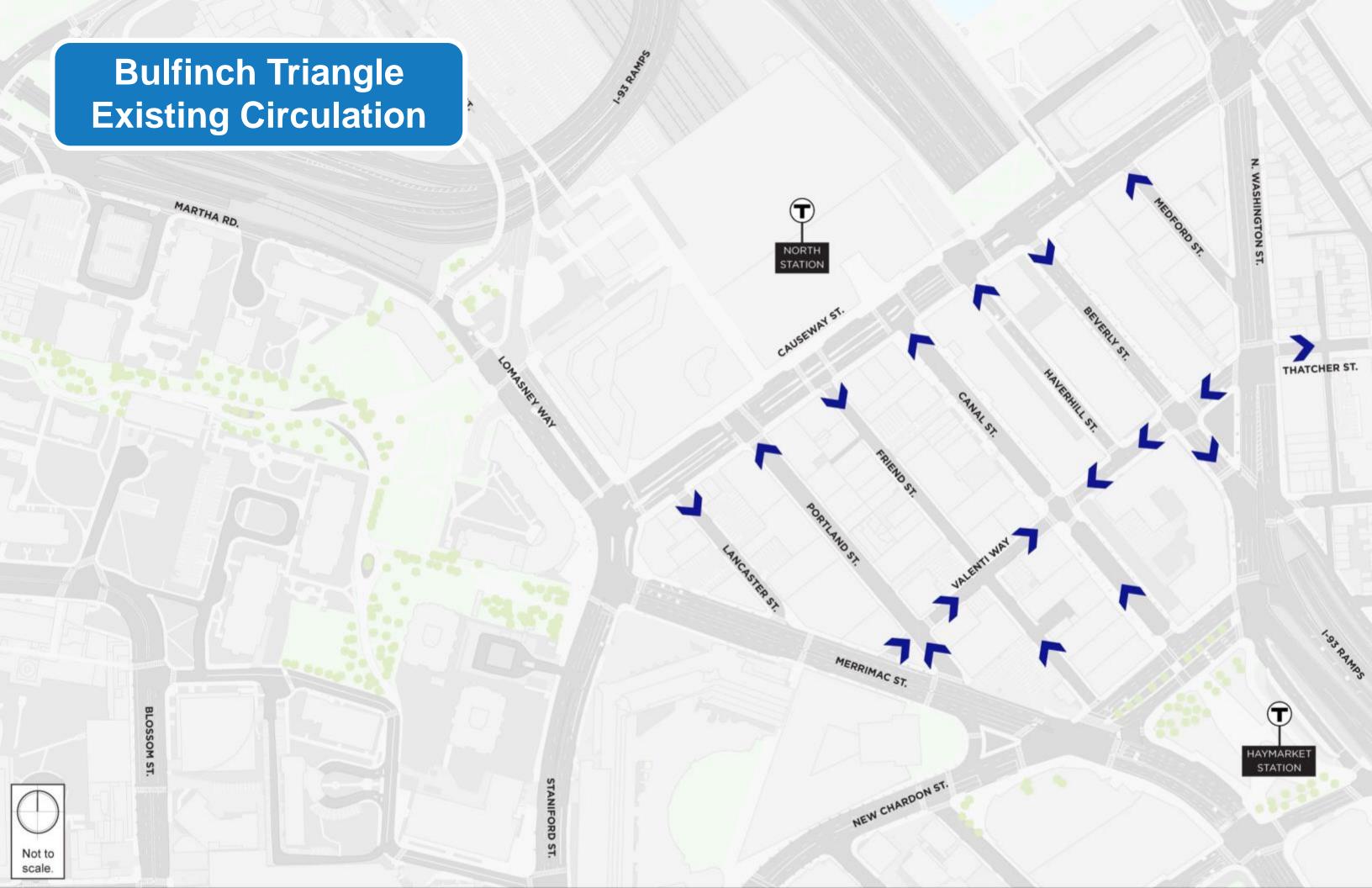
Short Term – Flex Zone (Curb Use)









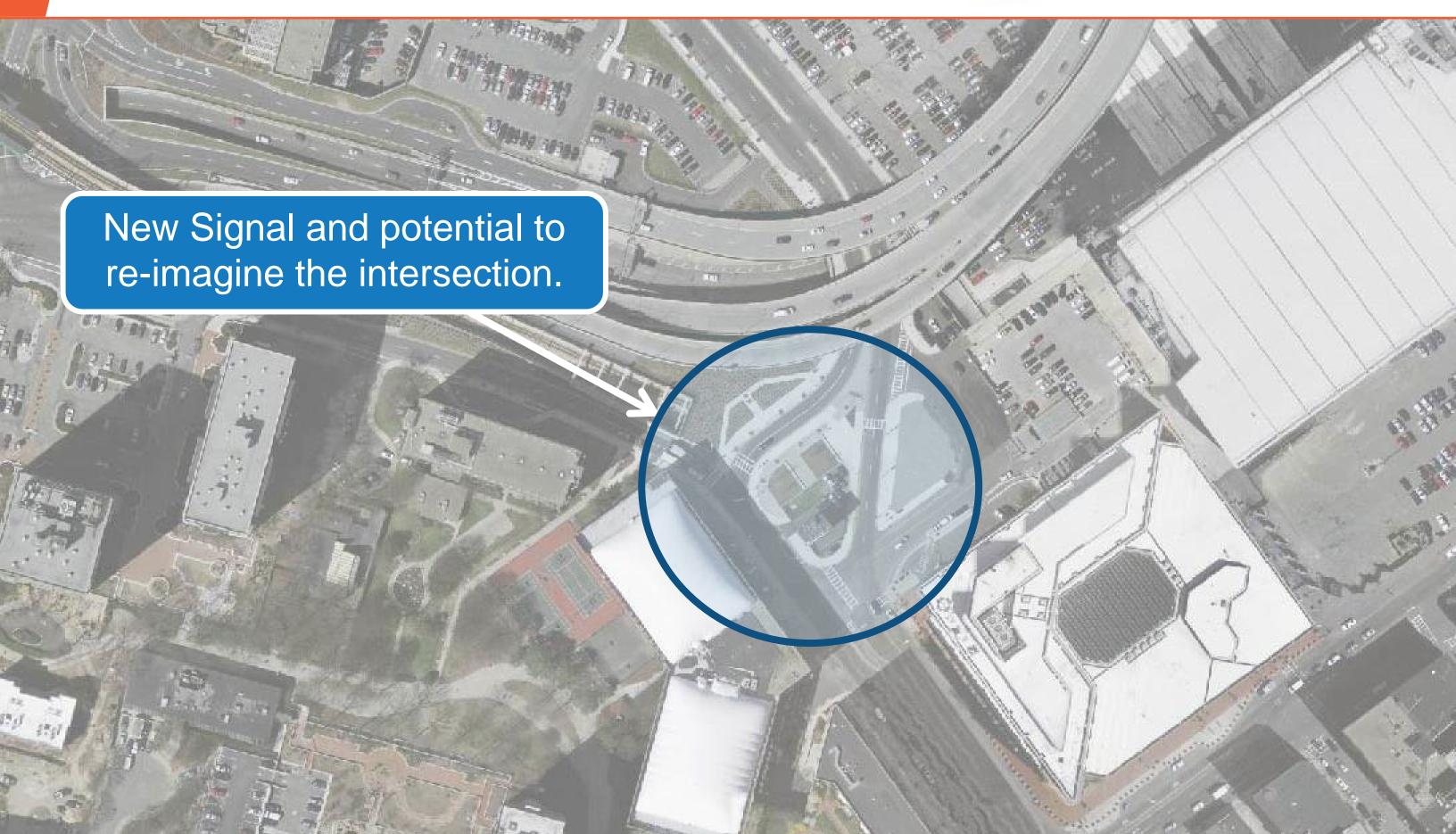


Lomasney/Nashua Intersection









Don't Block the Box Process



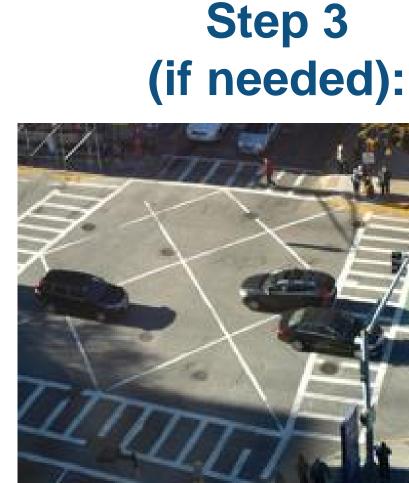




New police cadets enforce signage, report back to determine need for markings.

Step 1:









TDM from Local Employers?







Encourage More Local Employers to perform TDM and Report Annually to the City. (Including TD Garden)



The fastest way to the **Barclays Center® Brooklyn** is the LIRR.





Actually, we're just across the street.

Whether you're cheering for the Nets, or catching world-class acts like Jay-Z inaugurating the arena, the Long Island Rail Road is the best way there and back. Traffic's crazy. Street parking, limited. Paid parking, expensive. Long Island Rail Road to Atlantic Terminal is the way to go. There are additional trains for late night events. And if you buy your round-trip ticket in advance, you'll get the best fare. For details, go to mta.info/lirr.

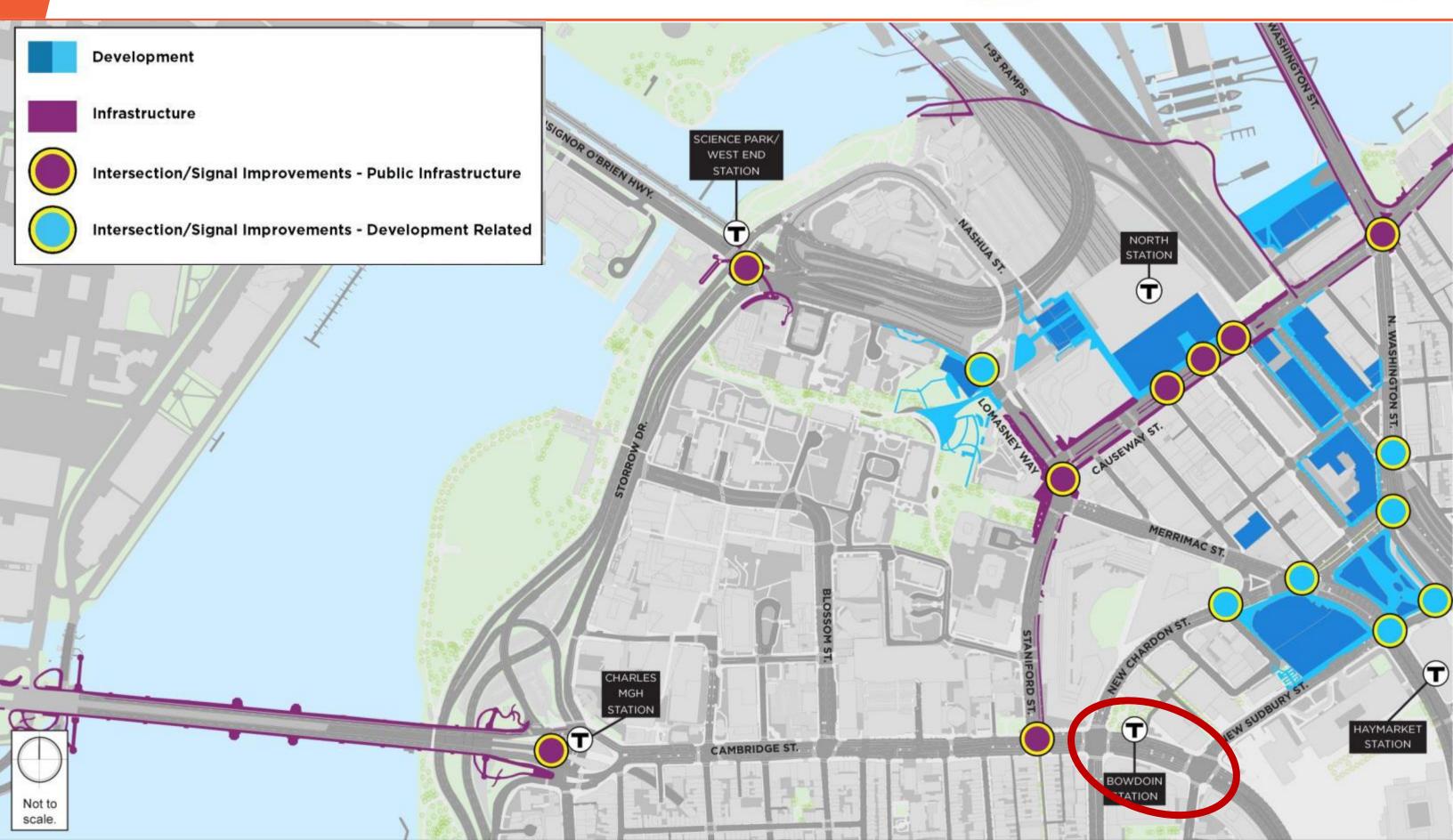


West End Signal Retiming (2 Signals) 5









Performance-Based Meter Pricing







- Studies have shown that managing parking supply (reducing the number of spaces) can significantly lower Single Occupancy Vehicle (SOV) use.
- To a lesser degree, adjusting parking pricing also has a significant effect on SOV use.

Source: FHWA



Adaptive Signal Technology Study







- Already underway in the city as part of new development.
- AST can help shorten the peak period impacts by better managing signal timings before and after the heaviest traffic time. It is not a magic bullet, but can reduce delay in the off-peak hours.
- AST can be expensive compared to conventional systems.
- AST can be helpful during special events.

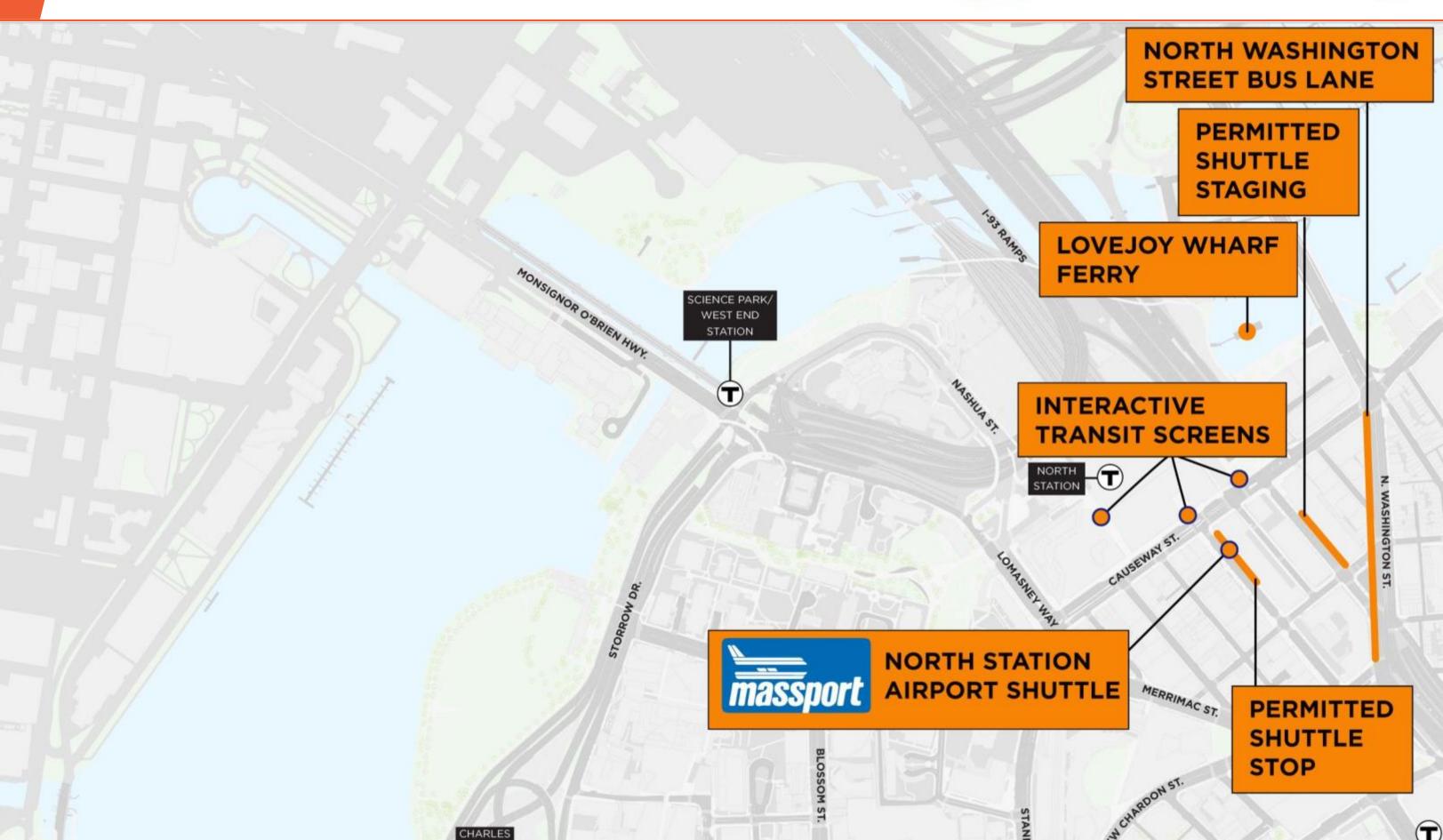


Short Term – Transit & Shared Mobility 5









North Washington St Bus Lane







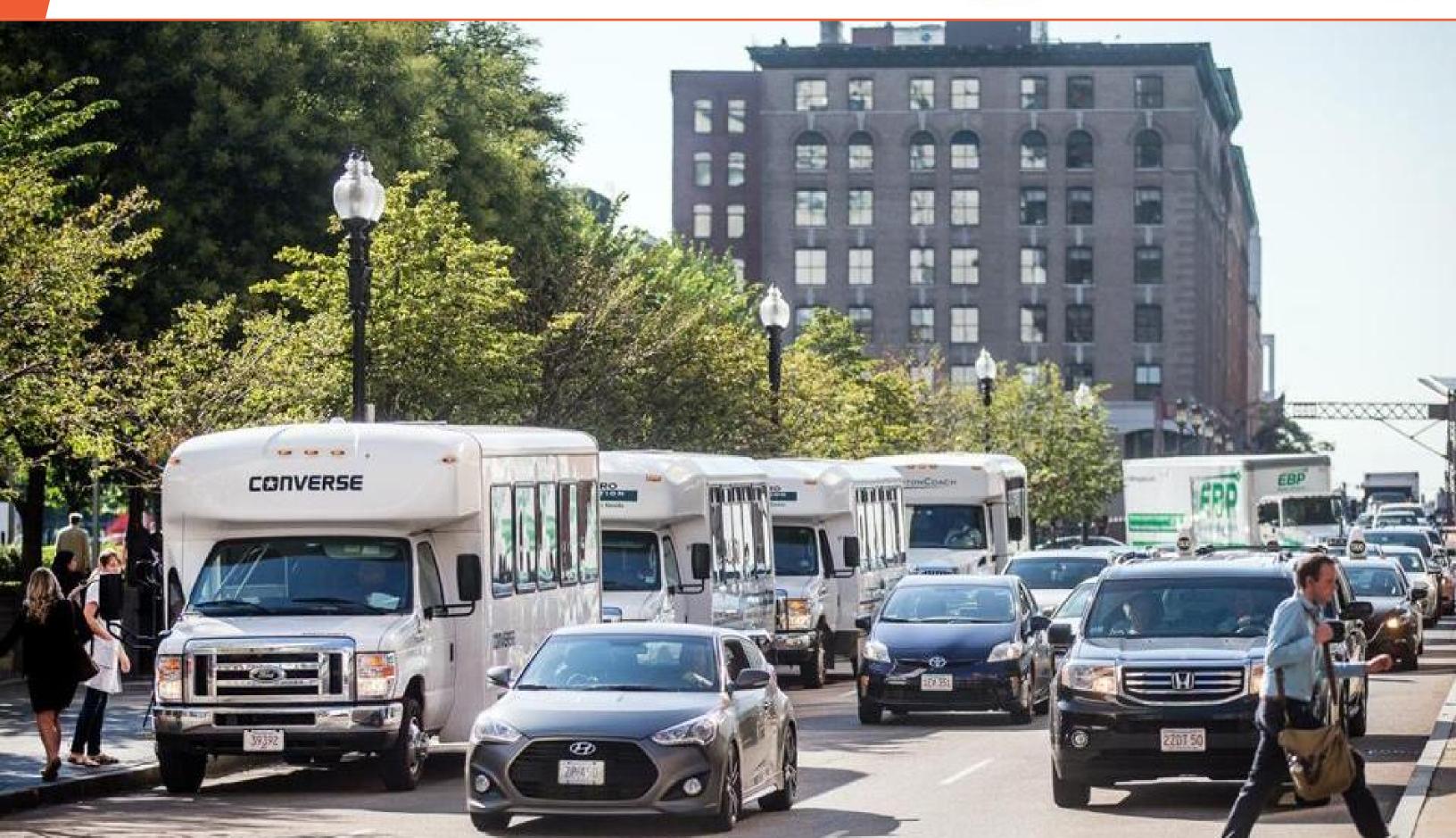


Shuttle Consolidation – Seaport







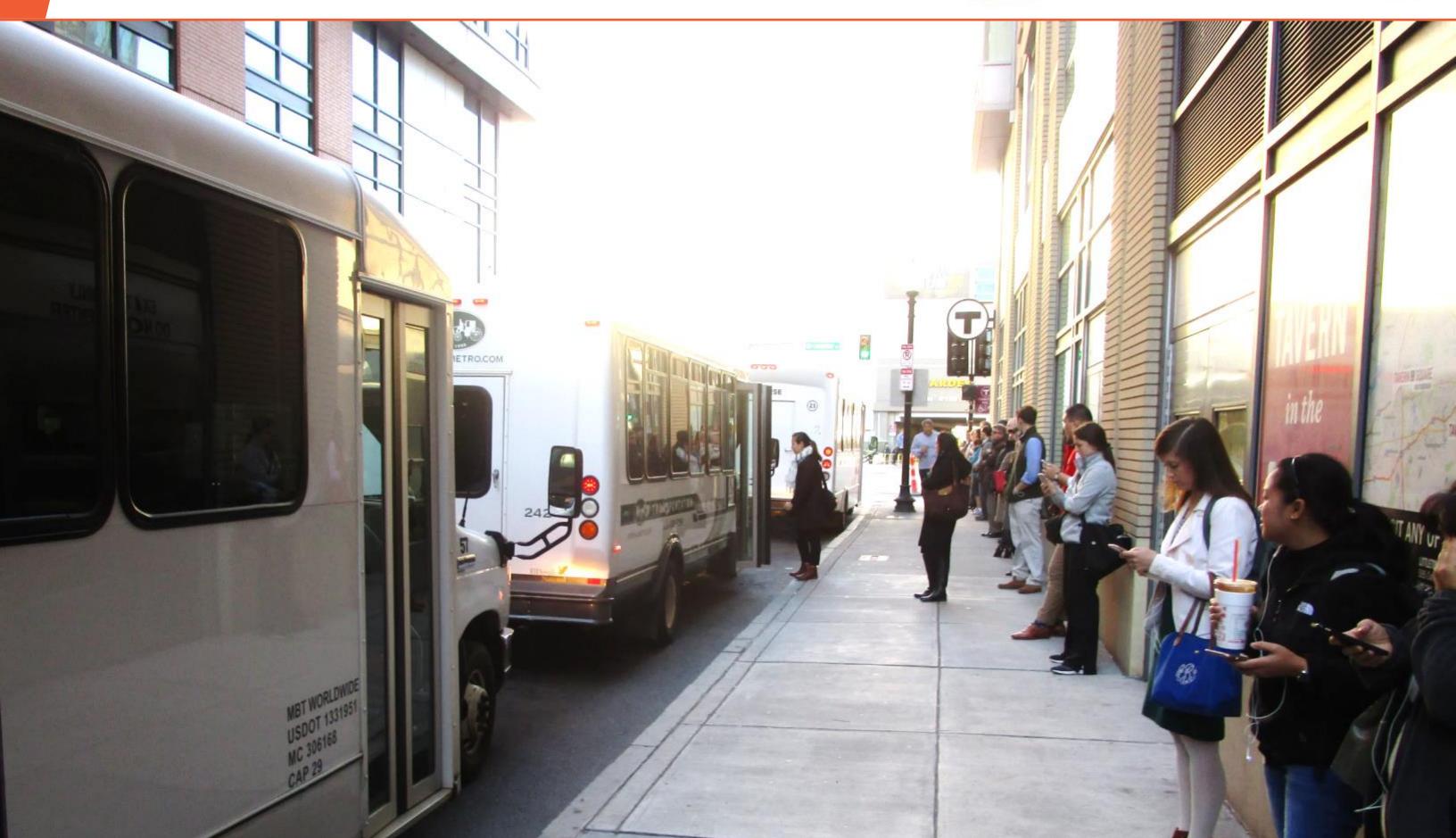


Bulfinch Triangle Shuttle Stop









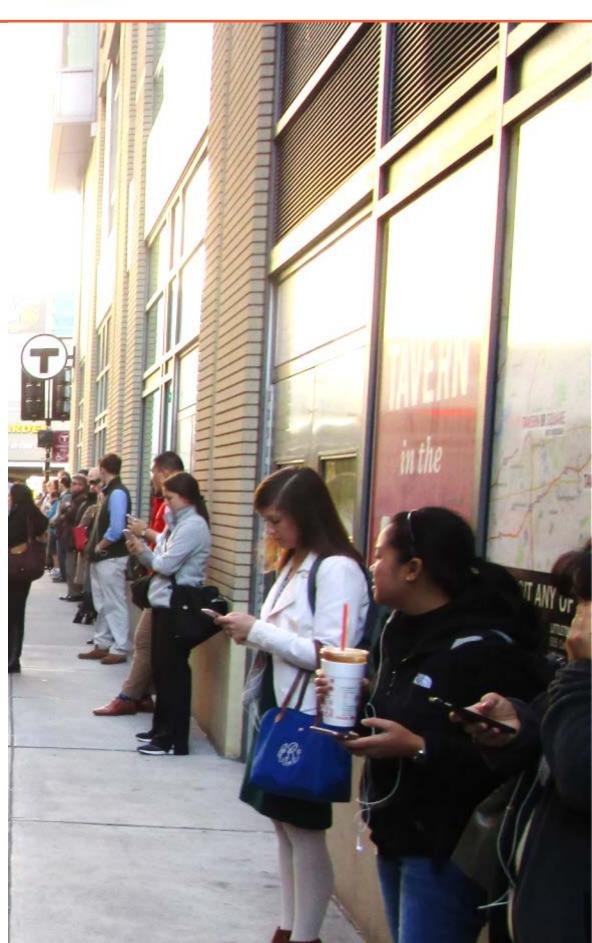
Shuttle Stop Permitting – SF Example







- Citywide formalization of shuttle stops. Permits are required for their use by operators (these may or may not also be MBTA stops).
- To get a permit, shuttle operator must give the city access to GPS tracking for monitoring.
- A cost is set for each stop a shuttle operator makes at a designated shuttle stop, and this cost supports the monitoring of shuttles at the city.
 - Operator estimates frequency, monitoring is used to make adjustments annually.



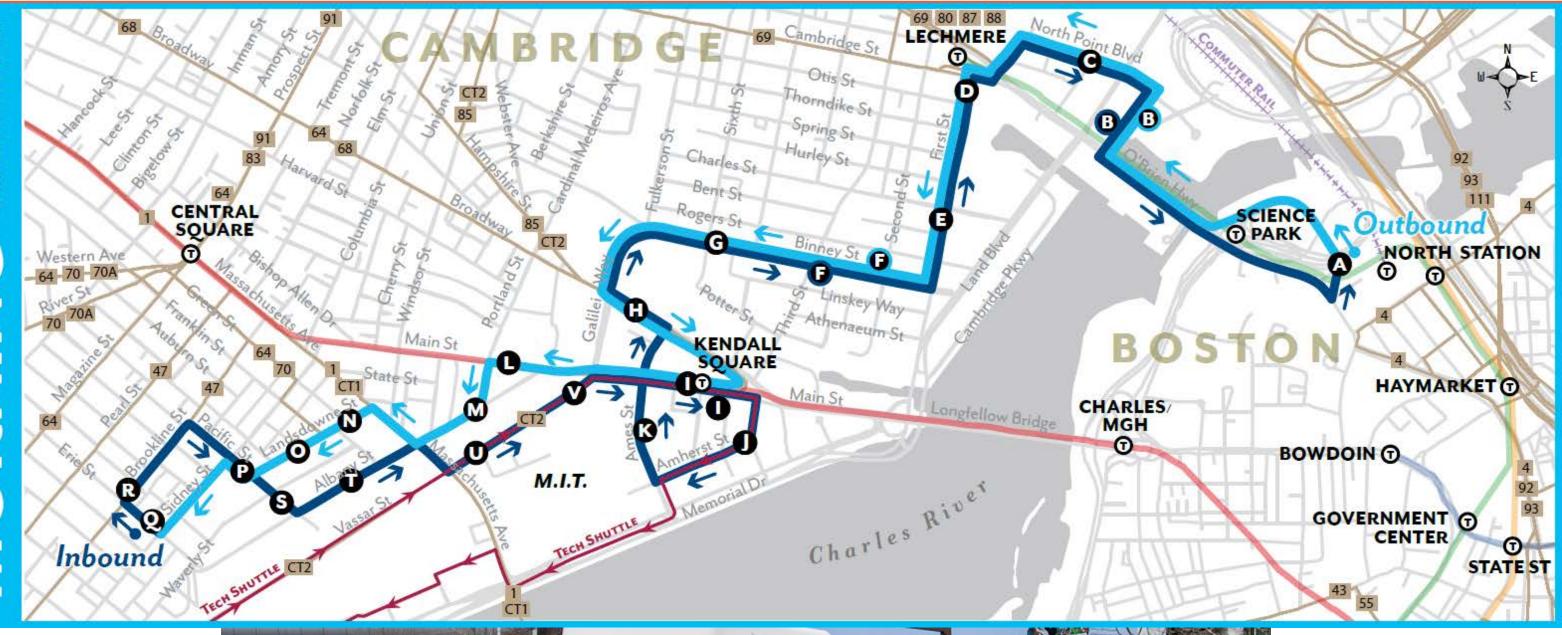
6:20 AM to 10:50 AM MORNIN

Shuttle Consolidation – EZ Ride











MBTA Ferry at Lovejoy Wharf







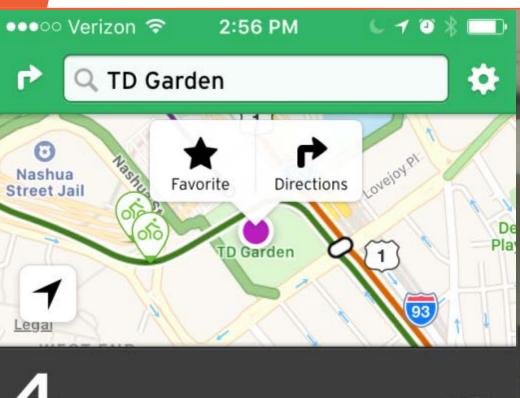


Interactive Transit Screens









49 minutes

● Tide St via South Station Causeway St / Canal St

5

• Inbound to Forest Hills
North Station

TC △ Cleveland Circle

5 minutes

LOW

North Station

3



N. Station Airport Shuttle









Short Term – Pedestrian Environment

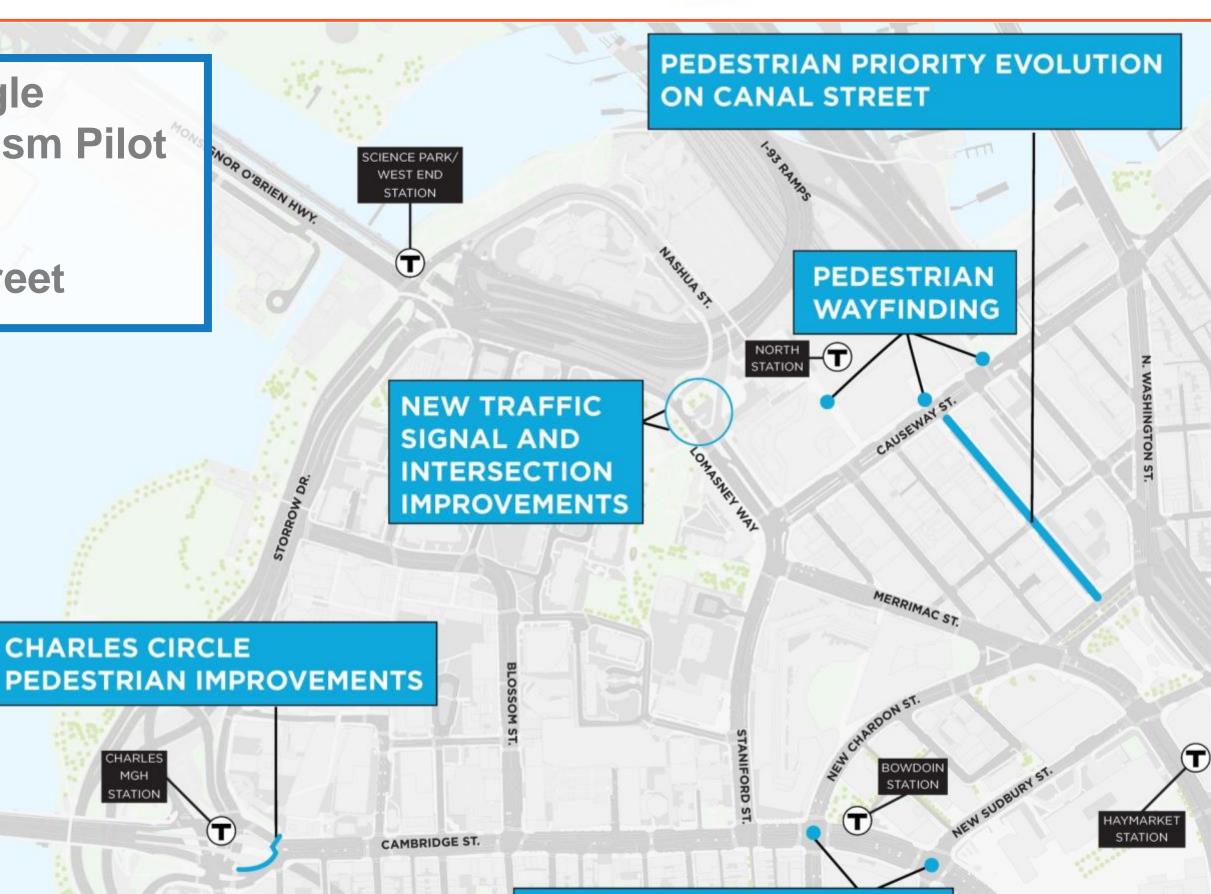
STATION



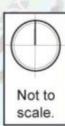




- **Bulfinch Triangle Tactical Urbanism Pilot** (Partial)
- **Open Canal Street**



WEST END SIGNAL RETIMING

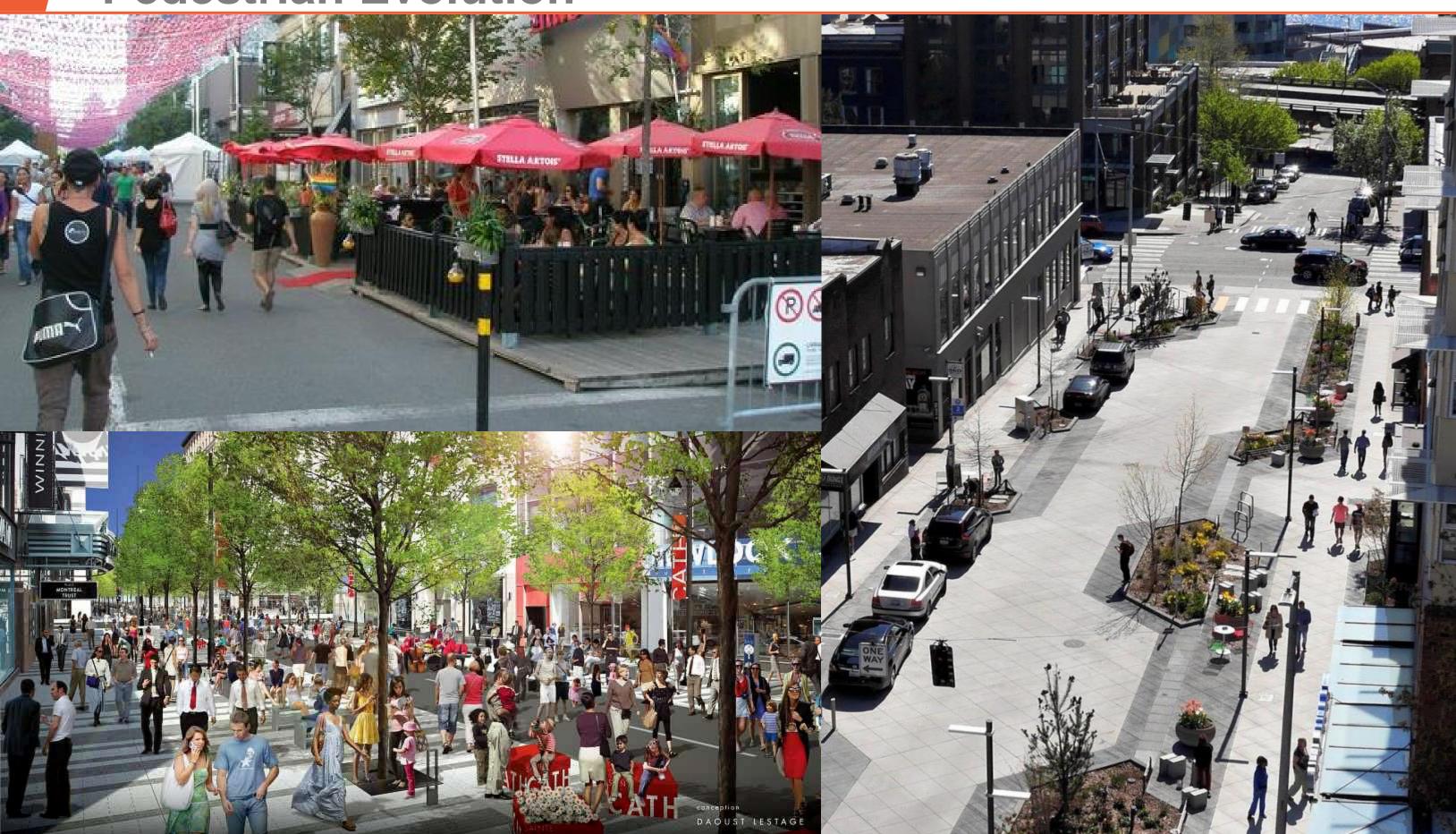


Bulfinch Triangle Pedestrian Evolution







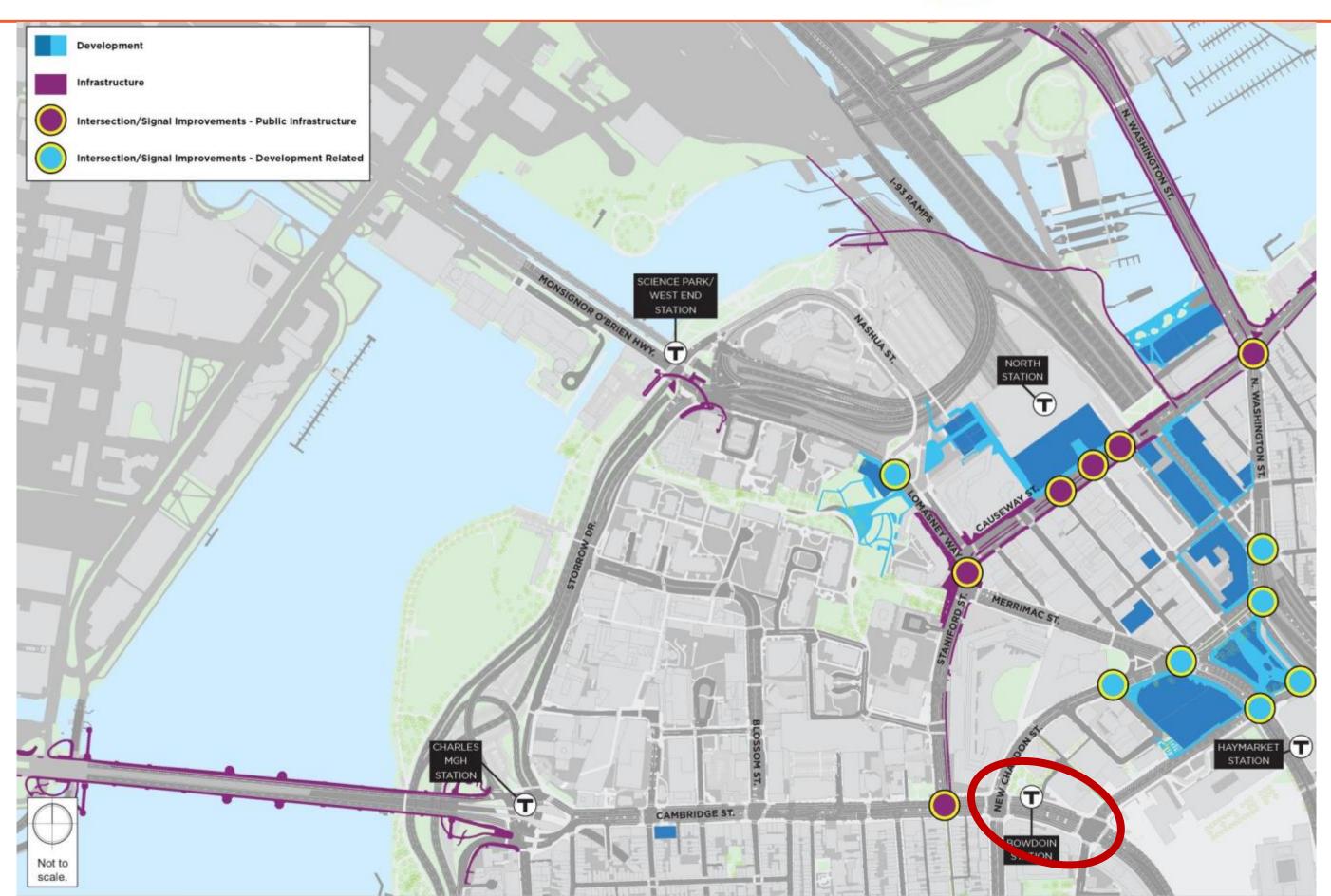


West End Signal Retiming (2 Signals)







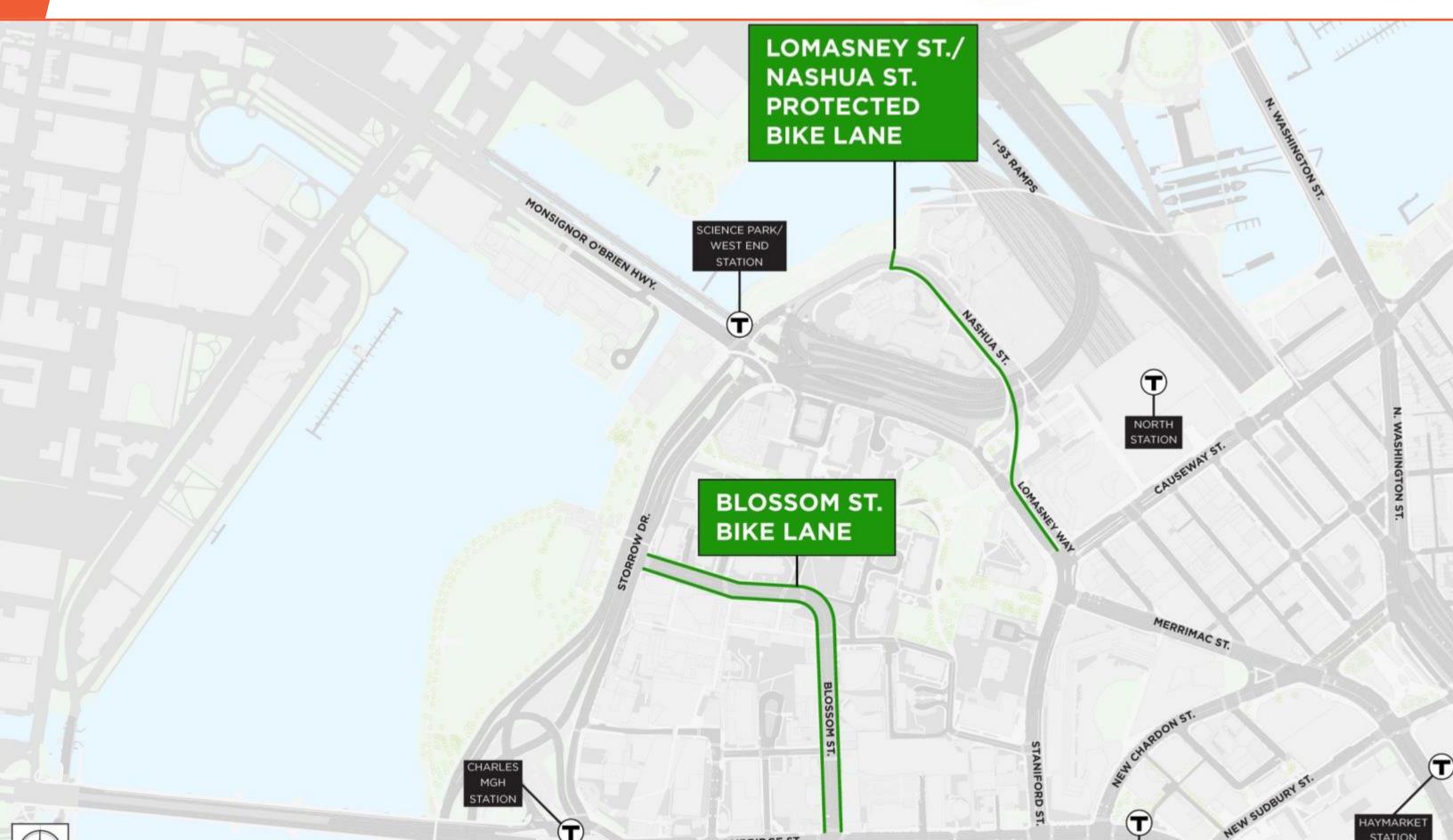


Short Term – Bicycles







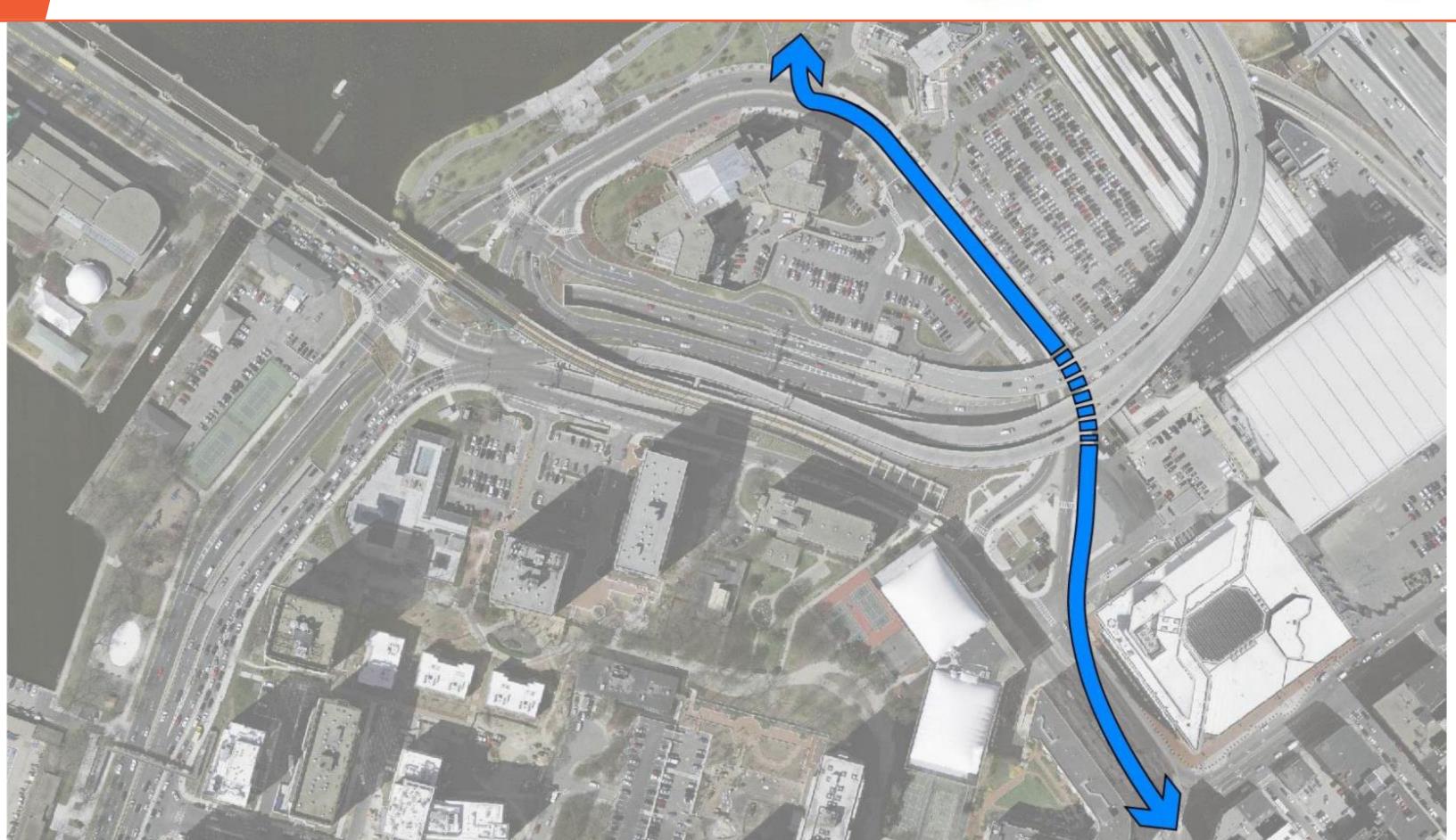


Lomasney/Nashua Bikeway









Short Term Highlights





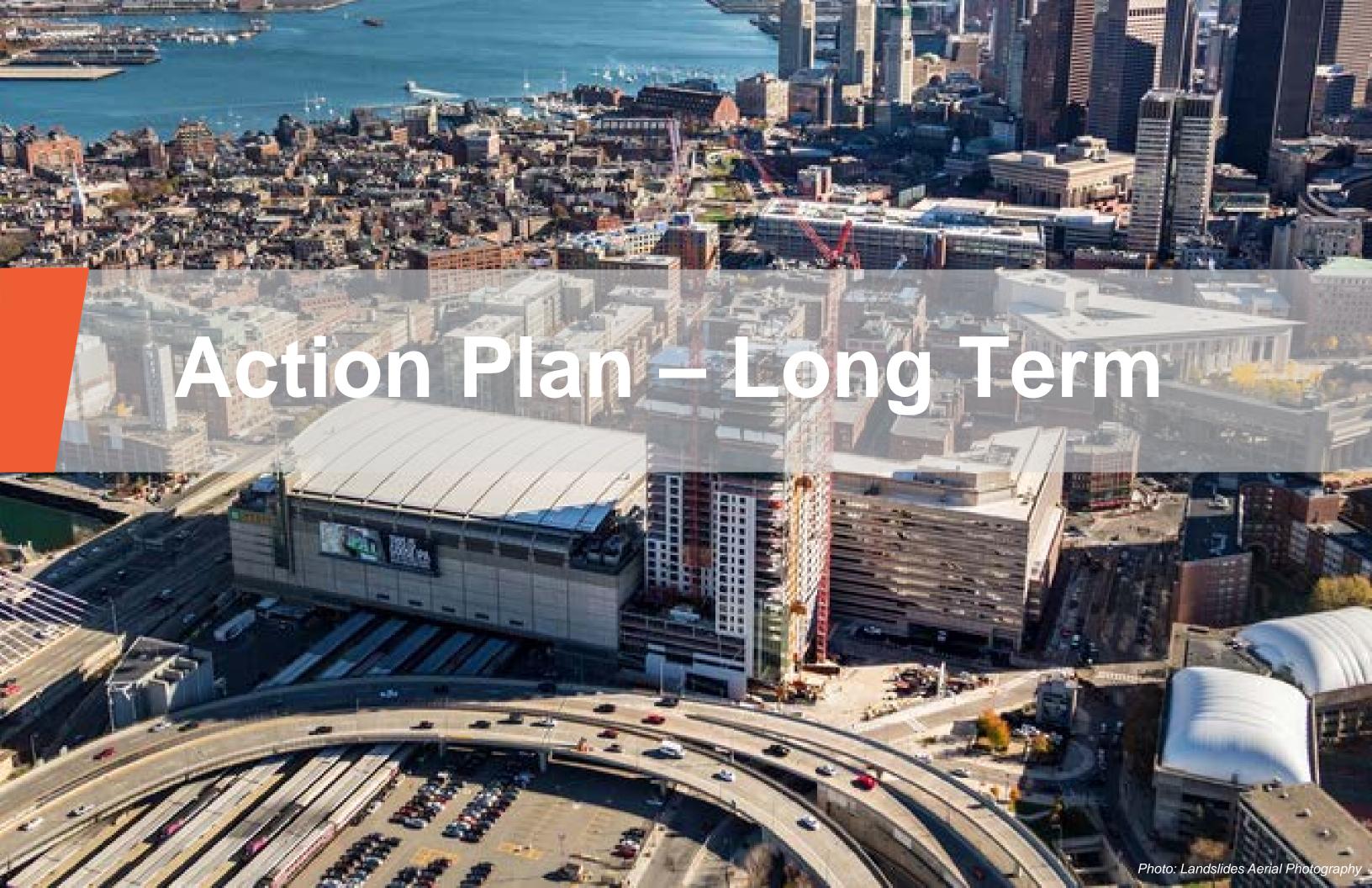


Eleven Top-Ranked Action Items

- Charles Circle Pedestrian Improvements
- West End Signal Retiming
- West End Dynamic Parking Pilot
- Lomasney/Nashua Protected Bike Lane
- North Washington Street Bus Lane
- Adaptive Signal Technology Study
- Lomasney/Nashua Intersection Improvements (traffic and peds)
- Don't Block the Box Markings
- TDM Commitments
- Bulfinch Triangle Traffic Circulation
- Create Public Transit App Kiosks at North Station

Six More Top-Ranked Action Items Partially addressed

- Canal Street Pedestrianization (process begins)
- Bulfinch Tactical Urbanism
- West End Wayfinding
- Permitted Shuttle Stop Network
- North Station Mobility Hub
- Bulfinch Triangle Curb Use Reorganization

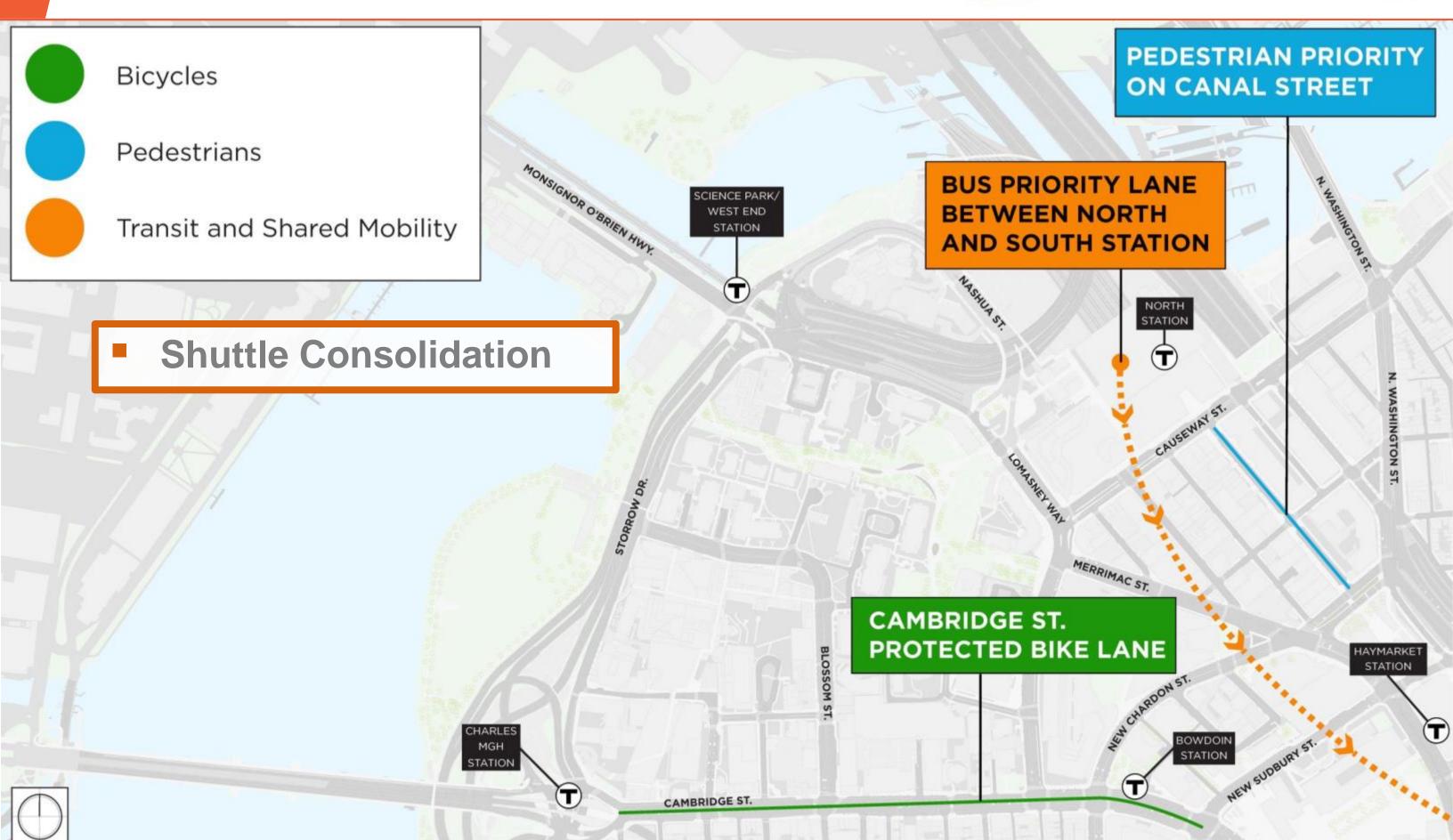


Long-Term Action Items









Long Term Highlights







Seven Additional Action Items addressed

- Canal Street Pedestrianization
- Cambridge Street Bike Lane
- Congress/Merrimac Bike Lanes
- MBTA/Shuttle/Tourist Trolley Consolidation
- North Station-South Station Bus Priority Lane
- Lovejoy Wharf Ferry
- North Station-Logan Airport Shuttle

Four Wider Changes Recommended

- Citywide Annual Reporting and Goal Setting Process for TDM
- Citywide Shuttle Stop Permitting
- Citywide Commercial Parking Revenue Collection
- Increase Shared Mobility Options



Goals for Bulfinch Triangle







Bulfinch Traffic Circulation

Difficult

→ → → → Make it Easier to Navigate by Car

Canal Foot Traffic to increase by 50% or more

→ → → → Make Canal More Pedestrian Oriented

Shuttles Causing Congestion

→ → → → Put them in a Nice Place Off of Causeway Street

Limitations for Bulfinch Triangle







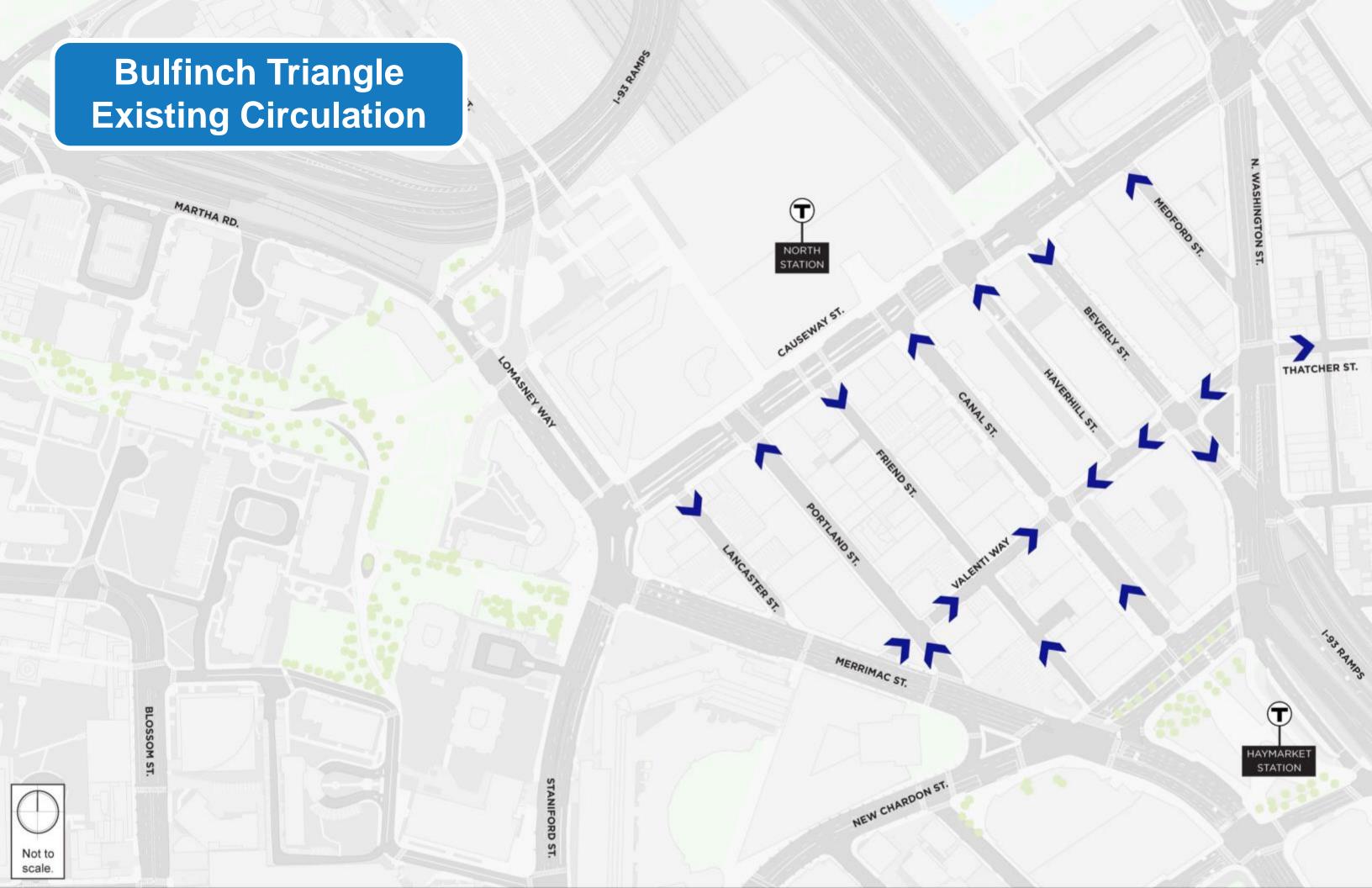
Prevent Significant Cut-Through Traffic → → → → Prevent Certain Moves (Such as Highway Access)

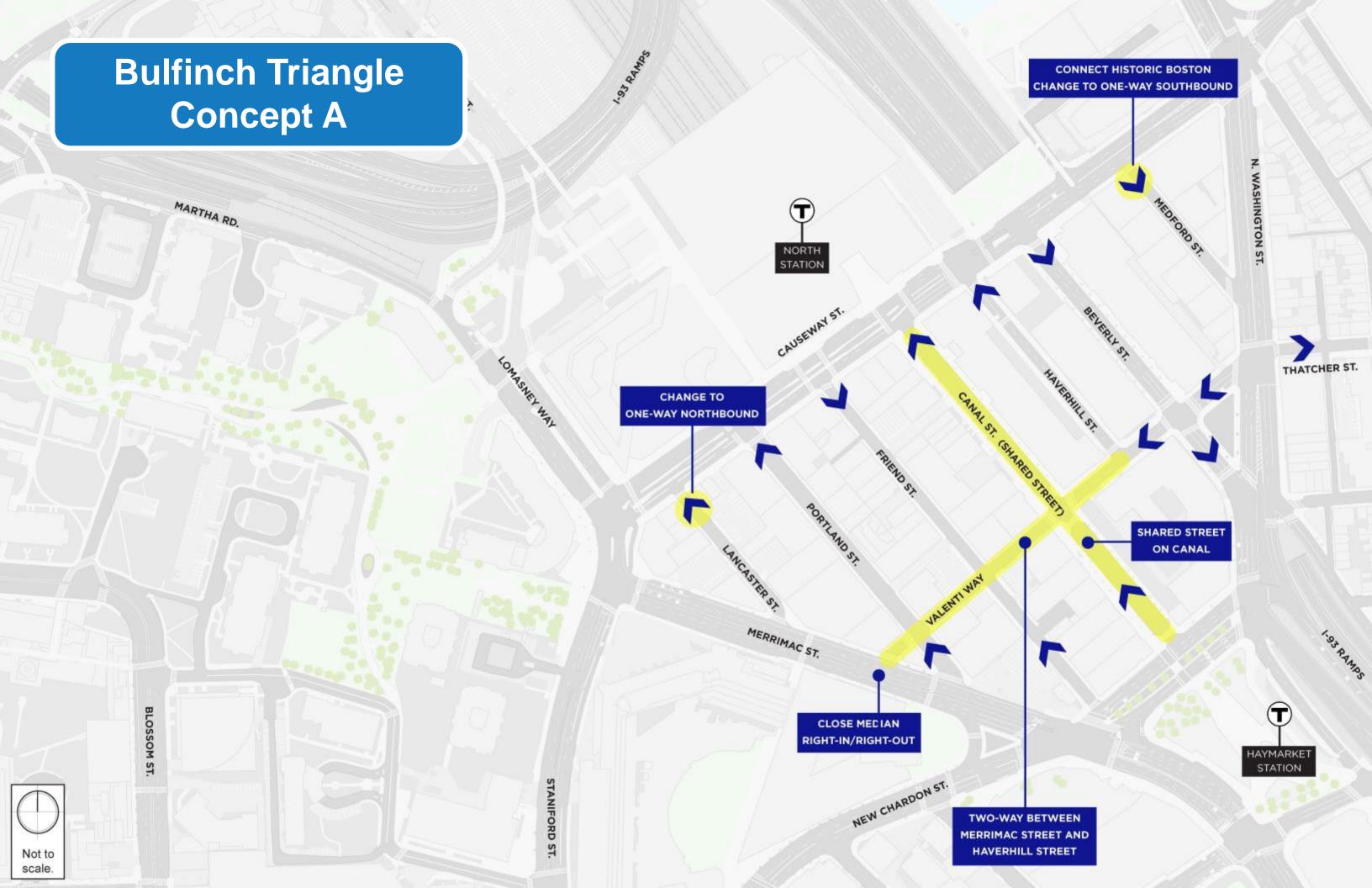
Truck Delivery and Other Uses are Still Needed for Canal

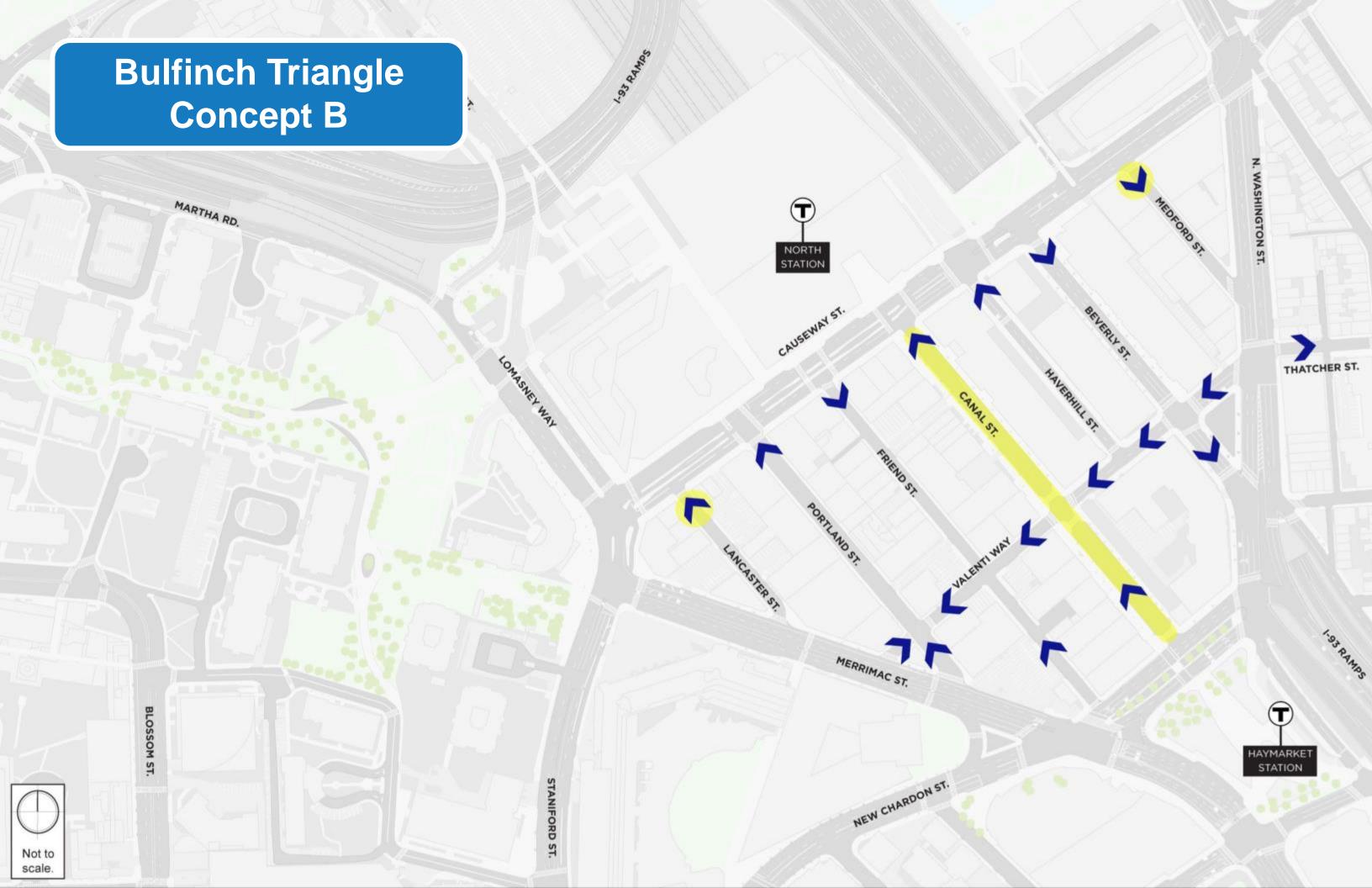
→ → → Design a Shared
Street

Speedy Shuttles Help Keep Cars Off the Road

→ → → → Make Sure Shuttle
Circulation is Simple





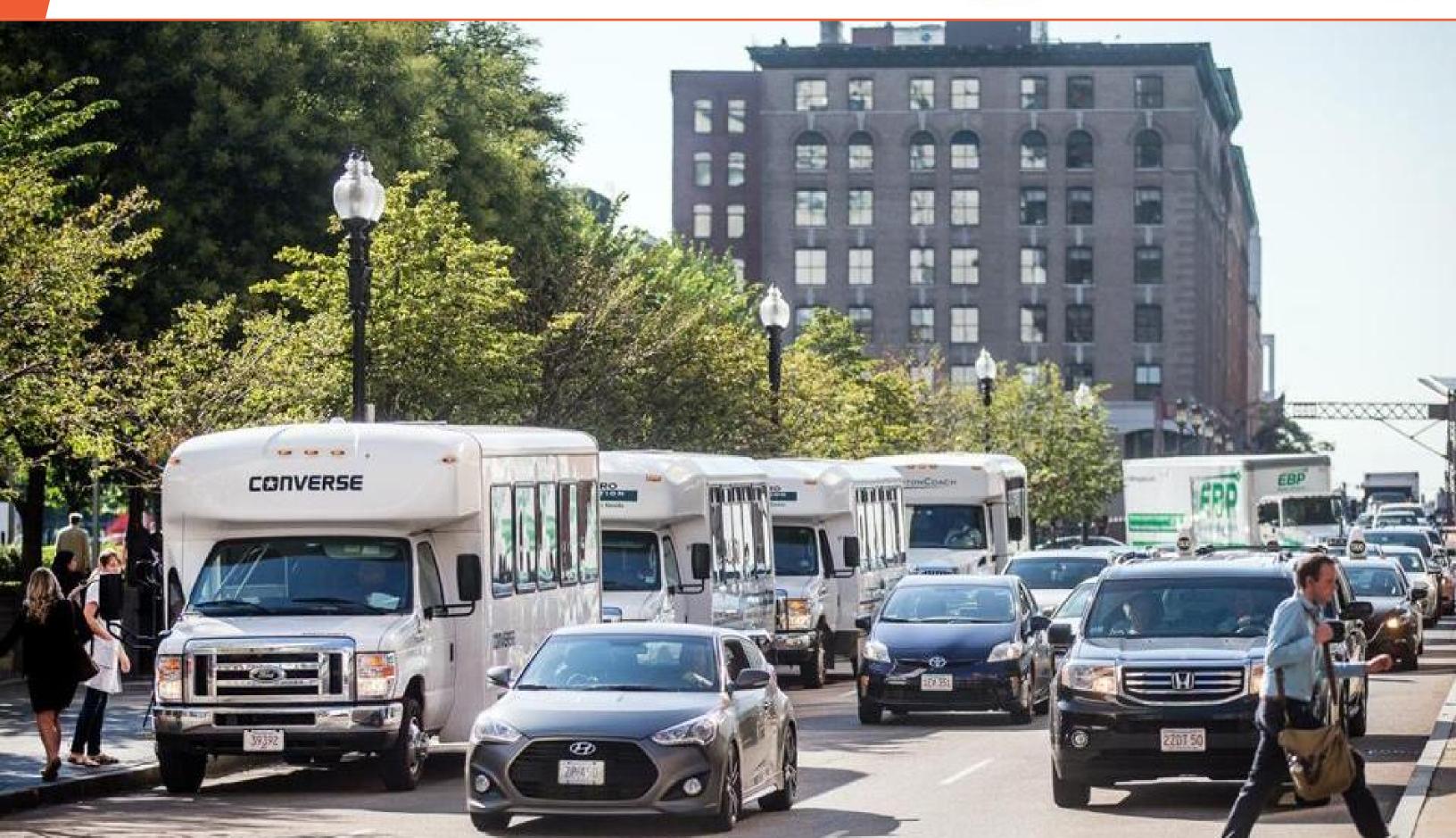


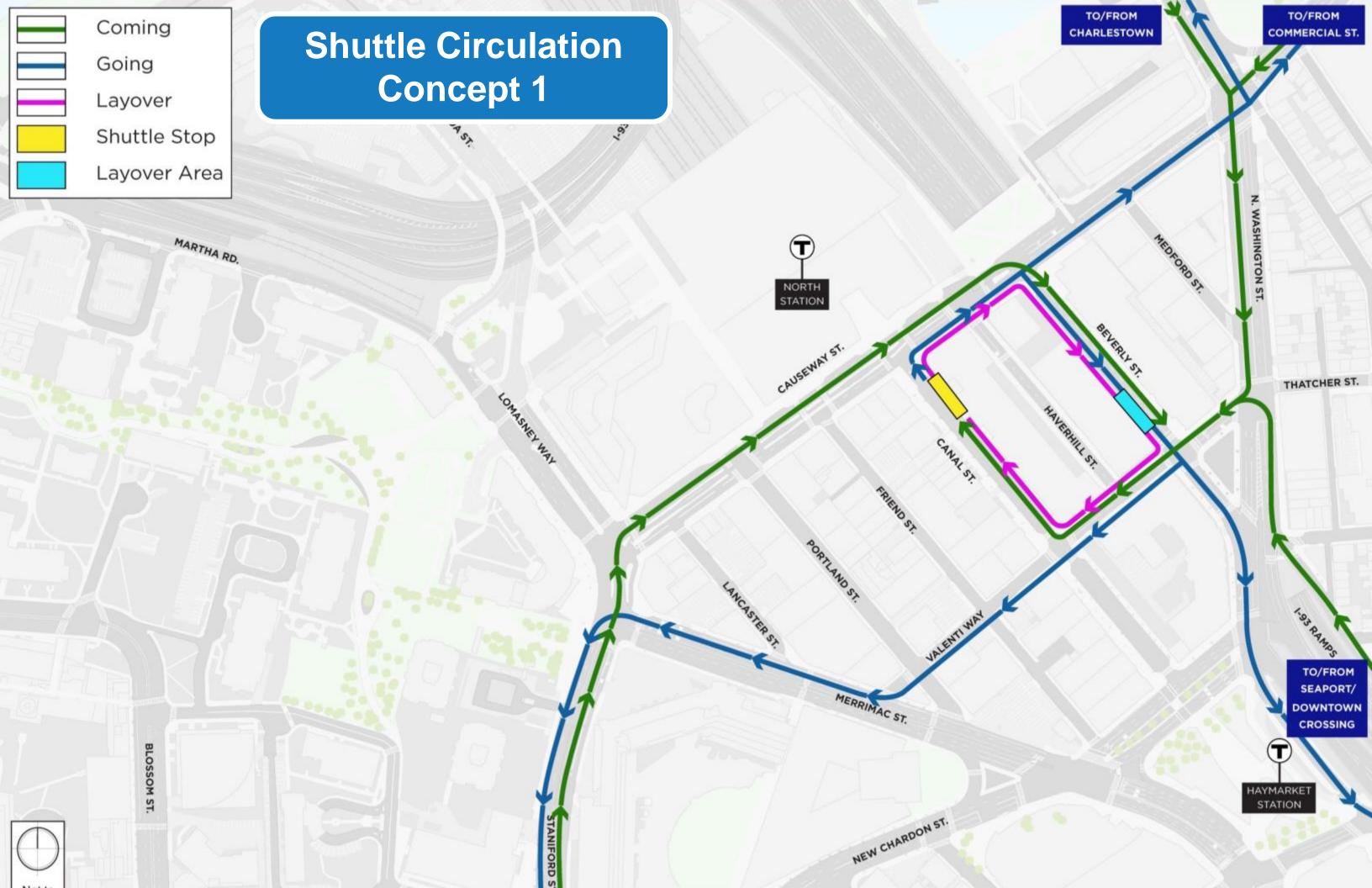
Shuttle Stop Relocation









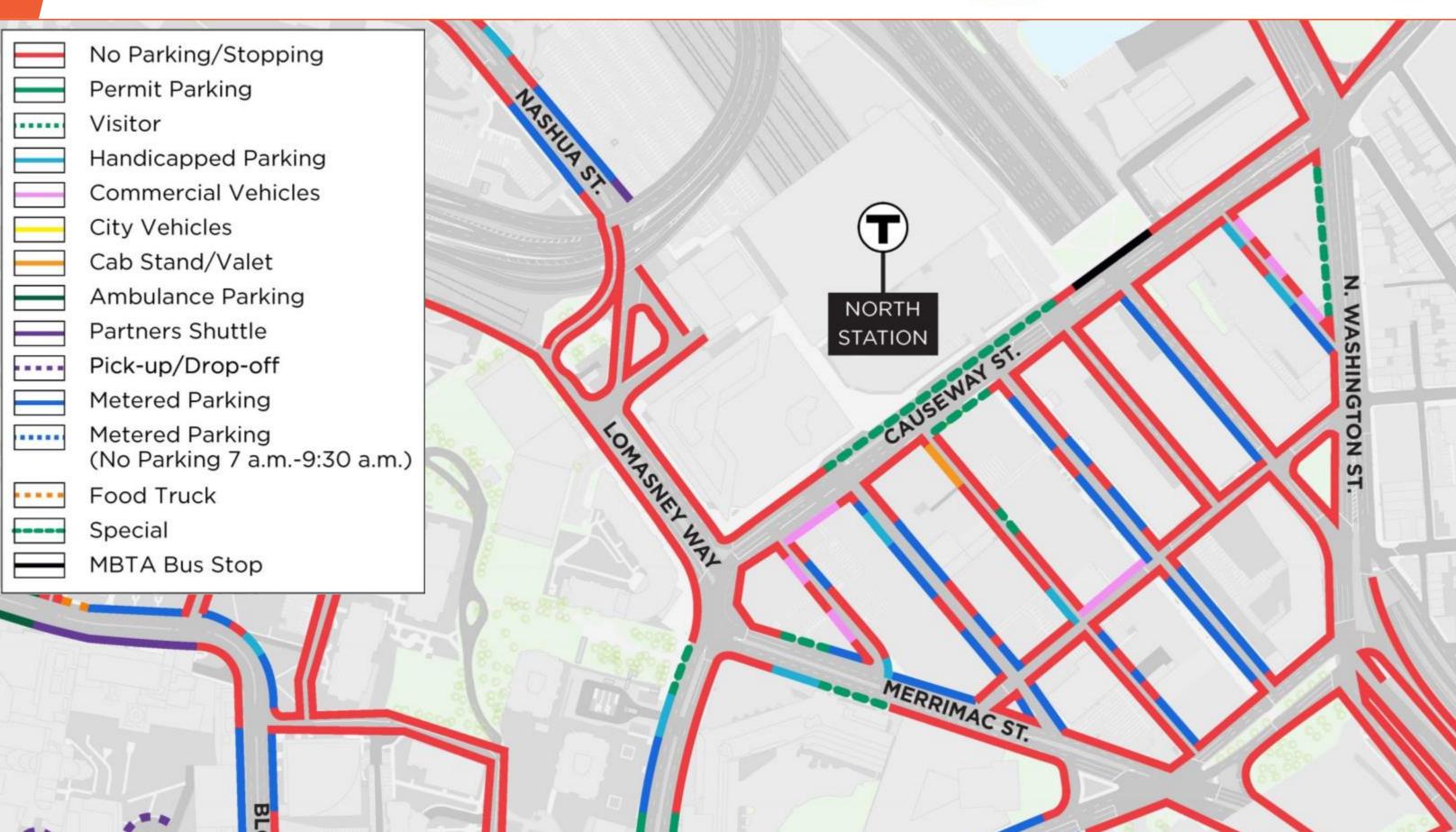


Existing Curb Use







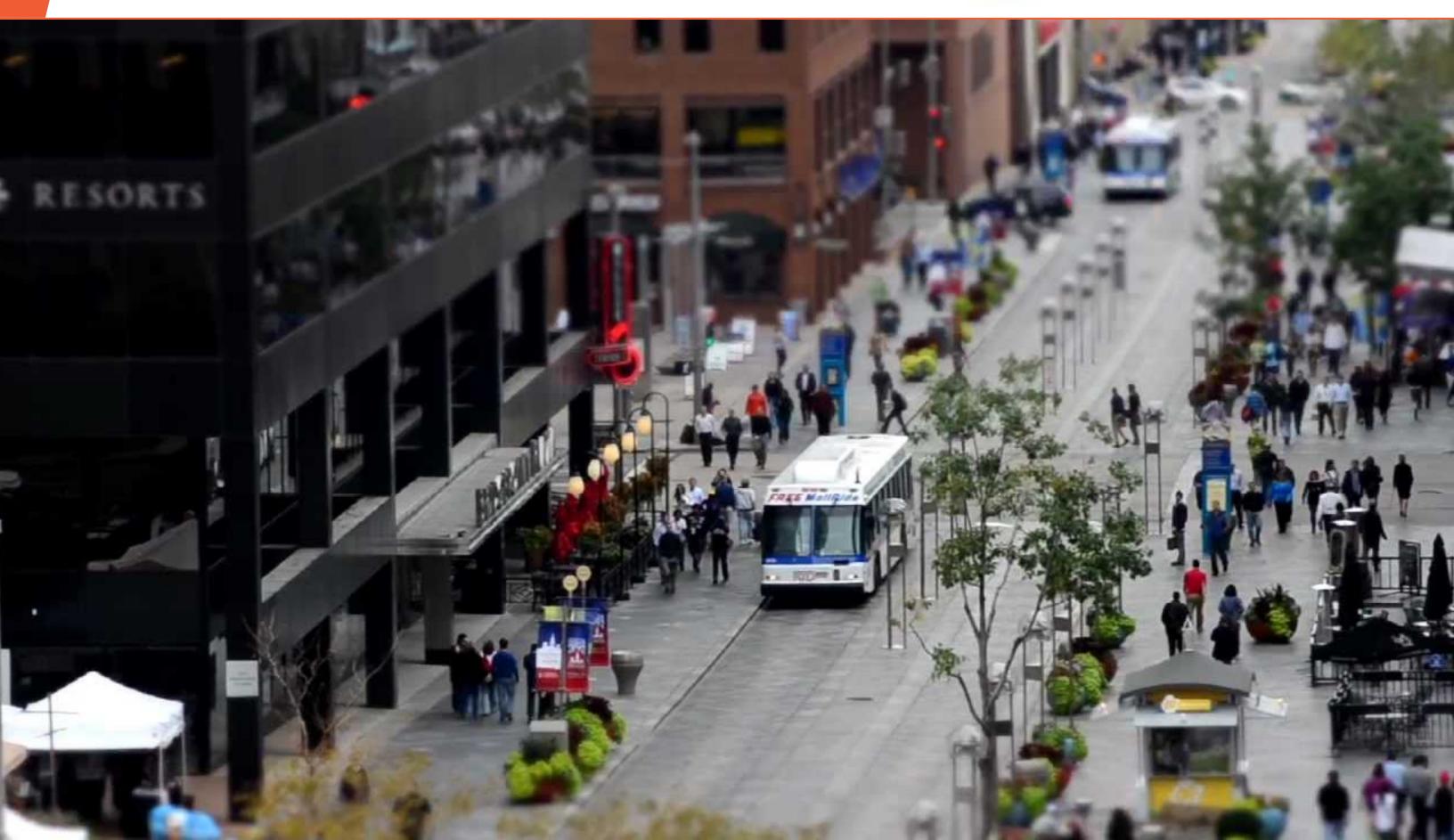


16th Street Mall – Shuttles and Peds







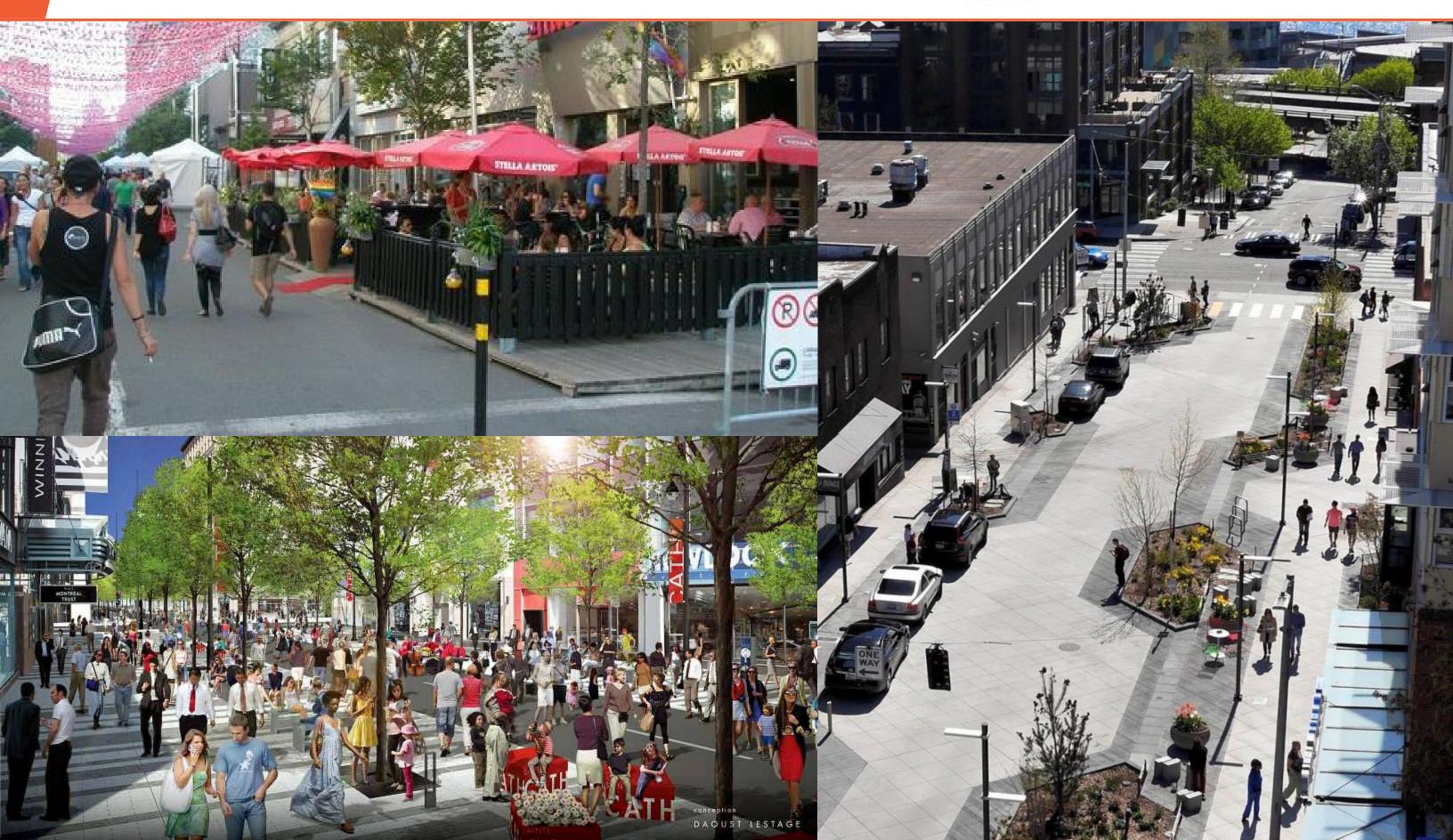


Parklets for Evolving the Streetscape 5







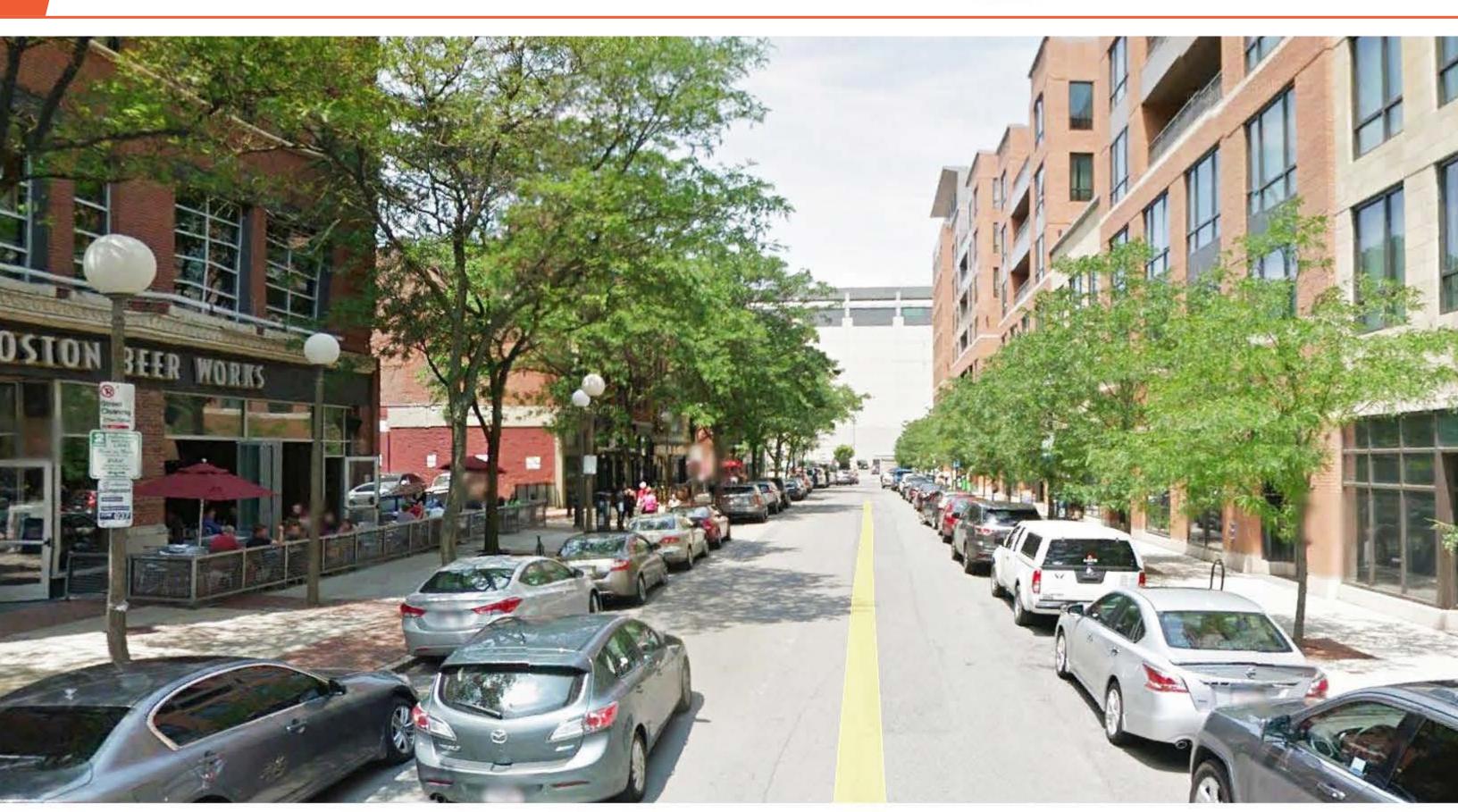


Parklets for Evolving the Streetscape 5







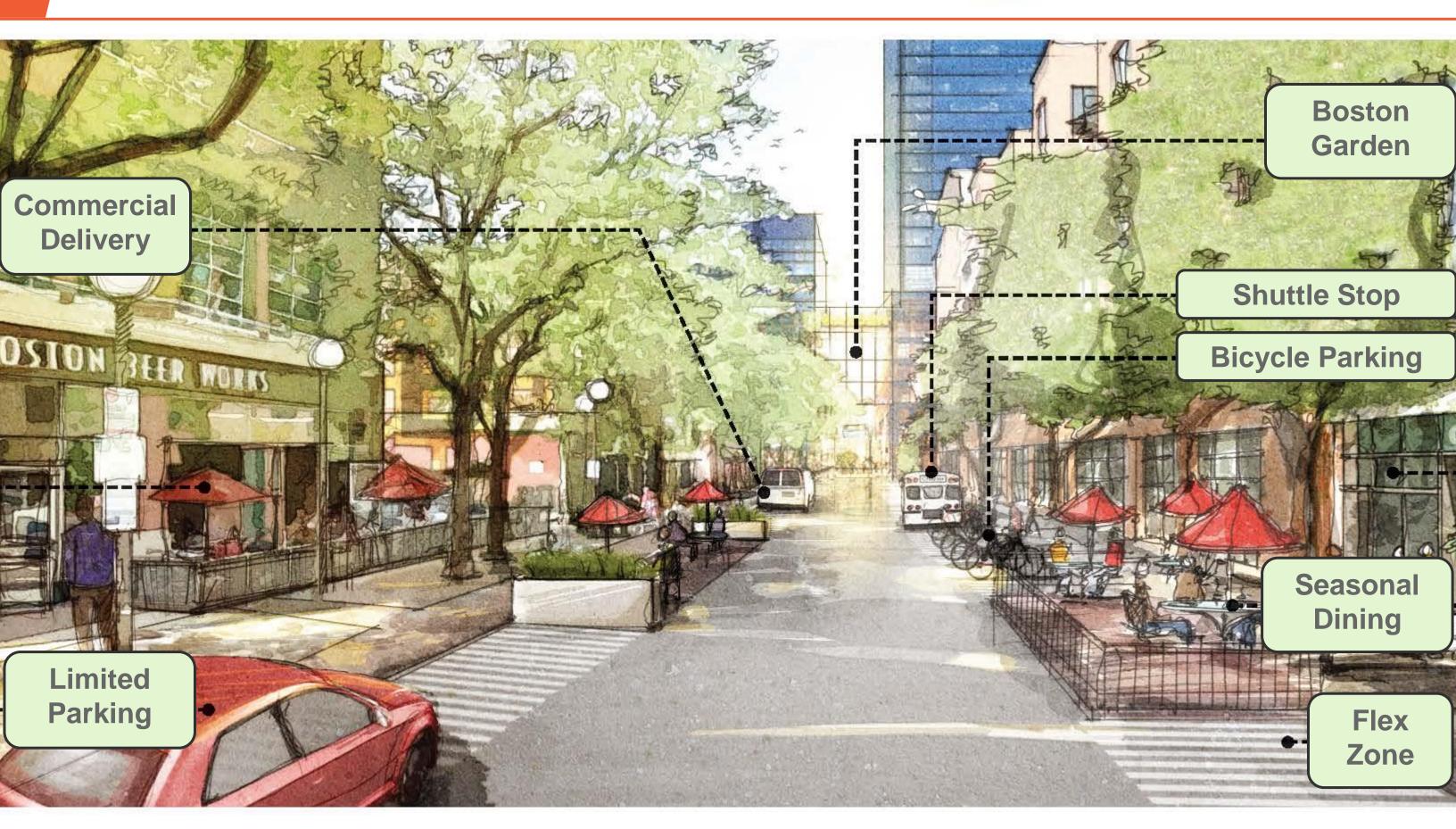


Parklets for Evolving the Streetscape







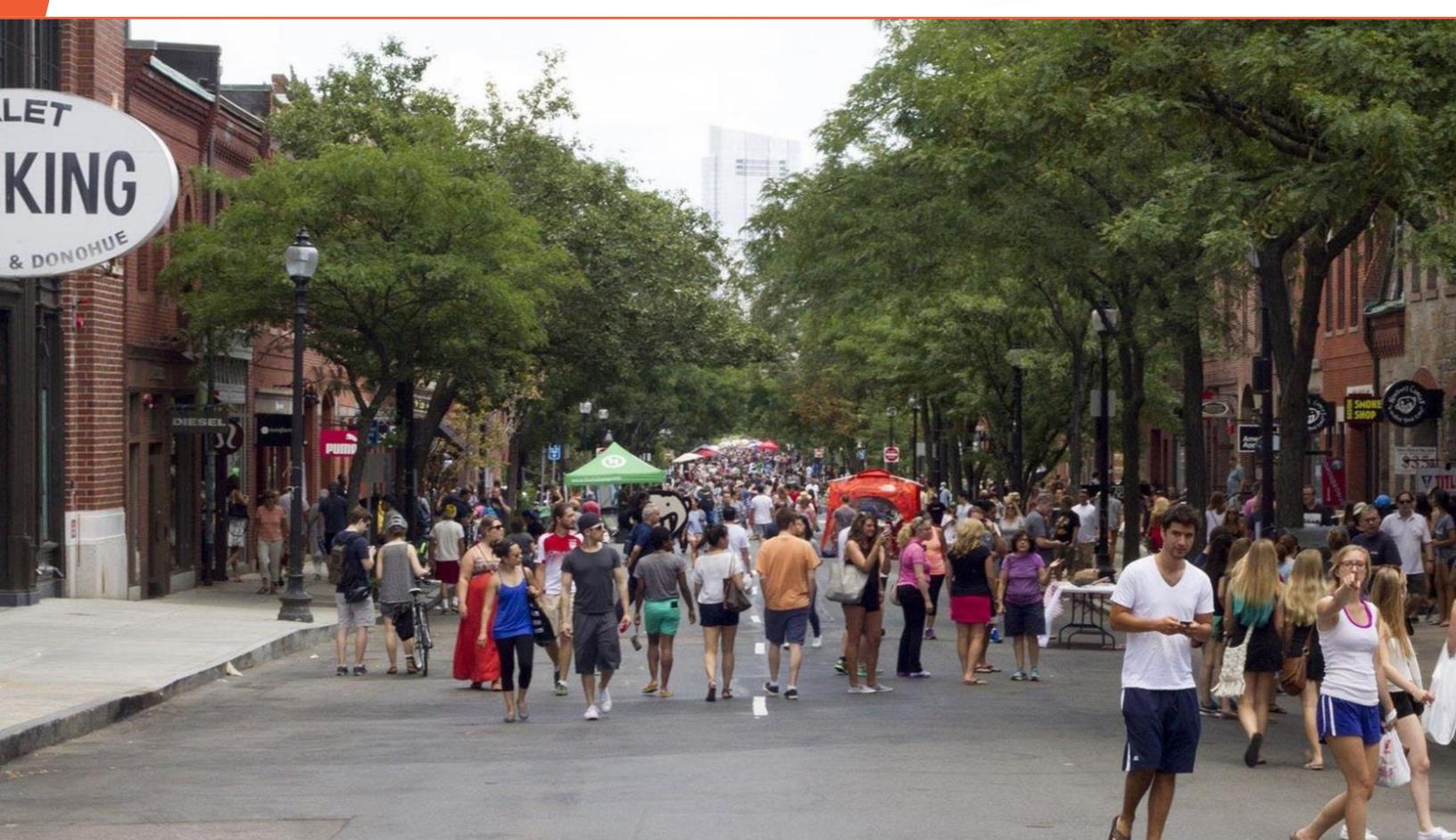


Open Canal Street









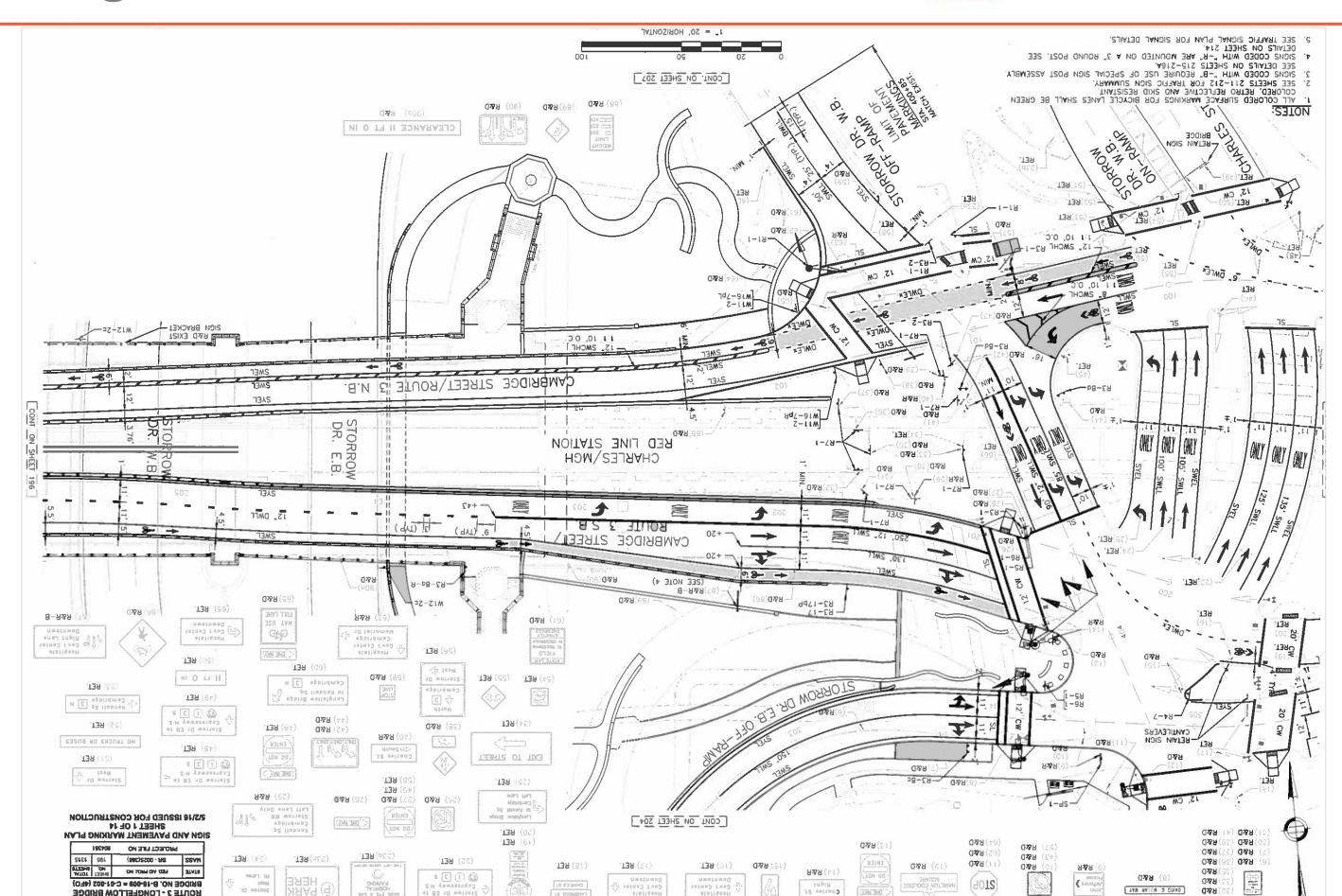


Longfellow Plans







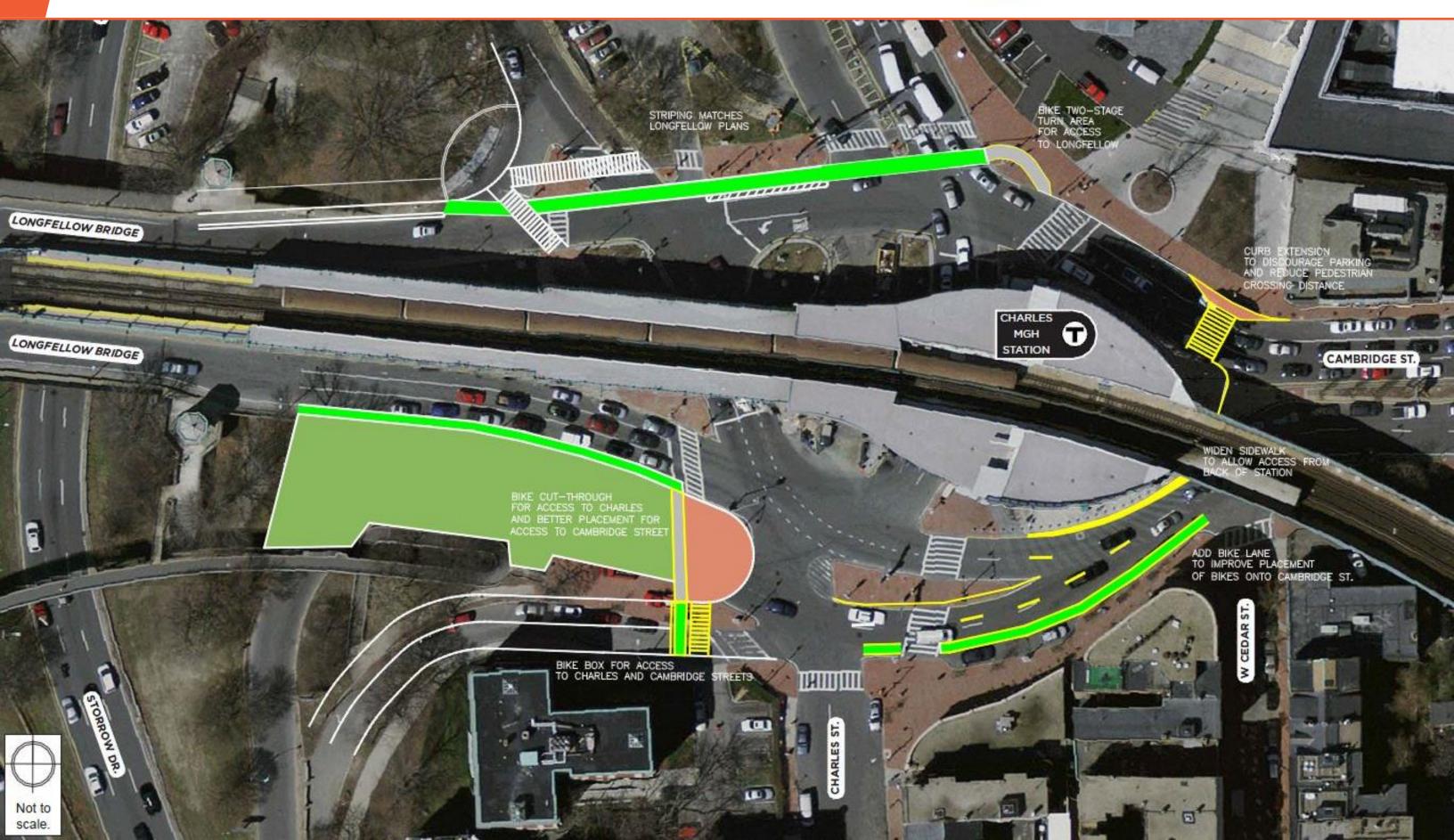


Charles Circle Ped. Improvements







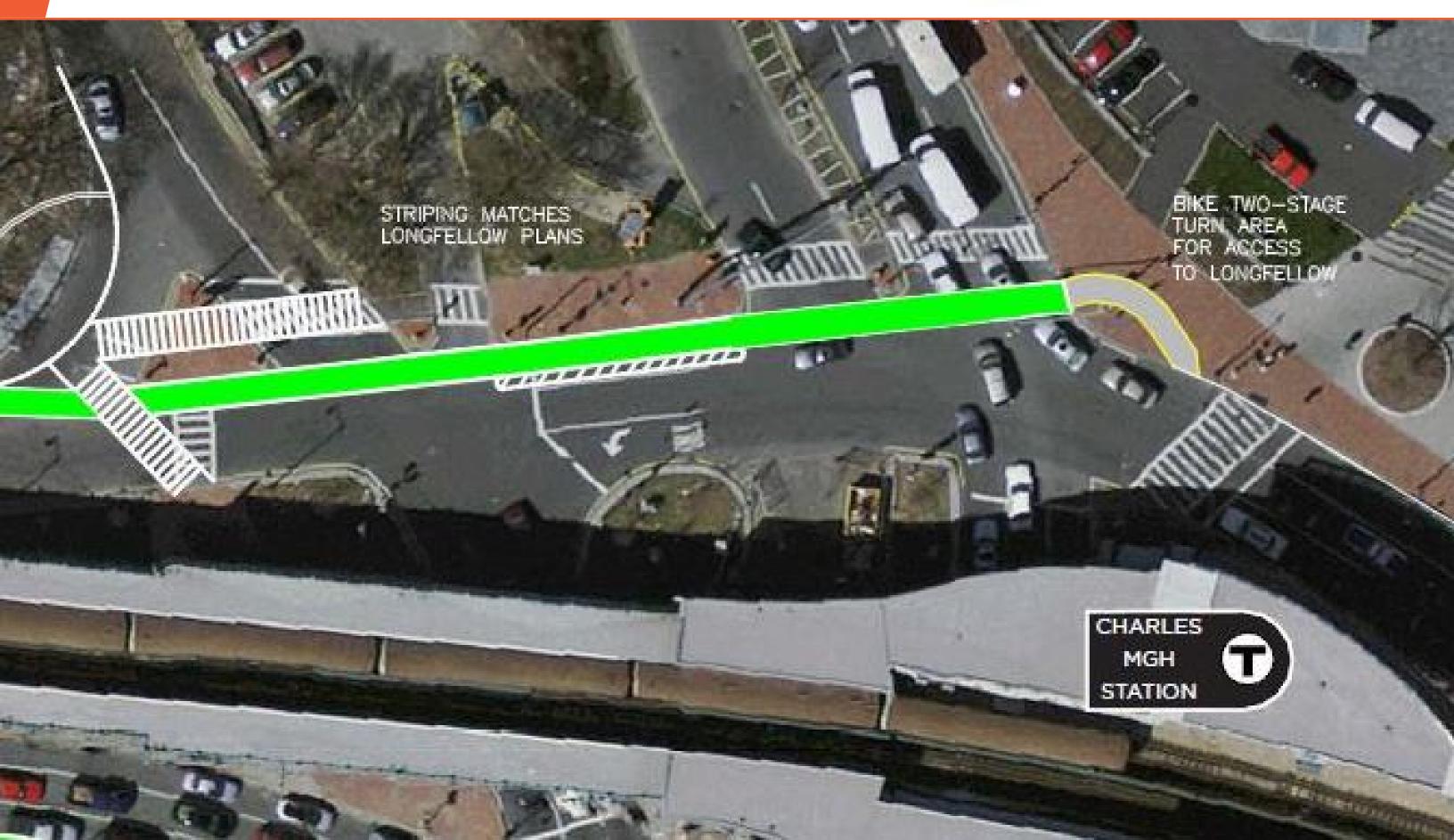


Charles Circle Ped. Improvements









Charles Circle Ped. Improvements









Discussion







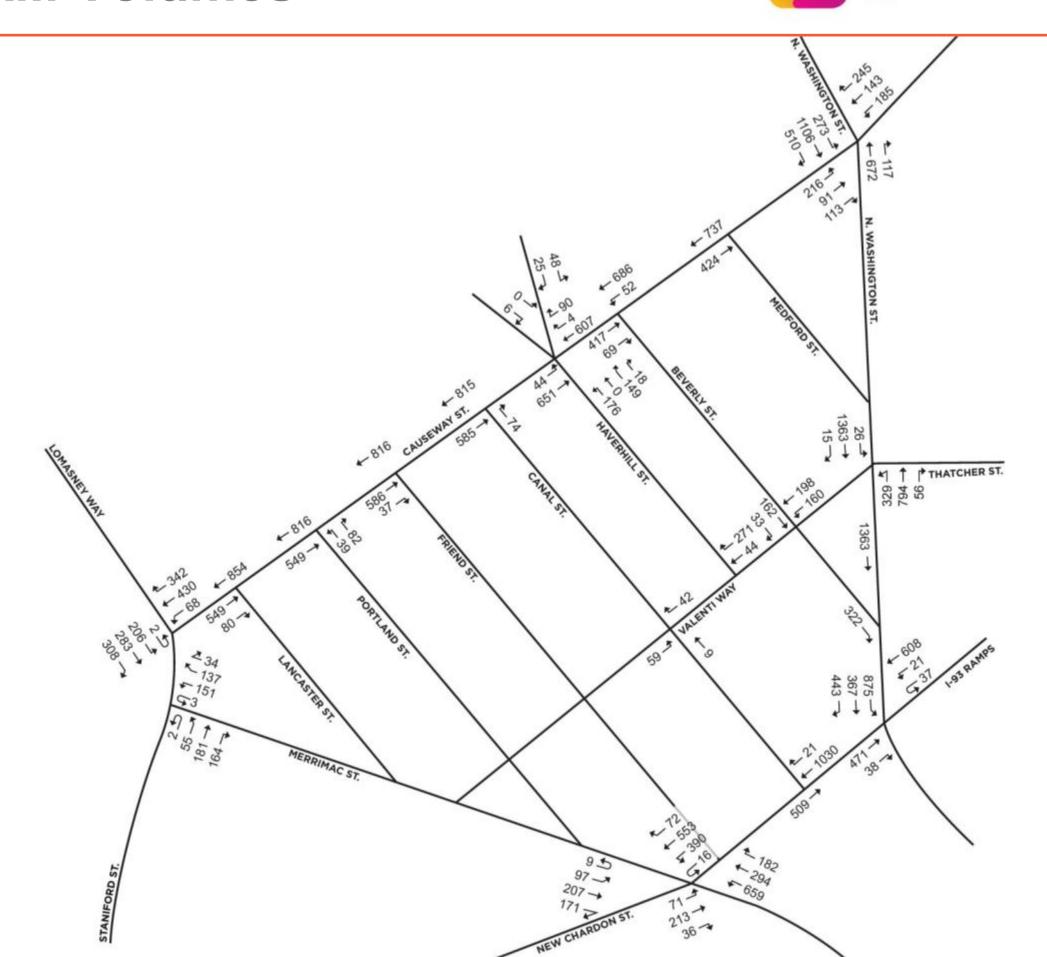


Future AM Volumes









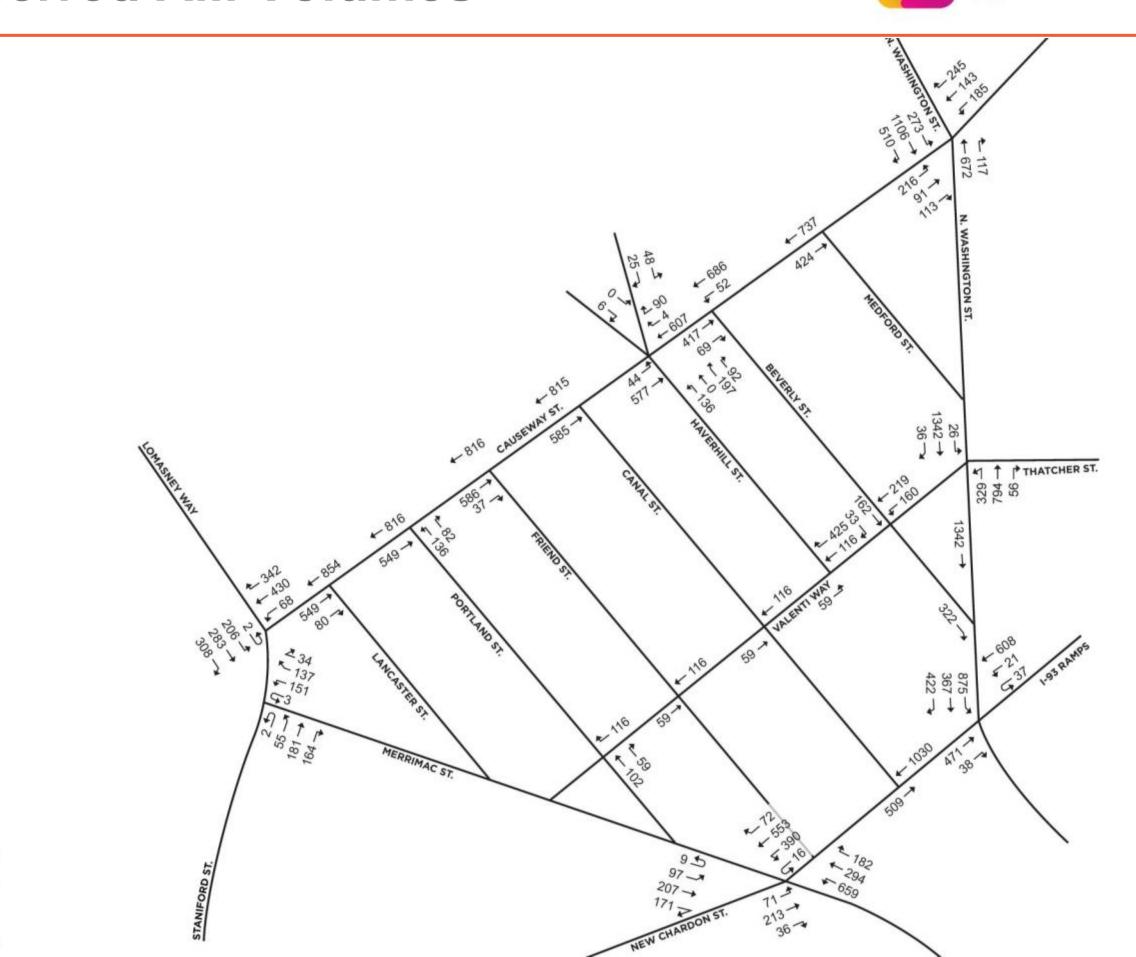


Preferred AM Volumes









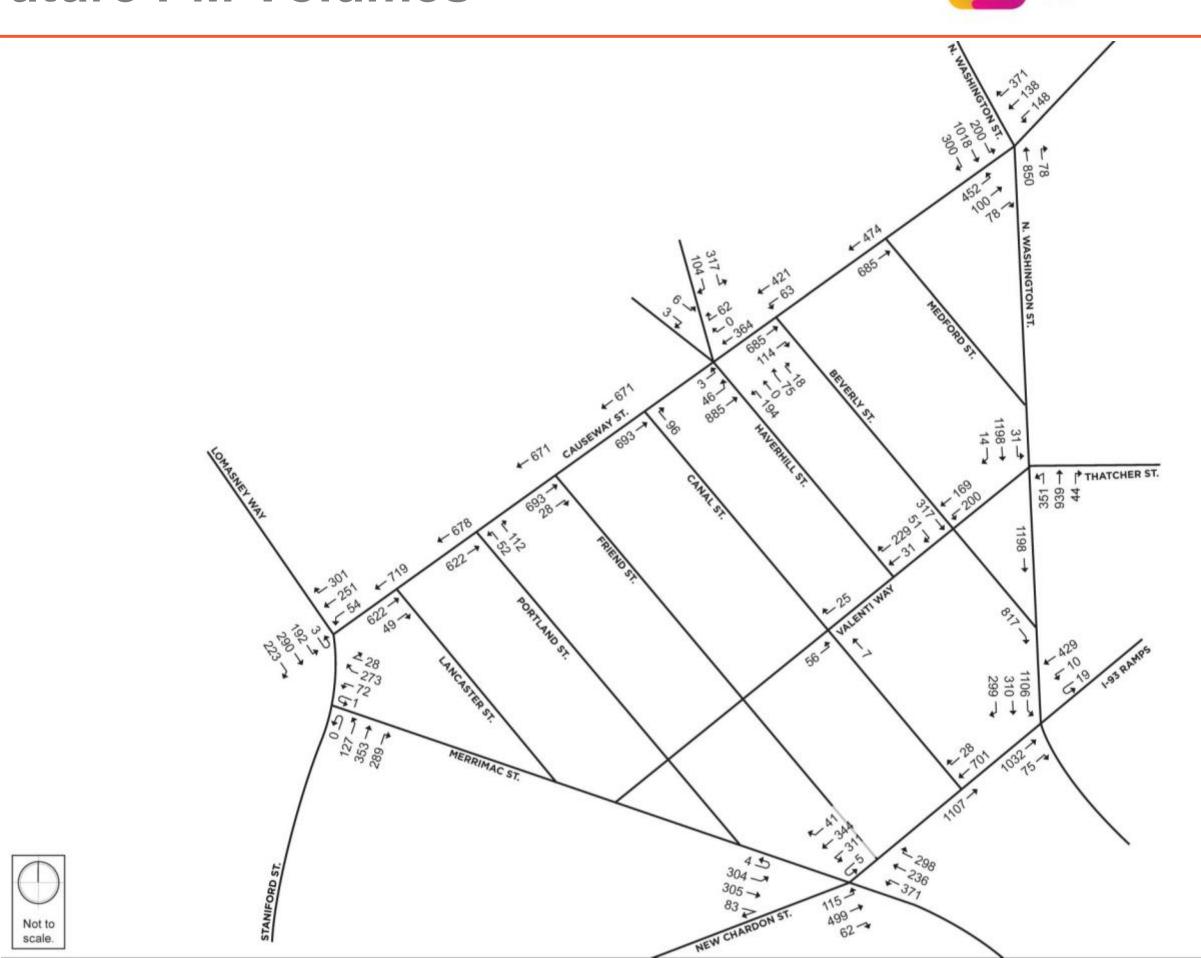


Future PM Volumes









Preferred PM Volumes







