

**776
SUMMER
STREET**

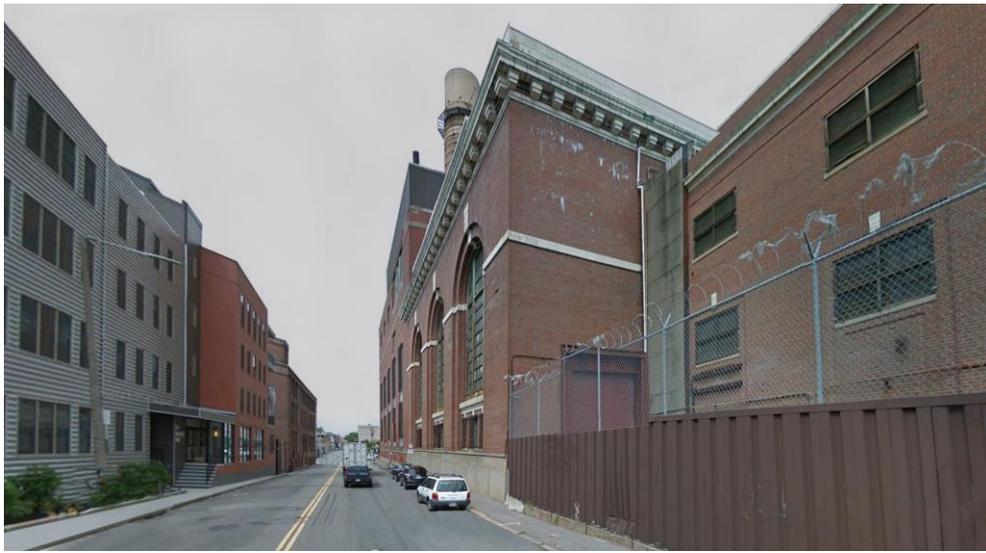
September 26, 2018



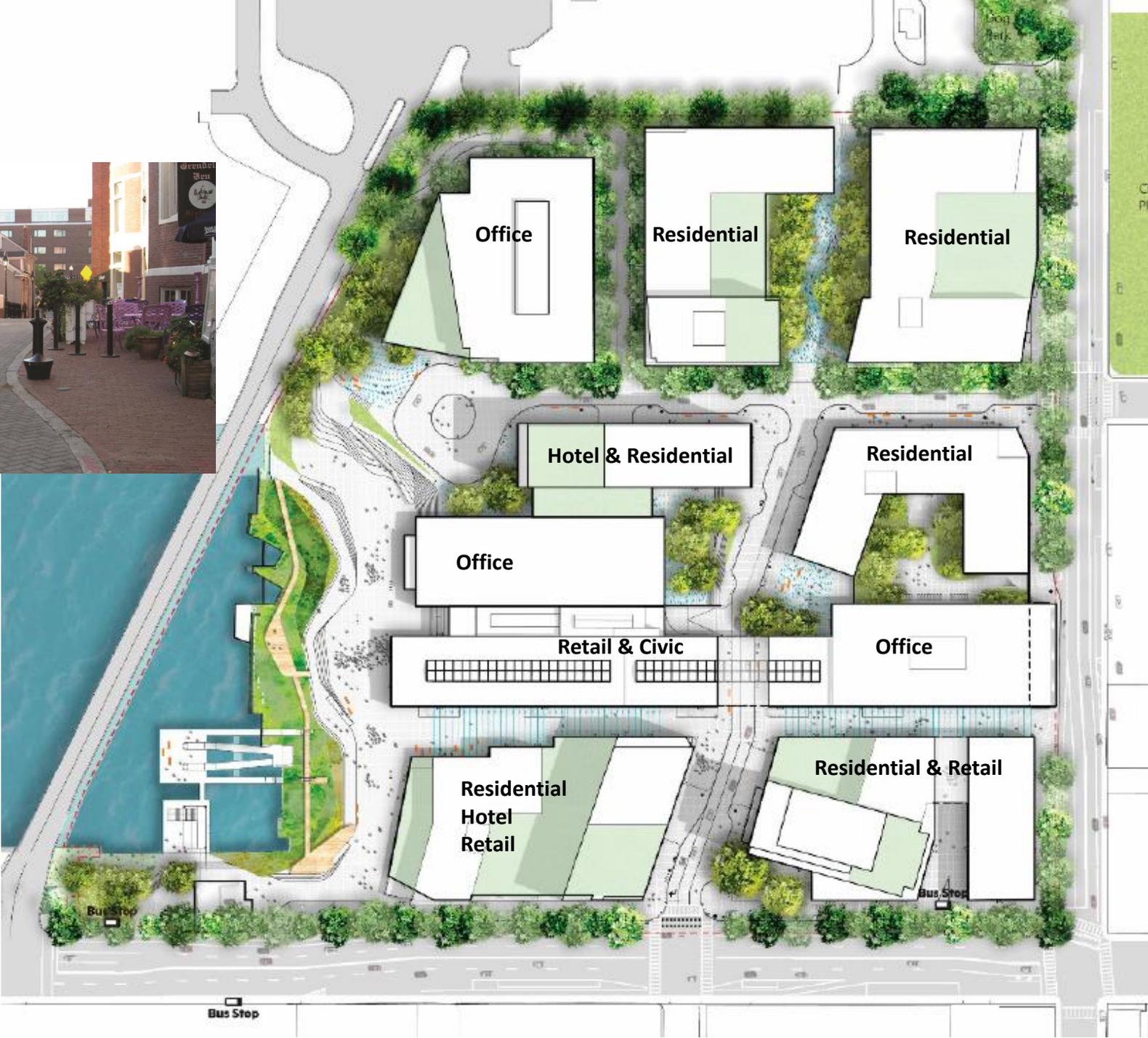
How Transportation Issues are Shaping our Plans

- We will be adding new car trips slowly over many years
- We will be able to keep up through transit and traffic improvements
- We can start making those improvements right now
- We will make roadway and transit improvements that improve safety
- This is a multimodal project, and we will promote walking, bicycling, and transit use.
- We will provide sufficient parking and curb space for drop-off and pick-up activity.

View from East 1st Street toward Summer Street



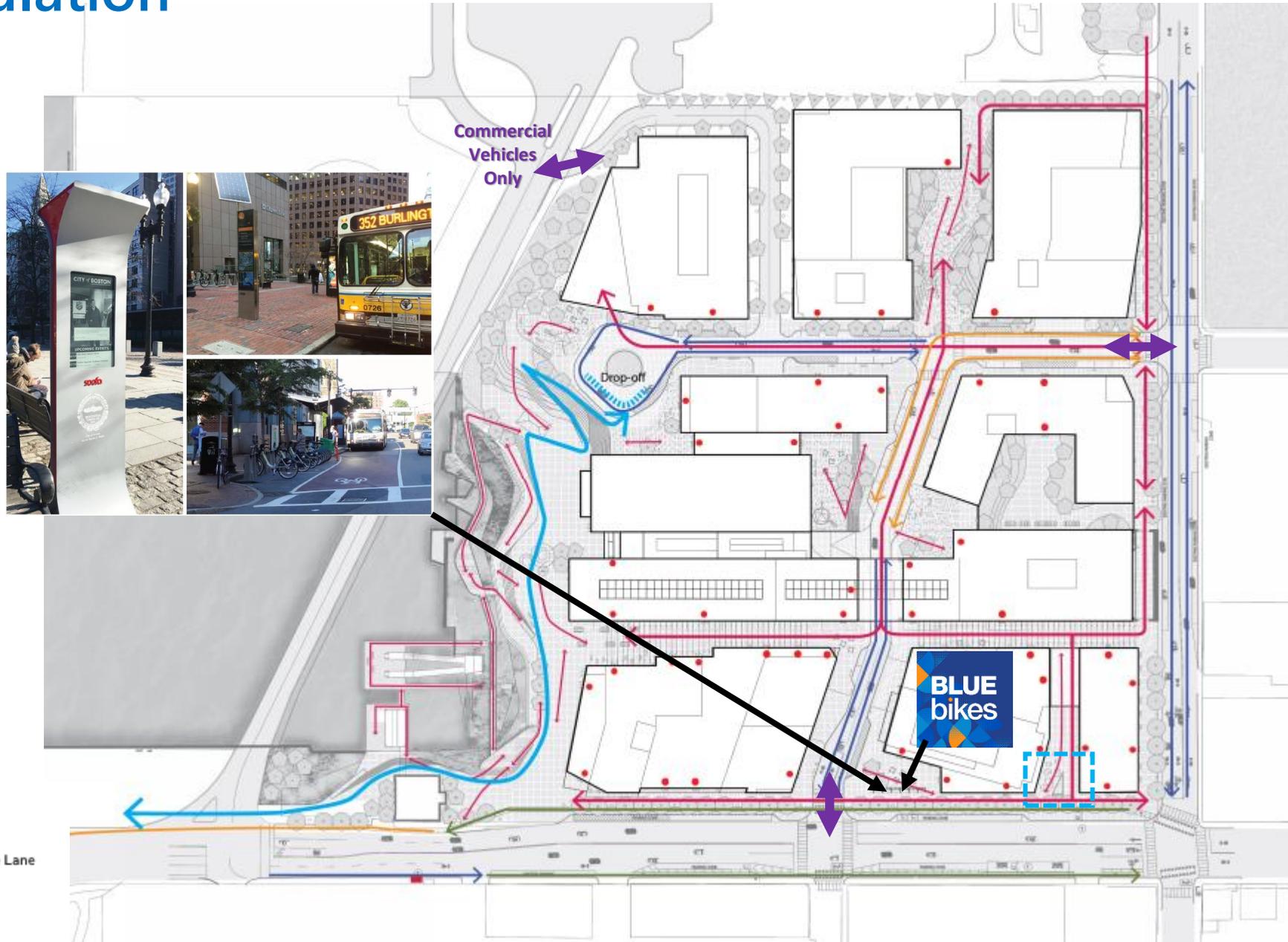
Project Overview



- 10 to 15 Years Incremental Buildout (Phases)
- Mixed-use Program
- 4 Renovated Buildings
- Significant open space – 50% of Site

Site Access and Circulation

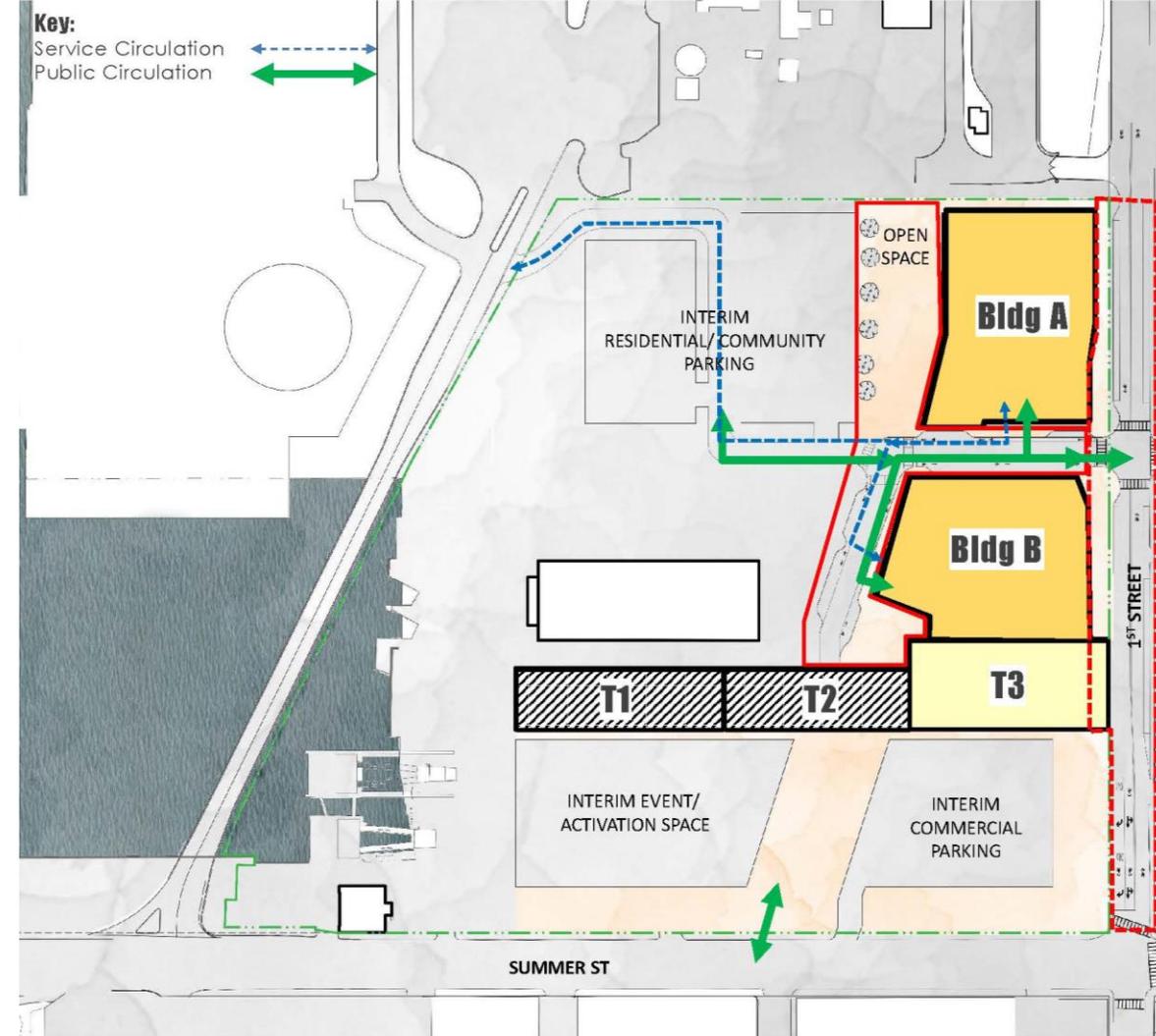
- Driveways
 - Elkins Street Extension
 - M Street Extension
 - Commercial Vehicles to Dedicated Freight Corridor
- Pathways throughout the Project Site
- Plaza with Bicycle and Pedestrian Amenities
 - Blue Bike Station
 - Mobility MicroHUB



- ◻ Covered Bus Stop
- Building Entry
- Key Pedestrian Routes
- Secondary Pedestrian Routes
- Route to Waterfront
- ↔ Vehicle Access
- ▬ Dropoff
- ▬ Dedicated Protected Bike Lane
- ← Sharrows
- ▬ Dedicated Bike Lane

Years 2020-2022 (Phase 1A)

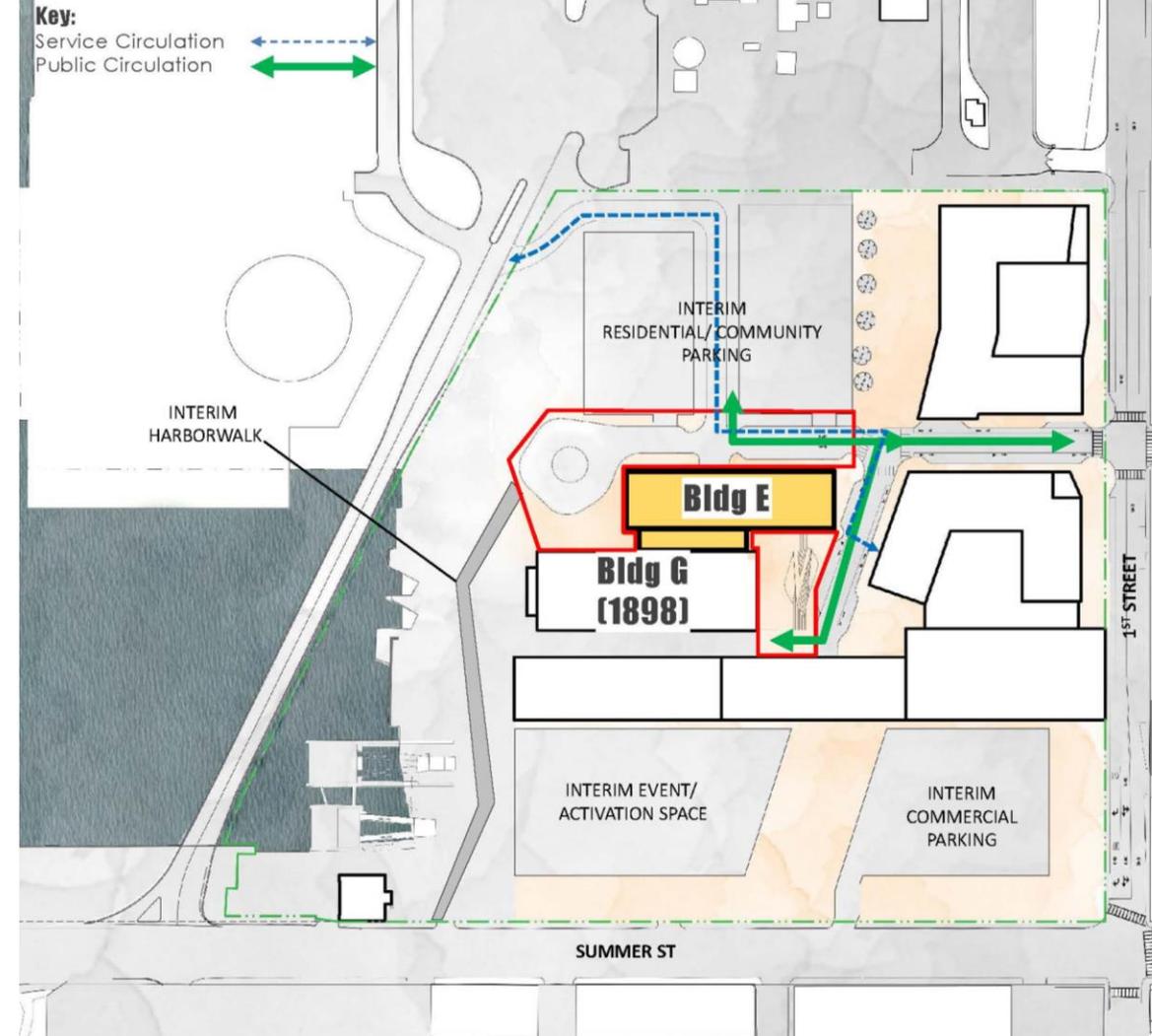
- Building A Residential 176 units
- Building B Residential 163 units
- Turbine Hall 3 Office 64,900 GSF
- Turbine Hall 1 Temp. Event / Flex / Active Use Space
- Turbine Hall 2 Temp. Event / Flex / Active Use Space



→ *M Street extension and crosswalks, East 1st Street bike accommodations and sidewalk widening, right-turn lane striping, Summer Street signal re-timing*

Years 2022-2024 (Phase 1B)

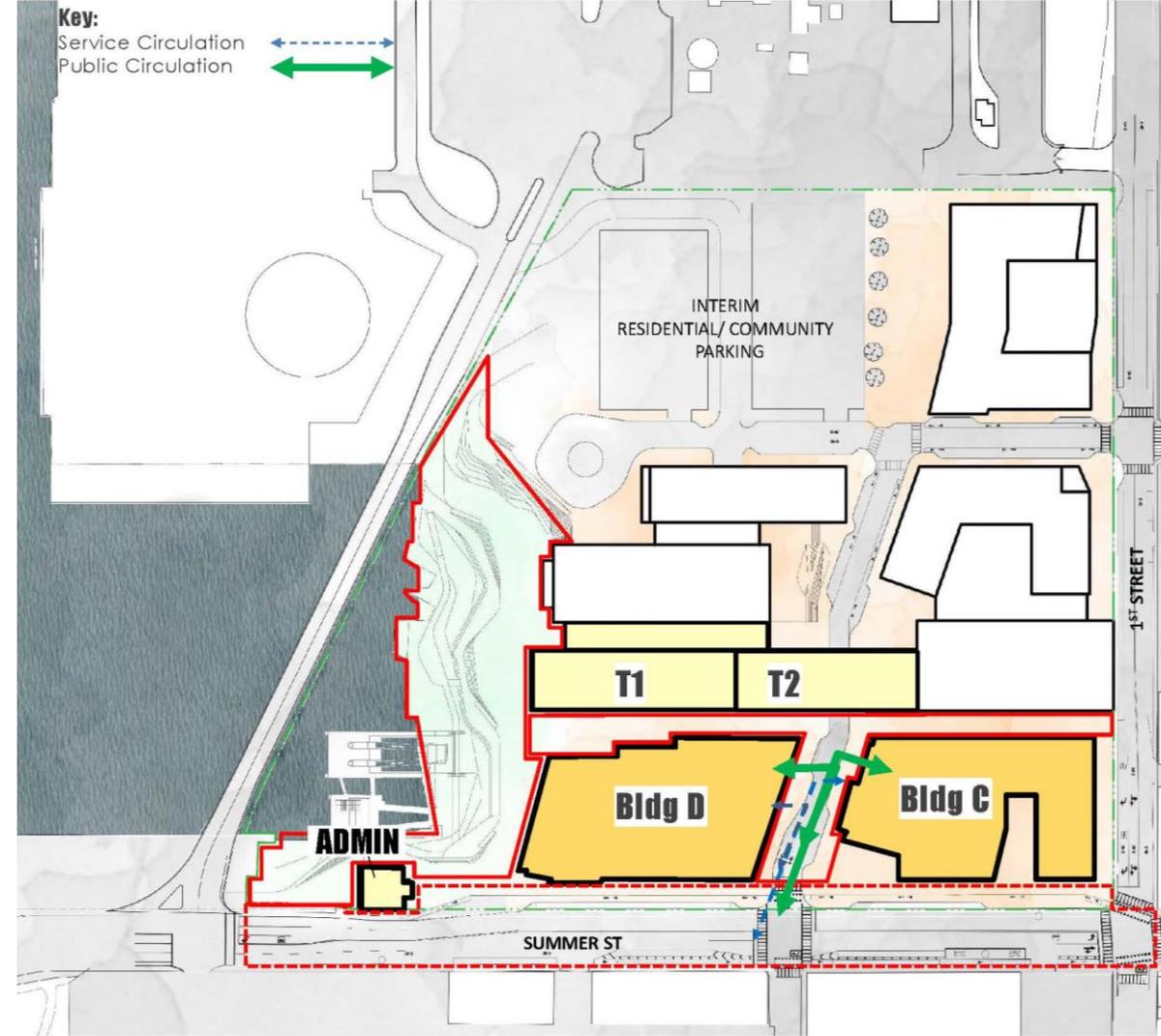
- Building E Residential Hotel 199 units 189 hotel keys
- Building G Office 55,490 GSF



→ M Street extension and crosswalks, East 1st Street bike accommodations and sidewalk widening, right-turn lane striping, Summer Street signal re-timing

Years 2024-2030 (Phase 2)

- Building C Residential 371 units
 Retail 19,510 GSF
- Building D Residential 200 units
 Hotel 155 hotel keys
 Retail 16,450
- Turbine Hall 1&2 Retail / Civic 47,690 GSF
- Admin Retail 2,660 GSF



→ Summer Street reconstruction (separated bike lanes, sidewalk, bus stop improvements), Elkins intersection signal, Summer Street signal equipment and phasing updates

Year 2030 and Beyond (Phase 3)

- Building F Residential 246 units
- Building H Office 247,680 GSF
Retail 16,770 GSF



→ Turbine Hall Road Connection, Service Drive to DFC Connection

Some Notes on Vehicle Trips

- **Hotels will not have large ballrooms or function rooms, only limited meeting space similar to Residence Inn on Summer Street in Fort Point or Element Hotel on D Street**
- **Retail will be small restaurants/shops intended to serve neighborhood needs**
- **Construction/commercial service vehicles will use service road connection to Dedicated Freight Corridor**

Four-Step Travel Demand Model for All Projects

How do we calculate Project-generated impacts?

1. Trip
Generation

Unadjusted
ITE Trips

How many trips are generated?

2. Future
Mode Choice

Auto
Trips

Transit
Trips

Bike/Walk/
Other Trips

*What travel mode is used for
each person trip?*

Adjusted Auto Trips

3. Future Trip
Distribution

*Where are the auto trips coming
from and going to?*

4. Future Trip
Assignment

*What is the route of each auto
trip?*



STEP 1 - TRIP GENERATION

How many trips are generated by a project?

- **Trip generation calculations**
 - **Unadjusted ITE Trip Generation from the most recent 2017 edition**
 - **Calculate the number of total trips generated by each land use code (LUC)**

Land Use	ITE LUC	Units	ITE Average Trip Rate		
			Daily	AM Peak Hour	PM Peak Hour
Residential	LUC 221 Condo/Apartment	Residential Units	5.44	0.36	0.44
Retail	LUC 820 Retail	ksf ¹	37.75	0.94	3.81
Hotel	LUC 310 Hotel	Rooms	8.36	0.47	0.60
Office	LUC 710 Office	ksf	9.74	1.16	1.15

¹ ksf, thousand square feet

STEP 2 – MODE CHOICE

How will people travel to and from the Project Site?

- **City of Boston BTD rates**
- **Recently approved neighborhood projects**
 - **Allocates unadjusted trips into auto, transit, and walk/bike/other trips**
 - **Calculation of internal trips between uses on-site**
 - **Use number of auto trips generated by the Project for traffic analysis**

Mode	Residential	Retail	Hotel	Office
Vehicle	34%	20%	40%	36%
Transit	42%	40%	37%	40%
Walk/Bike/Other	24%	40%	23%	24%

Daily Adjusted Vehicle Trips – Project Phasing (2019 – 2030+)

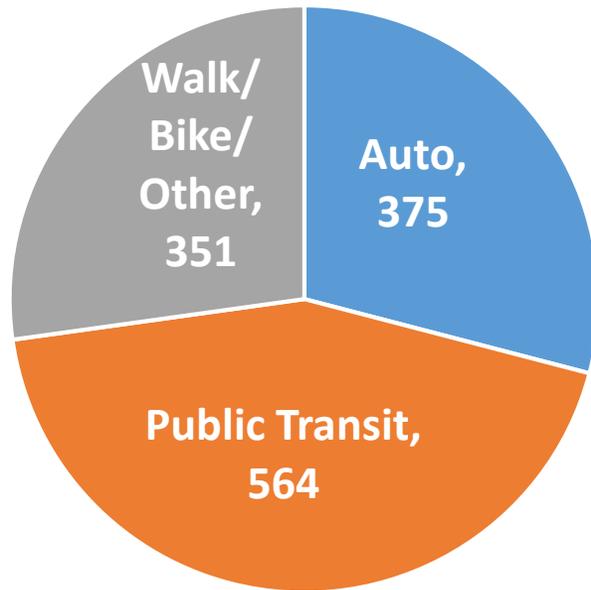
• Phase 1A	876 Total (438 Entering & Exiting)	}	Build Years 2019 - 2024
• Phase 1B	1,206 Total (603 Entering & Exiting)		
• Phase 2	2,022 Total (1,011 Entering & Exiting)	}	Build Years 2024 – 2030+
• Phase 3	1,528 Total (764 Entering & Exiting)		
Total Full Build	5,632 Total (2,816 Entering & Exiting)		

- Trips occur over a 24-hour period
- Includes service/delivery trips that will be using the service road to DFC
- Service/delivery trips such as: mail/package delivery, trash pick-up, dry cleaning

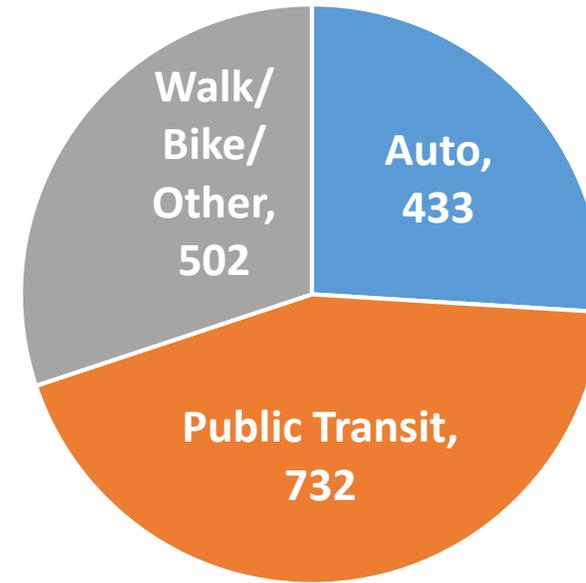
Traffic Analysis Focuses on the AM and PM Peak Hours

Full Build Project-Generated Trips

→ On average, this is 6 to 7 cars per minute entering and exiting the driveways during peak hours



AM Peak Hour Total Trips
8:00 – 9:00 AM
(Total Entering & Exiting)



PM Peak Hour Total Trips
5:00 – 6:00 PM
(Total Entering & Exiting)

Peak Hour Vehicle Trips by Phase

	Phase	Vehicle Trips	
		AM Peak Hour	PM Peak Hour
Build Years 2019 - 2024	1A	69	80
	1B	83	100
Build Years 2024 – 2030+	2	98	111
	3	125	142
	Full Build	375	433

STEP 3 - TRIP DISTRIBUTION

Where will Project trips go?

- Distributed to major roadways to show largest combined impact on existing infrastructure
- City BTD Area 13 information
- Census 2006-2010 Journey to Work
- Distribution applied to auto trips generated by the Project

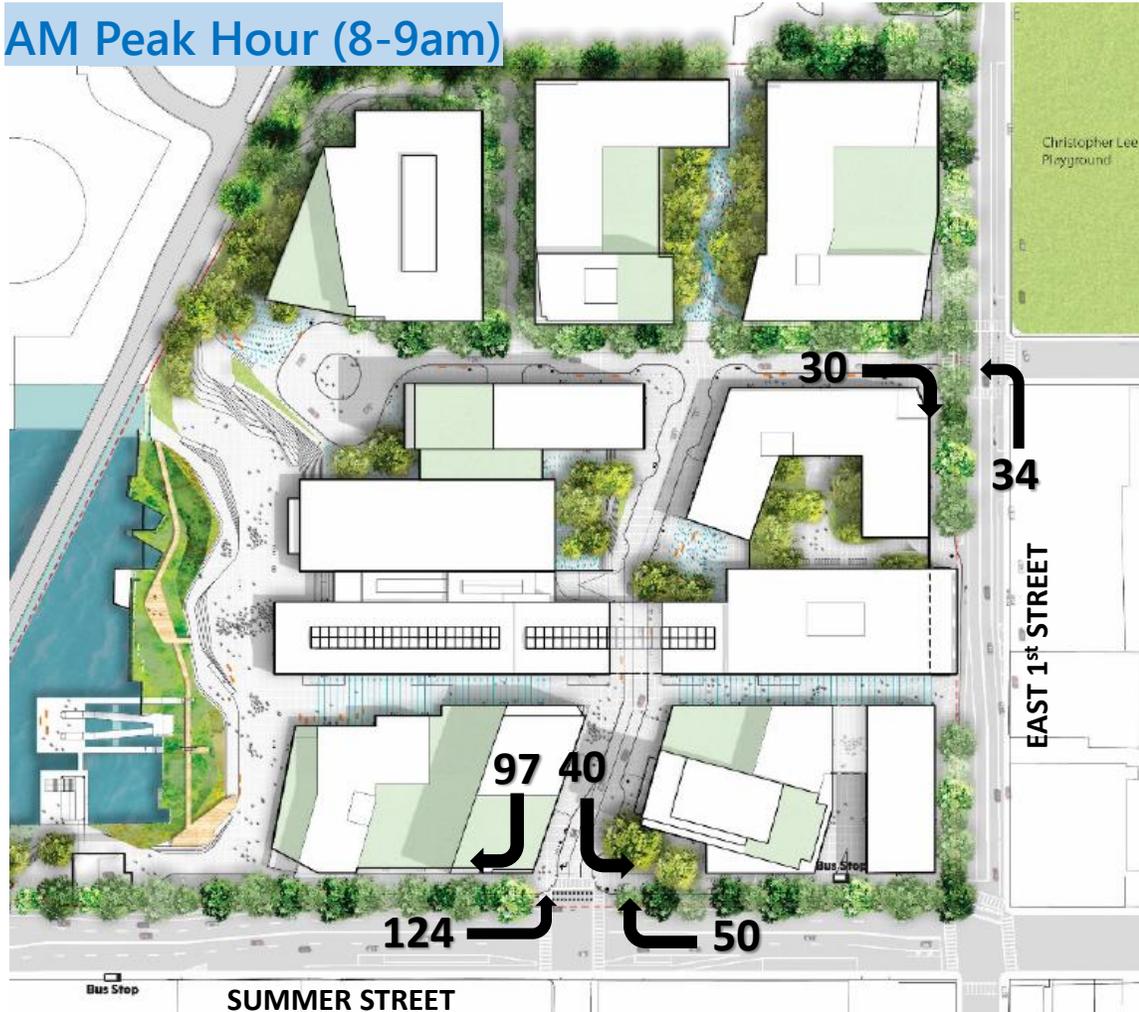


STEP 4 - TRIP ASSIGNMENT

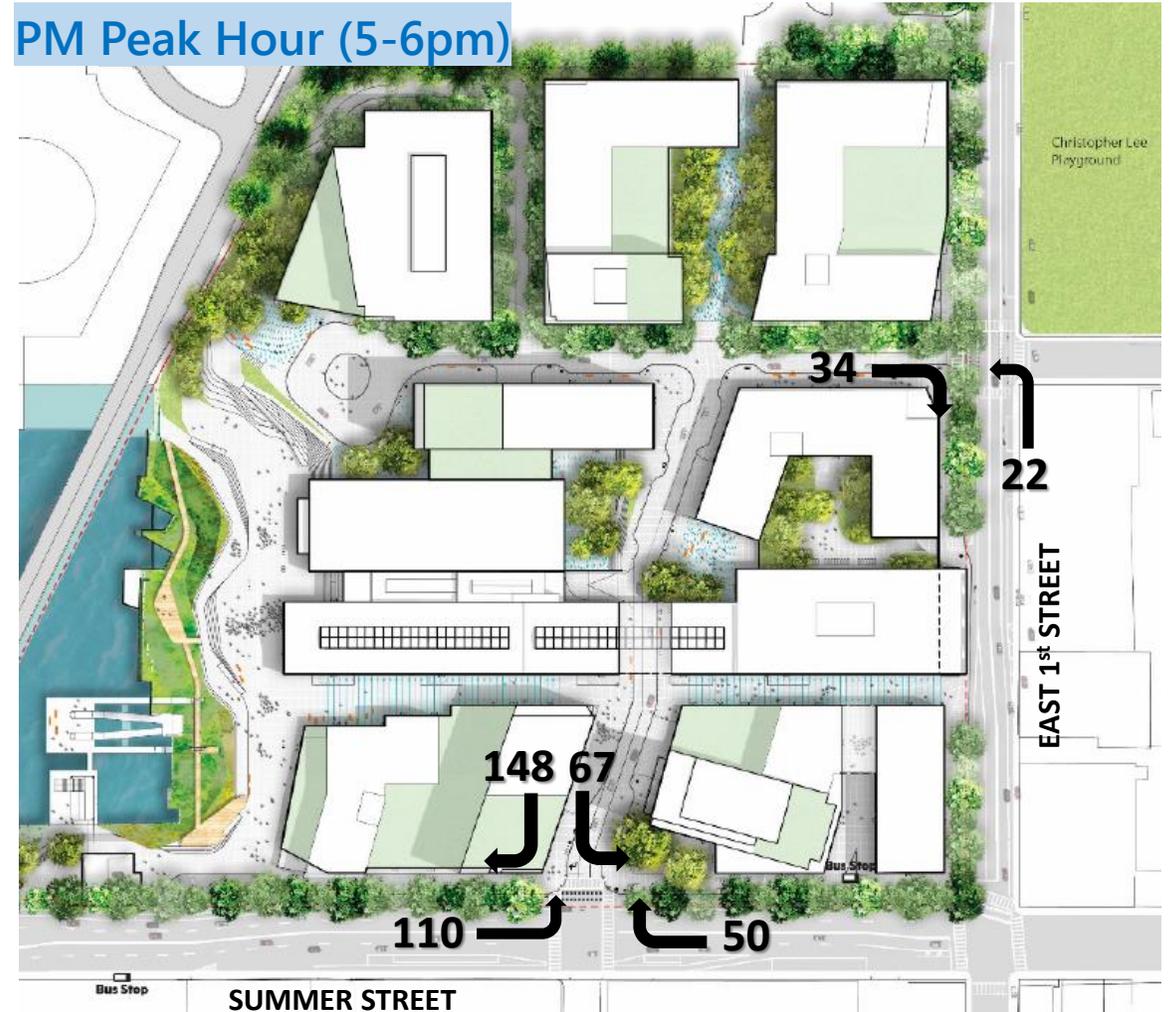
How many vehicles will enter and exit the Site driveways during the peak hours?

Project Generated Vehicle Trips (2030 Full Build)

AM Peak Hour (8-9am)

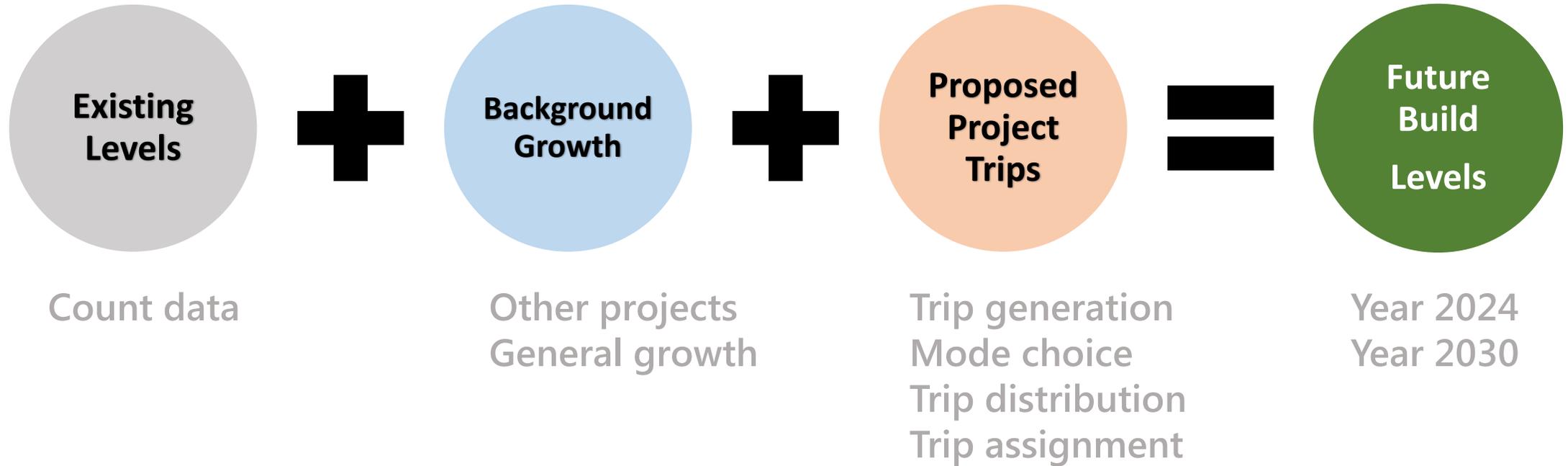


PM Peak Hour (5-6pm)



Traffic Analysis Methodology

Creating the Future Conditions Analysis



Project Impact Analysis Conditions

How will these trips impact the local streets?

- 1. 2017 Existing Conditions** (June 2017)
- 2. 2030 No-Build Conditions** (Background project trips + 0.5% growth per year)
- 3. 2030 Full Build Conditions** (2030 No-Build + Phases 1 + 2 + 3)
- 4. 2030 Full Build Mitigated Conditions** (Traffic signal/infrastructure improvements)

Transportation Infrastructure Improvements

➤ Improvements made over time as project phases are built out

- Upgraded signal and reconstruct intersection with dedicated turn lanes at Summer Street/L Street / East 1st Street
- New traffic signal at Summer Street and Elkins Street
- Improved signal timing at East Broadway/L Street
- Improved bus stop on Summer Street
- Explore and install appropriate traffic control device on East 1st Street at M Street
- Widened sidewalks on Summer Street and East 1st Street
- Bicycle accommodations on Summer Street and throughout the Project Site
- Project will provide internal curb space for drop-off and pick-up vehicles (Taxi, Lyft, Uber, shuttles, etc.)

South Boston City and State Transportation Improvements Underway

City Go Boston 2030 Plan

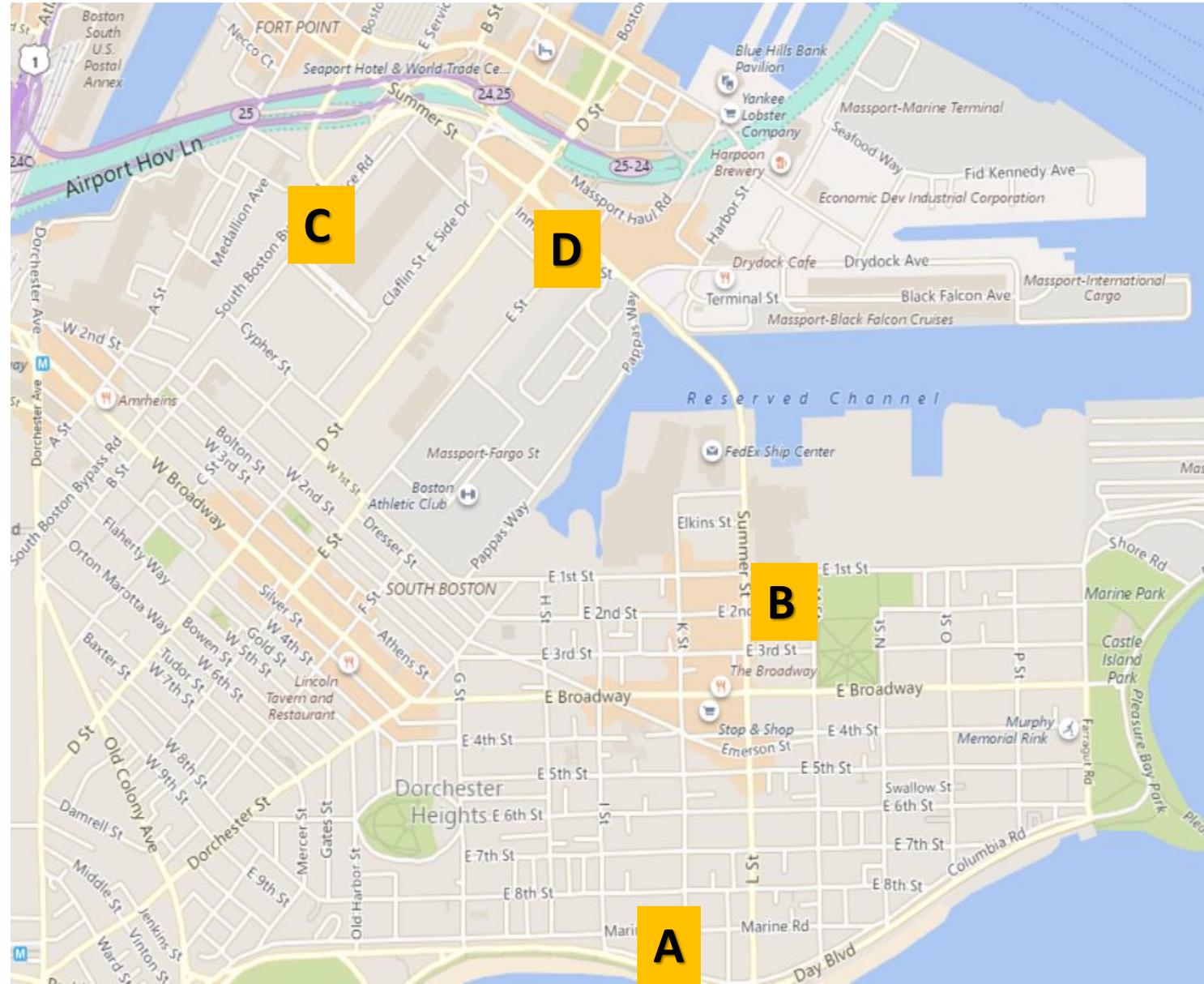
South Boston Waterfront Sustainability Plan

Focus40

Vision Zero

Improvements to increase transit, bicycling and walking which will improve safety and help reduce cut-through traffic in the South Boston neighborhood

- A. Day Boulevard Traffic Calming
- B. City Traffic and Safety Improvements in neighborhood
- C. One-year trial of South Boston Bypass Road Open to all traffic (pending approval)
- D. Adaptive Signal System in Seaport District – improve signal operations between South Boston neighborhood, Seaport and Downtown



Study Area Intersections

- Network approved by the BTD
- Signalized and unsignalized intersections
- L Street corridor to the south and Summer Street to the north of the Project Site
- 1st Street corridor



Intersection LOS

AM Peak Hour

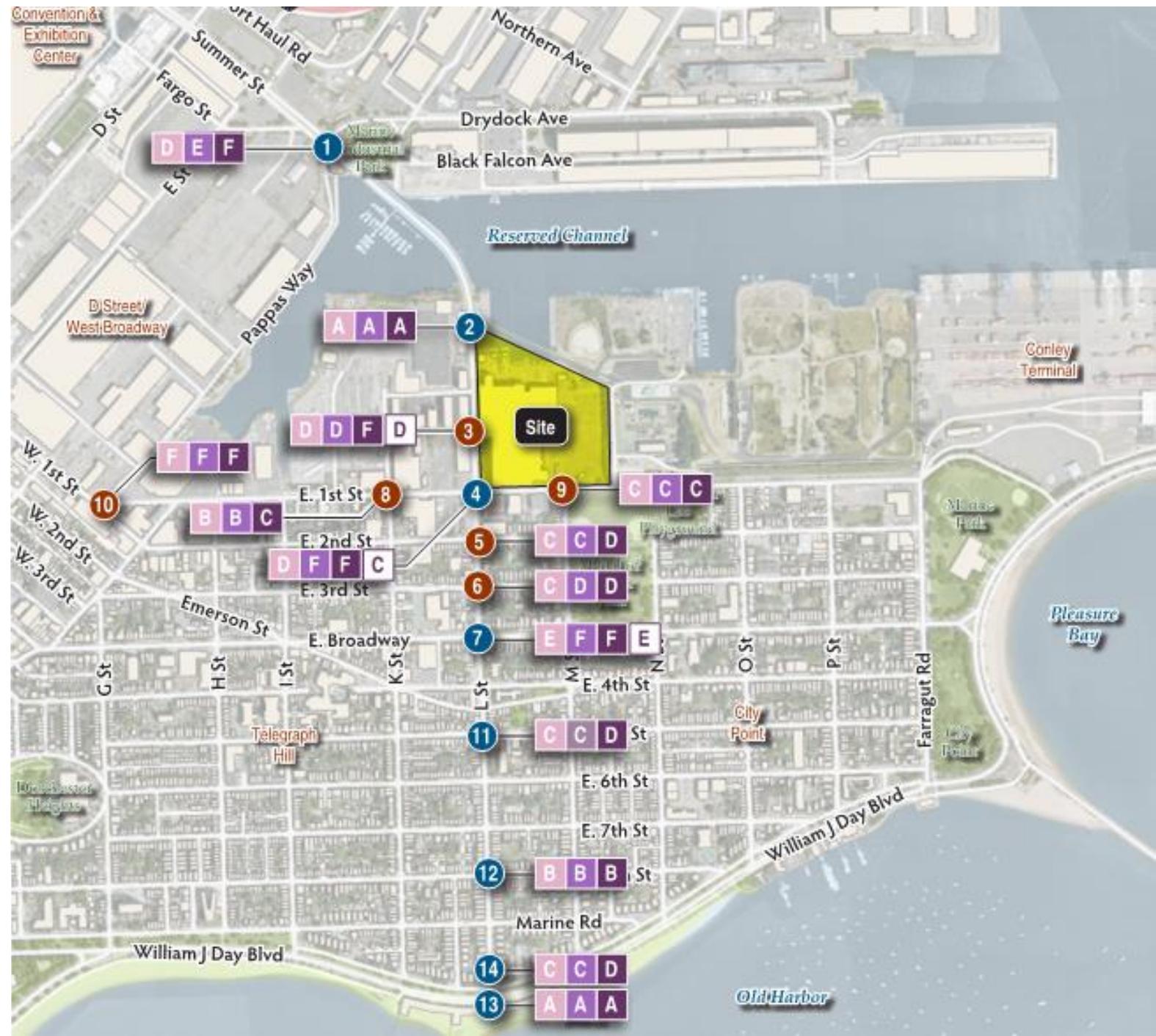
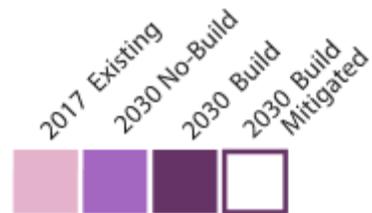
- Signalize Summer Street and Elkins Street
- Reconstruct Summer Street/L Street/East 1st Street intersection
- Signal improvements at L Street and East Broadway
- State and City Adaptive Signal System at Summer Street/Drydock Avenue/ Pappas Way intersection



Intersection LOS

PM Peak Hour

- Signalize Summer Street and Elkins Street
- Reconstruct Summer Street/L Street/East 1st Street intersection
- Signal improvements at L Street and East Broadway
- State and City Adaptive Signal System at Summer Street/Drydock Avenue/ Pappas Way intersection



Existing MBTA System

- South Boston needs better public transit
- Route 7 is over capacity during the peak hours

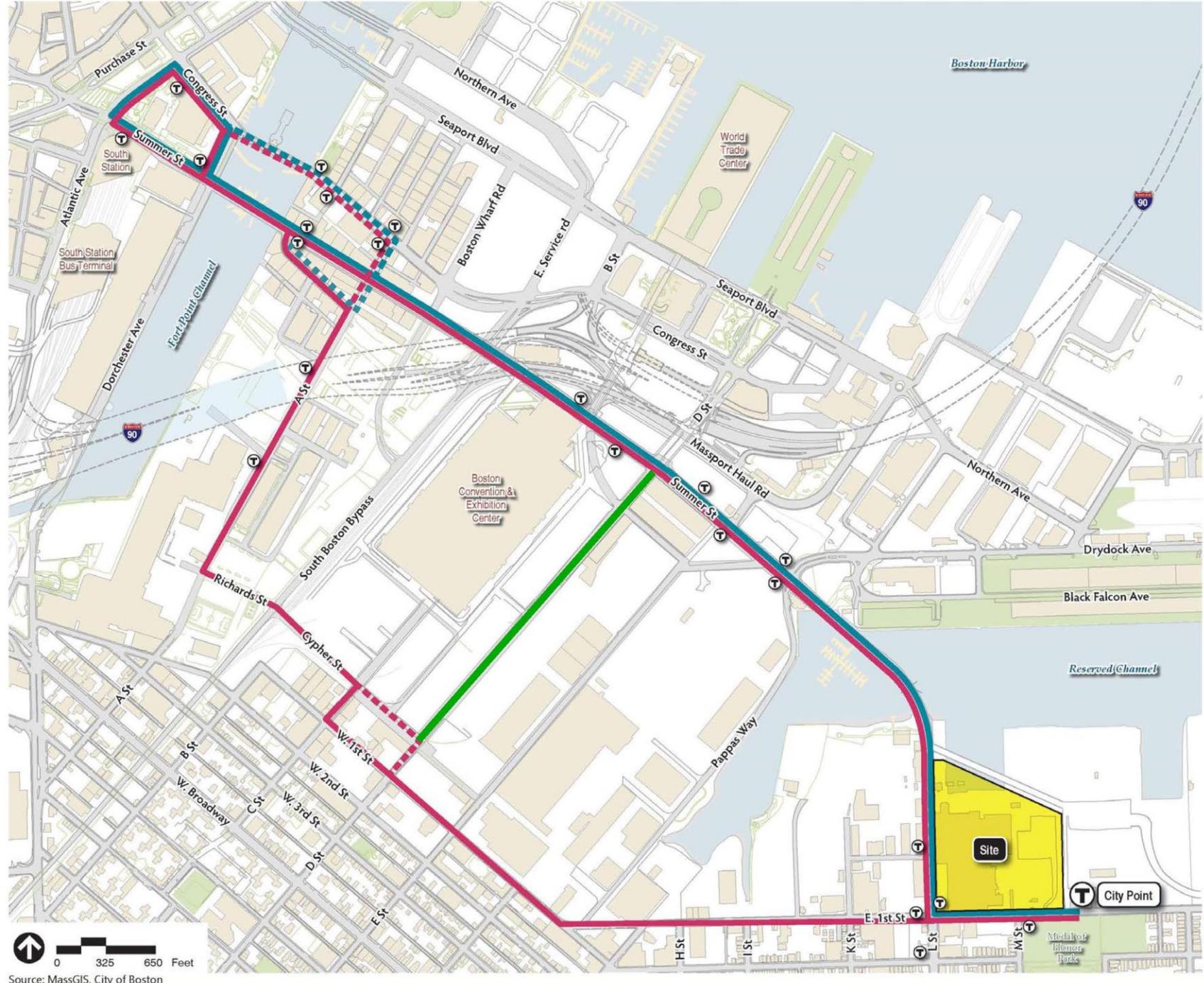


Transit Improvements

- The people who will live and work at L Street Station, and everyone in South Boston need better public transit, especially to and from South Station, and they need it now.
- We have been developing and testing ideas for better bus service, open to everyone with a T pass, that we would arrange at our expense, in partnership with the MBTA.
- As a private partner, we have more flexibility to test, pilot and innovate.
- We could start implementing service improvements in Q1 2019.
- Better bus service does not interfere with any other longer-term proposals for transportation improvements.



New Bus Routes in South Boston



Project Proposal

 **Option A**
(First/A Street)

 **Option B**
(City Point Express)

 **Option C**
(D Street)

TDM Programs - Reduce Travel by Vehicles

- Blue Bikes Station
- Transportation Coordinator
- Transportation Management Association
- Real-time transit information in the lobby of each building
- Preferential parking for carpool/vanpool and electric vehicles
- Transportation awareness events
- Covered bicycle parking in each building for residents and employees (1,500+ spaces)
- Bicycle racks for visitors throughout the site (270+ spaces)
- Carshare services such as Zipcar
- Bicycle locker/shower facilities
- Provide air pumps and bicycle tools
- Transit pass programs
- Mobility MicroHUBs
- Emergency Ride Home Program

Project Pedestrian Improvements

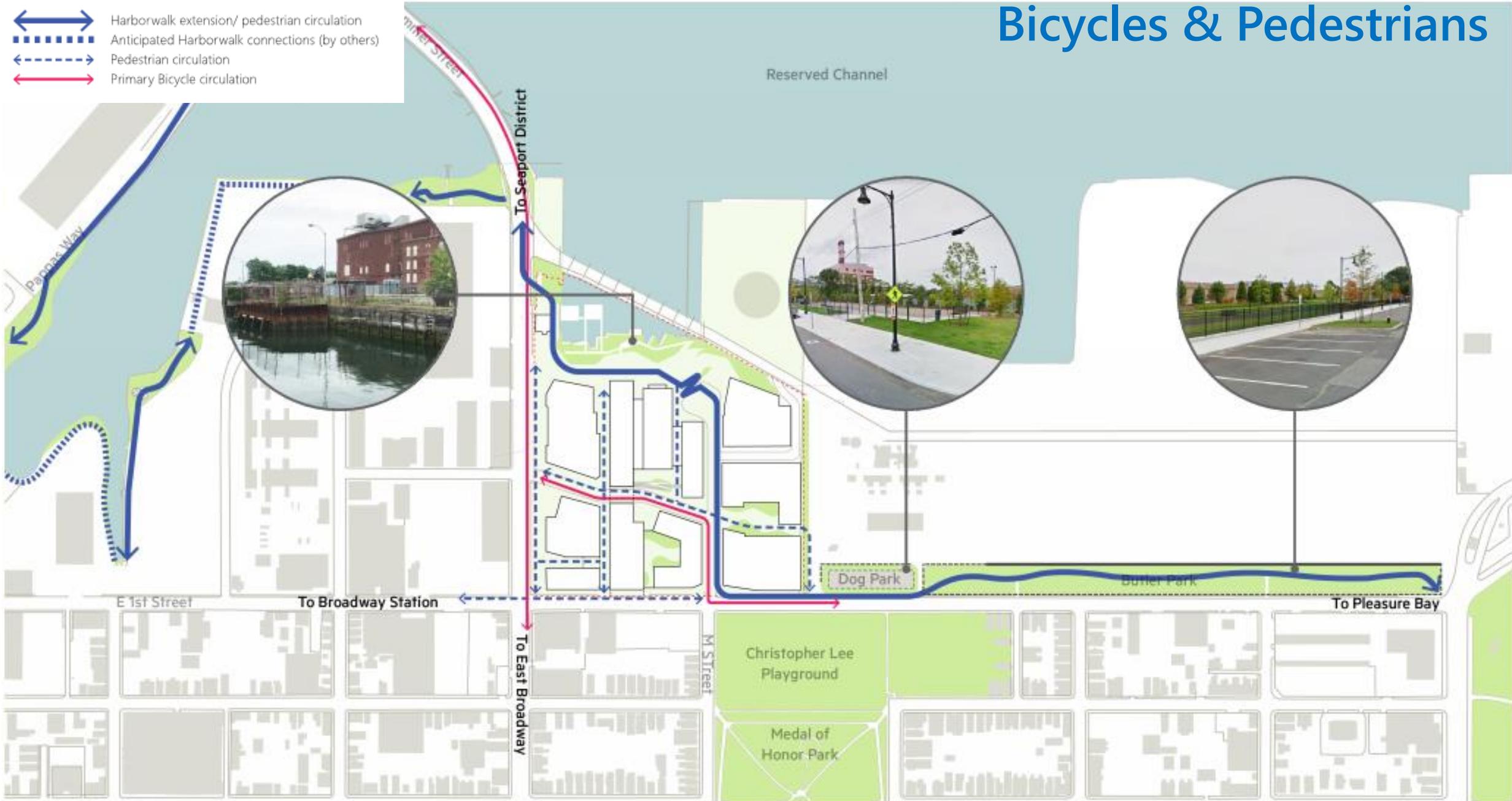
- Sidewalks on Summer Street and East 1st Street widened
- Pedestrian friendly internal roads
- Crosswalks at Elkins Street Extension and M Street Extension
- Improved pedestrian crossing at Summer Street/L Street/East 1st Street
- Explore and install appropriate traffic control device on East 1st Street at M Street
- Incorporate other traffic calming/pedestrian safety measures as recommended by current community discussions

View from M Street



Neighborhood Connectivity Bicycles & Pedestrians

- ↔ Harborwalk extension/ pedestrian circulation
- ⋯ Anticipated Harborwalk connections (by others)
- - - Pedestrian circulation
- ↔ Primary Bicycle circulation



Parking Supply and Management

(Presented Previously at Last Week's Meeting)

Land Use	Program	Parking Ratio	Parking Supply
Residential - Condos	567 units	1.0 per unit	567
Residential - Apartments	777 units	0.5 per unit	389
Retail	85.6 ksf	0.4 per ksf	34
Hotel	344 rooms	0.33 per room	113
Office	368.1 ksf	0.8 per ksf	294
Total Spaces			1,397 spaces

- **Through build-out, structured parking will be supplemented with surface parking areas**
- **Monitoring parking space use during each phase of the Project**
- **Opportunity for community parking on nights, weekends, and snow emergencies (in surface parking lots during initial phases and within structured parking later on)**
- **34 on-street parking spaces internal to the Project Site**

Traffic and Parking Monitoring and Reporting

- **Commitment to traffic and parking monitoring between phases, with reporting to City and the neighborhood and appropriate adjustments to mitigation**
- Monitor and Mitigate if necessary eastbound along East 1st Street at O Street, P Street and Farragut Road
- Work with the City of Boston on traffic monitoring program as part of our Transportation Access Plan Agreement (TAPA)
- Implement comprehensive Transportation Demand Management (TDM) program

THANK YOU



View from East 1st Street toward Summer/L Street

