

#### I-90 ALLSTON INTERCHANGE A MULTIMODAL TRANSPORTATION PROJECT TASK FORCE MEETING March 10, 2016 – FIORENTINO COMMUNITY CENTER

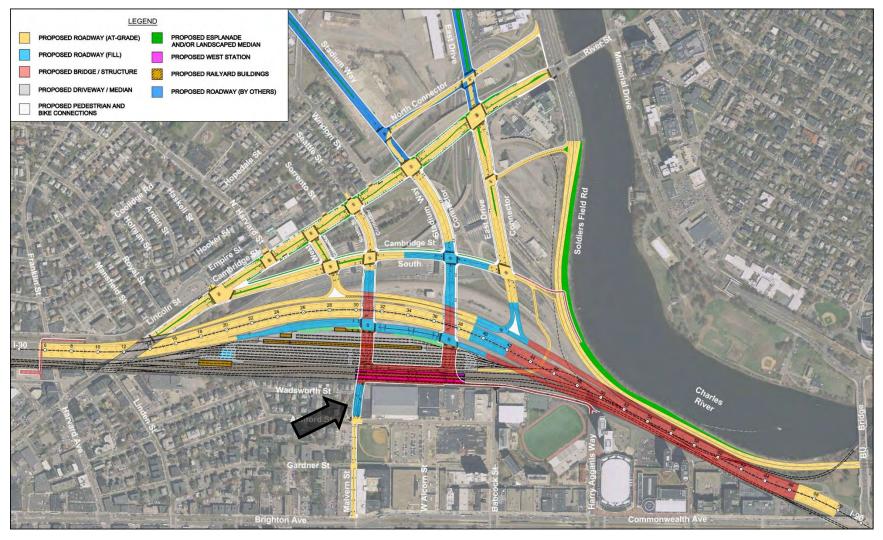
# **Meeting Agenda**

- Welcome & Introductions
- Urban Interchange Concept 3K-4c with Connection to Commonwealth Avenue
- Urban Interchange Concept 3K-4 Construction Staging
- Concept 3K-4 Construction Staging Roll Plans
- Section 4(f) Discussion
- Questions/Comments

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- Welcome & Introductions
- Urban Interchange Concept 3K-4c with Connection to Commonwealth Avenue

# Urban Interchange Concept 3K-4c with Connection to Commonwealth Avenue



# Urban Interchange Concept 3K-4c with Connection to Commonwealth Avenue

- Alternatives Evaluated:
  - 1. Two-Way connection open to All Vehicles
  - 2. Two-Way connection limited to Buses-Only

# Urban Interchange Concept 3K-4c CTPS Modeling Assumptions: Traffic

- New two-way, north-south roadway connection to West Station
- Includes Bicycle and Pedestrian connections
- No turn restrictions at Packards Corner
- No new restrictions on Ashford Street, Babcock Street and Gardner Street

# Urban Interchange Concept 3K-4c CTPS Modeling Assumptions: <u>Transit</u>

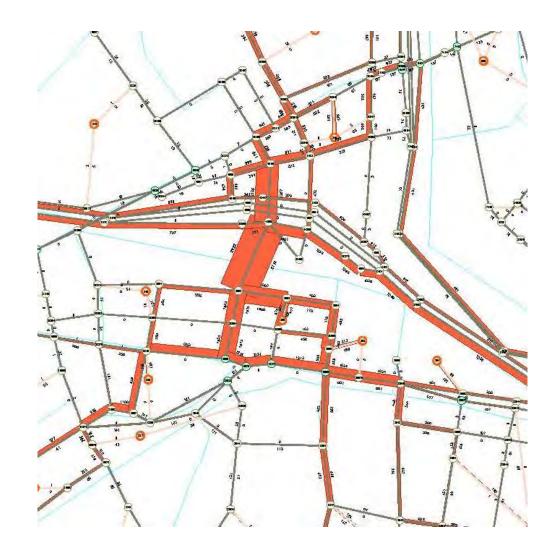
- Commuter Rail Service Worcester Line
  - 4 trains during AM/PM peak 3hr period
- Bus Service to the North
  - MBTA 64 and 66 Buses; partial re-routing
  - Shuttle Services (2) to Harvard Sq. and Central Sq. at 5 minute headways (Private)
- Bus Service to the South
  - Shuttle Service (1) to/from Longwood Medical Area at 10 minute headways (Private)

Urban Interchange Concept 3K-4c with Connection to Commonwealth Avenue

- Options Evaluated:
  - 1. Two-Way connection open to All Vehicles
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#### Malvern Street (full 2-way) -projected traffic volumes (2035)

- AM Peak: 1,640 vph
  - 955 Northbound
  - 685 Southbound
- PM Peak: 2,000 vph
  970 Northbound
  - 1,030 Southbound



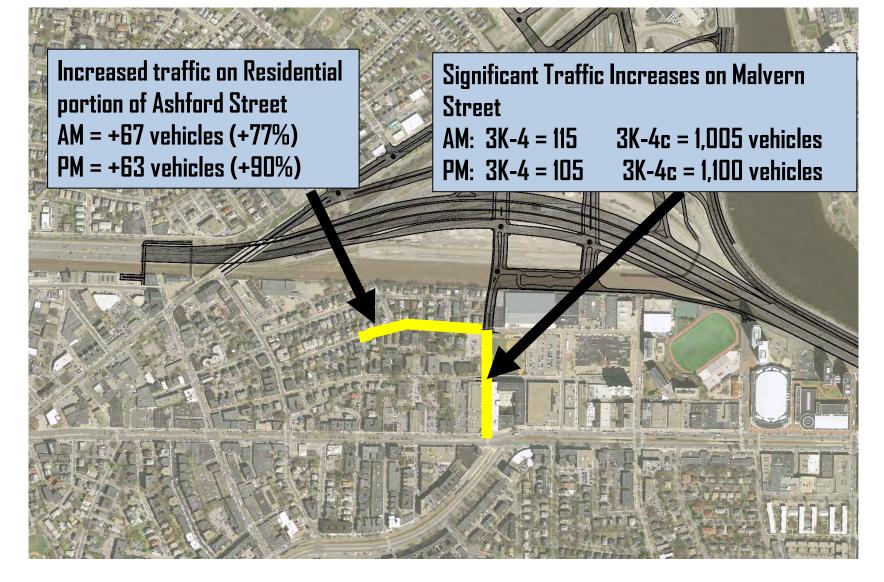
Harvard Ave - Reduced Traffic AM = -236 vehicles (-26%) PM = -194 vehicles (-18%)

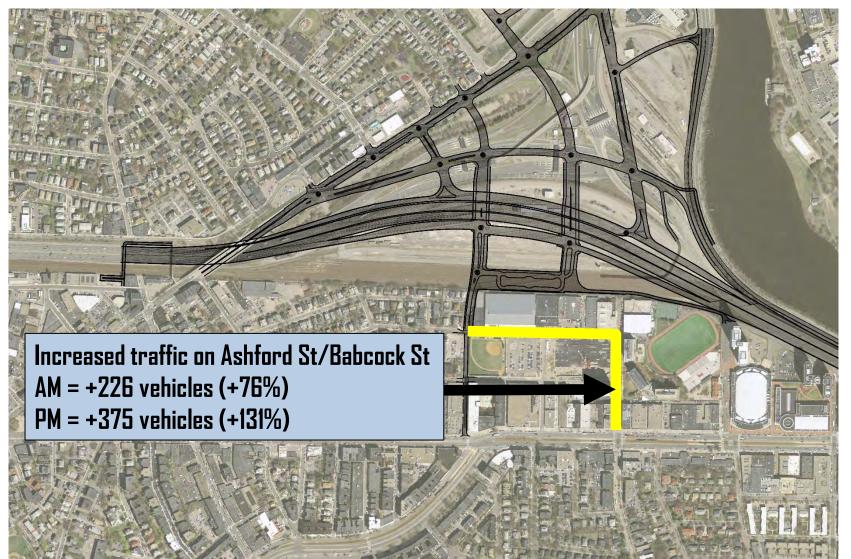
Cambridge St. Overpass – Reduced Traffic AM = -477 vehicles ( -17%) PM = -572 vehicles ( -18%)

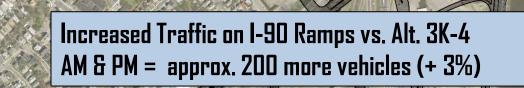
Linden St. - Reduced Traffic AM = -229 vehicles (-47%) PM = -307 vehicles (-67%)

# Interchange Alternative 3K-4c New Roadway Connection

Traffic Operations Improved at Cambridge St./Harvard Ave in AM Peak 3K-4 = LOS E 3K-4c = LOS C

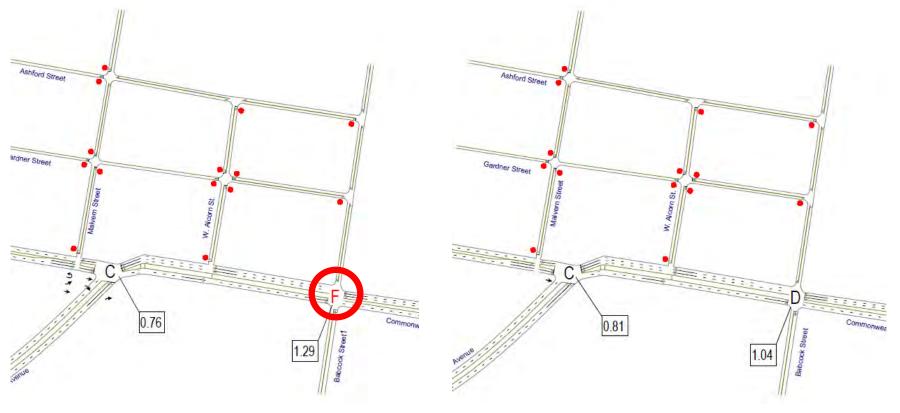






New connection to Comm. Ave. draws more highway traffic thru the interchange

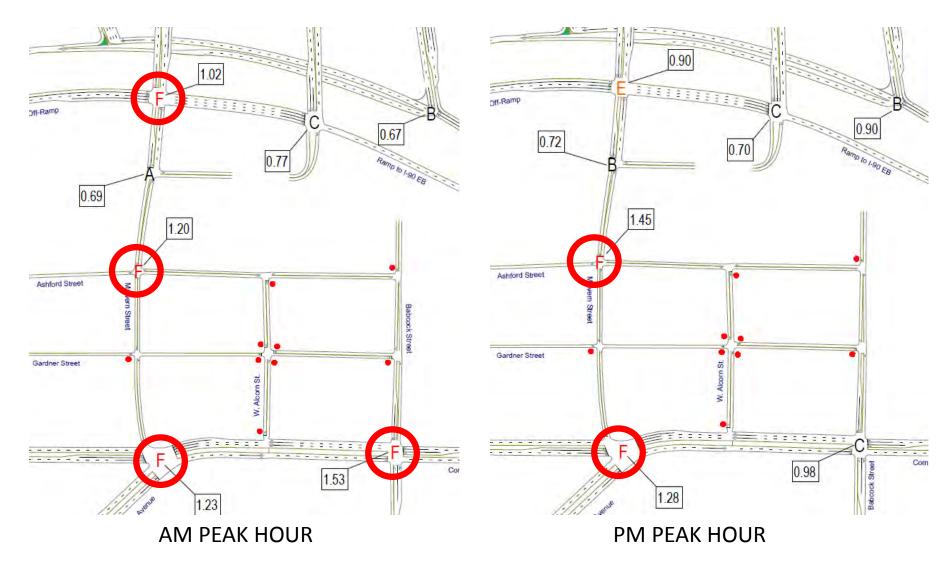
#### Malvern Street Traffic Operations Existing - Level of Service (2015)



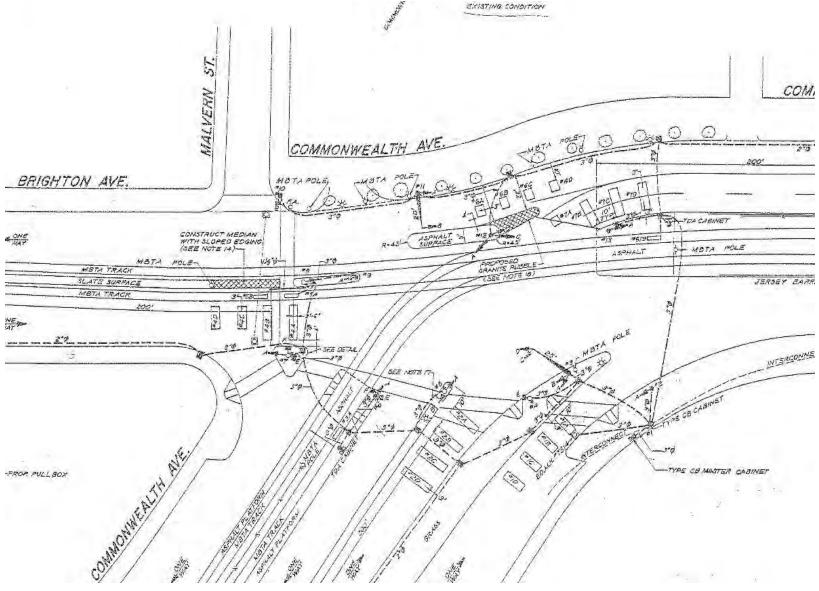
#### AM PEAK HOUR

**PM PEAK HOUR** 

#### Malvern Street - Alternative 1 Level of Service Full 2-Way (2035)



#### Packard's Corner Signal Plan



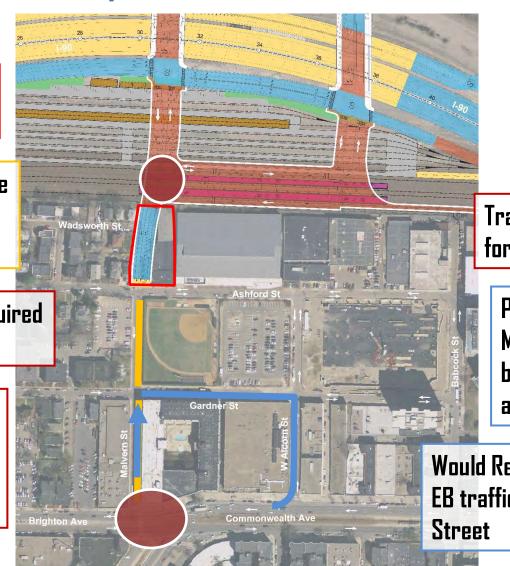
#### Urban Interchange Concept 3K-4c Two-Way connection open to All Vehicles - Potential Impacts

Full Property Taking at 76 Ashford Street

Remove Parking on the Eastern Side of Malvern Street

Major Alterations Required to Packard's Corner

Modify curb radii at corner of Malvern St/Comm Ave for Right Turns



Traffic Signal Required for Full Connection

Potential One-Way Malvern Street NB between Comm Ave and Gardner St

Would Require Gardner St EB traffic to use W Alcorn Street Urban Interchange Concept 3K-4c New Roadway Connection to Commonwealth Avenue

- Options Evaluated:
  - 1. Two-Way connection open to All Vehicles
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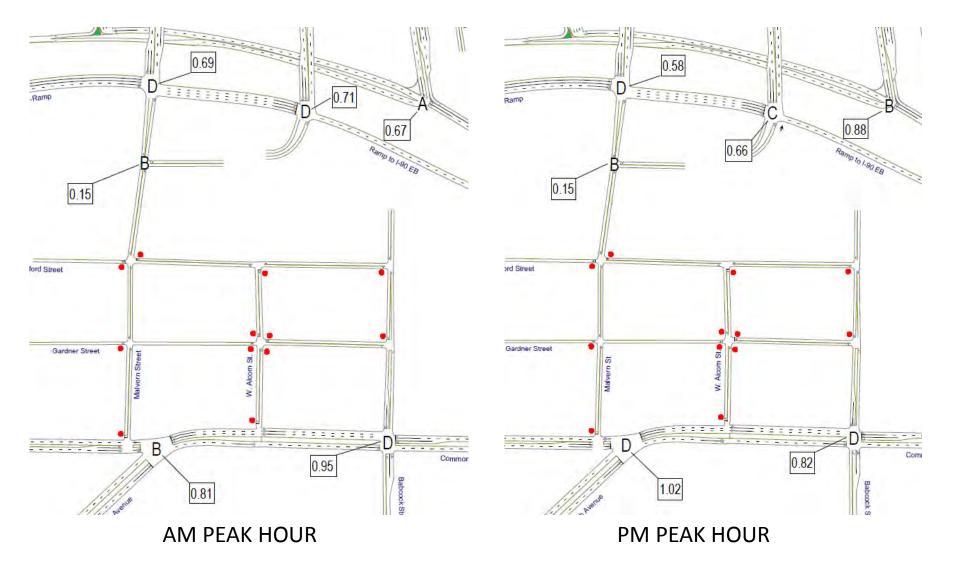
# Urban Interchange Concept 3K-4c Proposed Bus Routing (inbound to West Station)



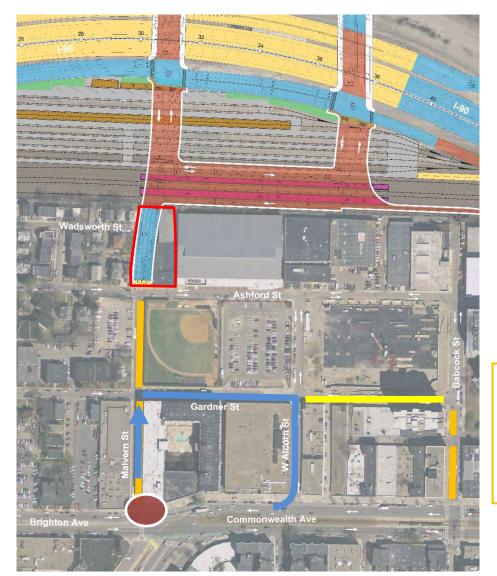
# Urban Interchange Concept 3K-4c Proposed Bus Routing (outbound via Babcock St)



#### Malvern Street - Alternative 2 Level of Service Bus Only (2035)



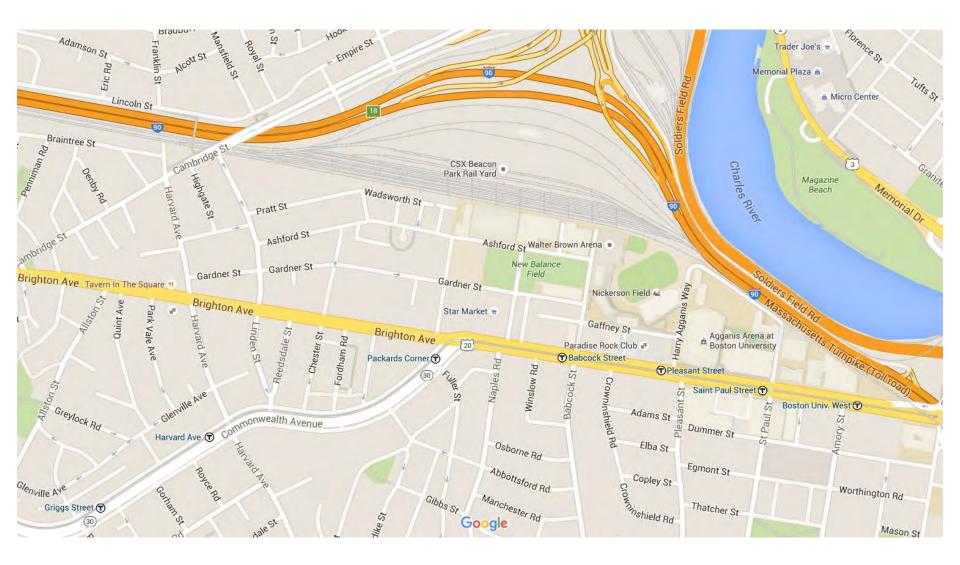
#### Urban Interchange Concept 3K-4c Two-Way connection limited to Buses Only - Potential Impacts



Requires One-Way Gardner Street EB to Babcock Street

Remove Parking on Babcock Street to Introduce 2<sup>nd</sup> SB Lane

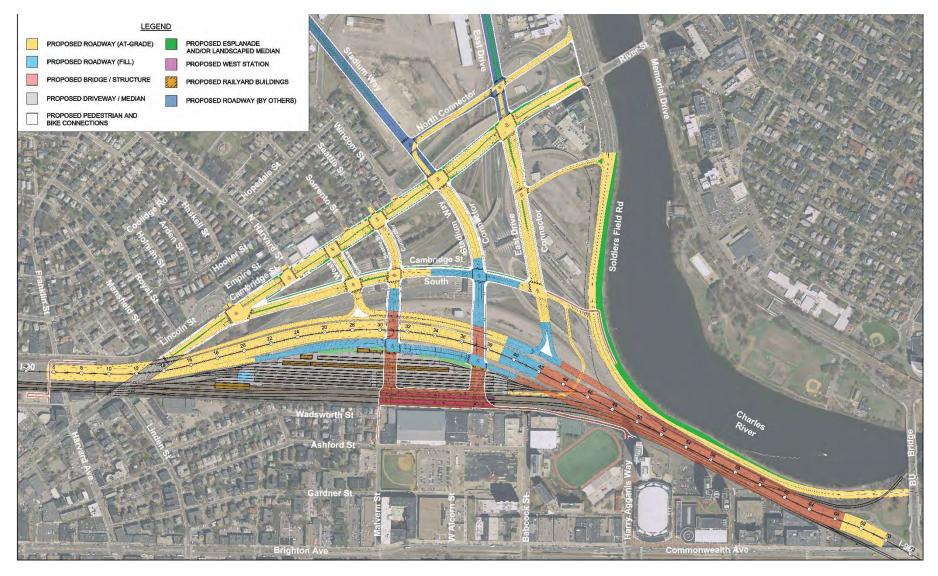




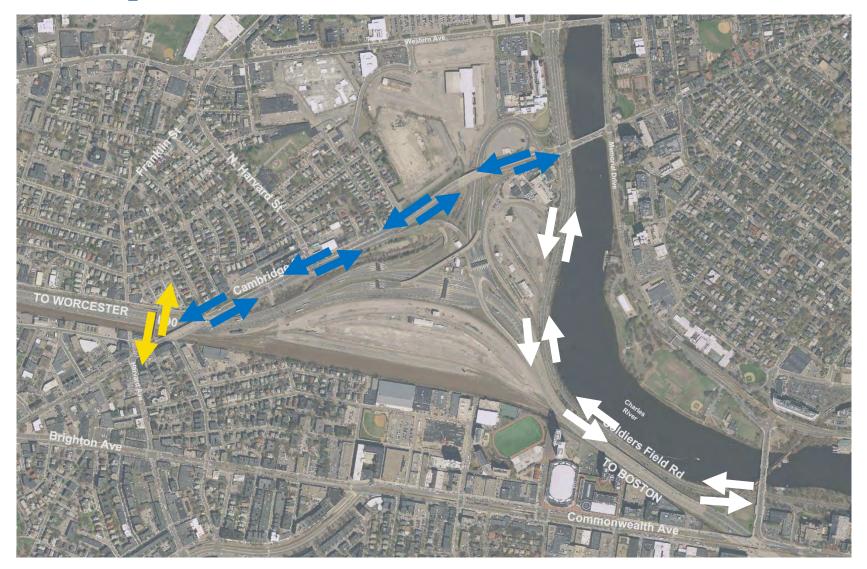
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- Urban Interchange Concept 3K-4 Construction Staging

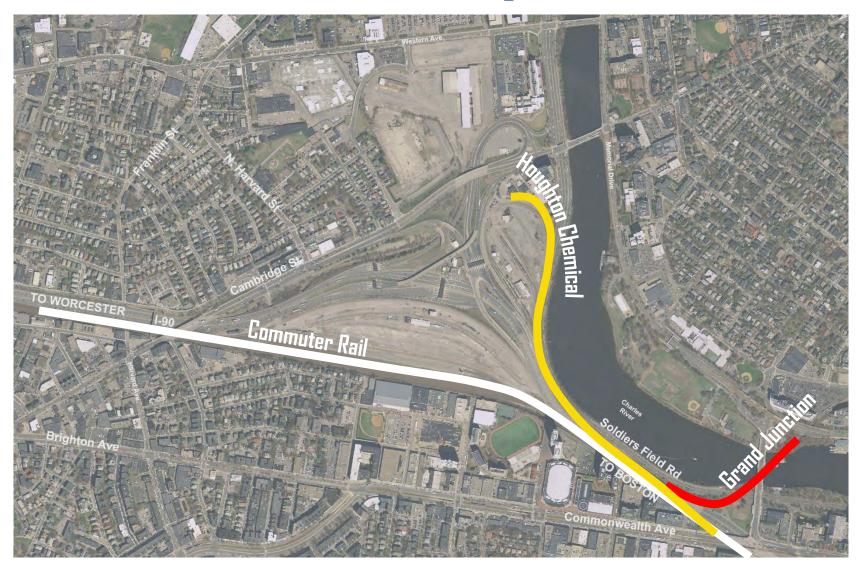
#### Urban Interchange Concept 3K-4 Construction Staging



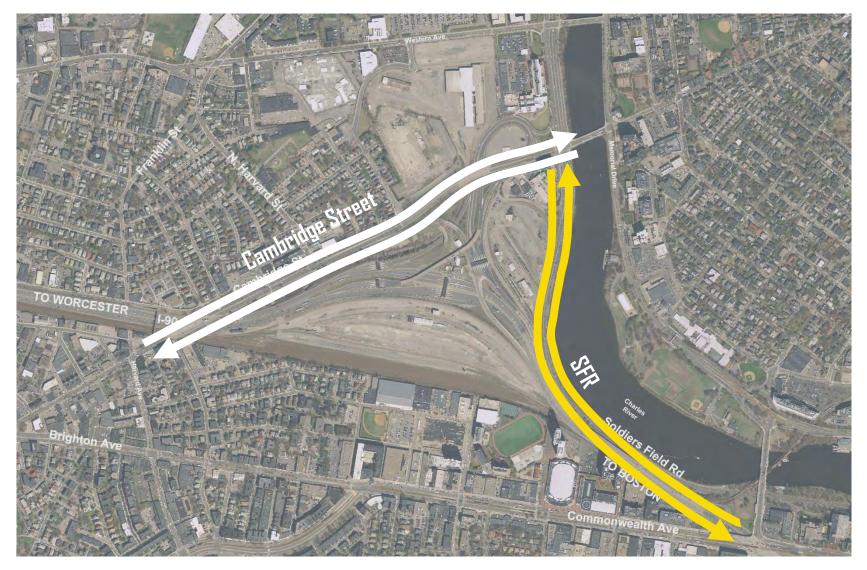
#### Maintain Bike & Pedestrian Movements Cambridge St/SFR/Cross I-90



#### Maintain Rail Service Commuter Rail/Grand Junction/Houghton Chemical



#### Maintain Traffic Movements Cambridge Street and Soldiers Field Road



#### Maintain Interchange Traffic Movements I-90 East and West Bound



# Maintain Interchange Traffic Movements I-90 East Bound Exit Ramp



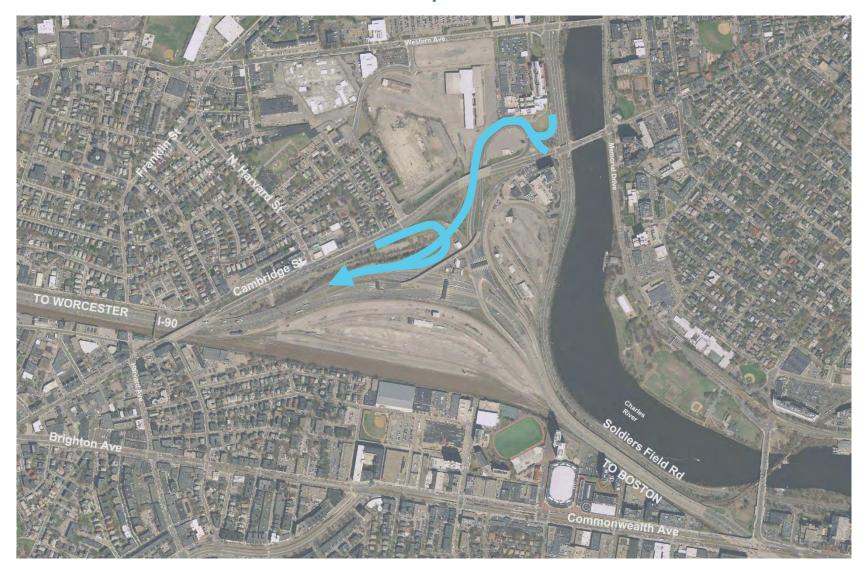
# Maintain Interchange Traffic Movements I-90 West Bound Exit Ramp



#### Maintain Interchange Traffic Movements I-90 East Bound Entrance Ramp



# Maintain Interchange Traffic Movements I-90 West Bound Entrance Ramp



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#### Interchange Alternatives Construction Staging Service Impacts and Durations

	ABC	Amateur Planner	ЗК
Worcester Line Construction Impacts	12 months low speed operation 24 months intermittent impacts	12 months low speed operation 24 months intermittent impacts	24 months intermittent impacts
Grand Junction Construction Shutdown	Minimum 3 year closure	Minimum 4 year closure	Short term outages (few weeks)
PDW Path Construction Impacts	Min. 6 month closure or detour (temporary relocation of path to the south requires additional stage and duration)	Min. 5 year closure or detour	No closures anticipated
Construction Duration	52-76 months	66-96 months	58-72 months

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- Section 4(f) Discussion

## Section 4(f) Discussion

#### Section 4(f) Hierarchy of Considerations

According to 49 U.S.C. §303, a project that requires the use of parkland or a historic district may be approved only if:

No prudent and feasible alternative exists; **and** it includes all possible planning to minimize harm.

Secretary determines there will be a **de minimis impact** 

Project undergoes a Programmatic Section 4(f) Evaluation Project undergoes an Individual Section 4(f) Evaluation

# Section 4(f) Discussion

#### 4(f) mandates which alternative to select:

Primary Criteria	Avoids	Must select an alternative that completely avoids impacts; if there is not an alternative that is prudent and feasible that does so, then
Secondary Criteria	Least Harm (Minimizes)	Considers: Ability to mitigate or enhance Severity of unmitigated impacts Significance of 4(f) property Jurisdictional views of 4(f) property
Tertiary Criteria	Purpose & Need, cost, and non-4(f) resources	Consideration of purpose and need, other resources, or cost may factor into the alternative selection only after applying the secondary criteria.

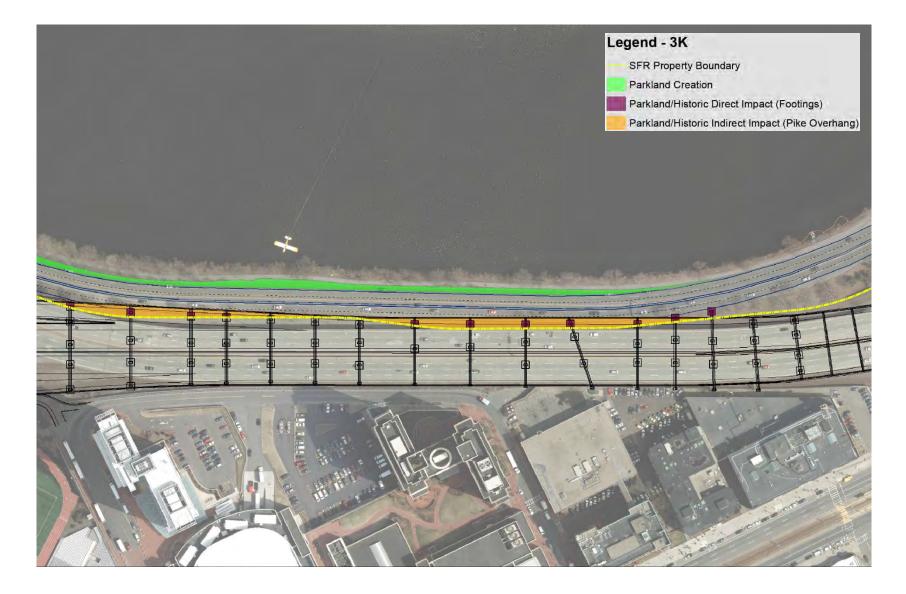
# Section 4(f) Discussion – Existing Conditions



# Section 4(f) Discussion – Concept 3K



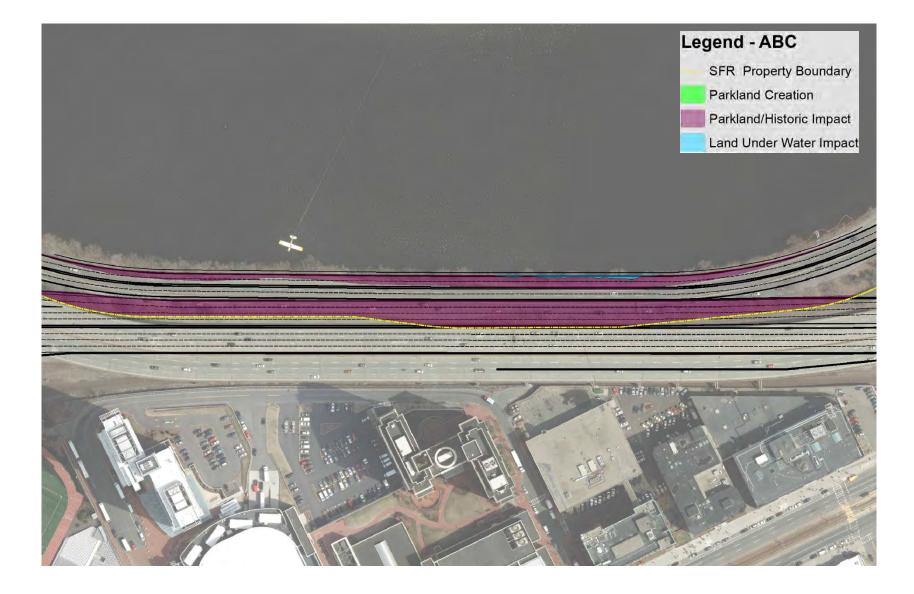
# Section 4(f) Discussion – Concept 3K



# Section 4(f) Discussion – ABC Alternative



# Section 4(f) Discussion – ABC Alternative



# Section 4(f) Discussion – Amateur Planner Alternative



#### Section 4(f) Discussion – Amateur Planner Alternative



# Section 4(f) Discussion – Summary Table

#### DRAFT

Alternative	Parkland Creation	Parkland/Historic Indirect Impacts	Parkland/Historic Direct Impacts	Land Under Water
<b>3K</b>	65,000 sf	21,000 sf	2,200 sf	0 sf
ABC	21,000 sf = 45,000 sf Created – 24,000 sf Lost	0 sf	88,000 sf	1,500 sf
Amateur Planner	58,000 sf	0 sf	26,200 sf	0 sf

# **Questions/Comments**

- BRA Meeting March 28 Fiorentino Community Center
- Full Meeting April 7 Fiorentino Community Center