



# I-84 HARTFORD PROJECT

## I-84 Hartford Project Public Advisory Committee Meeting #17

March 27, 2018





## New PAC Members

- Tony Cherolis – Center for Latino Progress
- John Walsh – alternate to Aetna representative Mike Marshall
- Julio Concepción, MetroHartford Alliance – replacing Oz Griebel
- Mike Kolonauski, Amtrak – replacing Earl Watson
- Chris Hansen, FHWA – replacing Eloise Powell



## Meeting Agenda

1. Multimodal station planning (25 minutes)
2. Local road network (15 minutes)
3. CT ***fastrak*** alignment (15 minutes)
4. Environmental documentation (15 minutes)
5. Next steps (5 minutes)



## Today's Objectives

- Recommend multimodal station concept
- Discuss on-going local road planning work
- Share latest thinking on **CT *fastrak***
- Highlight progress on environmental documentation
  - Include Section 106/4(f) processes



# Multimodal Station Planning





## Where We Left Off (November 2017 Meeting)

- Reviewed five concepts
- Discussed multimodal functionality
- Reviewed site topography
- Defined evaluation criteria





# Considerations

## Urban design

- Visibility
- TOD
- Open space
- Neighborhood connectivity

## Mobility and safety for all users

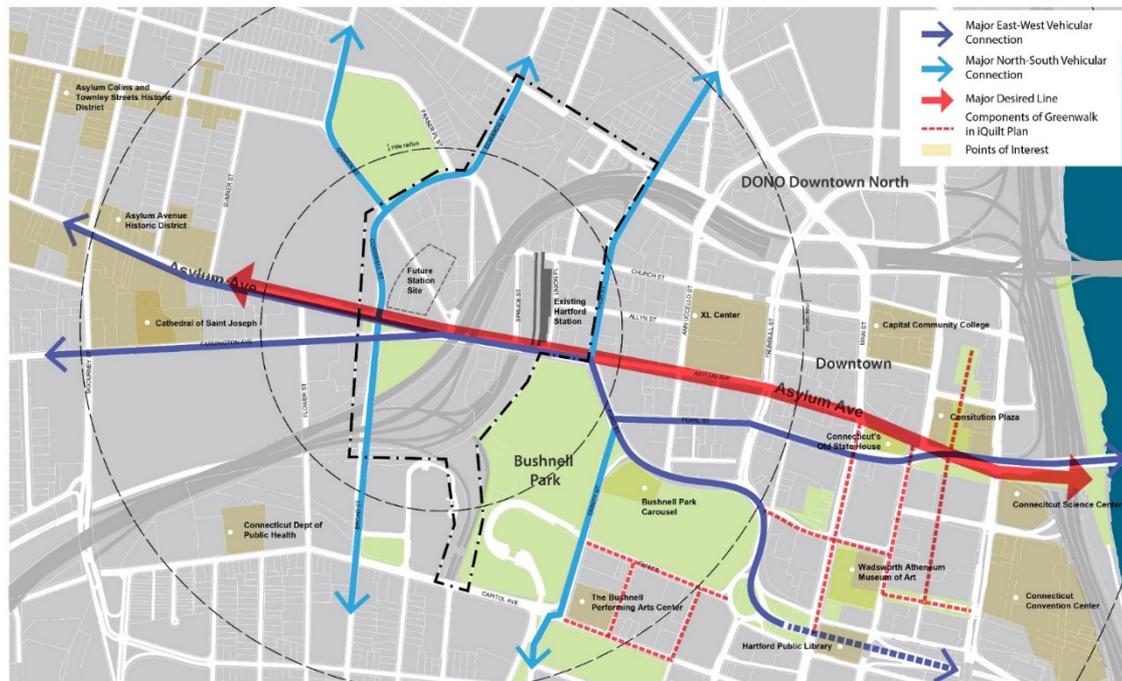
- Traffic / access management
- Bicycle / pedestrian
- Transit
- Multimodal functionality

## Engineering

- Staging / phasing
- Costs
- Operations / maintenance

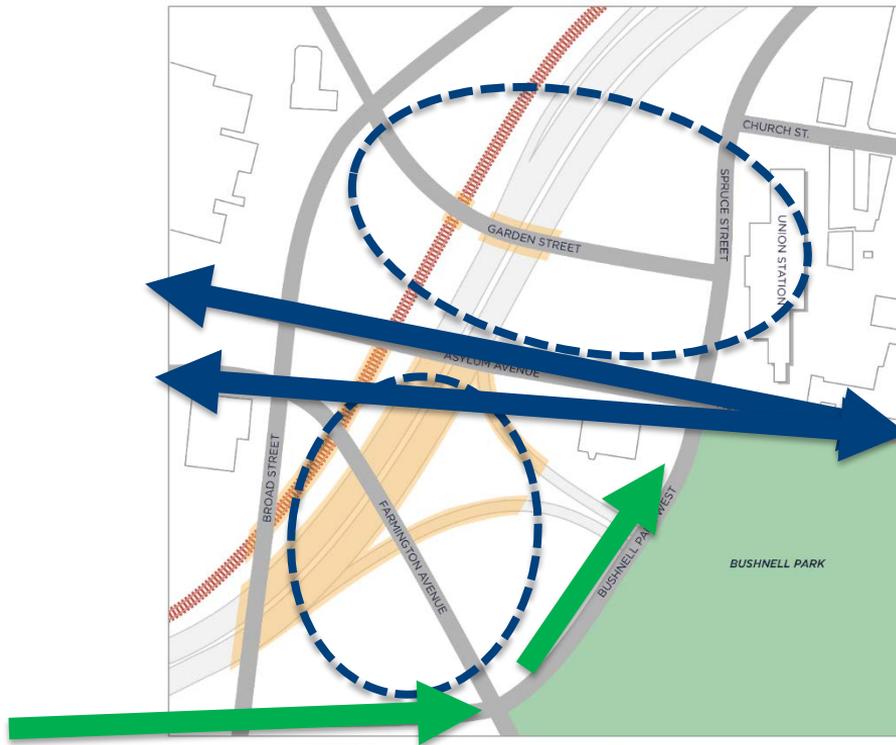
## Guiding Principles of the *Capital Gateway Concept Plan*

- 1. Improve connectivity**
  - Establish an urban grid
  - Strengthen the east-west pedestrian and bike connection
- 2. Create a district and strengthen sense of place**
  - Create clear economic anchors
  - Create a strong open space strategy
- 3. Set the stage for economic development**
  - Optimize development potential



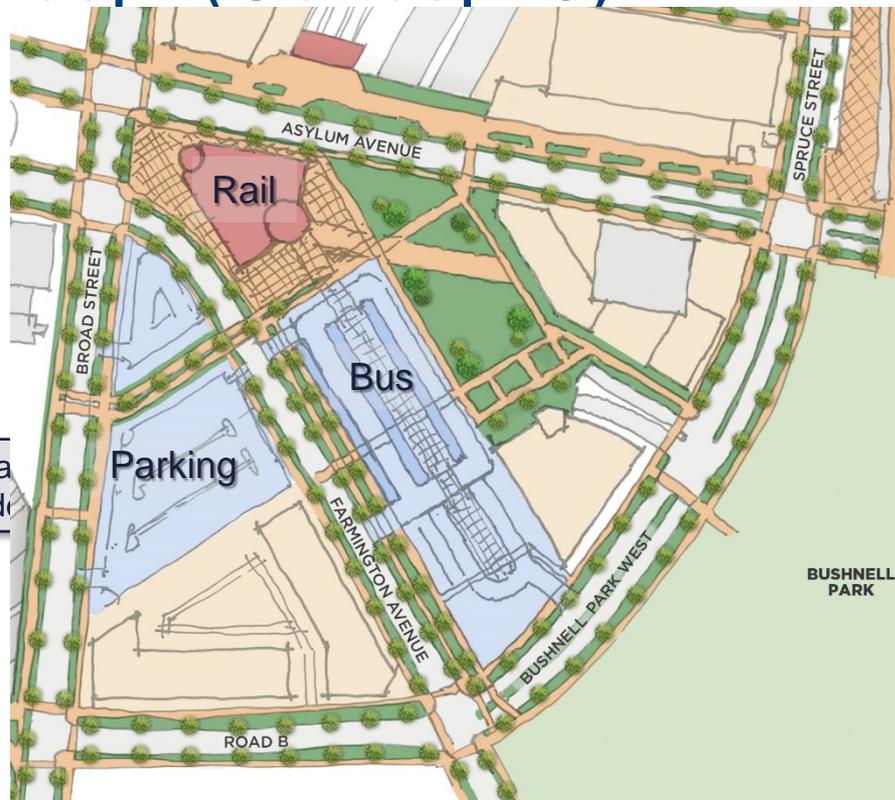
## Multimodal Station Overview

- Study area
- Transit integration
- Five representative concepts
- Considerations



## First Representative Concept (Concept J)

- Rail station anchors Asylum Ave / Farmington Ave intersection
- Defines Farmington Ave extension by bus station & parking
- Lack of strong open space linkage
- Access management / staging concerns



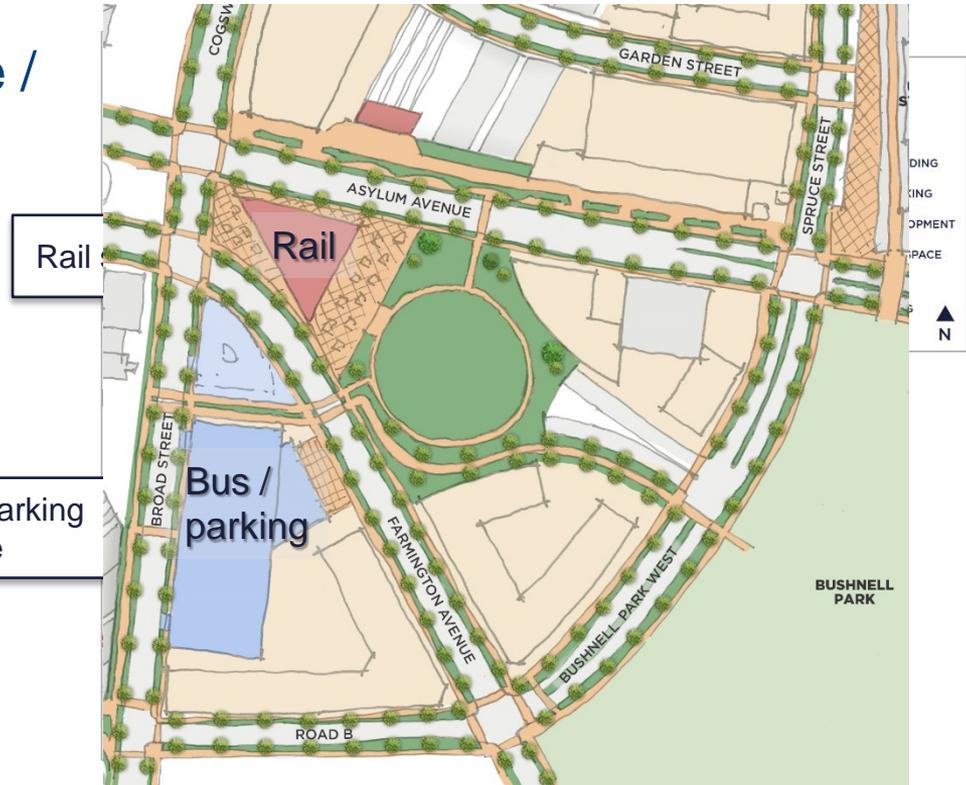
## First Representative Concept (Concept J) - Phase 1

- Not all rail station can be built
- Parking across Farmington Ave and Asylum Ave
- Farmington Ave extension constructed after Lowered Highway Alternative
- In-place 4 – 6 years



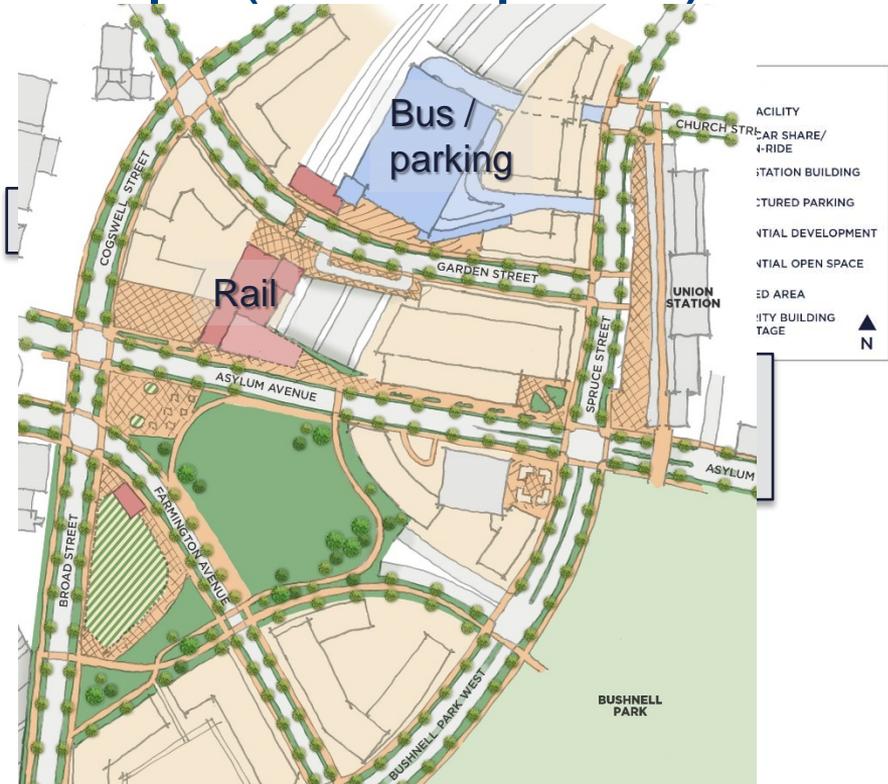
## Second Representative Concept (Concept K)

- Rail station anchors Asylum Ave / Farmington Ave intersection
- Synergy between bus and rail components
- Broad St defined by bus station
- Cost / staging concerns



# Third Representative Concept (Concept E1)

- Rail station anchors Asylum Ave edge
- Strong rail / bus connection
- New “Station Green” open space
- Significant capping / cost



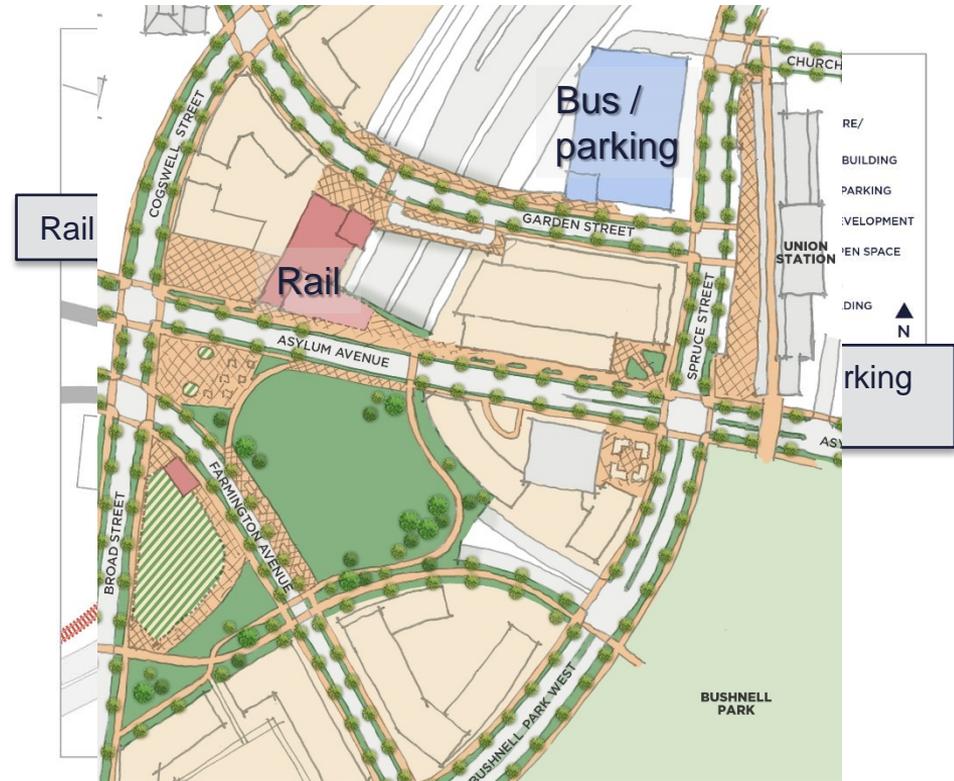
## Third Representative Concept (Concept E1) - Phase 1

- Rail station operational
- Bus services remain at Union Station
- Independent functionality required
- Surface parking



## Fourth Representative Concept (Concept E2)

- Rail station anchors Asylum Ave edge
- Bus station separate from rail
- New “Station Green” open space
- Lower cost due to less vertical construction on cap and less capping



# Fifth Representative Concept (Concept E3)

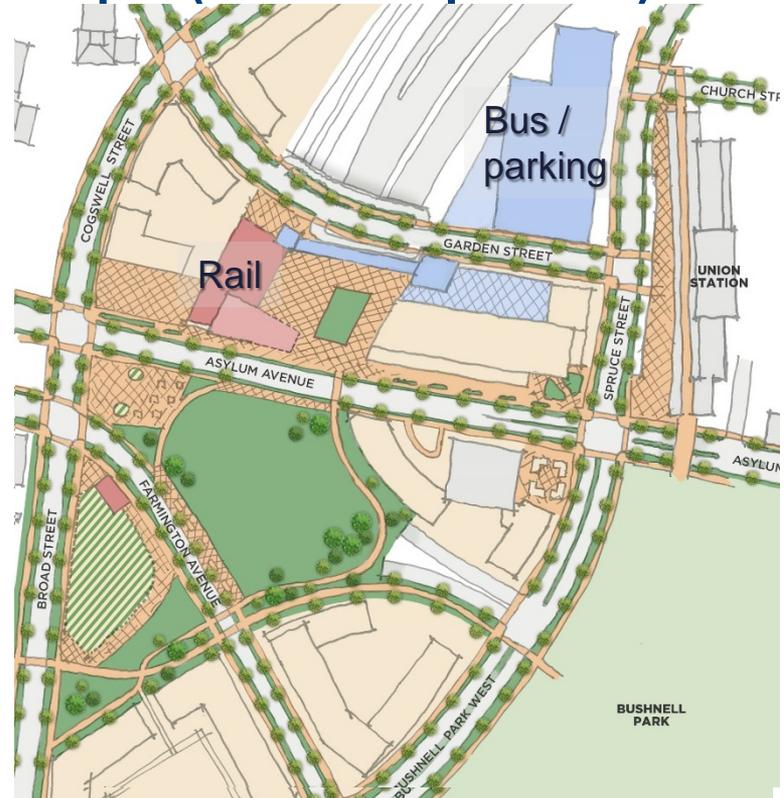
- Rail station anchors Asylum Ave edge
- New “Station Green” open space
- Comprised on multimodal functionality / capping



## Fifth Representative Concept (Concept E3)

- Rail station anchors Asylum Ave edge
- New “Station Green” open space
- Compromise on multimodal functionality / capping

*Project Team recommends this concept*





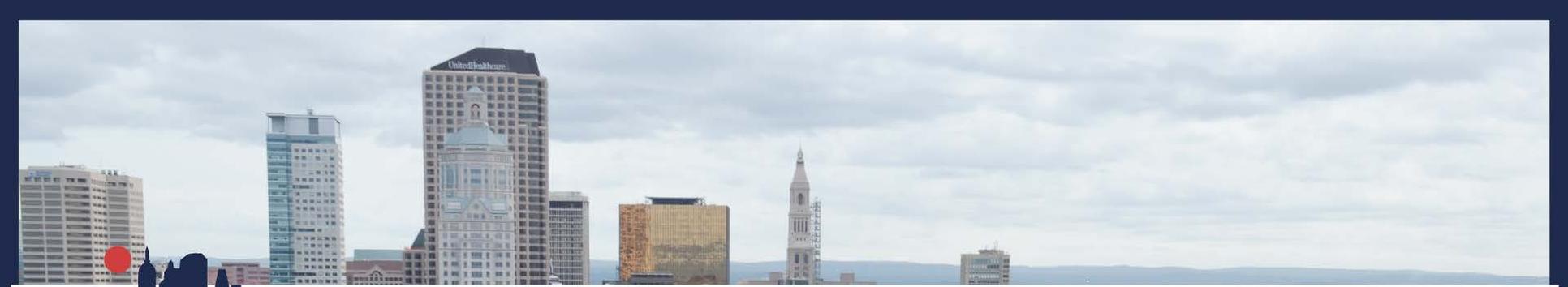
# Conclusion and Next Step

## Conclusion

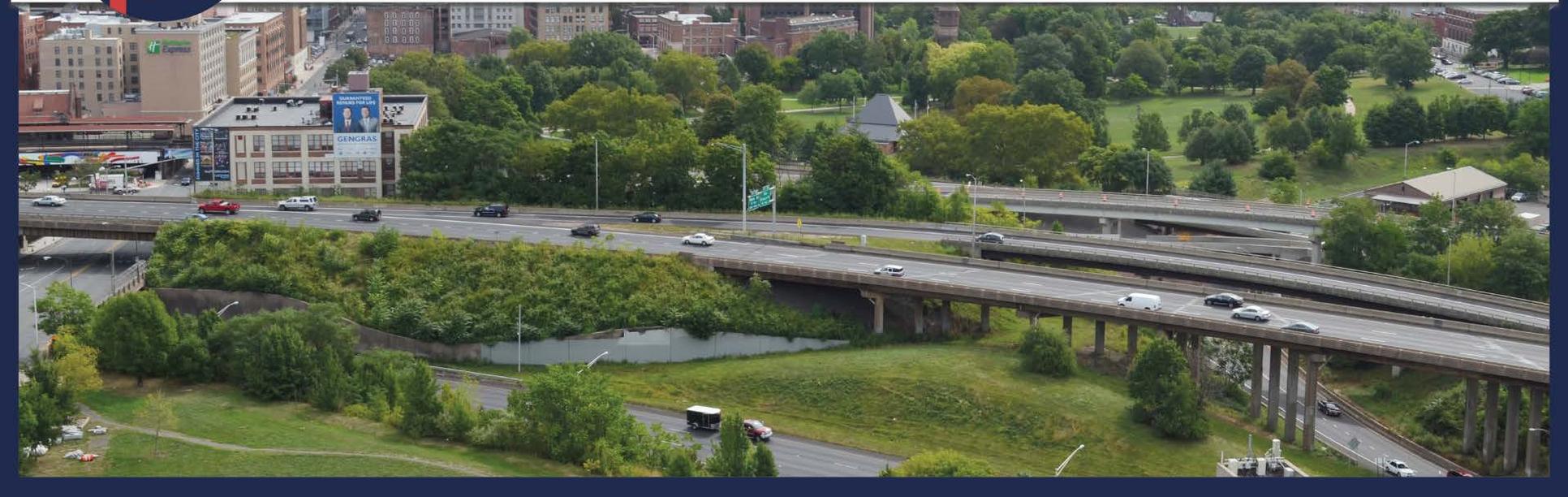
1. E3 recommended – best satisfies criteria
  - Advantages of northern concepts
    - Staging, traffic / access, potential development / open space
  - Balance cost / multimodal functionality

## Next step

1. Advance to 15% architectural design



# Local Road Network





## Recent Focus Areas

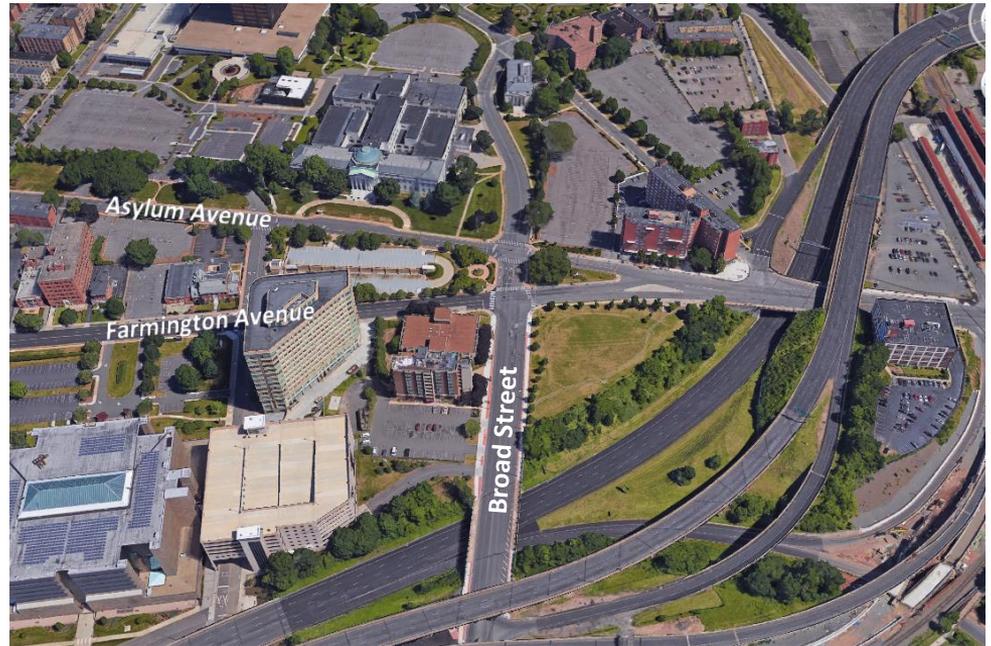




# The Trident

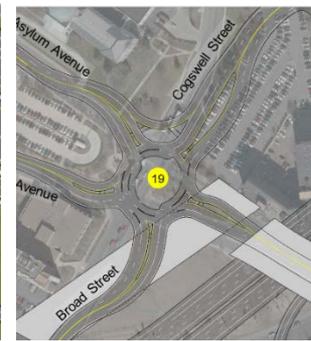
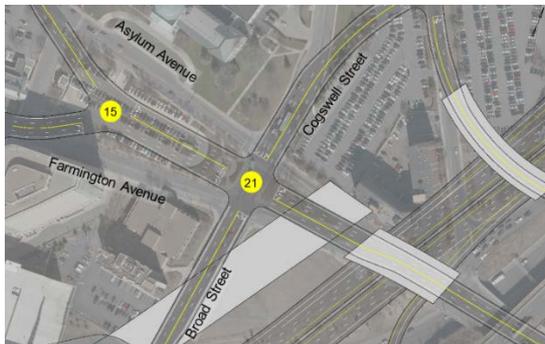
## Opportunities:

- Reimagine street character in vicinity of Trident (Farmington Ave, Broad St, and Asylum Ave)
- Improve mobility between Downtown and west neighborhoods
- Enhance pedestrian and bicycle mobility





# Many Concepts Evaluated





## Options Presented at November PAC Meeting



**Roundabout**



**Western Shift**



**Farmington Ave Extension**

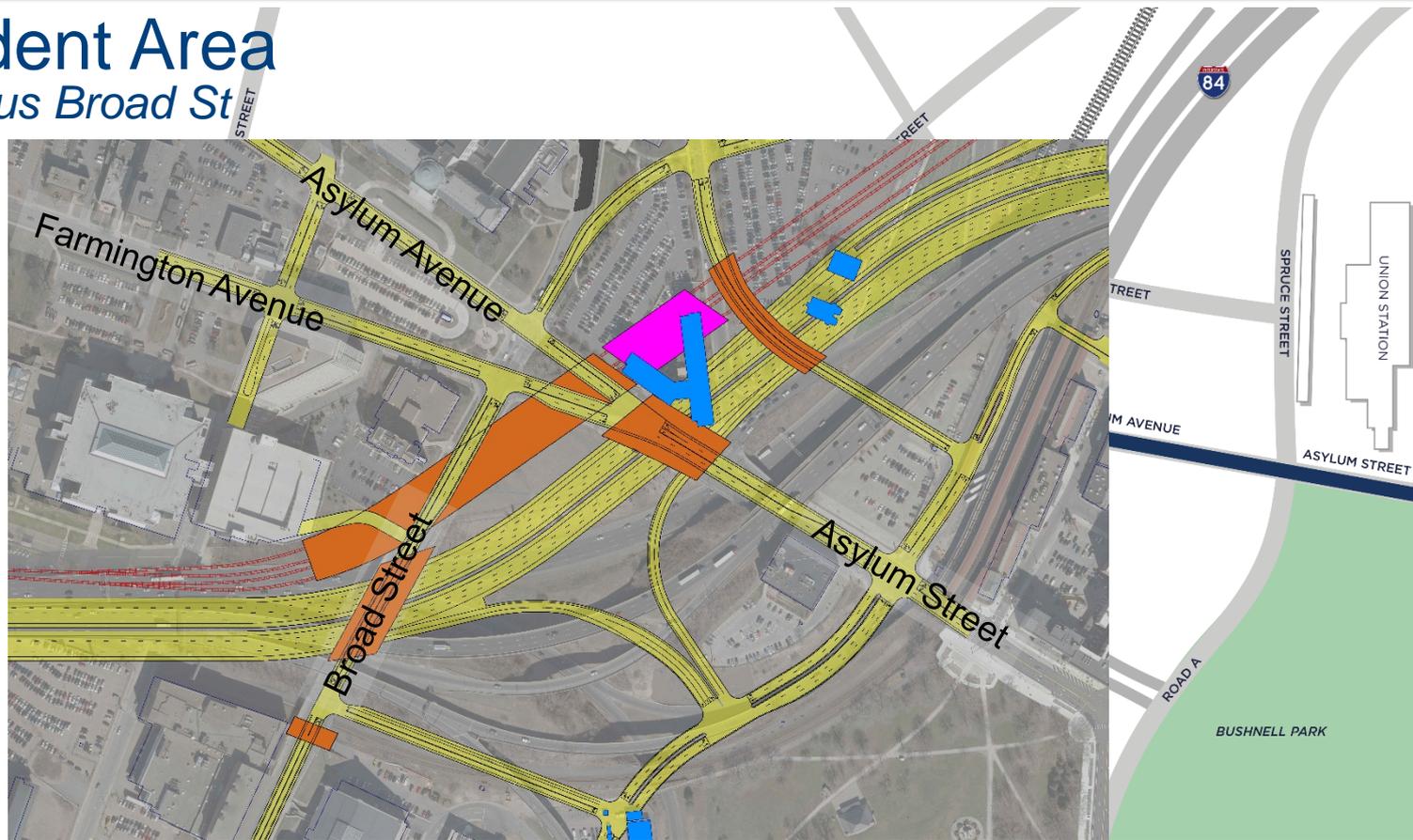


**Discontinuous Broad St**



# The Trident Area

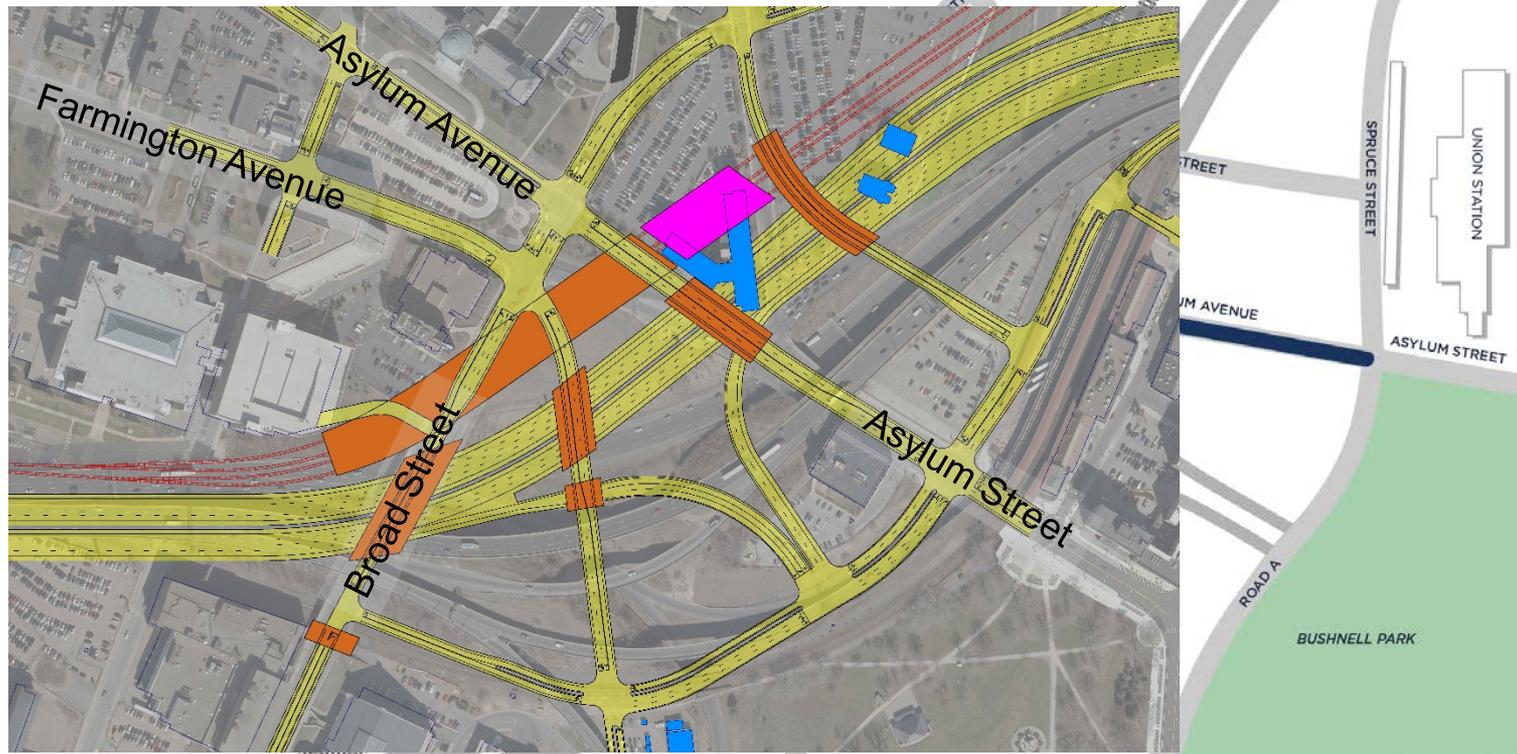
*Discontinuous Broad St*





# The Trident Area

## *Farmington Avenue Extension*





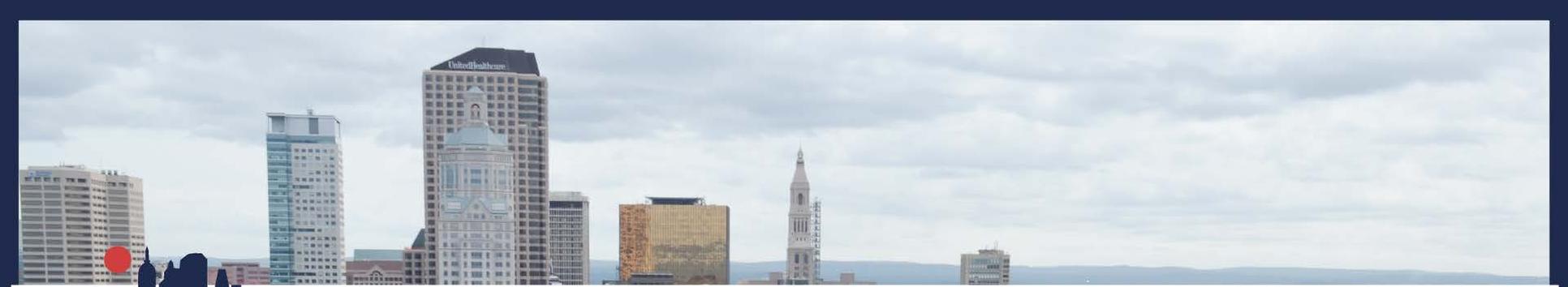
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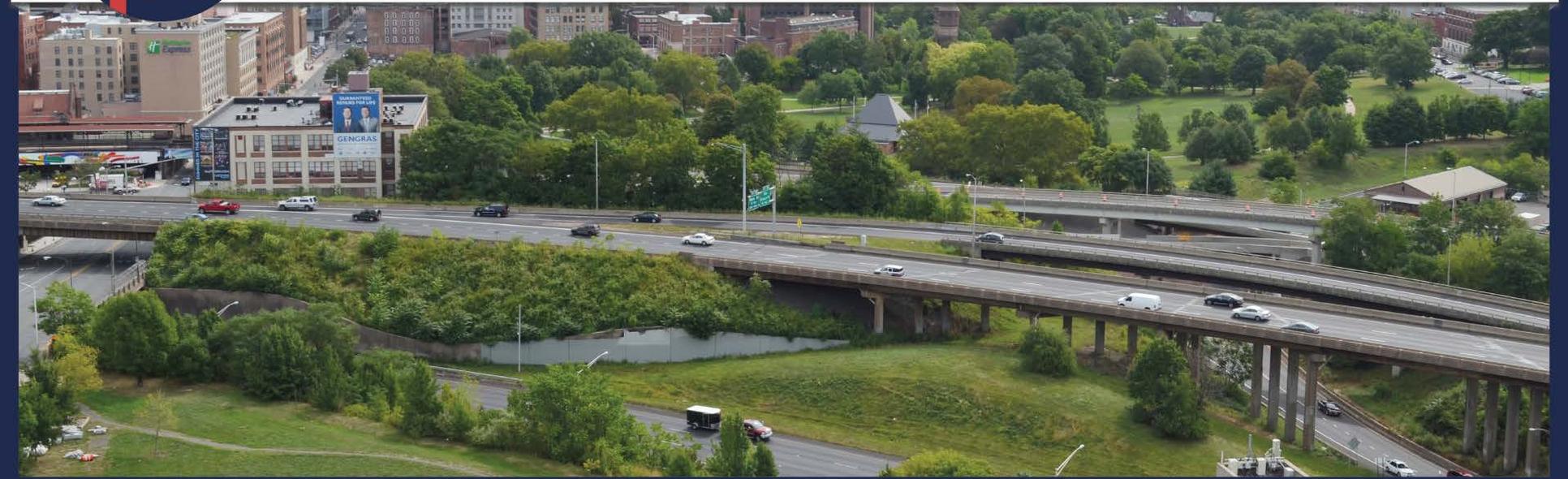
1. Adopt Farmington Ave extension
2. Continued evaluation of both remaining concepts

## Next step

1. Level 3 Screening



# CTfastrak Alignment





# Why Relocate CT *fastrak*?





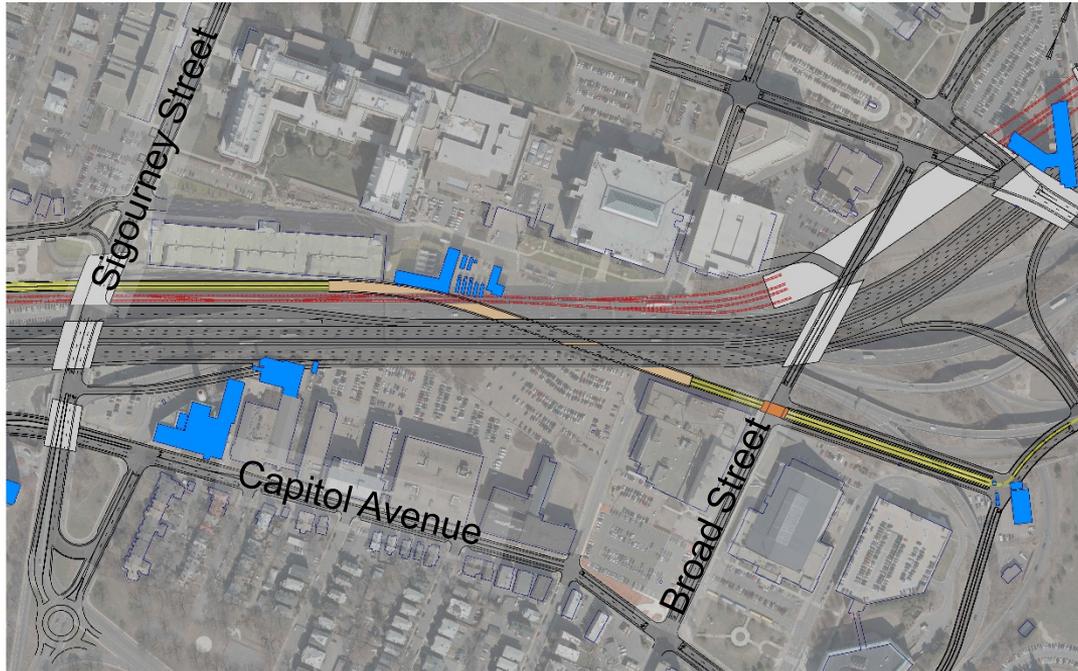
## Where We Left Off (February 2016 Meeting)

- Sigourney St to Broad St tunnel



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# Sigourney St to Broad St Tunnel

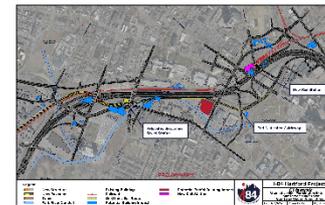
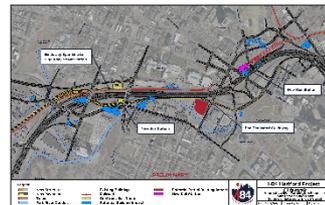
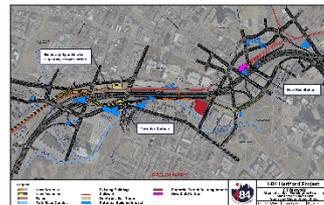
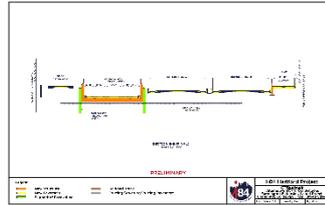
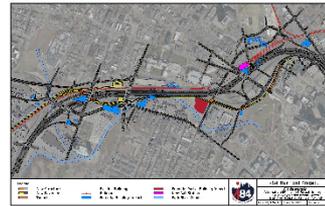
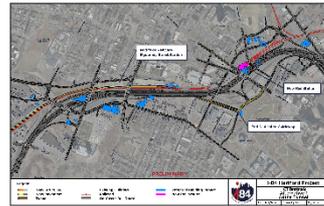
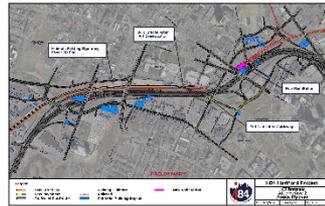
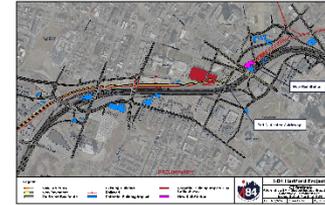
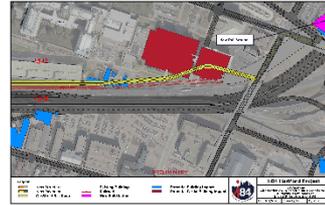
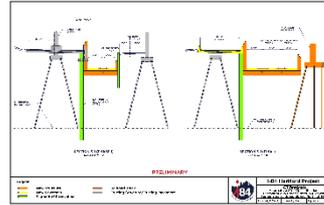
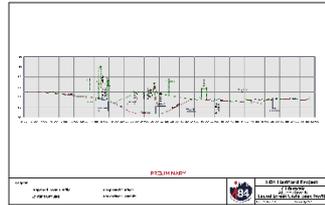
- Significant challenges / fatal flaws
  - Cost
  - Construction duration



Back to  
the Drawing  
Board



## Many Alternatives Developed





# Considerations

- Accessibility to central business district and Downtown
- Service goals – permanent and temporary
- Building / property impacts
- Cost



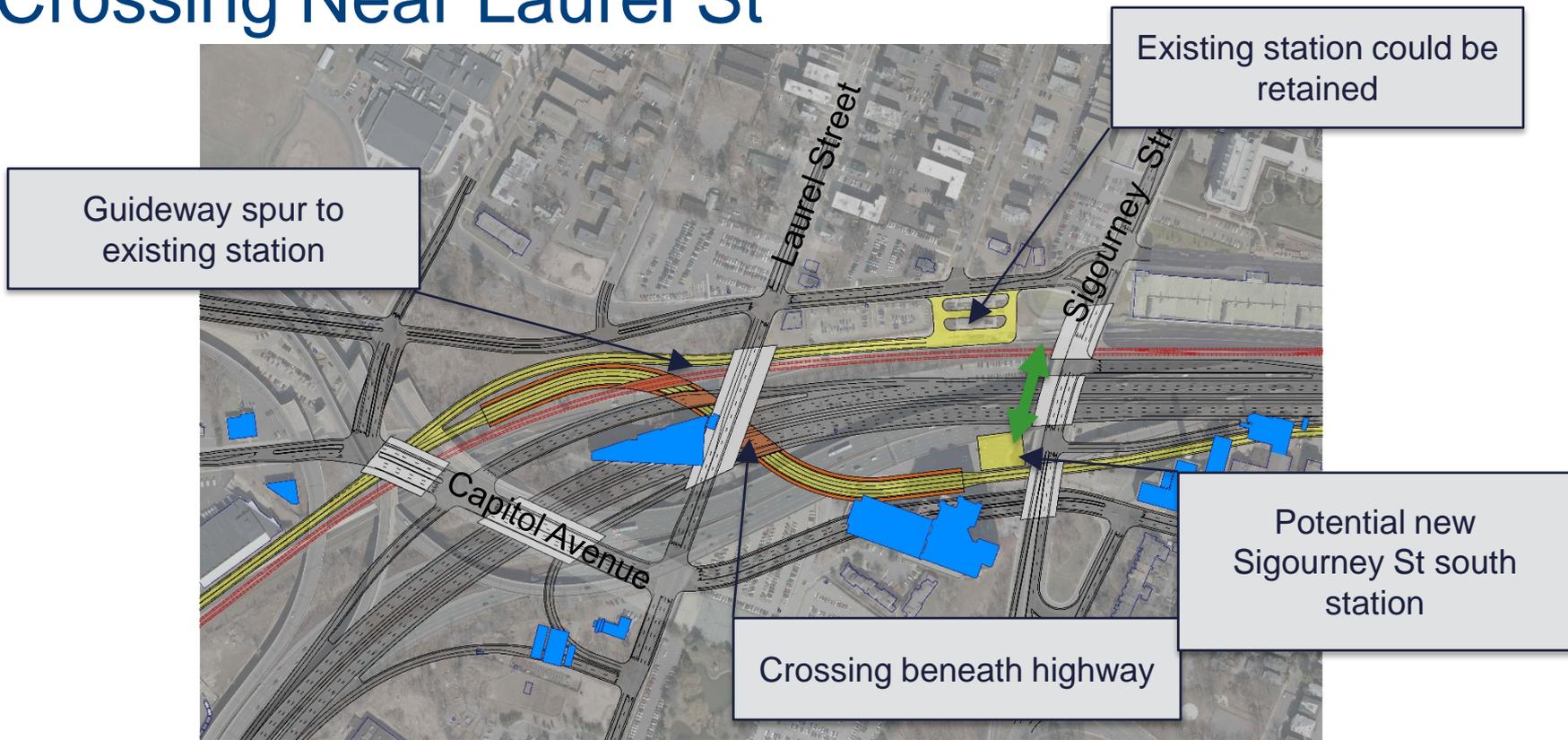
## Latest Thinking

- Cross beneath I-84 and rail near Laurel St



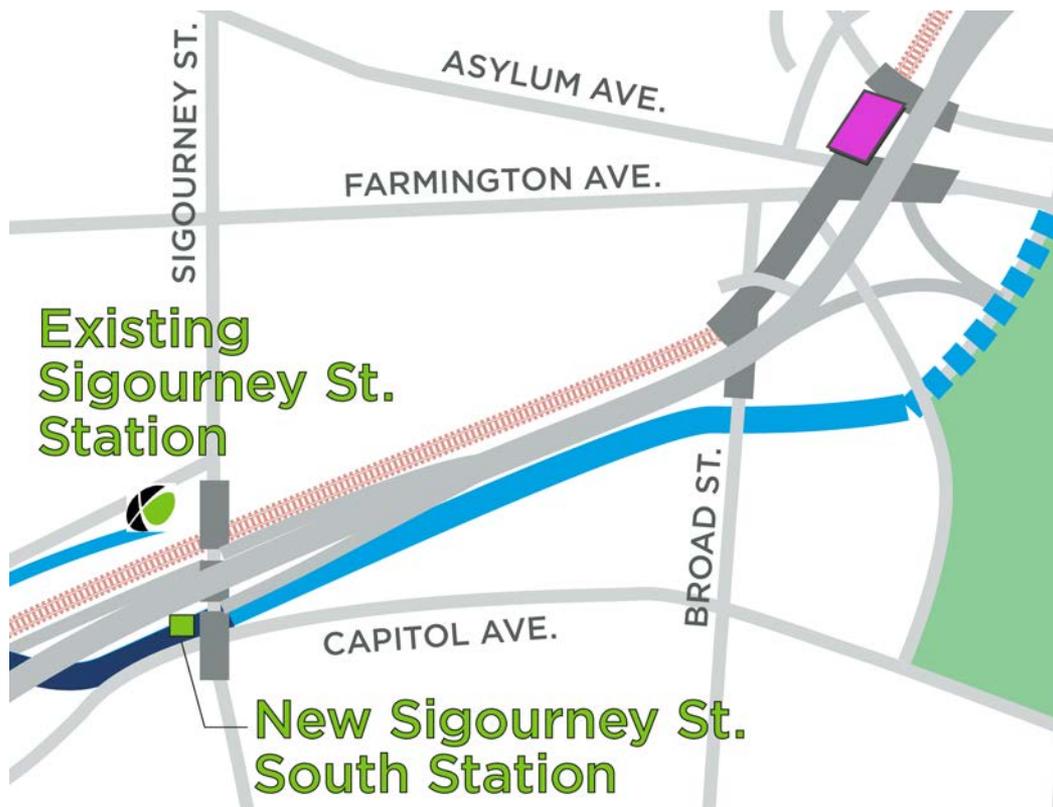


# Crossing Near Laurel St





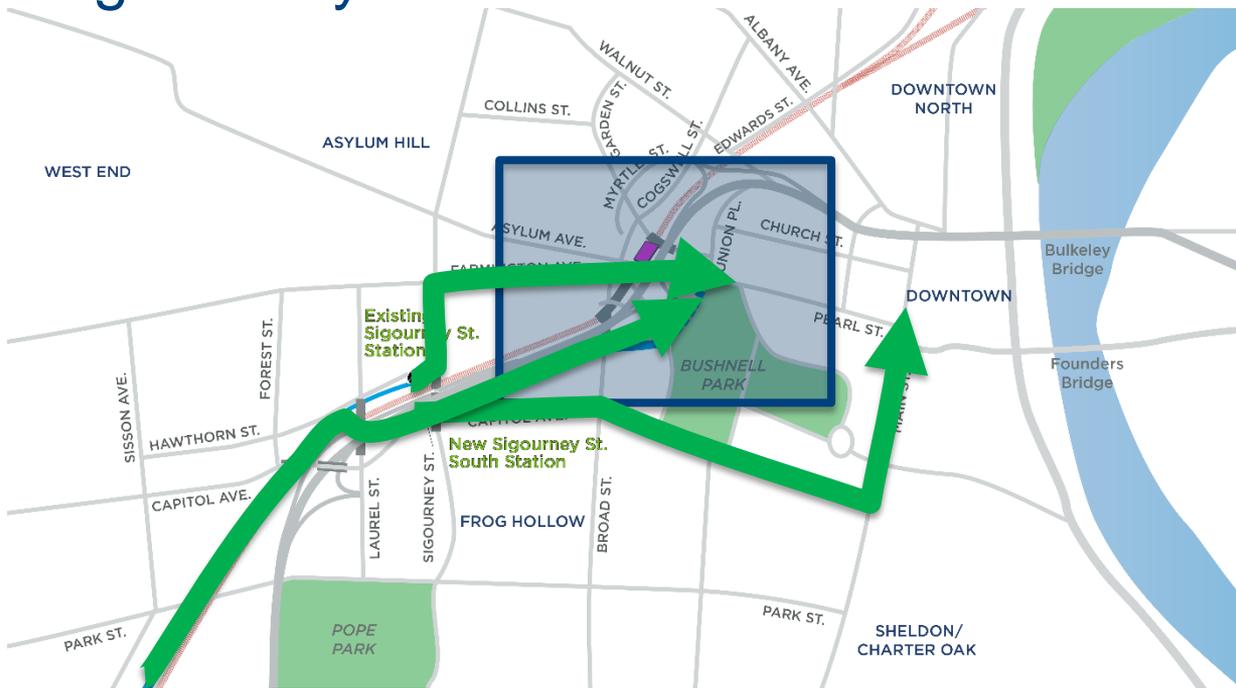
# CT *fastrak* Station





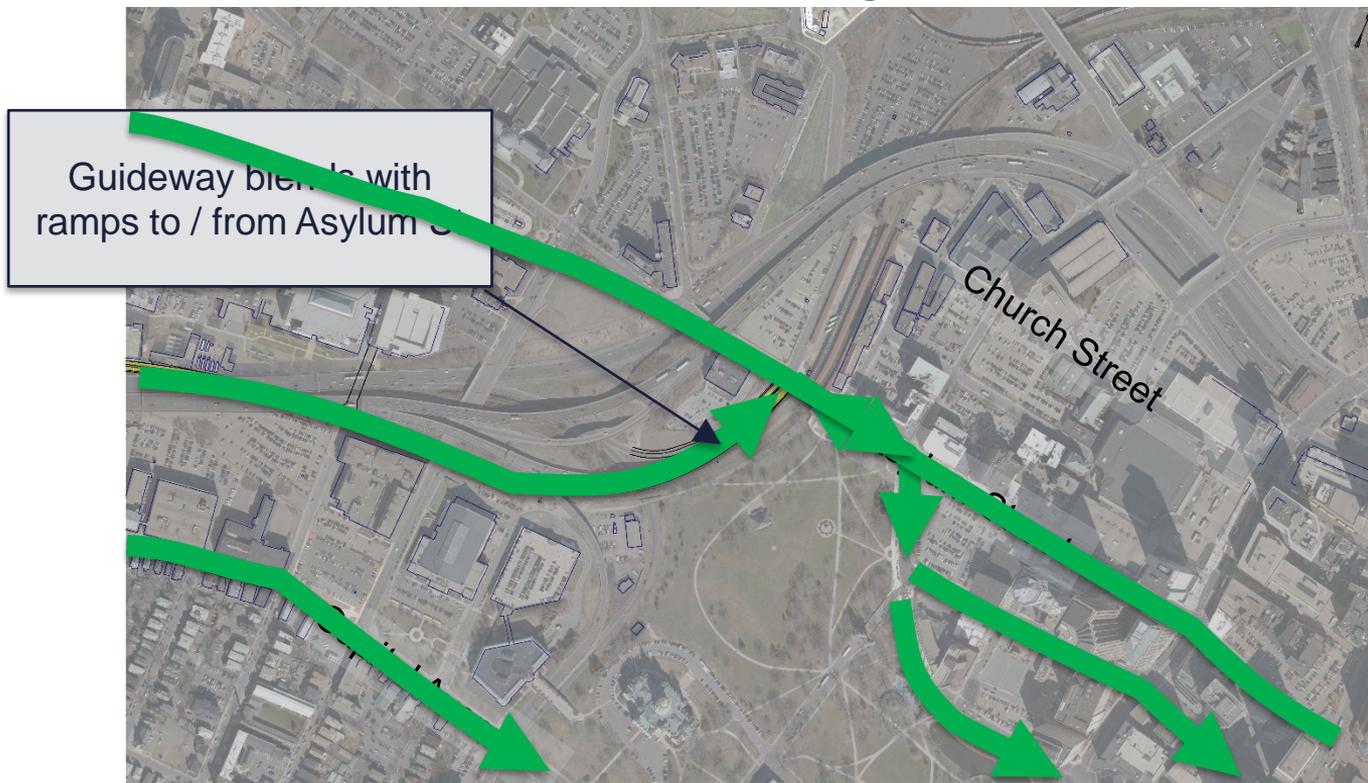
## Latest Thinking

- Eastern guideway terminus





## Eastern Terminus – Existing



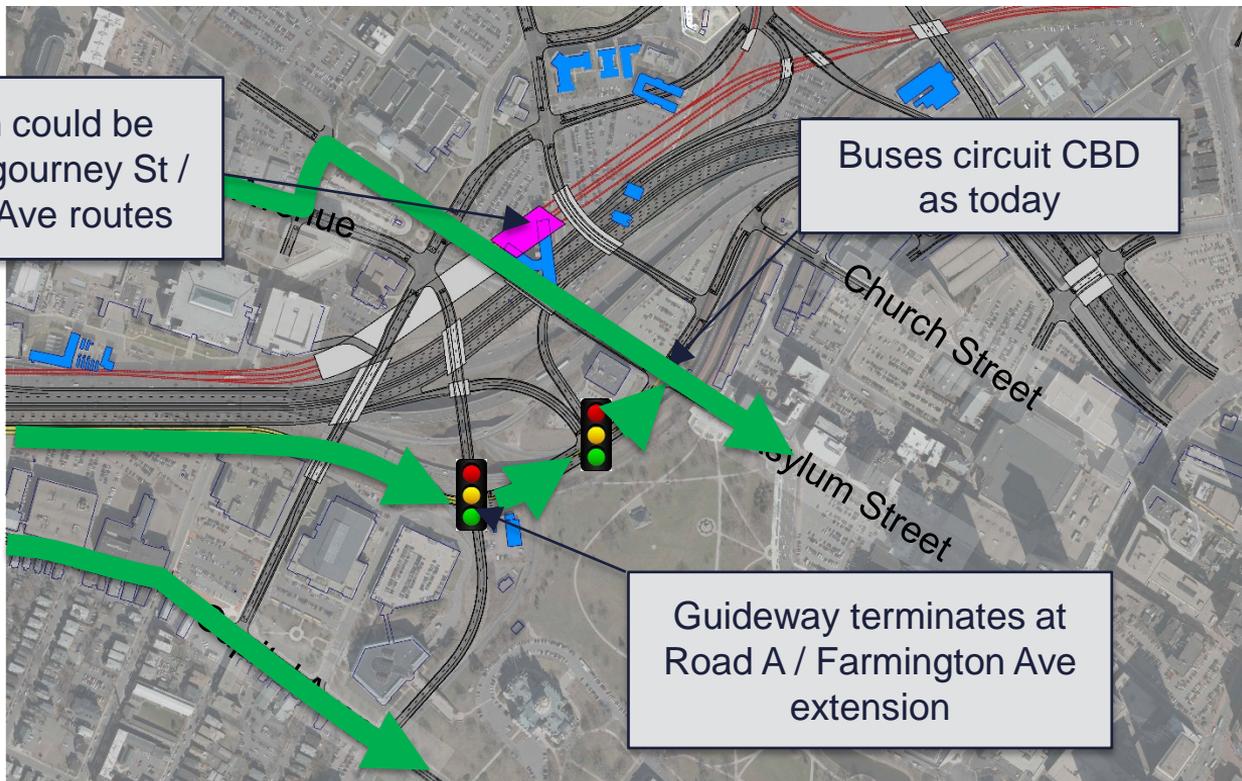


# Eastern Terminus – Option 1 (Under Broad St)

Rail station could be served by Sigourney St / Farmington Ave routes

Buses circuit CBD as today

Guideway terminates at Road A / Farmington Ave extension



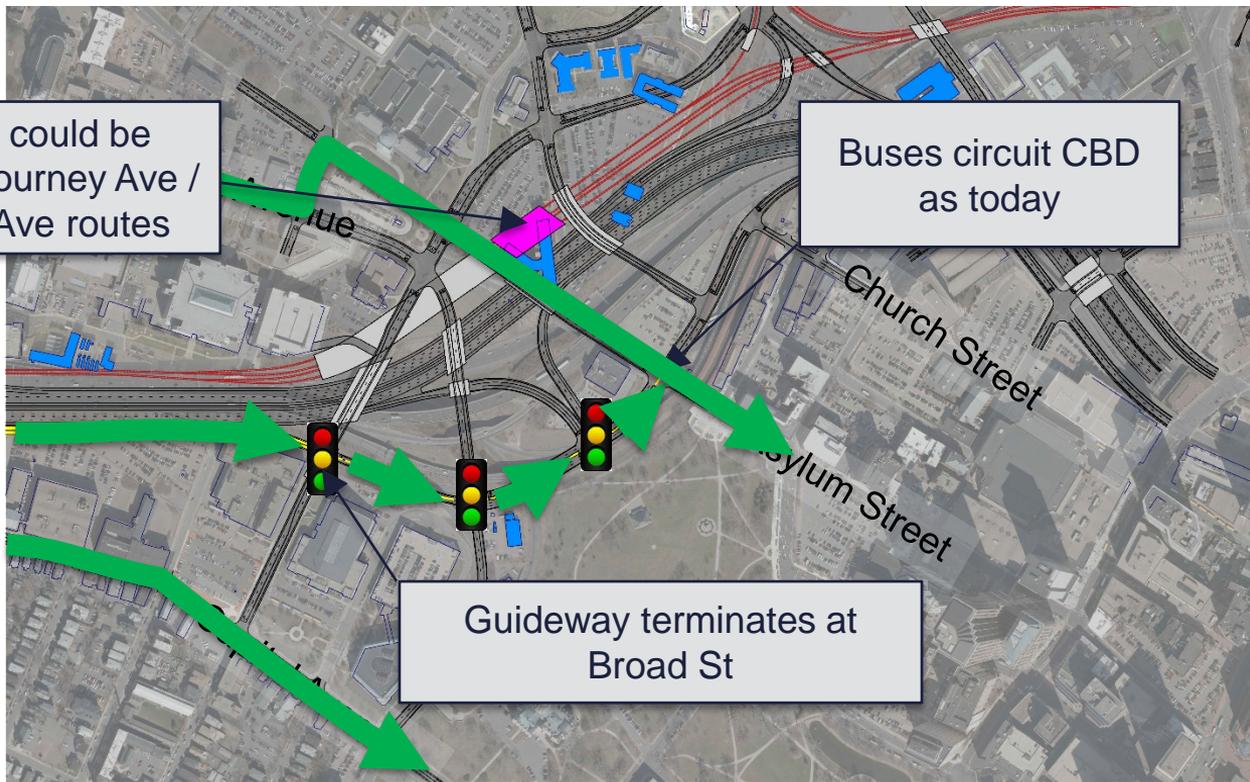


# Eastern Terminus – Option 2 (To Broad St)

Rail station could be served by Sigourney Ave / Farmington Ave routes

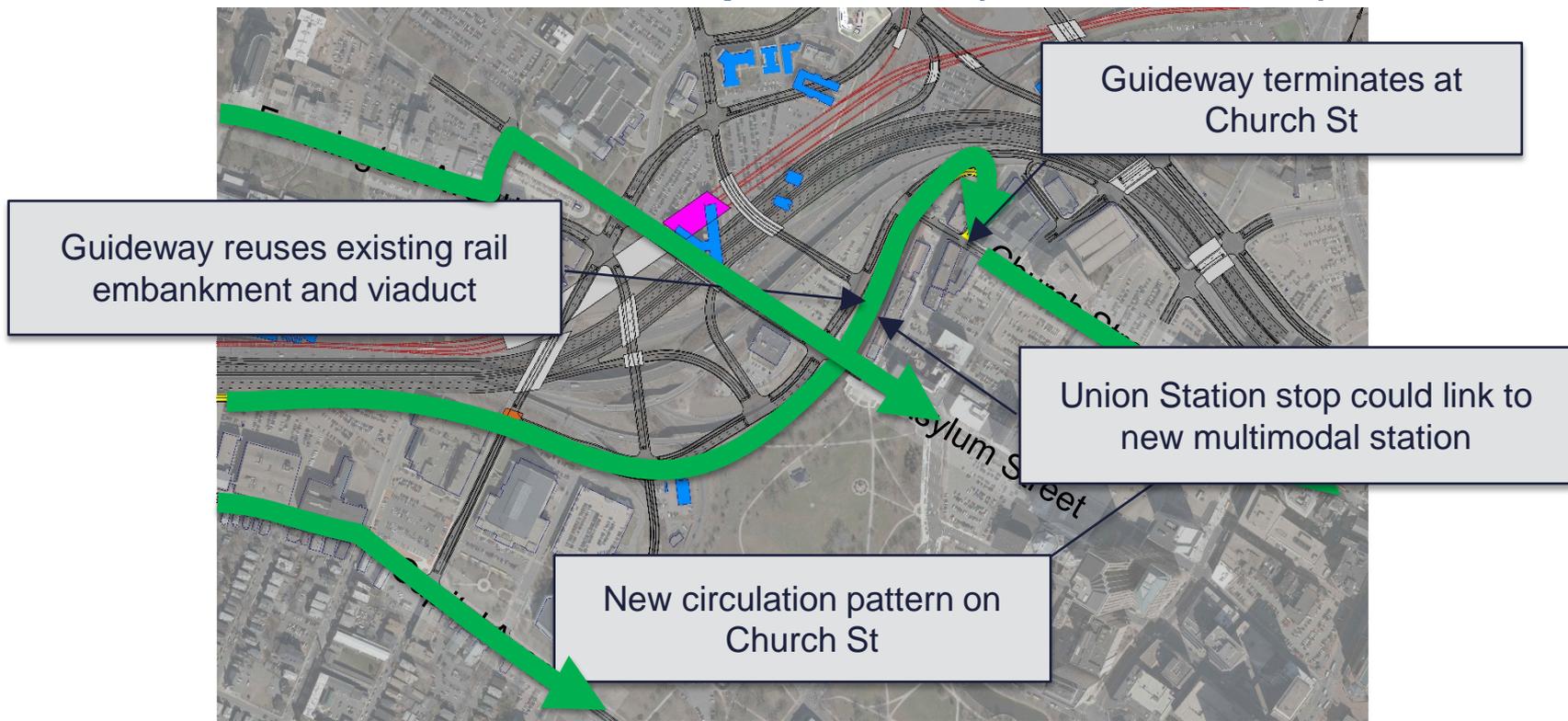
Buses circuit CBD as today

Guideway terminates at Broad St





## Eastern Terminus – Option 3 (Church St)





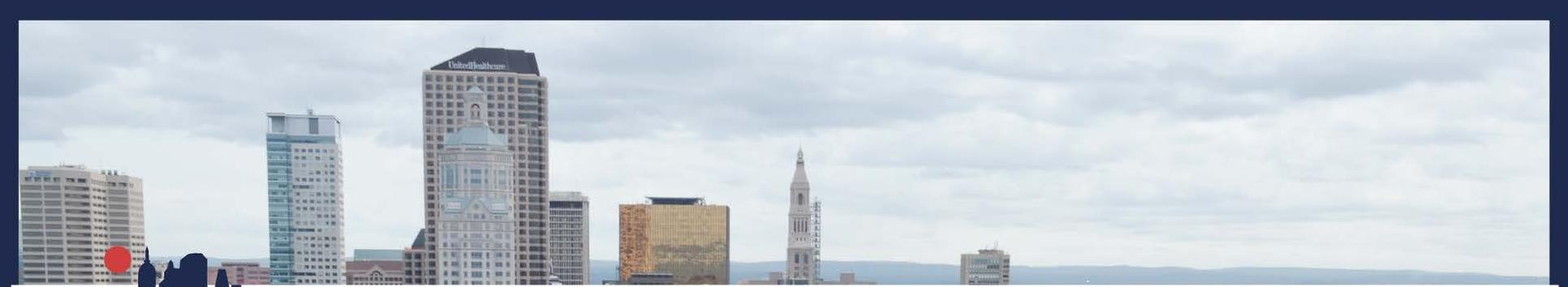
# Conclusion and Next Steps

## Conclusion

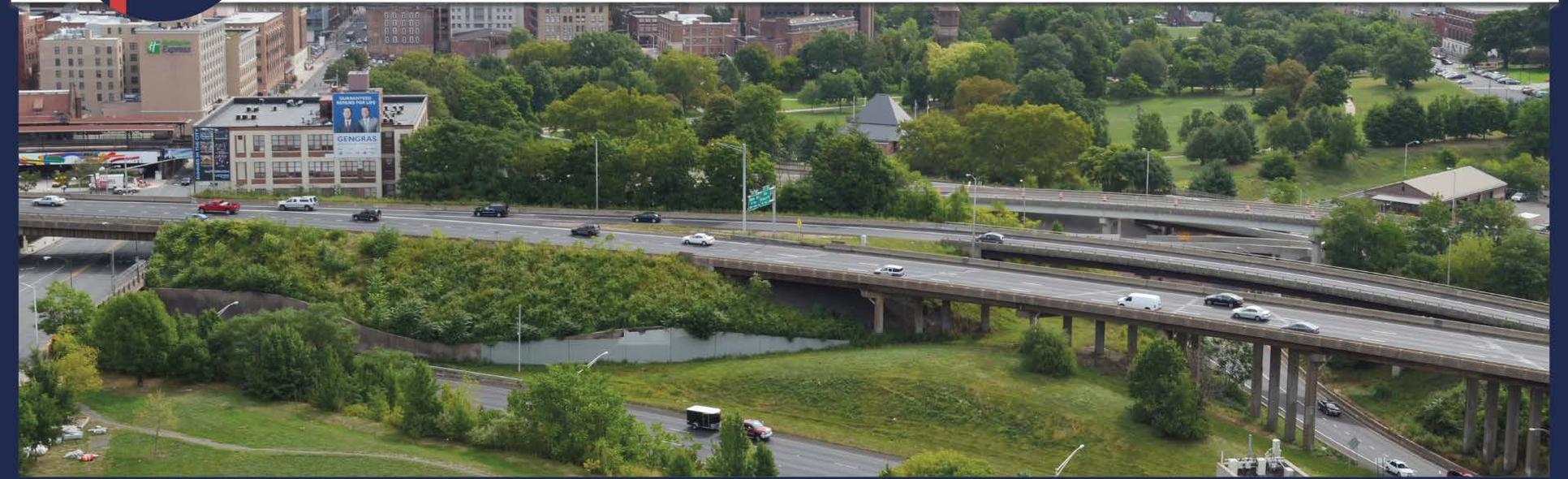
1. Utilize new crossing location near Laurel St

## Next Steps

1. Further analyze and refine Sigourney St station / eastern terminus
2. Document preferred alignment



# Environmental Documentation





# Technical Report Updates

- Cultural Resources (March 2018)
- Air Quality (January 2018)
- Noise and Vibration (April 2018)
- Land Use and Socioeconomic Impacts (April 2018)

## 52 Known Identified Architectural Resources



### Resource Types

#### NHL

1: Connecticut State Capitol

#### NR-Listed

11: Apartment at 49-51 Spring Street

14: Clay Hill Historic District

31: Bushnell Park

#### NR-Eligible

37: The Hartford Insurance Company

#### SR-Listed

41: Connecticut Mutual Life Insurance Building

42: Main Street Historic District No. 1

#### Locally Designated

45: George Keller Historic District

# 16 Recommended National Register – Eligible



**Key:**

- 10: 70 Farmington Avenue
- 36A: Atrium Building- Aetna Life Insurance Company, 155 Farmington Avenue
- 46: Capitol Records - 133 Laurel Street
- 47: 39-45 Spring Street
- 48: 87-101 Spring Street
- 49: Park River Conduit
- 53: 69-73 Myrtle Street
- 54: 79 Myrtle Street
- 55: 165-171 Walnut Street
- 56: 48-60 Union Place
- 57: 64-84 Union Place
- 58: Artspace, 545-555 Asylum Avenue
- 59: 28-30 Laurel Street
- 66A: 132 Collins Street
- 66B: 156-160 Collins Street
- 69: Gallaudet Square



## Architectural Resources Affected by Reasonable Range of Alternatives

Impacted Resource	Direct Impact	Indirect Impact
Parkville Industrial Historic District, 760 Capitol Ave	Alternative W3-3	
Frog Hollow Historic District, 470 Capitol Avenue	Alternatives E3(S), E5(S), E6(S)	
49-51 Spring Street	Alternatives E3(S), E5(S), E6(S)	
NHHS Rail Line Historic District	Alternatives W3-3, E3(S), E5(S), E6(S)	
Connecticut Mutual Life Insurance Building	Alternative E6(S)	
Capitol Records, 133 Laurel Street	Alternative W3-3	
39-45 Spring Street	Alternatives E3(S), E5(S), E6(S)	
87-101 Spring Street	Alternatives E3(S), E5(S), E6(S)	
69-73 Myrtle Street	Alternative E6(S)	Alternatives E3(S), E5(S), E6(S)
Hartford Union Station		Alternatives E3(S), E5(S), E6(S)
The Hartford Insurance Company		Alternatives E3(S), E5(S), E6(S)
79 Myrtle Street		Alternatives E3(S), E5(S), E6(S)

*For the most part the reasonable range of alternatives have the same direct and indirect impacts to historic architectural resources except that Alternative E6(S) has additional direct impacts to two resources (Connecticut Mutual Life Insurance Building and 69-73 Myrtle Street)*



## Phase 1B Archaeological Testing Proposed

- 54 properties to be tested
- Acquiring necessary permits and coordinating with property owners
- Spring 2018 start
- Summer 2018 completion

Type of Phase IB Testing	Acres	Type of Phase IB Testing	Acres
GeoProbe	7.89	STP	6.55
GeoProbe/Trench	1.96	STP/EU	6.69
STP/EU/Trenching	7.08	STP/Trenching	0.33
Trenching	21.12	Trenching/EU	10.52



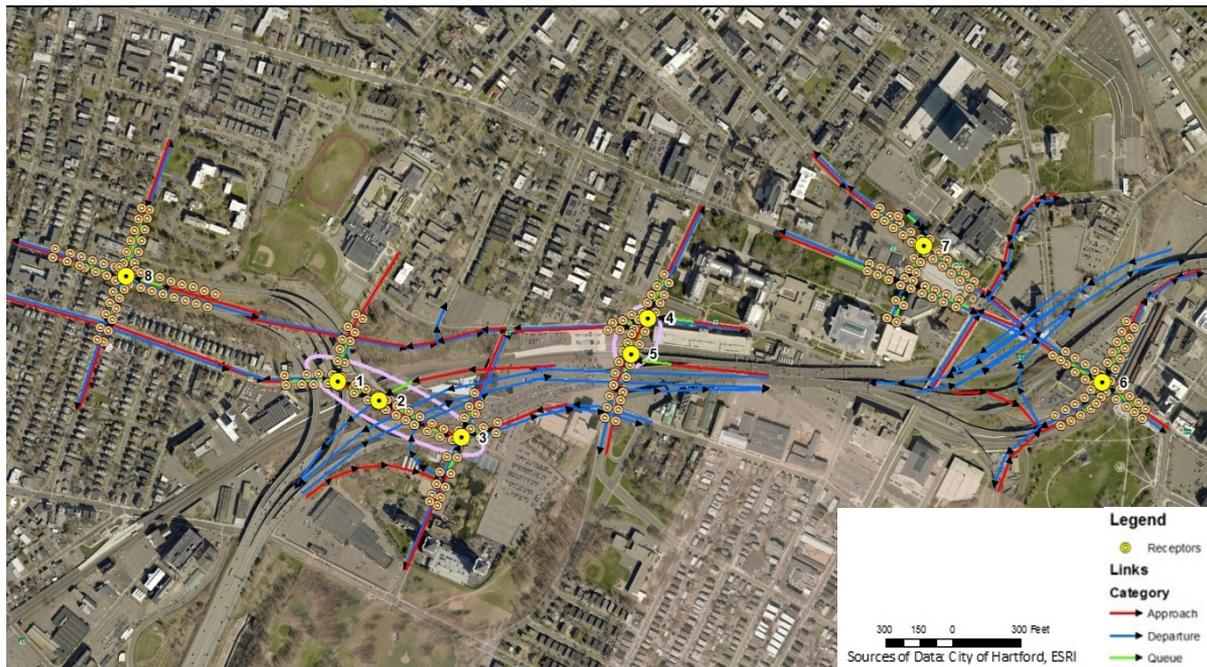
## Phase 1B Testing Locations



## Air Quality Technical Report

### *CO Microscale Analysis for Eight Worst-Case Intersections*

- Predicted CO levels well below NAAQS
- Localized CO and PM impacts are less than significant





## Air Quality Technical Report

- Mobile Source Air Toxics (MSATs) analysis for corridor (9)
  - Compared to existing conditions: reductions of 70-99%
  - Compared to 2040 No Build conditions: reductions of 9-18%
  - Reasons: improved LOS and reduced congestion and VMT, cleaner burning vehicles
- Temporary, localized construction Impacts
  - No detailed modeling analysis warranted (no local site would experience more than five years of construction activities)

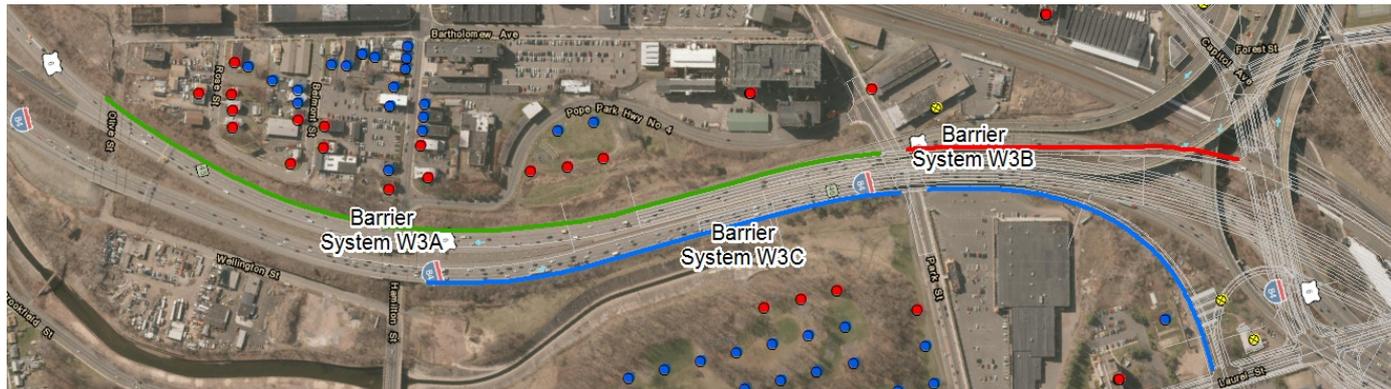
# Noise and Vibration Technical Report

- Multimodal modeling: highway, bus, rail
- 17 baseline noise measurements
  - “Validate” future prediction models
- Alternatives evaluated
  - Existing, 2040 Build and No-build



## Noise and Vibration Technical Report

- Lowered Alternative provides “shielding effects” from edge of roadway
- I-84 highway noise masks CT **fastrak** and commuter / freight rail noise
- 10 noise barriers evaluated according to CTDOT “feasible & reasonable” criteria.
  - “W3A” barrier westbound side of I-84 south of Park St recommended





## Noise and Vibration Technical Report

- Vibration from diesel locomotives not predicted to exceed the FTA “annoyance” criteria at residences or sensitive receptors
- Vibration from diesel locomotives predicted to be well below the threshold of structural damage
- No vibration impacts from highway sources
  - Damped suspension of rubber-tired vehicles vs. steel-wheeled rail vehicles



## Land Use and Socioeconomic Technical Report

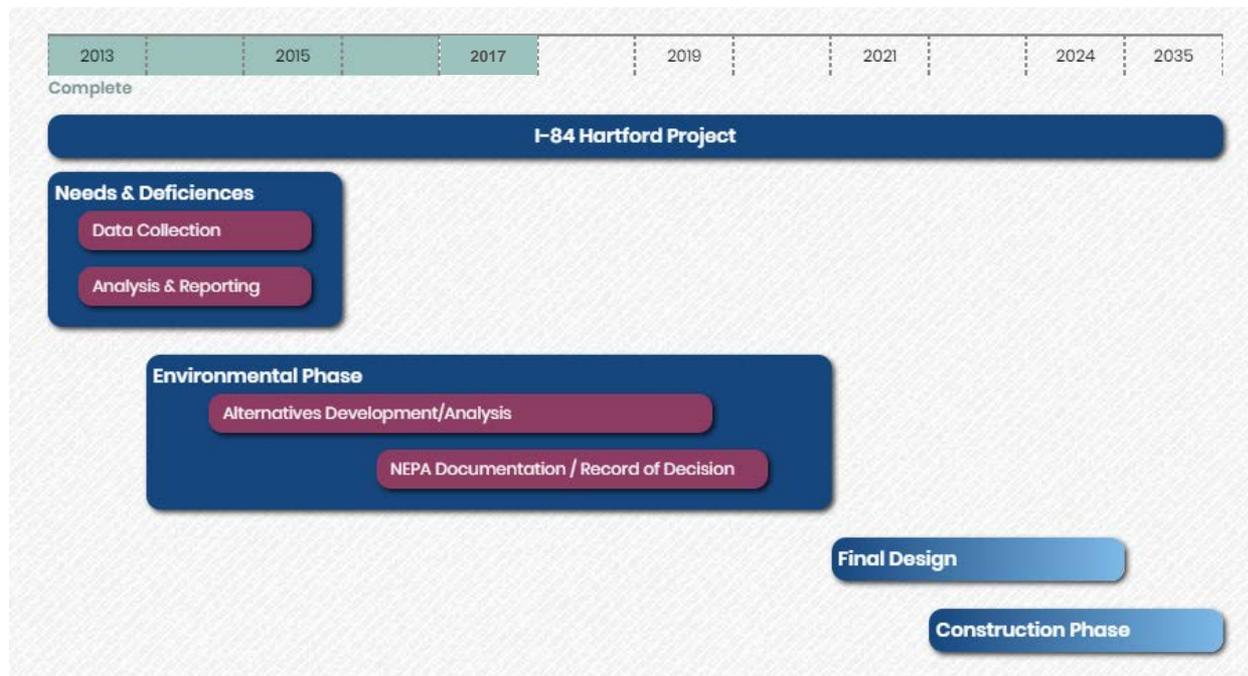
Topic	Contents
Affected Environment	<ul style="list-style-type: none"><li>- Existing conditions: land use, demographic, socioeconomic, EJ populations</li></ul>
Consequences	<ul style="list-style-type: none"><li>- Effects: Land use, activity patterns, housing/employment, neighborhood stability</li><li>- Consistency with State and Regional Plans</li></ul>
Mitigation	<ul style="list-style-type: none"><li>- Displacement/Relocation Plan (in progress)</li></ul>

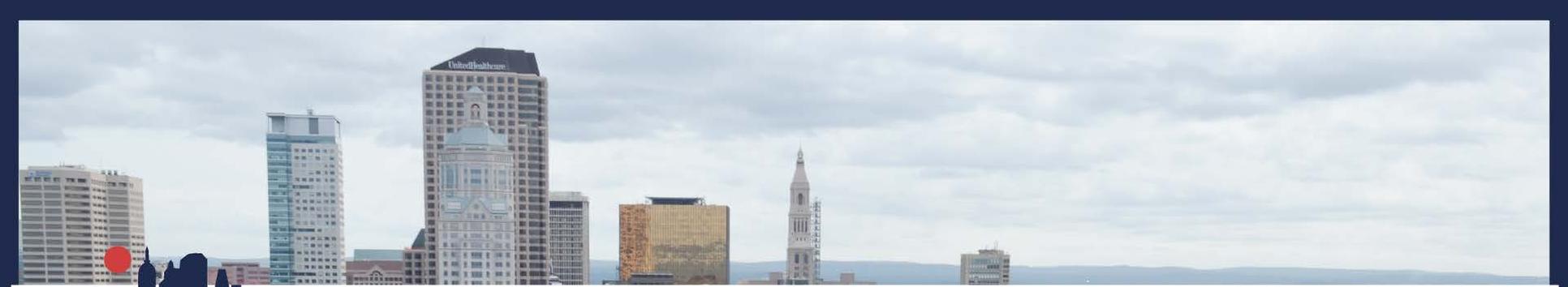




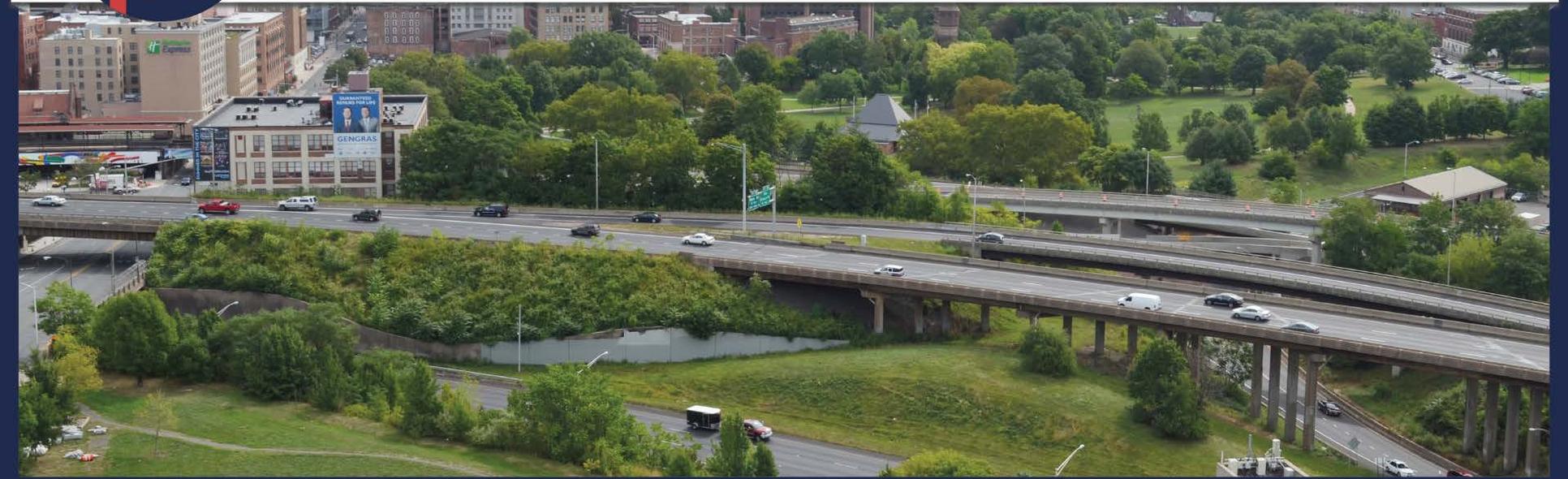
## Next Steps

- Draft EIS out for public review - early 2019
- Public Hearing - spring 2019
- Final EIS / Record of Decision - summer 2020





# Next Steps





## Next Steps

1. Public forums late-spring / early-summer
  - Multimodal station
  - I-84 / I-91 Interchange Study
2. Advance station conceptual design
3. Identify CT ***fastrak*** alignment / Trident concepts to be evaluated in DEIS (Level 3 Screening)



# Thank You!

Thank you for your time. We appreciate your commitment to helping us reach the best possible solution for the State of Connecticut, the Capitol Region, and the City of Hartford.

*-Your I-84 Hartford Project Team*