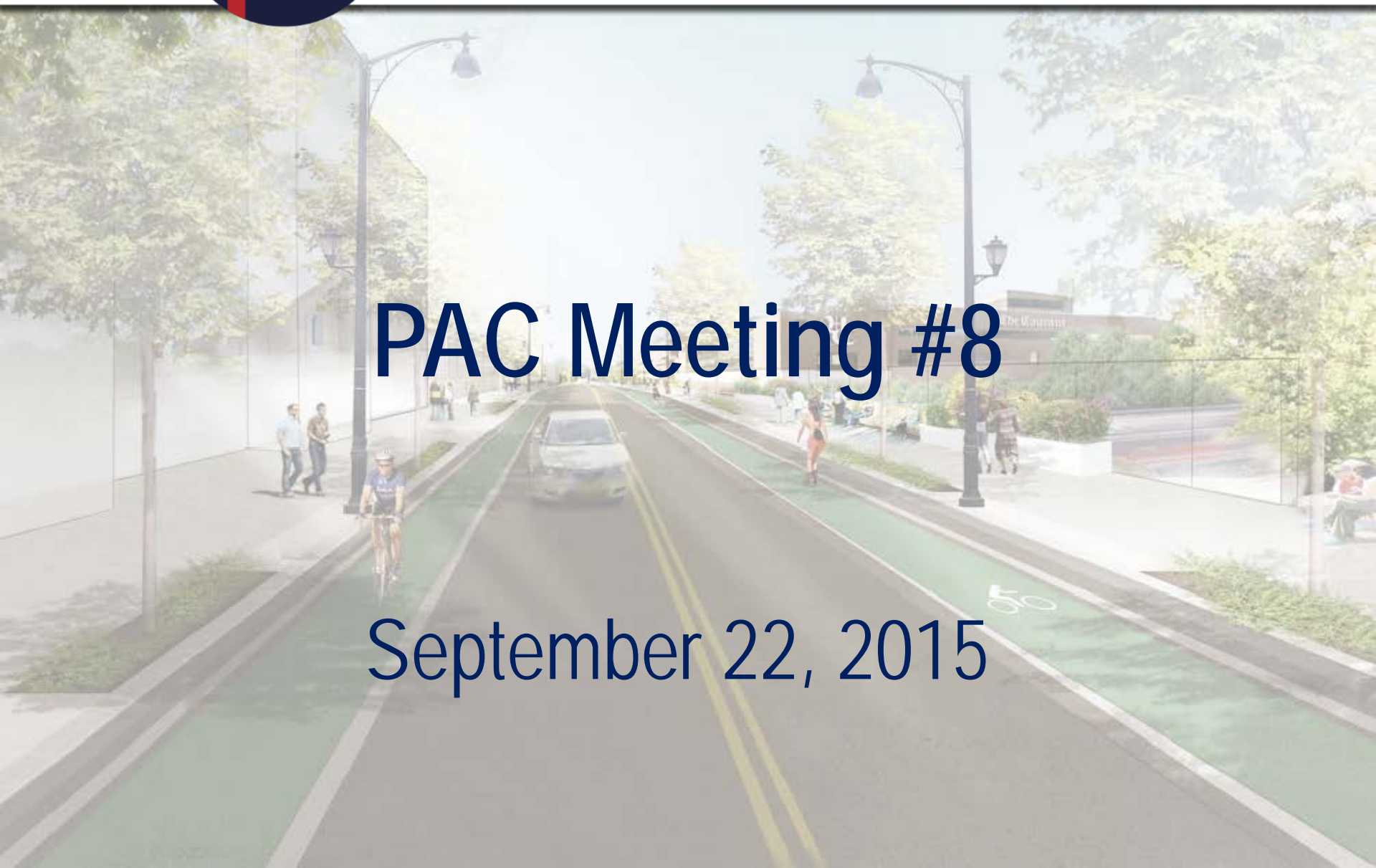




I-84 HARTFORD PROJECT

PAC Meeting #8

September 22, 2015





Presentation Outline

1. Updates since June 2015 PAC meeting
2. Current work efforts
 1. Preliminary traffic analysis
 2. Alternatives screening
3. Next steps



Update Since June 2015 PAC

Public Outreach

- Open Planning Studio, Clay Arsenal (7/29/15)
- Open Planning Studio, Parkville (8/12/15)
- Stakeholder meetings (10+)
- Pop-up events (10+)
- Summer newsletter





Interactive Alternatives Webpage

- View and assess the alternatives
- Provide feedback, ask questions
- i84hartford.com

The screenshot displays the 'Interactive Alternatives Analysis' webpage. It features several map panels showing different highway alignment alternatives (e.g., Alternative 2/3 W2, W3-1, W4) and a 3D model of the highway alignment. The 3D model shows the highway alignment over a terrain with various streets (Sigourney Street, Broad Street, Aughton Street, High Street, Ann Uccello Street) and conduits (North Branch of Park River Conduit, Park River Conduit, Gully Brook Conduit). A legend indicates 'Highway Alignment' options: Elevated, Lowered, and Tunnel. Other considerations include 'Assess property impacts', 'Minimize property impacts', and 'Maximize safety and mobility'. The page is titled 'Interactive Alternatives Analysis: Evaluating the Alternatives'.

OPEN PLANNING STUDIO
View materials from our August 12th event.

INTERACTIVE ALTERNATIVES ANALYSIS

HARTFORD TIMELINE
Read a brief history of transportation in Hartford.

RELATED PROJECTS
View map and descriptions of other projects related to I-84.

3D INTERACTIVE MODEL
Explore the project area.



Interactive Alternatives Webpage

The slight variations in alignment can be seen here, along with the dividing line between the east and west sections of the project.

West / East

- West
- East

Highway Alignment

- Elevated
- Lowered
- Tunnel

Clear

View as List

Alternative 2/3 W1



Alternative 2/3 W2



Alternative 2/3 W3-1



Alternative 2/3 W3-2



Alternative 2/3 W4



Alternative 2/3 W5

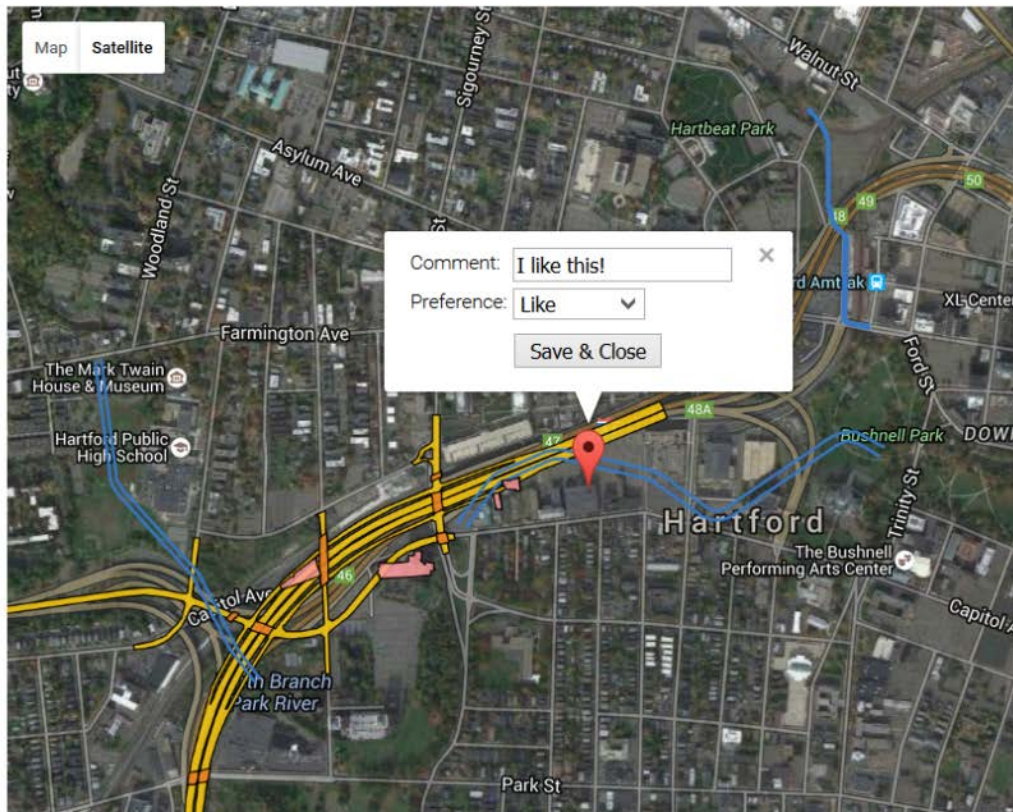




Interactive Alternatives Webpage

Alternative 2-3 W2

This interchange option consists of an eastbound off-ramp and a westbound on-ramp located at a new road connecting West Boulevard to Capitol Avenue. One-way frontage roads connect the half diamond interchange to a half diamond interchange at Sigourney Street that includes an eastbound on-ramp and a westbound off-ramp. This interchange option eliminates the existing westbound off-ramp to Sisson Avenue and the eastbound on-ramp from Sisson Avenue. Instead, vehicles would use the proposed Sigourney Street ramps for access to and from Sisson Avenue.



Toggle Map Layers

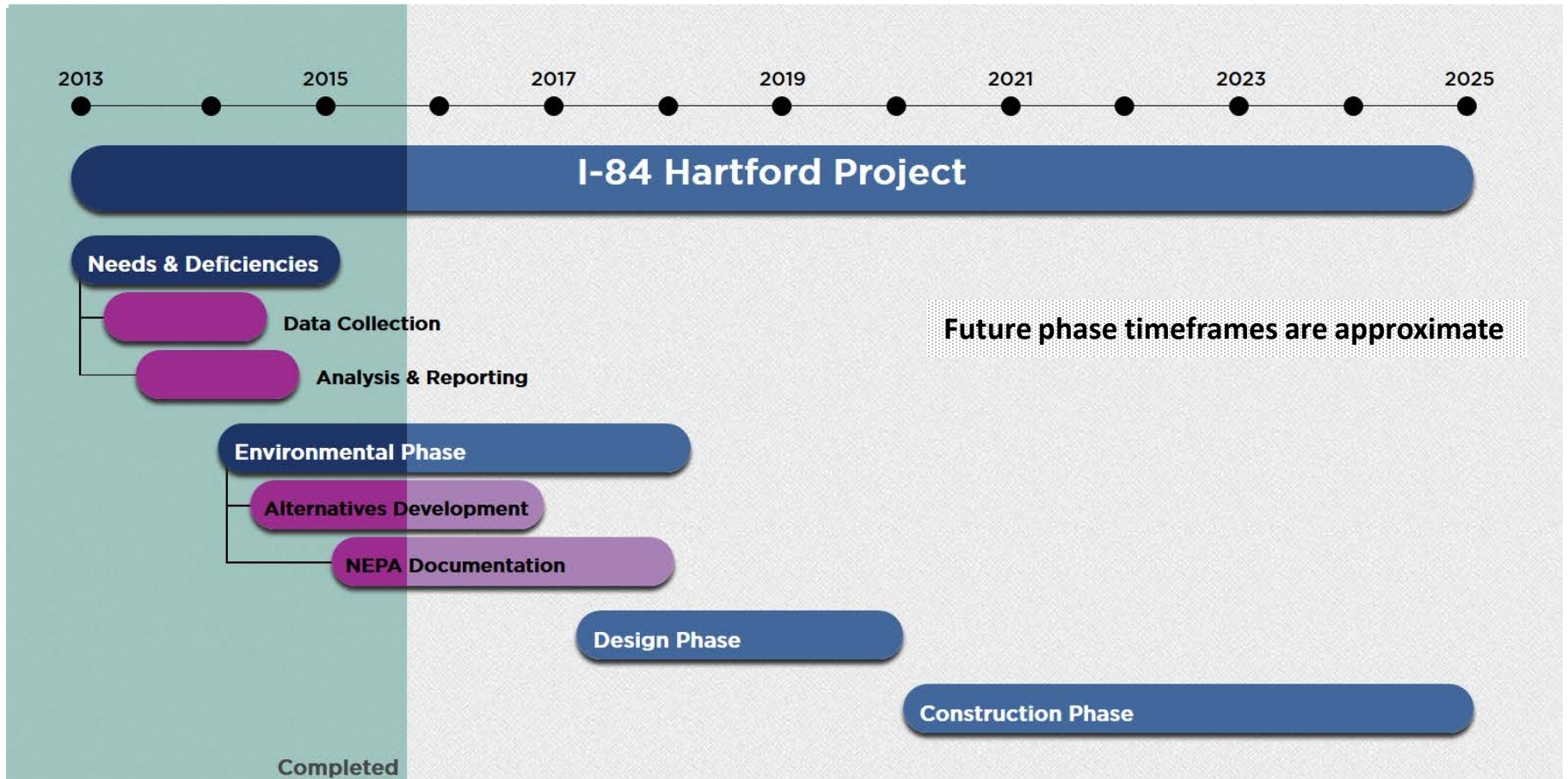
- Potential I-84 Alignment
- New Rail Alignment
- River Conduits
- Impacted Buildings
- Potential Developable
- Traffic Analysis

Give Us Your feedback:

1. Under the Toggle Map Layers header above, slide the desired buttons to the right to view them on the map
2. Click any point on the map to add a marker
3. Click the marker to add a comment
4. Click the Save & Close button to submit your comment

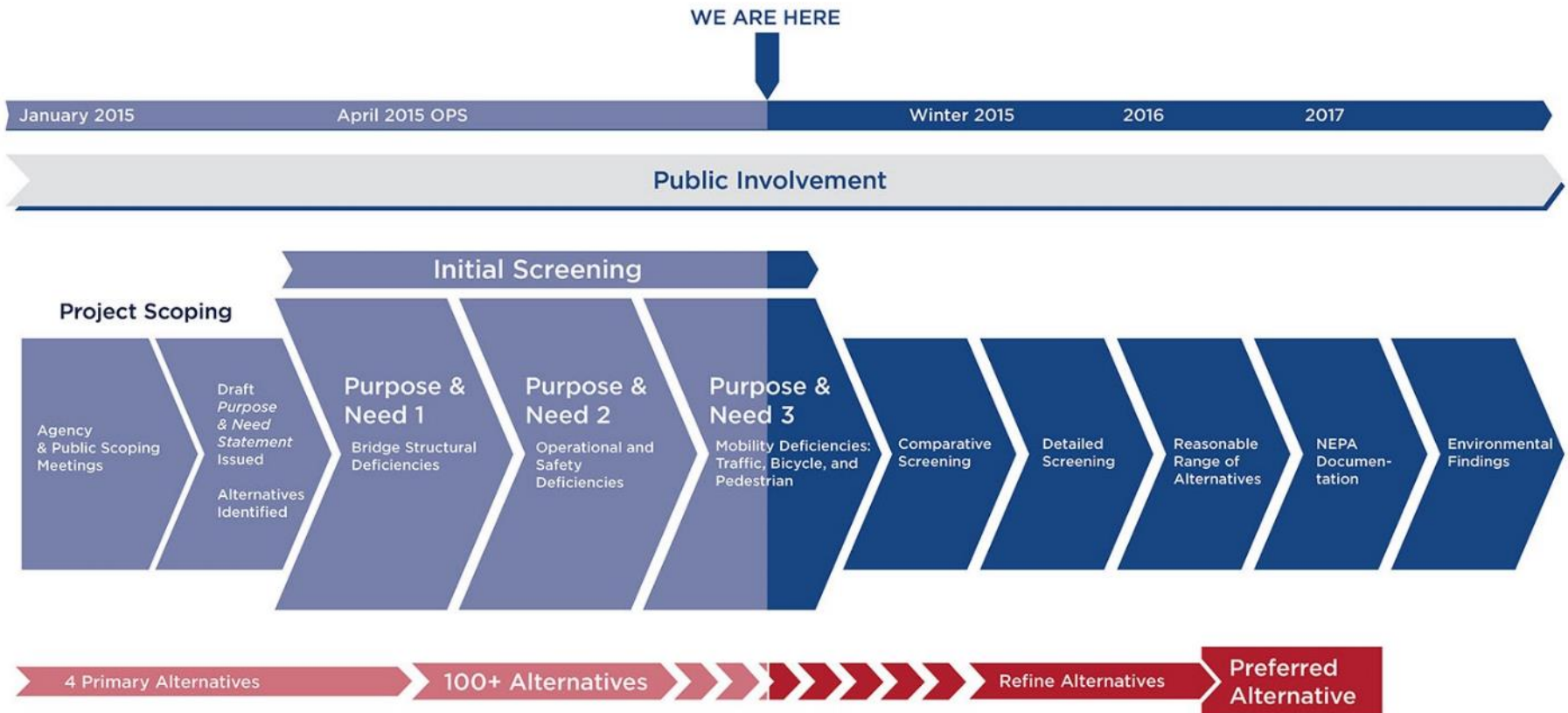


Project Schedule





Environmental Phase: Schedule



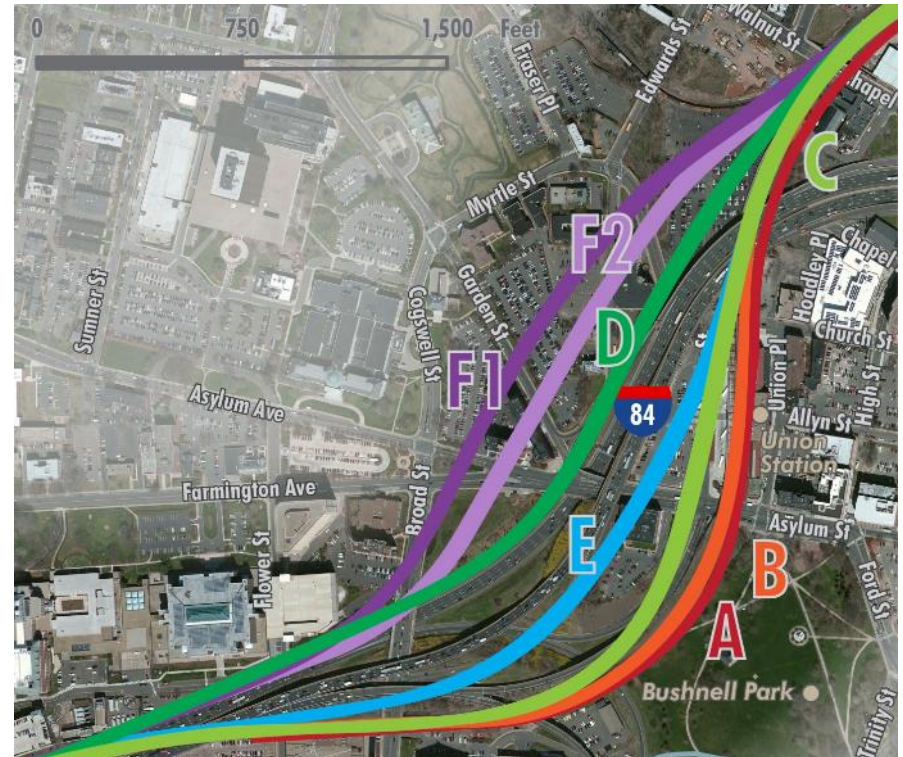
Hartford Railroad Alternatives Study

- Draft report completed September 8, 2015
- Examined a range of alignments to upgrade the line
- Stated that relocating the railroad is feasible



Draft Revised I-84 Purpose and Need

- Rail relocation addressed as a Goal & Objective
- Revised Purpose and Need will be made available for PAC review / comment

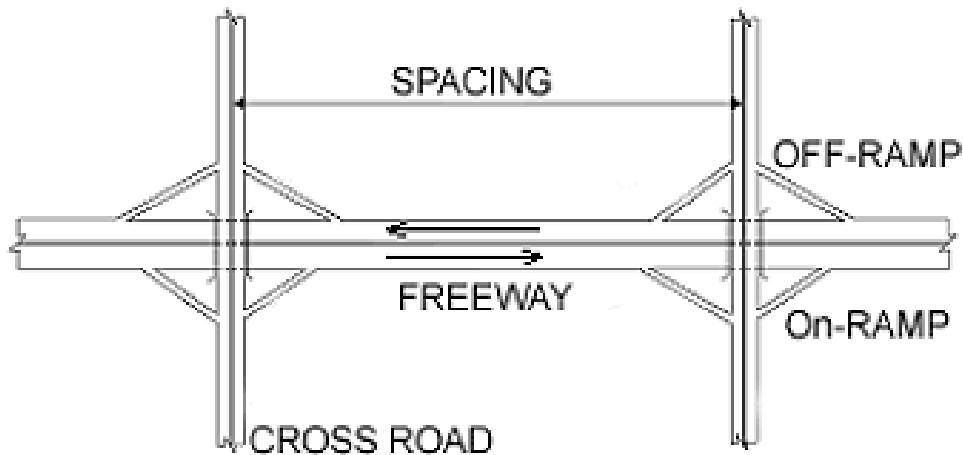




Current Work Efforts: Traffic Analysis

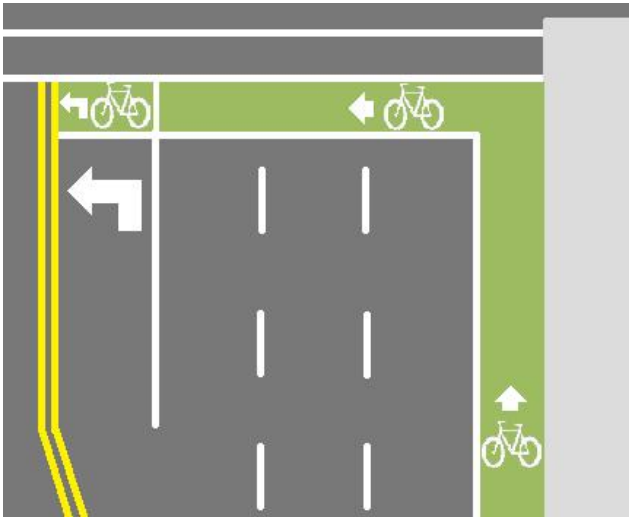
Mainline Analysis

- Interchange spacing
- Lane balance / continuity
- Weave distances



Preliminary Intersection Analysis

- Minimize roadway widths
- Optimize signal operations
- Pedestrian / bicyclist-friendly
- Good / fair / poor





Bicyclist and Pedestrian Analysis

- CRCOG pedestrian and bicycle counts
- City, regional, and special interest plans
- Users
 - Bicycle, Pedestrian, and Transit Working Group
 - Stakeholder and public meetings
 - Open Planning Studios
 - Website commenters

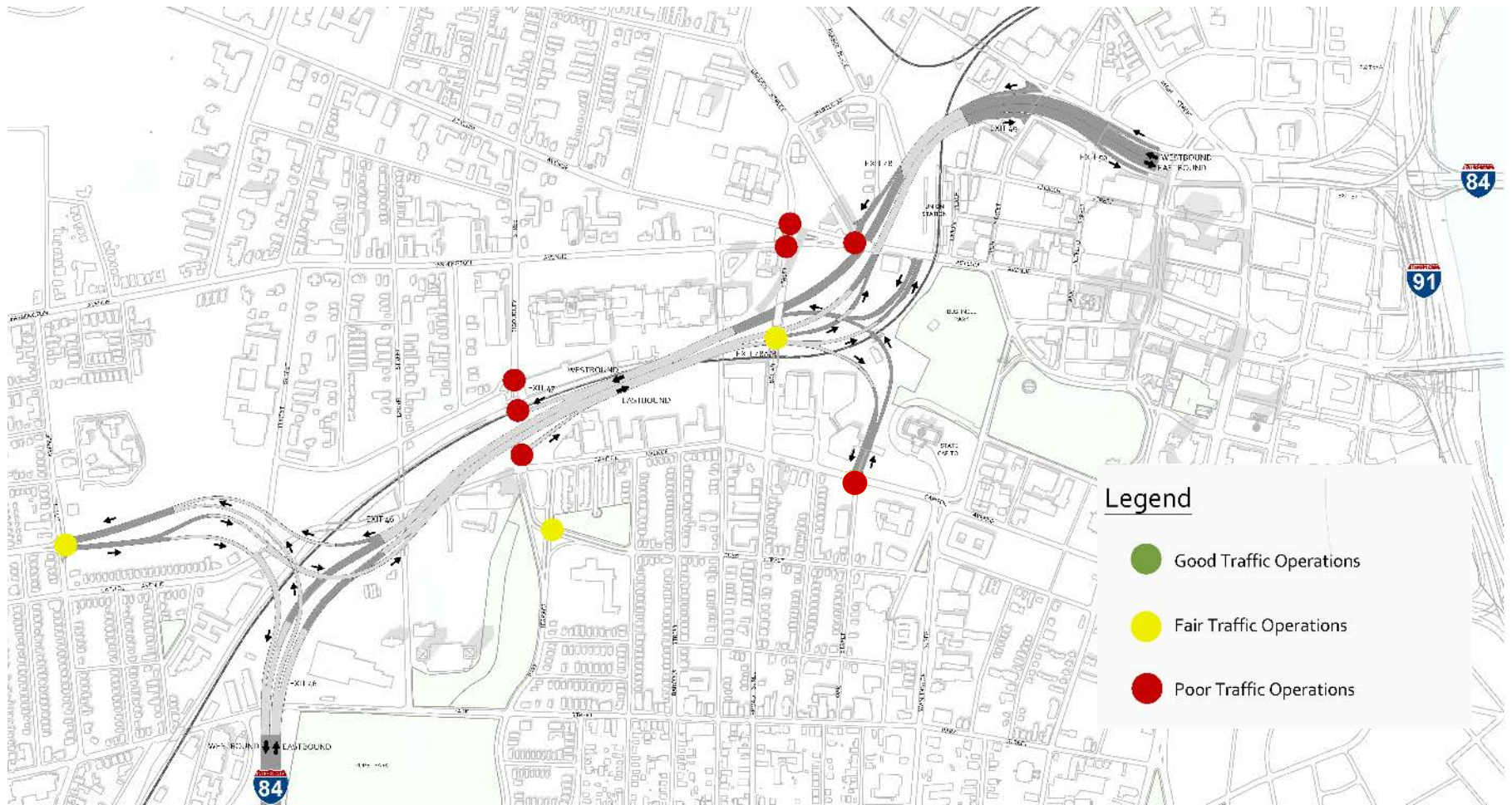
Bicyclist and Pedestrian Analysis

- Incorporating data and information into the traffic model
- Balancing intersection lanes with walkability / bikeability





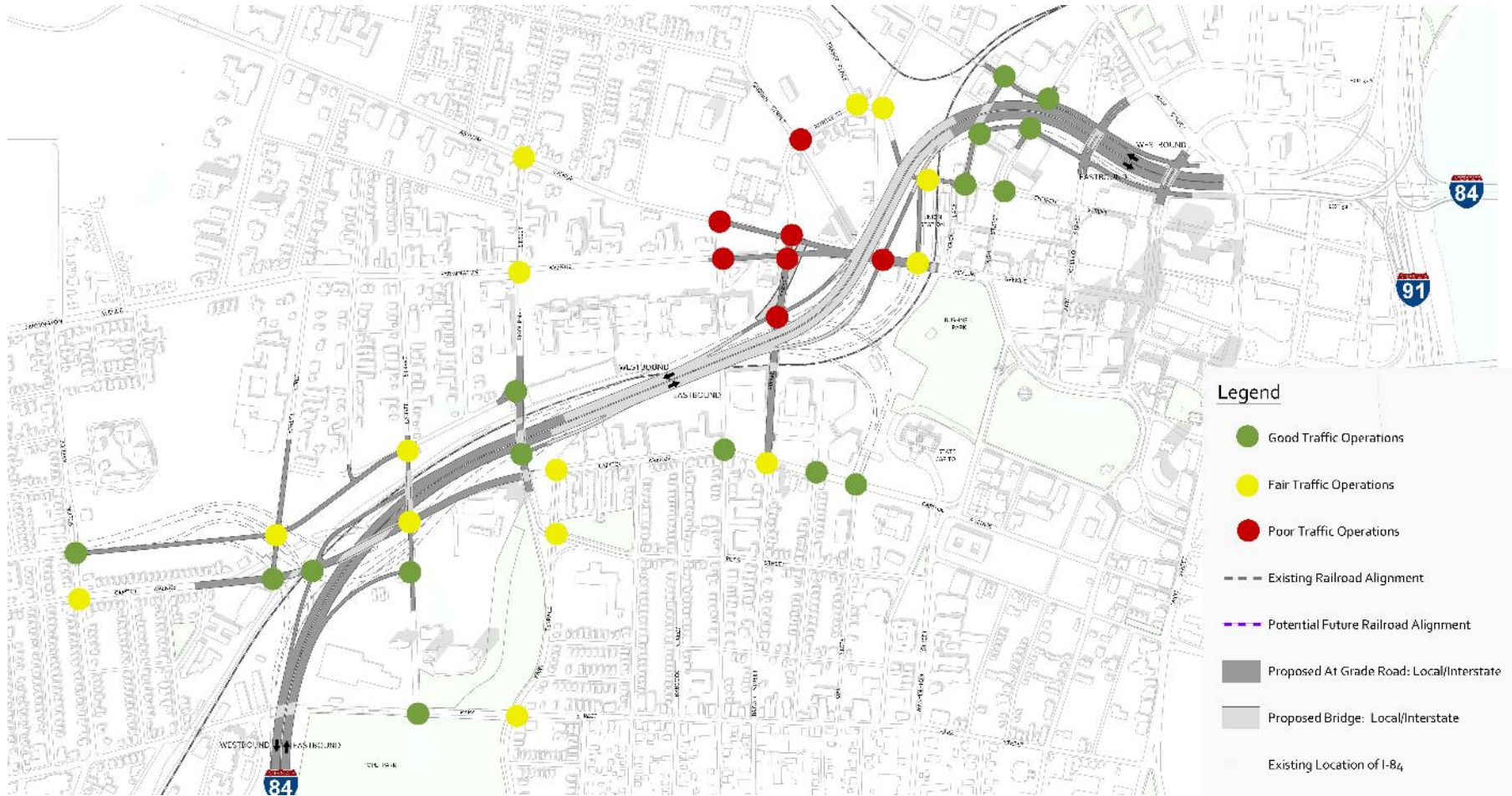
Existing Conditions



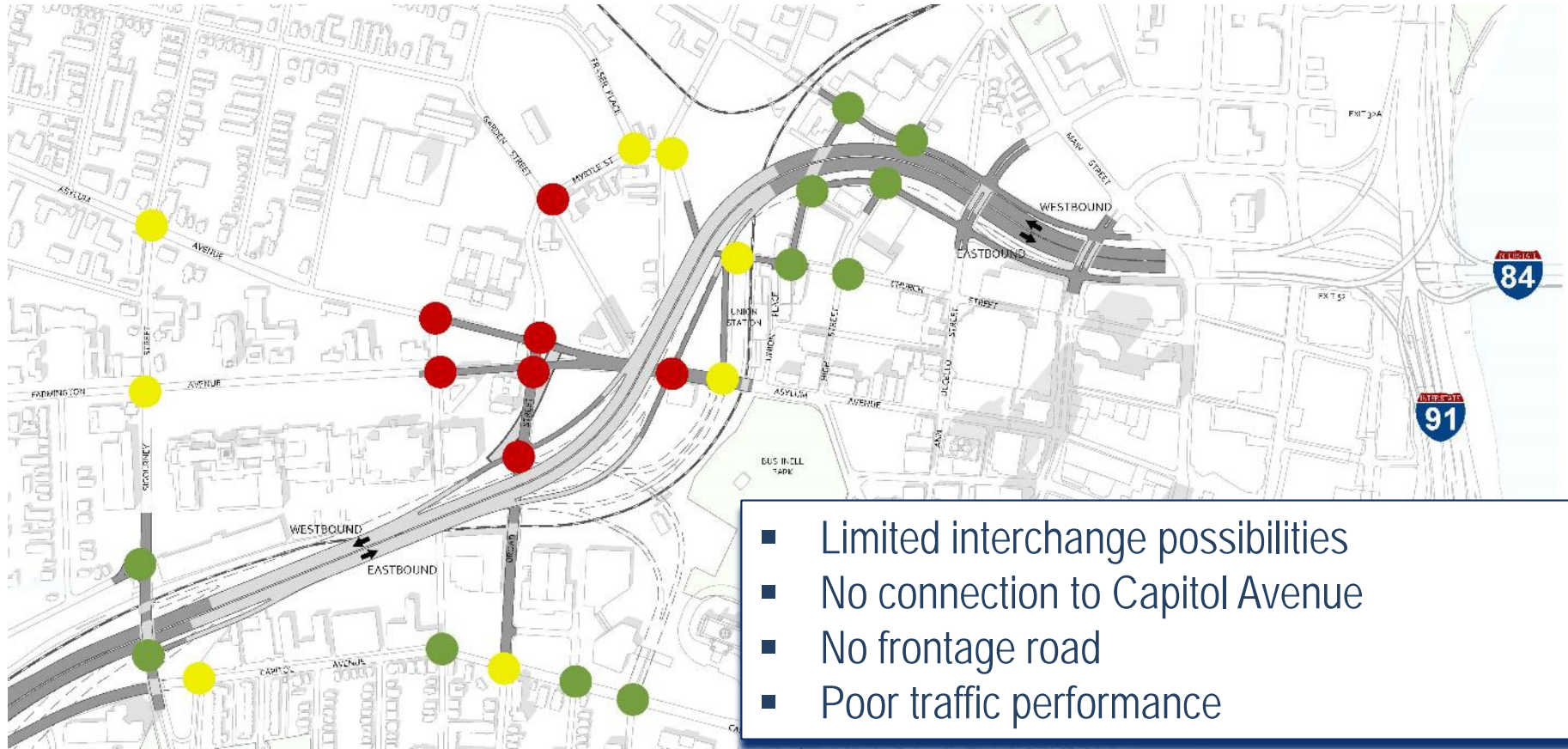


I-84 HARTFORD PROJECT

Alternative 2A: W3-2/E3 (Elevated)



Alternative 2A: W3-2/E3 (Elevated)



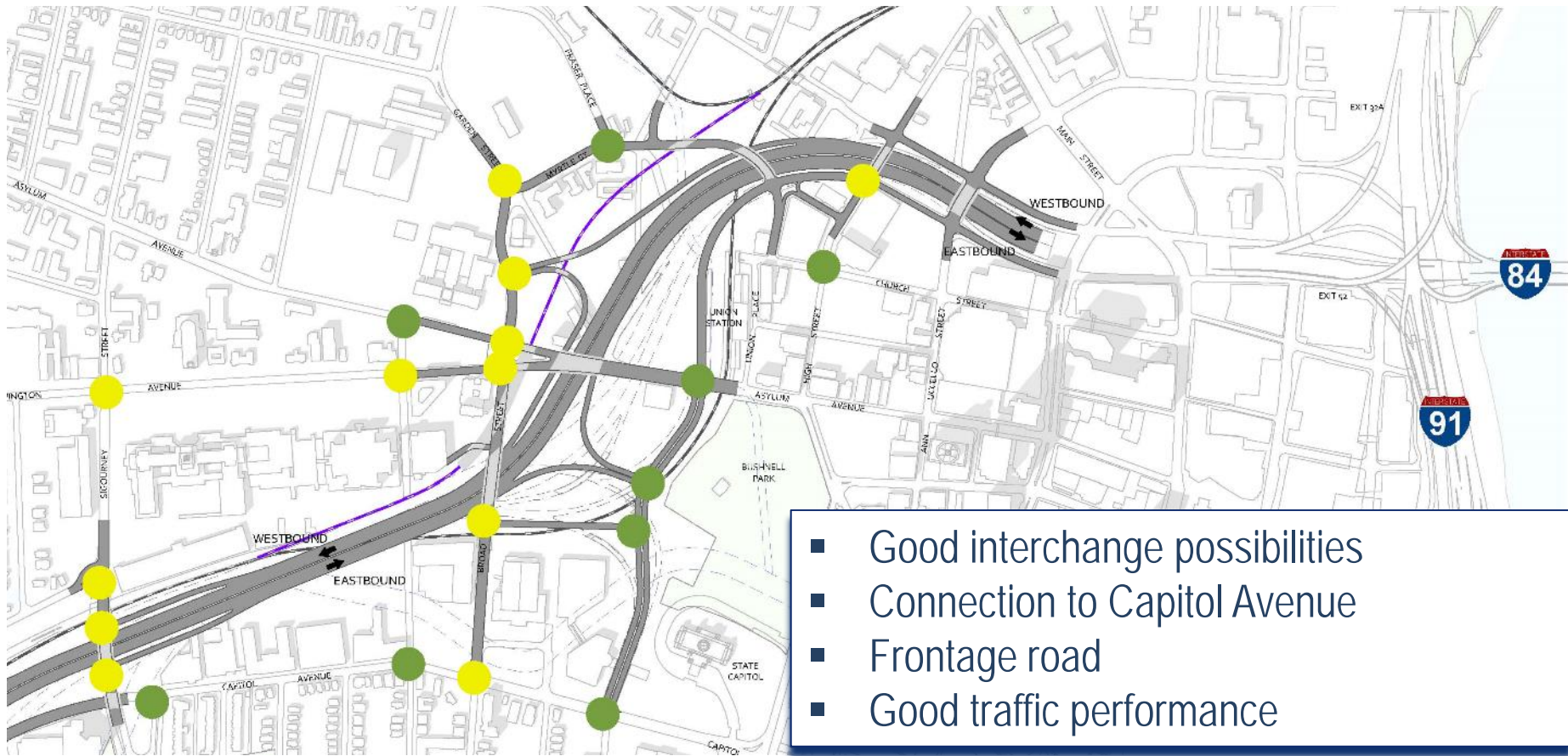
- Limited interchange possibilities
- No connection to Capitol Avenue
- No frontage road
- Poor traffic performance



Alternative 3B: W3-2/E2(S) (Lowered)

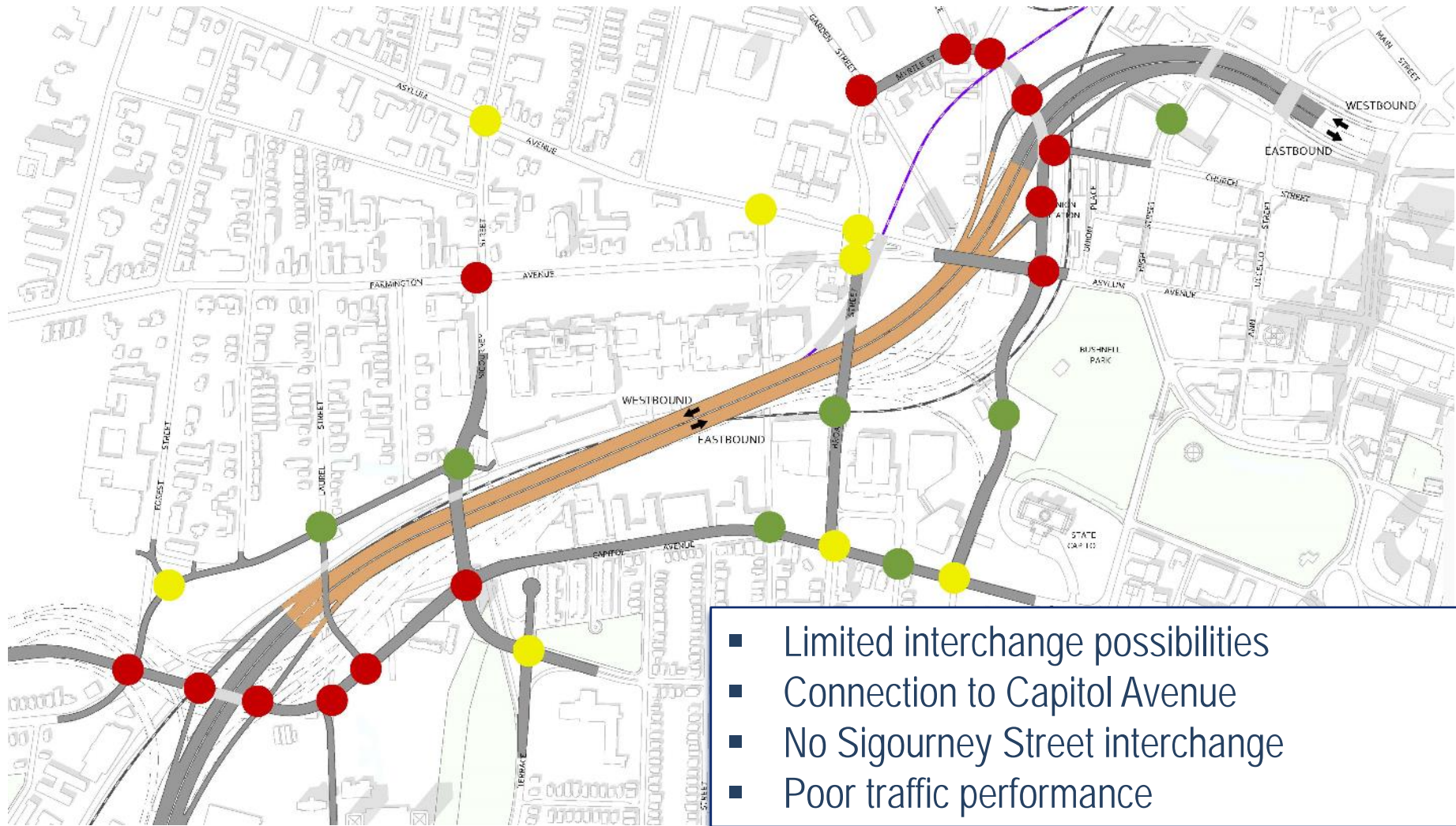


Alternative 3B: W3-2/E2(S) (Lowered)



- Good interchange possibilities
- Connection to Capitol Avenue
- Frontage road
- Good traffic performance

Alternative 4C (Tunnel)



- Limited interchange possibilities
- Connection to Capitol Avenue
- No Sigourney Street interchange
- Poor traffic performance



CT *fastrak*

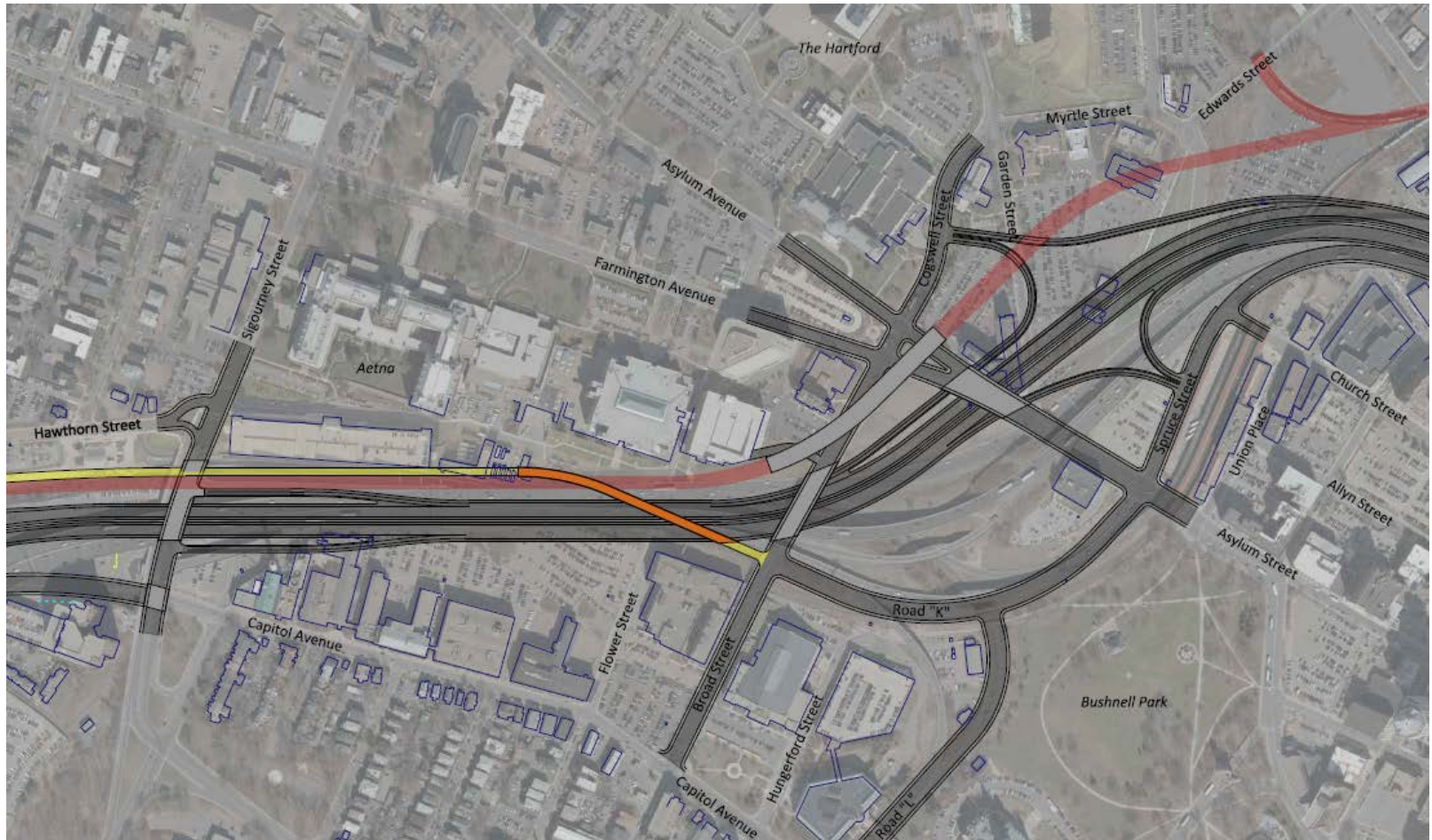
- Keep Union Station as bus hub
- Coordinate with Greater Hartford Transit District
- Maintain CT *fastrak* during construction
- Relocated railroad affects CT *fastrak* alignment





CT *fastrak* (Alternative 3)

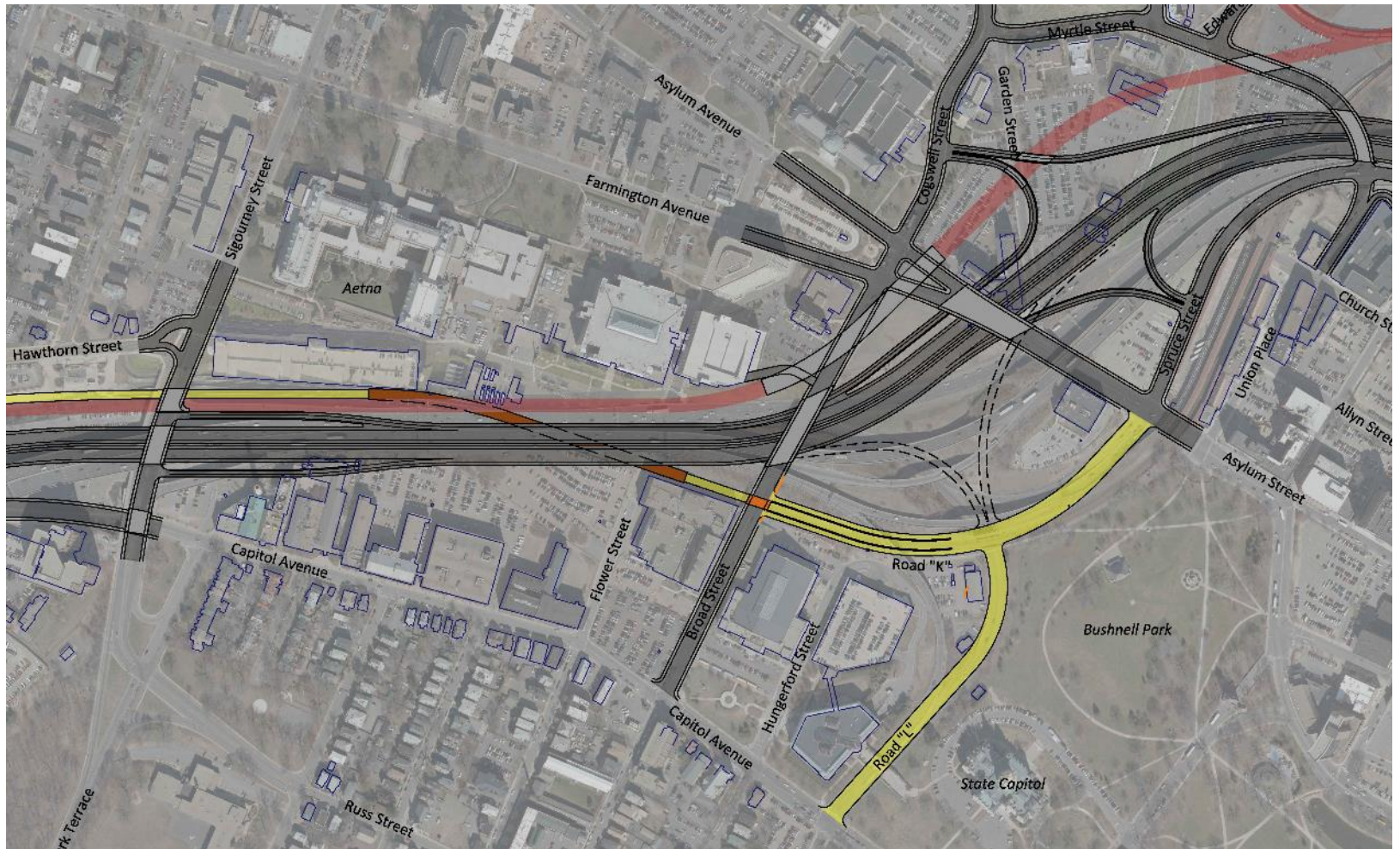
Over highway concept





CT *fastrak* (Alternative 3)

Under highway concept





Current Work Efforts: Alternatives Screening

Initial Screening

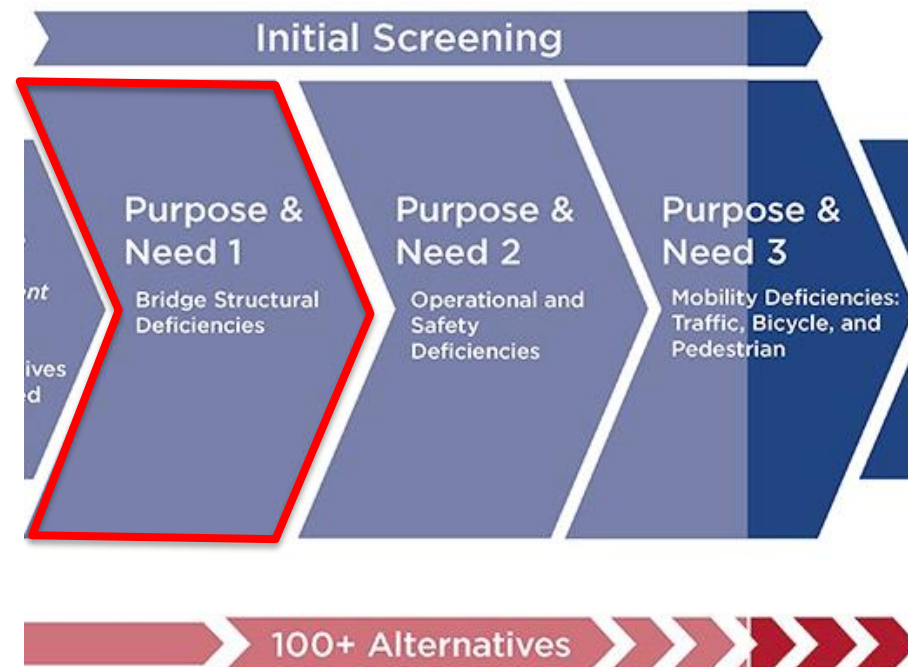
Using Purpose and Need

Alternative	Options west of Sigourney	Options east of Sigourney
2A (elevated)	10	3
3A, 3B, 3C (lowered)	10	12
4 (tunnel)	1	1



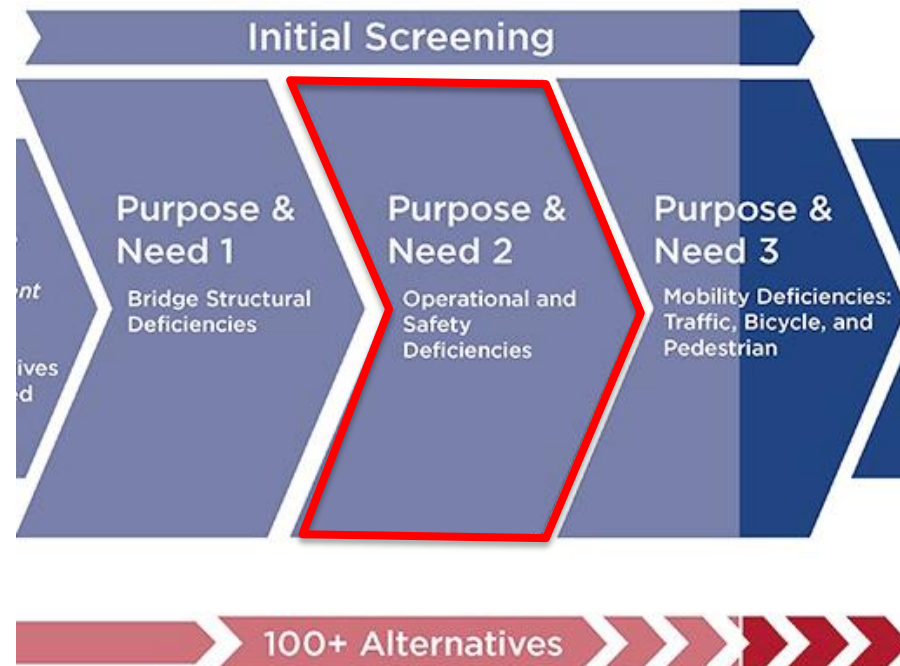
Initial Screening – Purpose and Need

Do the options address *bridge structure deficiencies*?



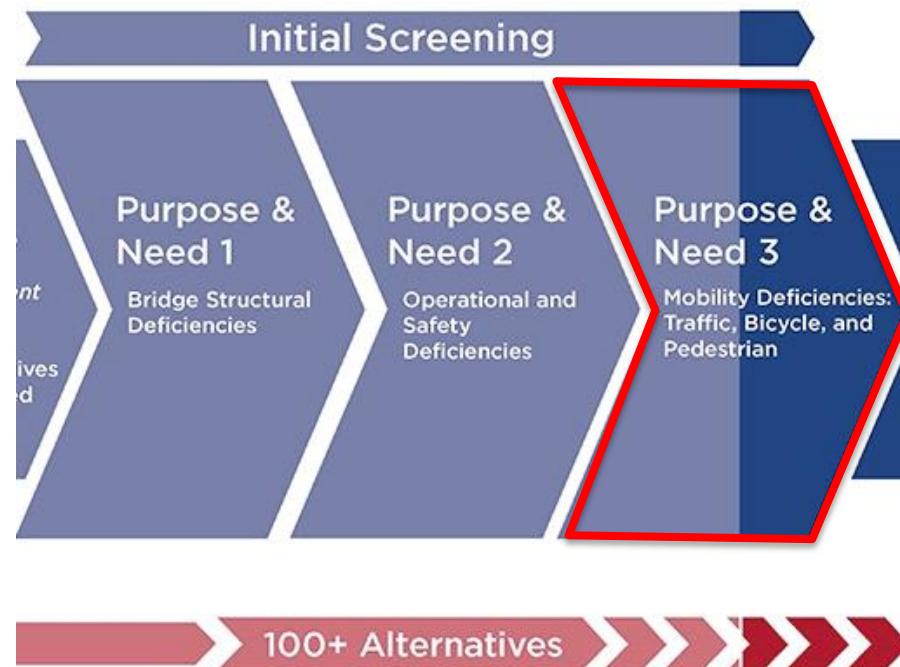
Initial Screening – Purpose and Need

Do the options address *operational and safety deficiencies*?



Initial Screening – Purpose and Need

Do the options address *mobility deficiencies*, including *traffic performance and bicycle and pedestrian accommodations*?





Initial Screening Results

Three categories for all options:

1. **Eliminated**, because of critical flaws
2. **Set aside**, because of moderate/poor performance or more analysis needed
3. **Continue to be assessed**, because best performing

Initial Screening Results

Ability to Meet Purpose and Need	
Meets P&N	
Moderately Meets P&N	
Does Not meet P&N	
Critical Flaw	
More Analysis Needed	

Criteria	No Build	Eastern Options					Western Options										Tunnel									
		2A - Elevated		3A - At grade		3B - At grade			3C		Alternative 2/3							4C								
		E3		E5(S)		E2(S)	E3(S)	E4(S)	E1(S)	E2(S)	W1	W2	W3-1	W3-2	W3-3	W4			W5	W6-1	W6-2	W7				
Purpose & Need																										
Bridge Structure Deficiencies																										
Mainline Traffic Performance																										
Safety Considerations																										
Local Road Traffic Performance																										
Bike/Ped Accommodations																										
Other Considerations																										
Changes to Travel Patterns																										
Permit Feasibility																										
Impacted Buildings																										
Construction Costs																										

Ten options eliminated due to critical flaws:

- Various options in 2A, 3A, and 3B because of traffic performance (8 total)
- Alternatives 4A and 4B because of property impacts (2 total)



Initial Screening Results

Ability to Meet Purpose and Need	
Meets P&N	
Moderately Meets P&N	
Does Not meet P&N	
Critical Flaw	
More Analysis Needed	

Criteria	No Build	Eastern Options				Western Options							Tunnel									
		2A - Elevated	3A - At grade	3B - At grade			3C	Alternative 2/3														
		E3		E5(S)	E2(S)	E3(S)	E4(S)	E1(S)	E2(S)	W1	W2	W3-1	W3-2	W3-3	W4	W5	W6-1	W6-2	W7		4C	
Purpose & Need																						
Bridge Structure Deficiencies																						
Mainline Traffic Performance																						
Safety Considerations																						
Local Road Traffic Performance																						
Bike/Ped Accommodations																						
Other Considerations																						
Changes to Travel Patterns																						
Permit Feasibility																						
Impacted Buildings																						
Construction Costs																						

11 options set aside for now:

- Alternative 2A: E3 because of traffic performance (1 total)
- Alternative 3C because alignment is contingent on closure (2 total)
- Various western options because of moderate/poor traffic performance and one east/west connection (7 total)
- Alternative 4C because of traffic performance / costs (1 total)



Initial Screening Results

Ability to Meet Purpose and Need	
Meets P&N	
Moderately Meets P&N	
Does Not meet P&N	
Critical Flaw	
More Analysis Needed	

Criteria	No Build	Eastern Options												Western Options											Tunnel					
		2A - Elevated			3A - At grade					3B - At grade				3C		Alternative 2/3							4A	4B	4C					
		E1	E2(S)	E3	E1-1	E1-2	E2(S)	E3	E4	E5(S)	E1(S)	E2(S)	E3(S)	E4(S)	E1(S)	E2(S)	W1	W2	W3-1	W3-2	W3-3	W4	W5	W6-1	W6-2	W7				
Purpose & Need																														
Bridge Structure Deficiencies																														
Mainline Traffic Performance																														
Safety Considerations																														
Local Road Traffic Performance																														
Bike/Ped Accommodations																														
Goals & Objectives																														
Rail Accommodations																														
Multi-Modal Connectivity																														
Cost Effectiveness																														
Neighborhood Connections																														
Viewscape																														
Opportunities for Land Development																														
Other Considerations																														
Changes to Travel Patterns																														
Permit Feasibility																														
Impacted Buildings																														
Construction Costs																														

Started with 150+ alternative combinations



Initial Screening Results

Ability to Meet Purpose and Need	
Meets P&N	
Moderately Meets P&N	
Does Not meet P&N	
Critical Flaw	
More Analysis Needed	

Criteria	
Purpose & Need	
Bridge Structure Deficiencies	
Mainline Traffic Performance	
Safety Considerations	
Local Road Traffic Performance	
Bike/Ped Accommodations	

E5(S)	E2(S)	E3(S)	E4(S)

W3-1	W3-2	W3-3

Started with 150+ alternative combinations



Initial Screening Results

Ability to Meet Purpose and Need	
Meets P&N	Green
Moderately Meets P&N	Yellow
Does Not meet P&N	Red
Critical Flaw	Black
More Analysis Needed	White

Criteria	No-Build	Eastern Options				Western Options		
		Alt. 3A	Alternative 3B – At grade			Alternative 2/3		
		E5(S)	E2(S)	E3(S)	E4(S)	W3-1	W3-2	W3-3
Purpose & Need								
Bridge Structure Deficiencies	Green	Green	Green	Green	Green	Green	Green	Green
Mainline Traffic Performance	Red	Yellow	Yellow	Yellow	Yellow	Green	Green	Yellow
Safety Considerations	Red	Yellow	Green	Green	Green	Green	Green	Green
Local Road Traffic Performance	Yellow	Green	Green	Yellow	Yellow	Yellow	Green	Green
Bike/Ped Accommodations								

- Twelve build alternatives will be further assessed
 - Four eastern options
 - Three western options
- No-build alternative will continue to be assessed



Alternative 3A: Option E2(S)





Alternative 3B: Option E2(S)





Alternative 3B: Option E3(S)





Alternative 3B: Option E4(S)





Alternative 3A/3B: Option W3-1





Alternative 3A/3B: Option W3-2





Alternative 3A/3B: Option W3-3

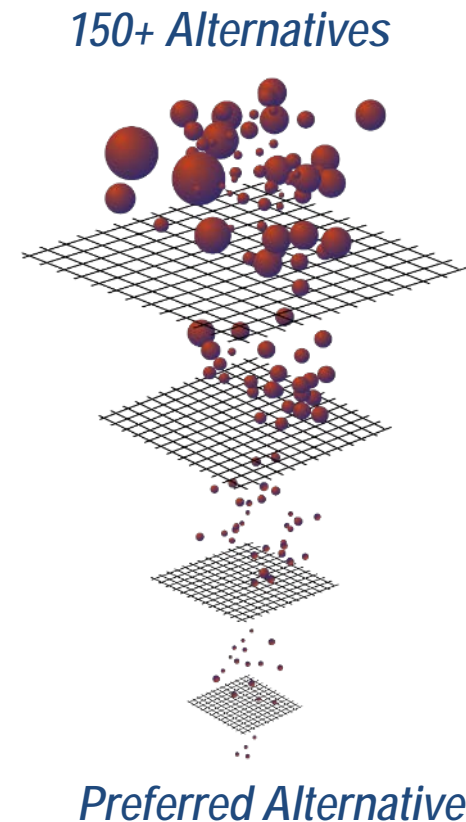




Next Steps

Alternatives Screening

- Add additional options to 3-D model
- Refine interactive alternatives analysis webpage
- Further assess options



Bicycle and Pedestrian Considerations

- Walking and bicycling are methods of transportation
- Regional routes (e.g. East Coast Greenway) are important
- Improve north-south connections on Broad and Sigourney Streets
- Create reconnections at Flower Street, Myrtle Street, and others for cross-town routes



Bicycle and Pedestrian Considerations

- Narrow existing roadways where appropriate
- Design facilities for all users, ages, abilities
- Create walkable intersections
- Add treatments and amenities





Upcoming Meetings

Working Groups / Roundtables:

- Traffic and Parking Working Group (10/5)
- Freight Roundtable (11/10)
- Bicycle, Pedestrian, Transit Working Group (soon!)

Stakeholders:

- Travelers employees (9/28)
- Hispanic Health Council (10/8)
- Property owners



Upcoming Open Planning Studios

- Today at The Lyceum (12-8 PM)
- 11/15 at Hartford Public Library, Mark Twain Branch (1:30-7 PM)
- 12/10 at Conference of Churches (12-8 PM)



Upcoming Public Meetings

- Three meetings in various locations
- East / west locations target commuters travelers
 - 10/20 at Whiton Memorial Branch Library, Manchester
 - 10/22 at Elmwood Community Center, West Hartford
 - 10/29 at Hartford Public Library, Hartford
- Discussion to include the refining of alternatives





Thank you for your time!

Your I-84 Hartford Project Team