



# I-84 HARTFORD PROJECT

## Freight Roundtable

**CTDOT Headquarters**  
Newington, CT

November 10, 2015



# Presentation Overview

- What is the I-84 project?
- Alternative overview
- Options that perform well
- Construction considerations



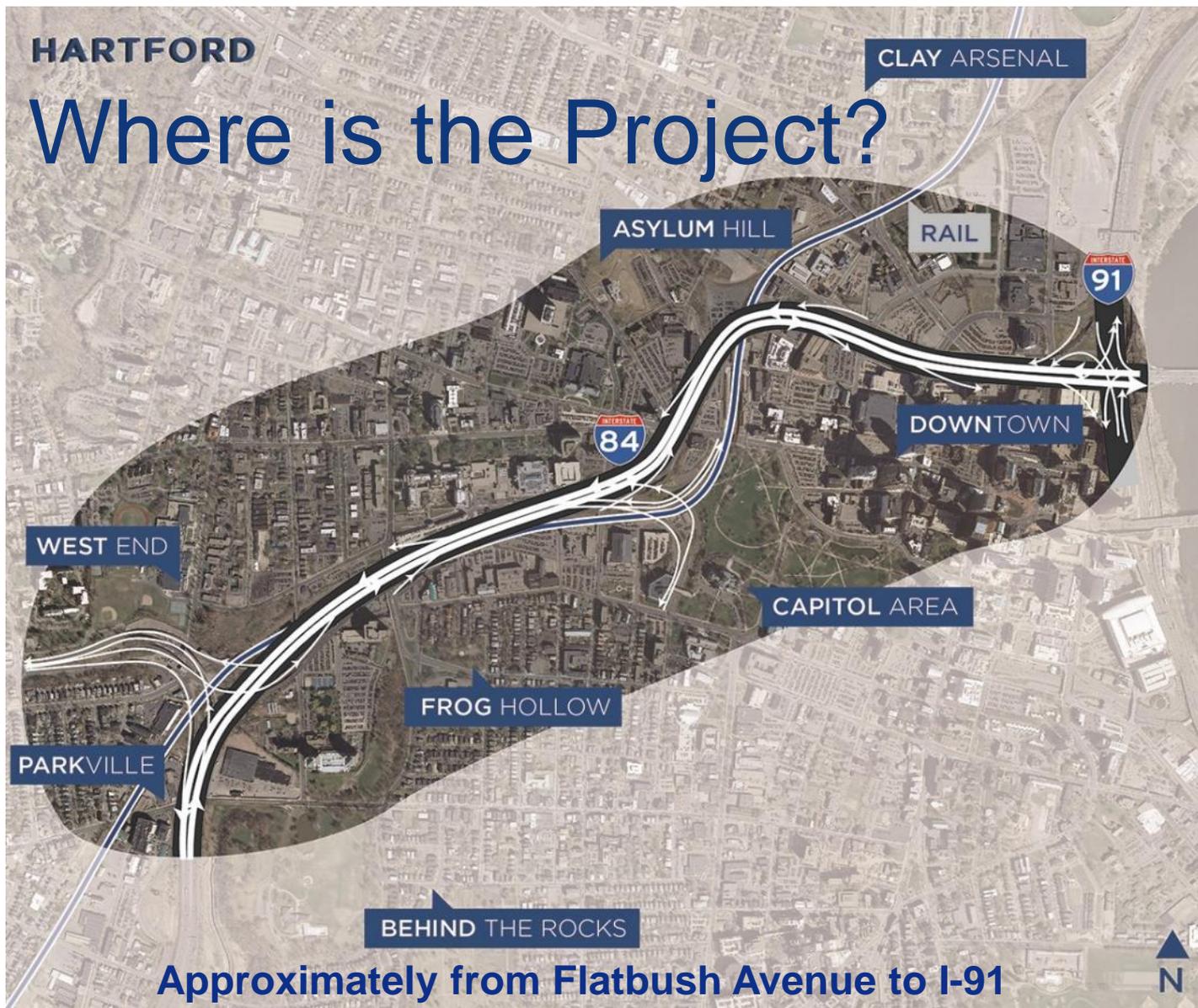


# What is the I-84 Hartford Project?



HARTFORD

# Where is the Project?



# I-84 Project Background

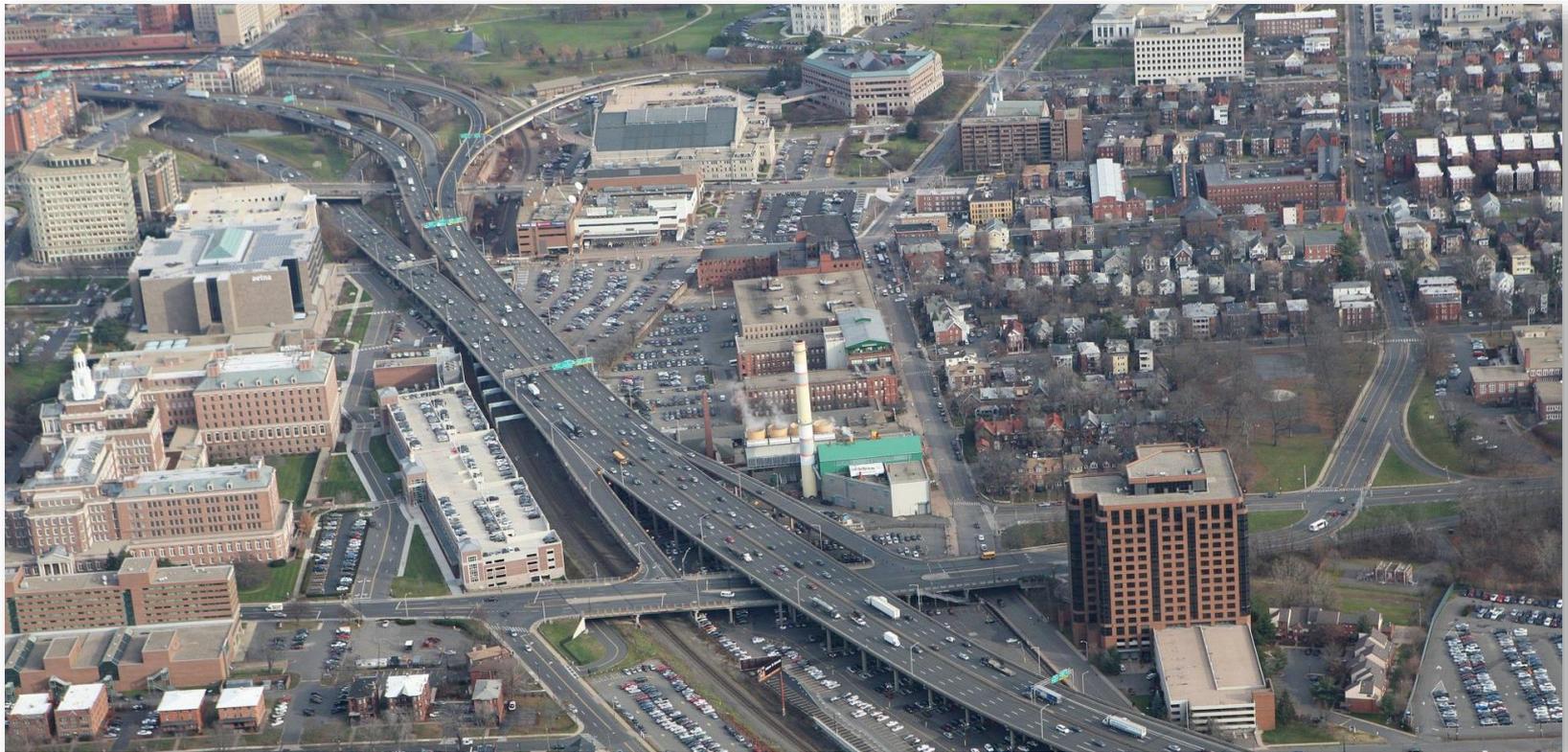
- Rail line built in 1830s
- Opened 1969; elevated to avoid impacting rail line
- Designed for 55,000 vehicles / day (Asylum Avenue area)
- Carries 175,000 vehicles / day (Asylum Avenue area)





## I-84 HARTFORD PROJECT

***“The impact of the I-84 freeway upon the physical environments into which it was introduced has been both dramatic and overwhelming.”***      - 1970 CTDOT & FHWA



# Why Is It Needed?

- Bridge Deficiencies
- Mainline Operation and Safety
- Mobility: Moving People and Goods

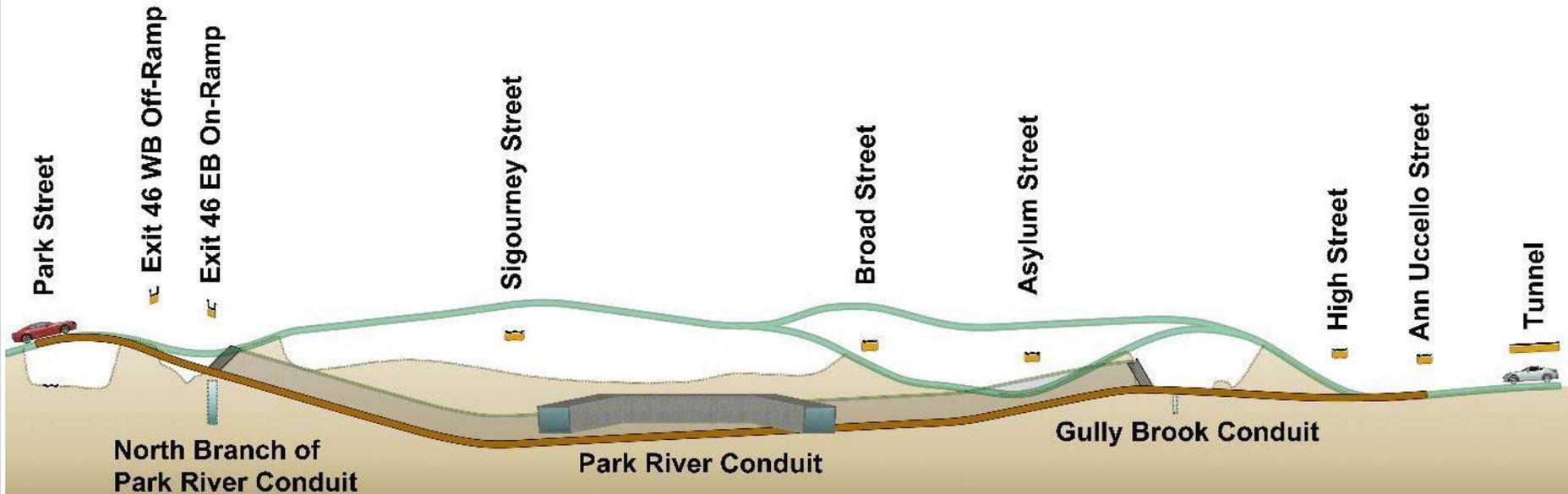




# 84 Alternatives Overview

# Mainline Alternatives

- Alternative 1: No-Build Green
- Alternative 2 (elevated) Blue
- Alternative 3 (lowered) Yellow
- Alternative 4 (tunnel) Brown

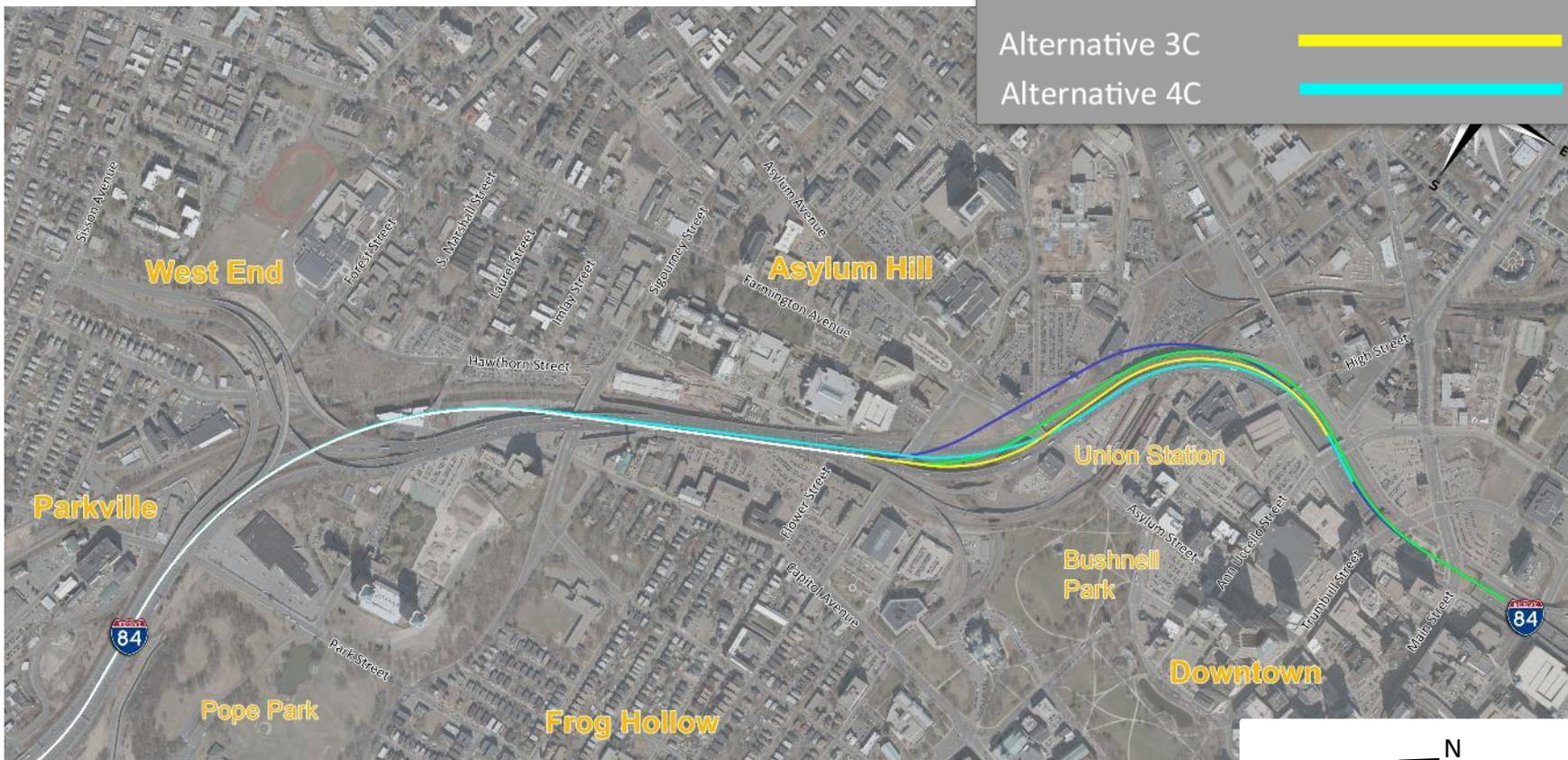




# Mainline Alternatives

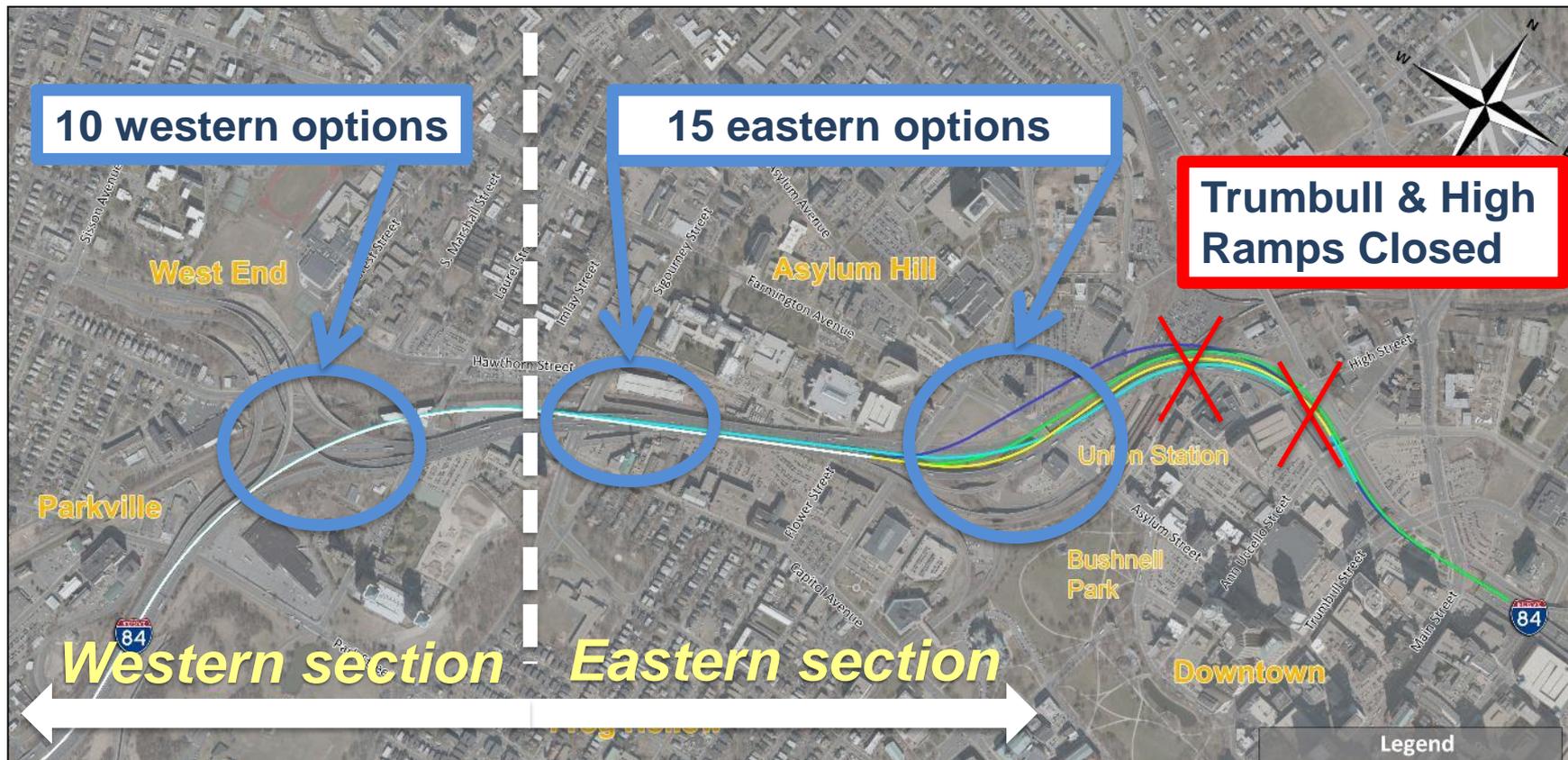
**Legend**

- Alternatives 2A/3A
- Alternative 3B
- Alternative 3C
- Alternative 4C



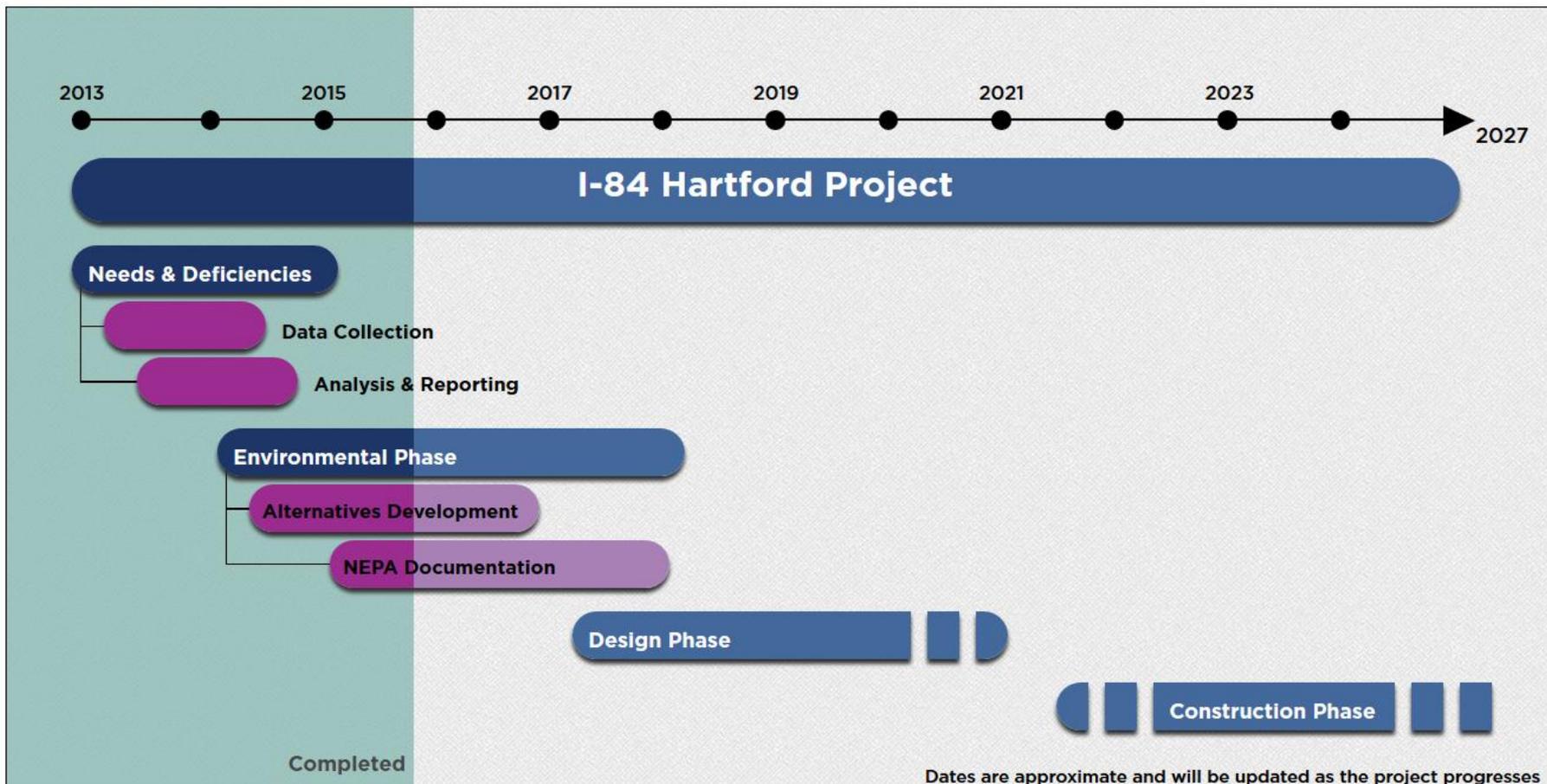


# Various Ramp Options





# Project Schedule



# Preliminary Traffic Analyses

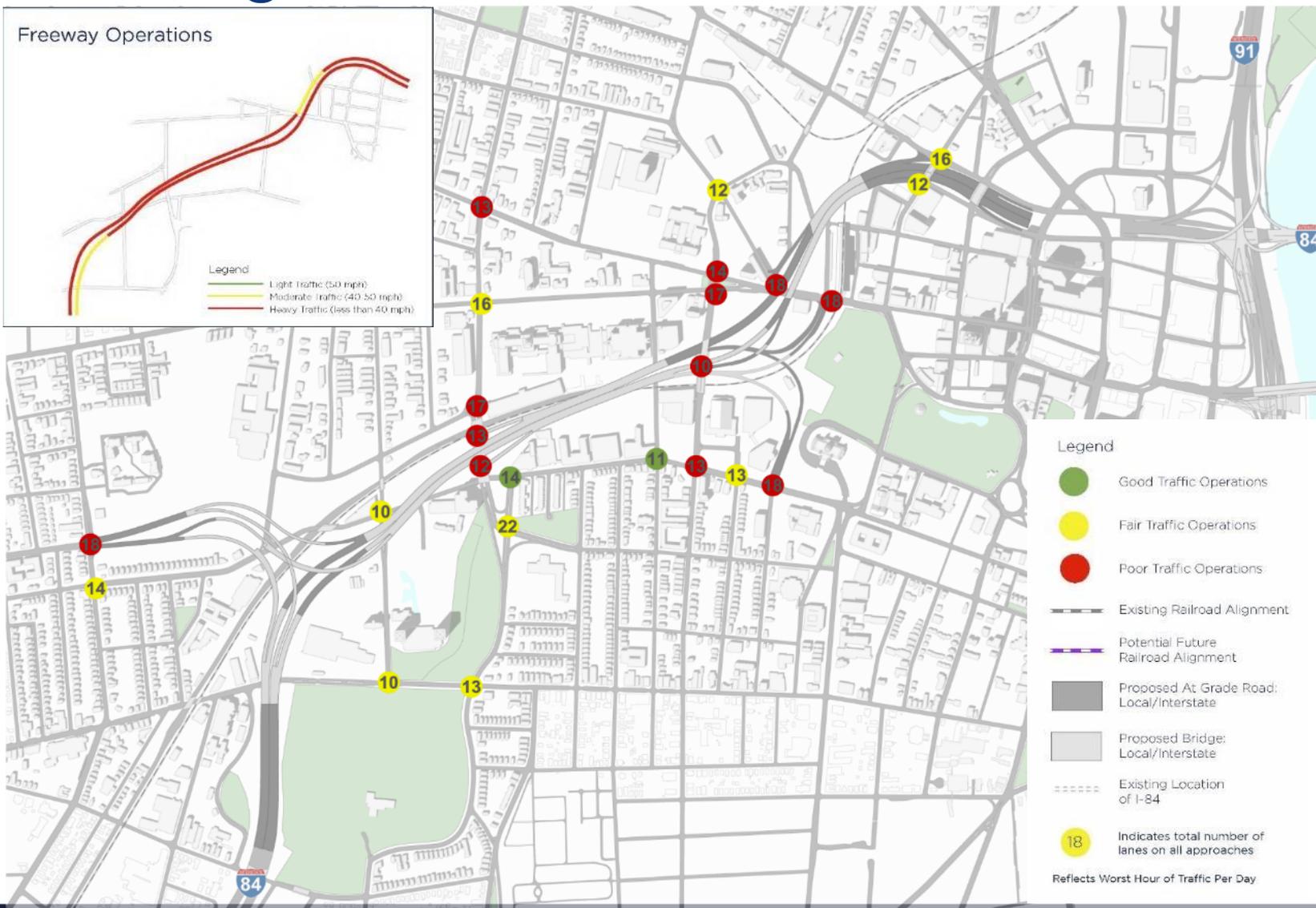
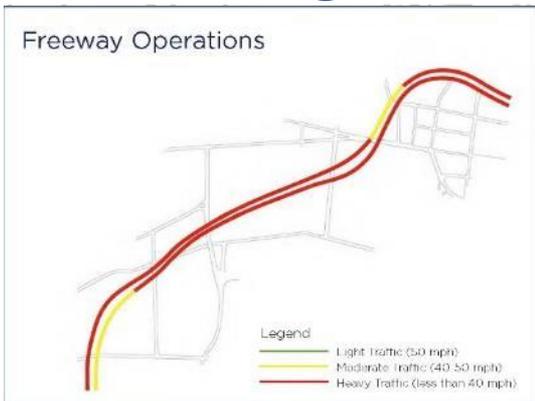
- Perform I-84 mainline analysis
- Analyze local road intersections
- Balancing lanes with walkability / bike usage





## Existing Conditions

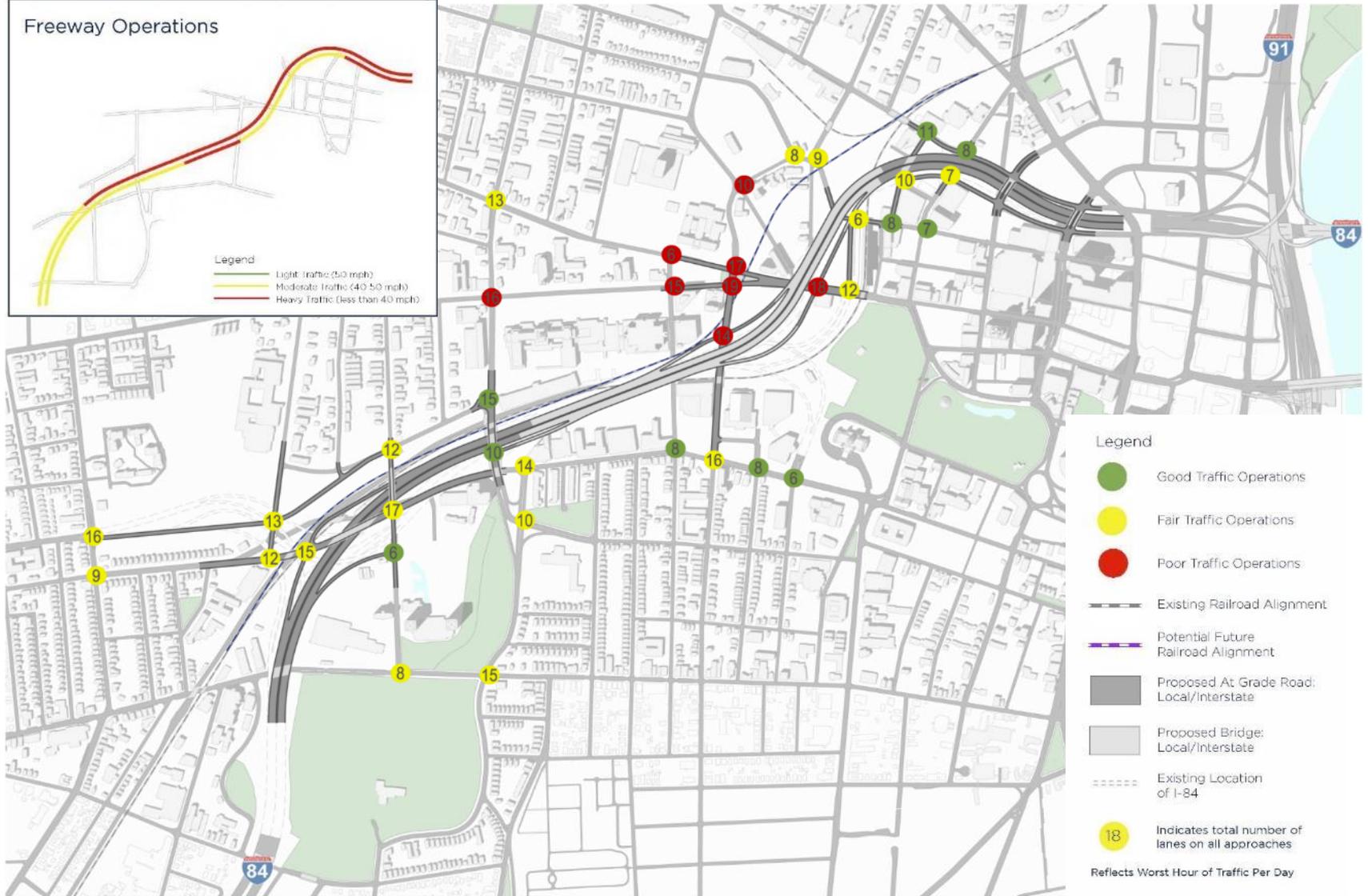
Freeway Operations





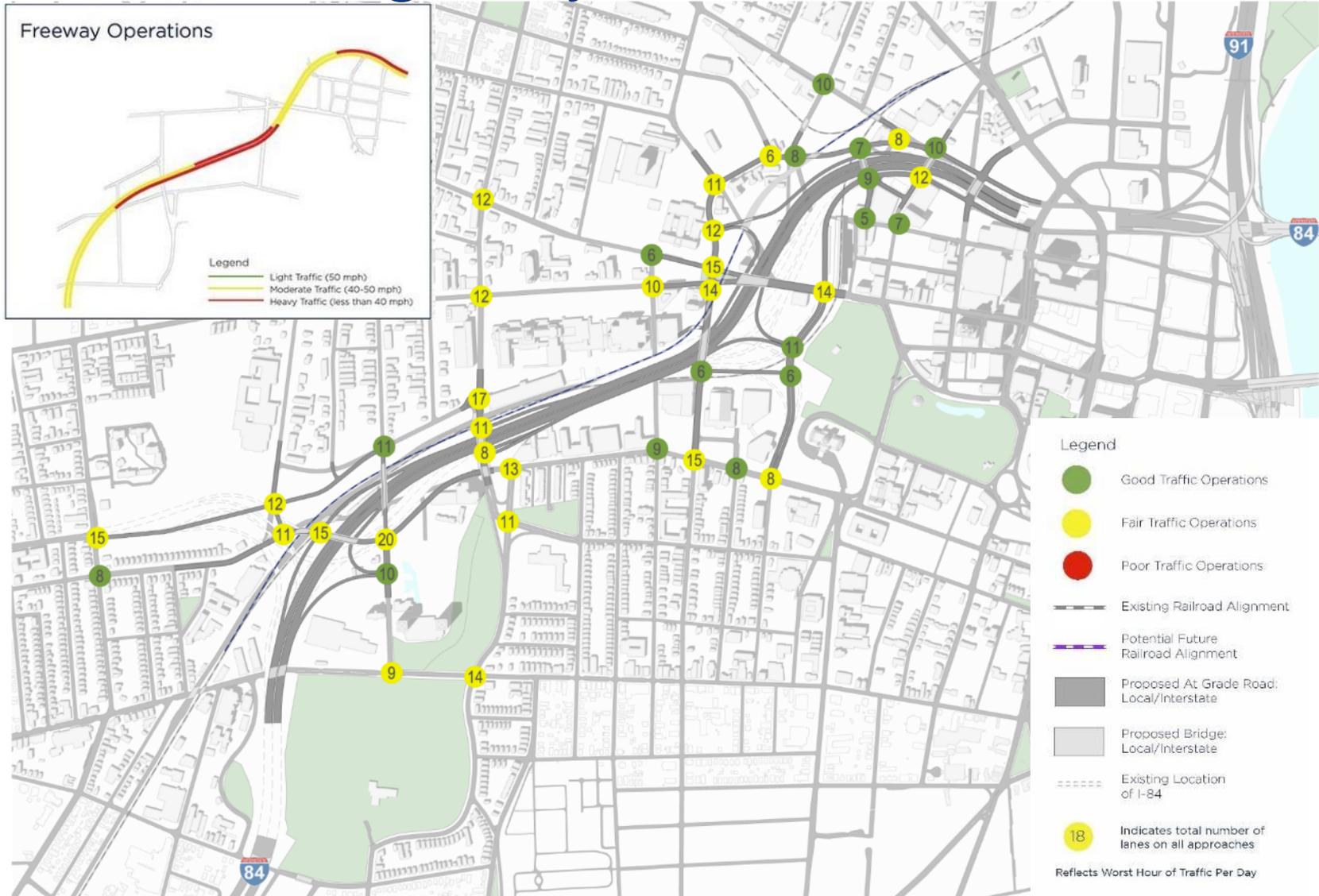
## Elevated Highway

### Freeway Operations



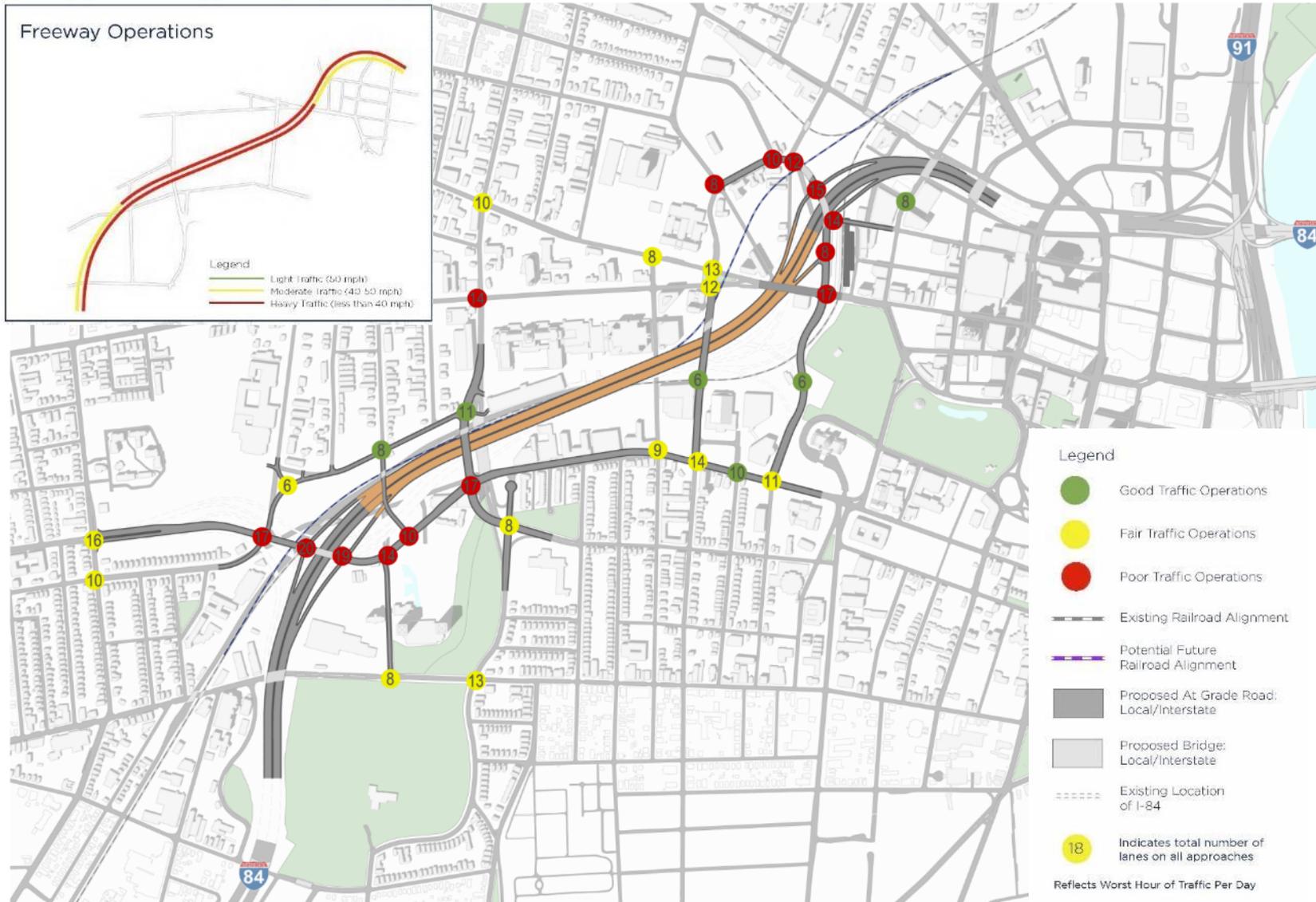


## Lowered Highway





## Tunnel



# Analysis Tells Us:

- Interchange spacing affects the mainline
- Keep Sigourney Street ramps
- Create new roads to add redundancy
- Better mainline operations = improve intersections





# Initial Analysis Shows...

Criteria	EASTERN OPTIONS														WESTERN OPTIONS															
	N-B	ELEVATED HWY			LOWERED HIGHWAY							ELEVATED / LOWERED HIGHWAY											TUNNELED HIGHWAY							
		ALT 1	ALT 2A		ALT 3A			ALT 3B				ALT 3C		ALT 2/3											ALT 4					
	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	4A	4B	4C-1	4C-2	
<b>Purpose &amp; Need</b>																														
Bridge Structure Deficiencies																														
Mainline Traffic Performance																														
Safety Considerations																														
Local Road Traffic Performance																														
Bike/Ped Accommodations																														
<b>Goals &amp; Objectives</b>																														
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<b>Other Considerations</b>																														
Changes to Travel Patterns																														
Permit Feasibility																														
Impacted Buildings																														
Construction Costs																														

Other Considerations	
Good	
Fair	
Poor	
Critical Flaw	
More Analysis Needed	

# Initial Analysis Shows...

Criteria	EASTERN OPTIONS														WESTERN OPTIONS										TUNNELED HIGHWAY					
	N-B	ELEVATED HWY			LOWERED HIGHWAY							ELEVATED / LOWERED HIGHWAY										TUNNELED HIGHWAY								
		ALT 1	ALT 2A		ALT 3A			ALT 3B				ALT 3C		ALT 3			ALT 2/3							ALT 4						
	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	4A	4B	4C-1	4C-2	
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- Some lowered highway options perform well
  - Relocated railroad creates interchange opportunities
  - New roadways create redundancy in network
  
- Additional building impacts



## Options That Perform Well

## Alternative 3A/3B: Option W3-1

### THE I-84 HARTFORD PROJECT

Lowered Highway  
Mainline Alternative 3A/3B  
Interchange Option W3-1

- Capitol Ave Through Street
- Partial Interchange (EB Off-Ramp to Laurel, No EB On-Ramp, WB Directional Split Diamond at Capitol)





## Alternative 3A/3B: Option W3-2

### THE I-84 HARTFORD PROJECT

Lowered Highway  
Mainline Alternative 3A/3B  
Interchange Option W3-2

- Capitol Ave Through Street
- Partial Interchange (EB Off-Ramp to Laurel, No EB On-Ramp, WB Directional Split Diamond at Capitol)
- West Blvd to Hawthorn Connection





## Alternative 3A/3B: Option W3-3

### THE I-84 HARTFORD PROJECT

Lowered Highway  
Mainline Alternative 3A/3B  
Interchange Option W3-3

- EB Off-Ramp and EB On-Ramp to Laurel, WB Directional Split Diamond at Capitol, West Blvd to Hawthorn Connection





## Alternative 3A: Option E5 (S)

### THE I-84 HARTFORD PROJECT

Lowered Highway  
Mainline Alternative 3A  
Interchange Option E5(S)

- Directional Split (WB Loop Ramps at Cogswell, EB Loop Ramps at Bushnell) with Sigourney Ramps





## Alternative 3B: Option E2 (S)

### THE I-84 HARTFORD PROJECT

Lowered Highway  
Mainline Alternative 3B  
Interchange Option E2(S)

- Interchange with Cogswell and extended Spruce St





## Alternative 3B: Option E3 (S)

### THE I-84 HARTFORD PROJECT

Lowered Highway  
Mainline Alternative 3B  
Interchange Option E3(S)

- Interchange with Edwards and extended Spruce St





## Alternative 3B: Option E4 (S)

### THE I-84 HARTFORD PROJECT

Lowered Highway  
Mainline Alternative 3B  
Interchange Option E4(S)

- Interchange with Cogswell and Spruce St





# Construction Considerations

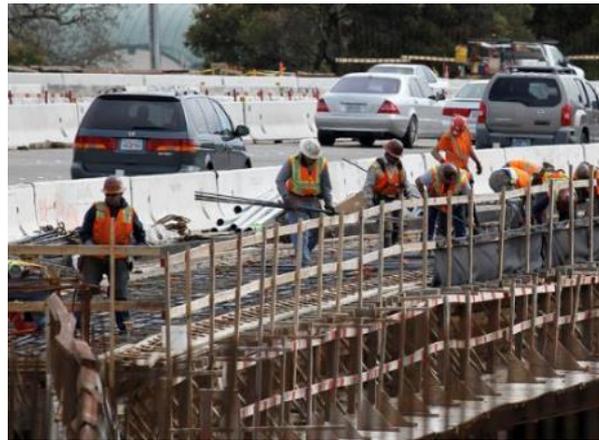
# Construction Considerations

- Impact upon stakeholders
- Maintaining traffic affects type of construction
- Conventional vs. accelerated techniques
- Section or lane closures



# Reducing Traffic During Construction

- Promote transit options
- Free/reduced fares?
- Carpooling / rideshare
- Other (e.g. bicycling)





Learn More / Provide Input



# Visit our Interactive Alternatives Webpage

- View and assess the alternatives
- Provide feedback, ask questions
- [i84hartford.com](http://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 crossing over various conduits (North Branch of Park River Conduit, Park River Conduit, Gully Brook Conduit) and streets (Sigoourney Street, Broad Street, Asylum Street, High Street, Ann Uccello Street). A legend indicates highway alignment options: Elevated, Lowered, and Tunnel. Other considerations include avoiding property loss, minimizing property loss, and maximizing safety. The page also includes a navigation menu with the following items:

- 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 Analysis:  
Evaluating the Alternatives**



## I-84 HARTFORD PROJECT



Questions?



# Thank You!

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

*Sincerely,*

*Your I-84 Hartford Project Team*



Q&A