



THE I-84 HARTFORD PROJECT

Public Advisory Committee Meeting #5

October 14, 2014



THE I-84 HARTFORD PROJECT



Welcome!



U.S. Department of Transportation
Federal Highway Administration



CRCOG *CAPITOL REGION
COUNCIL OF GOVERNMENTS*
Working together for a better region.



Agenda

1. Welcome & meeting purpose (**10 minutes**)
 - a) Project status and schedule
 - b) Today's meeting purpose

2. Overview of the public scoping meeting (**30 minutes**)
 - a) Scoping package
 - b) Presentation
 - c) Boards

3. Preliminary alternatives (**40 minutes**)
 - a) No build
 - b) Highway above grade option (enhanced viaduct)
 - c) Highway at grade option
 - d) Tunnel option(s)
 - e) Coordination with rail alternatives
 - f) Why no bypass alternative?
 - g) Cost-risk assessment

4. Next steps (**10 minutes**)
 - a) Public scoping meeting
 - b) Working Groups



Where we are today





Purpose of today's meeting

1. To introduce “**scoping**” and the upcoming public scoping meeting as the kickoff of NEPA/CEPA processes
2. To get your input on the early **definition** and **presentation** of alternatives
3. To discuss status of additional **Working Groups**



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Overview of the Scoping Process





Scoping

- Scoping is the first “official” step in the environmental process
- Purpose of scoping
 - To convey what the project is all about (purpose and need)
 - To seek input on alternatives
 - To seek input on environmental concerns
- Agency scoping
- Public Scoping Meeting



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Public Scoping Meeting

Date



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Agenda

- History of I-84
- What is the I-84 Hartford Project?
- What are NEPA/CEPA?
- What is Scoping?
- What is Purpose and Need?
- What is the Current Range of Alternatives?
- What is the Alternatives Analysis Process?
- What are the Environmental Resources?
- What are the Public Involvement Opportunities?
- What are the Next Steps?



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History



First, a little history...

- Rail line built in 1830s
- I-84 built in 1960s
 - Designed to avoid impacting rail
 - Resulting design is mostly elevated



A product of its time...

- I-84 was conceived prior to NEPA/federal regulations
- Soon after it was built, many realized that its effect on Hartford was not all positive



“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

- The I-84 Hartford Project provides an opportunity to rethink the previous design

Prior Studies

- CTDOT previously evaluated a viaduct replacement
- 2010 “HUB study” looked at additional concepts
 - Significant public input gained
 - **Concepts only – no engineering**
- CTDOT committed to evaluate additional solutions that have the potential for win-win outcomes





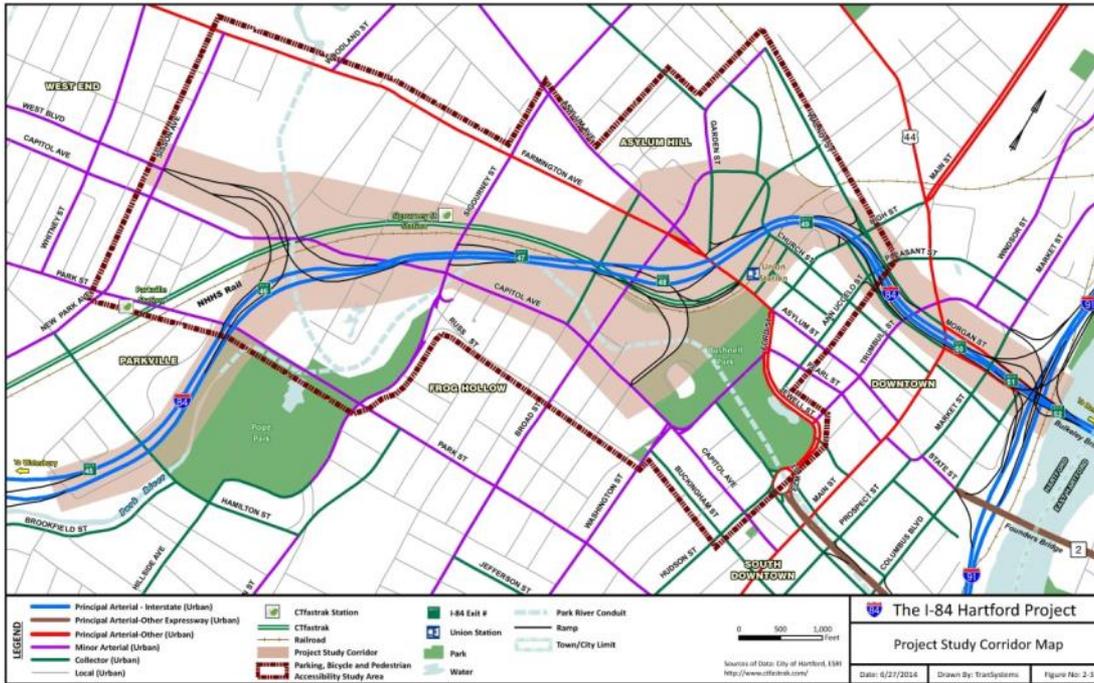
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About the Project





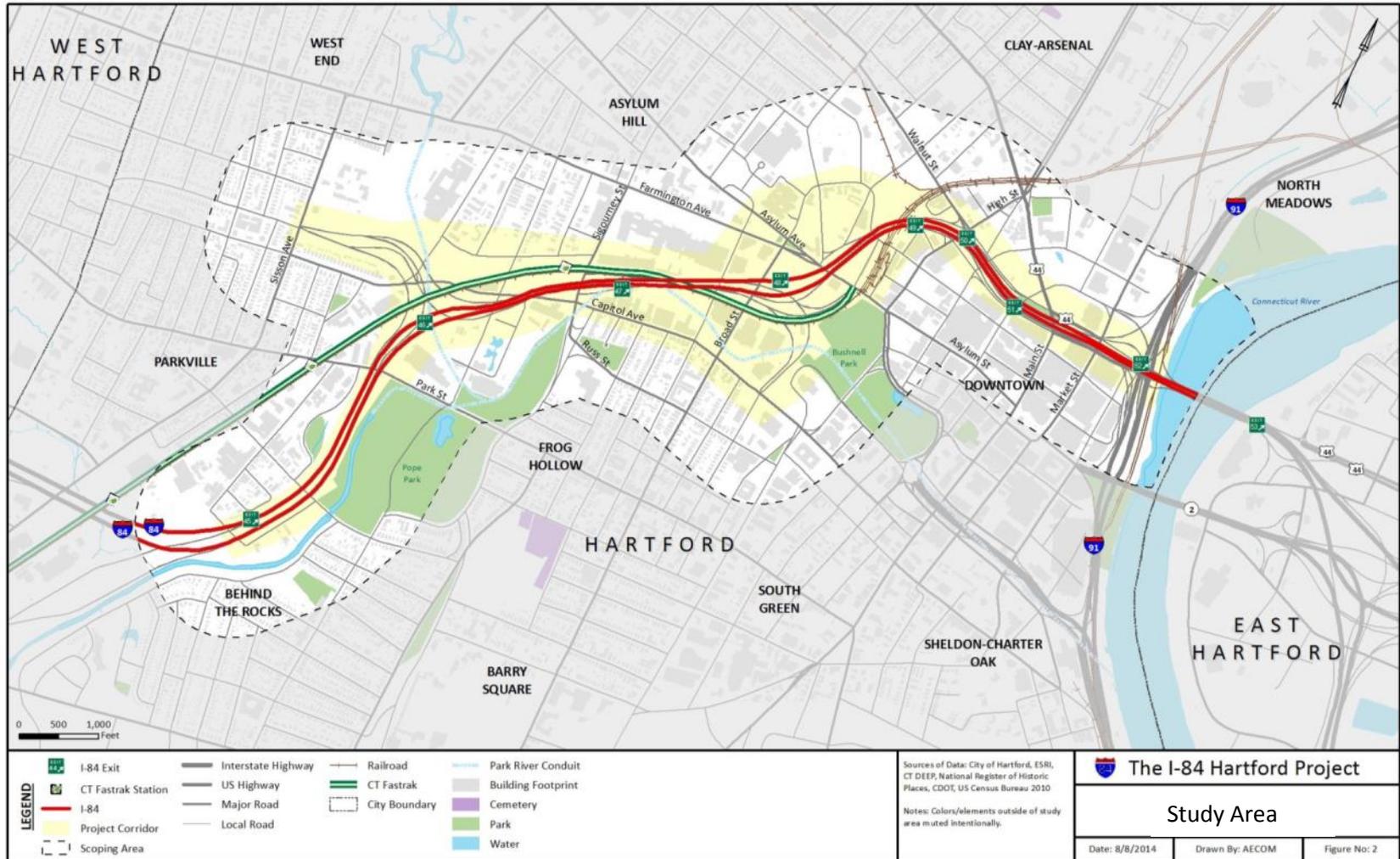
About the I-84 Hartford Project



- 2-mile project corridor located between Flatbush Avenue and I-91
- Current traffic volumes are approximately 175,000 vehicles per day (more than 3 times the design volume)
- Existing design does not meet modern interstate standards for current or future traffic demand



Study Area





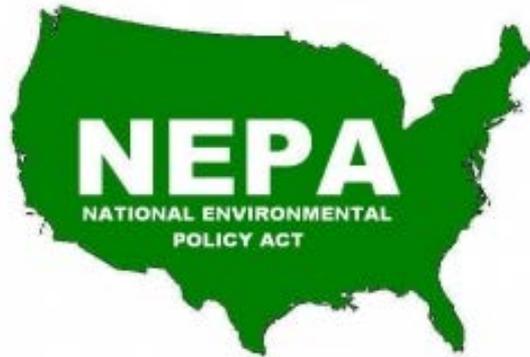
Project Schedule





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NEPA/CEPA





What are NEPA and CEPA?

National Environmental Policy Act (NEPA - 1969)

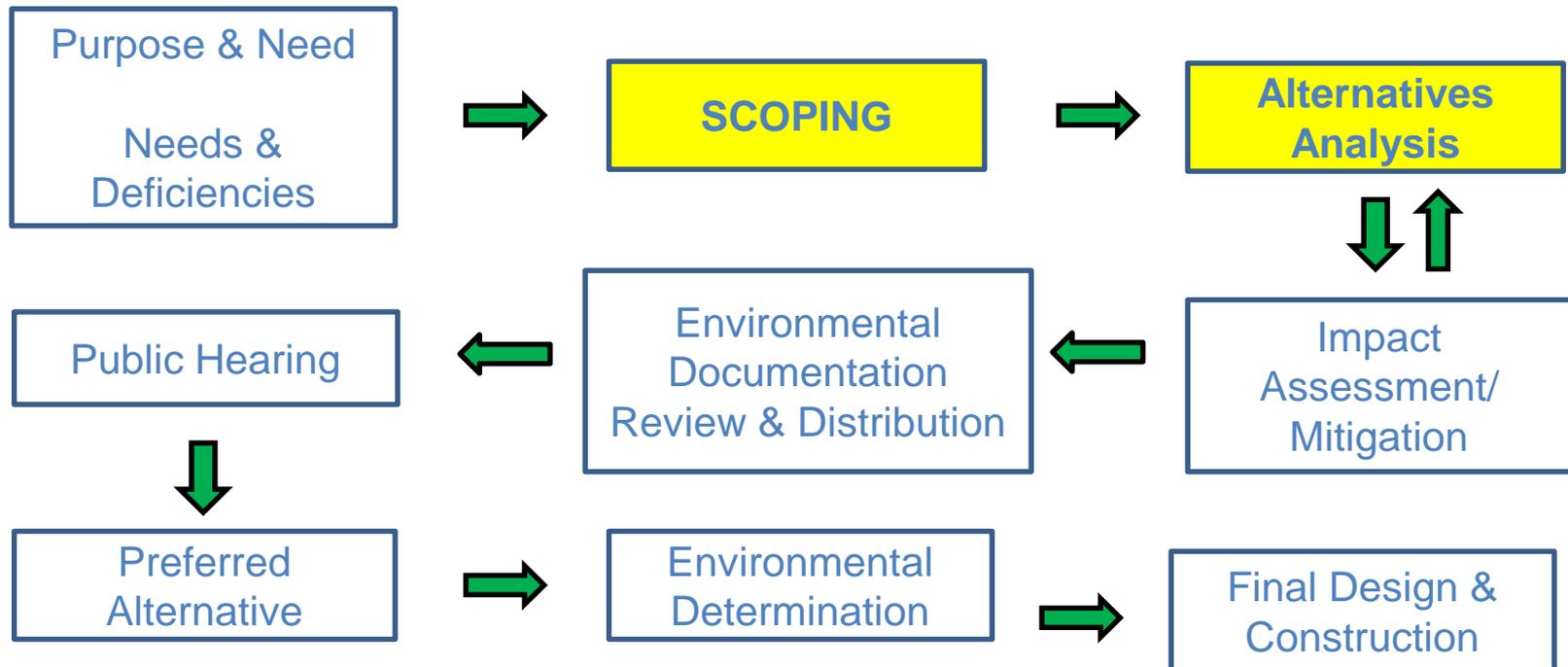
- NEPA is a decision-making process that allows for the selection of a transportation improvement alternative that will meet the Purpose and Need of the project while minimizing and/or mitigating adverse impacts.

Connecticut Environmental Policy Act (CEPA - 1971)

- CEPA is the state process that closely follows the intent of NEPA and has similar requirements.

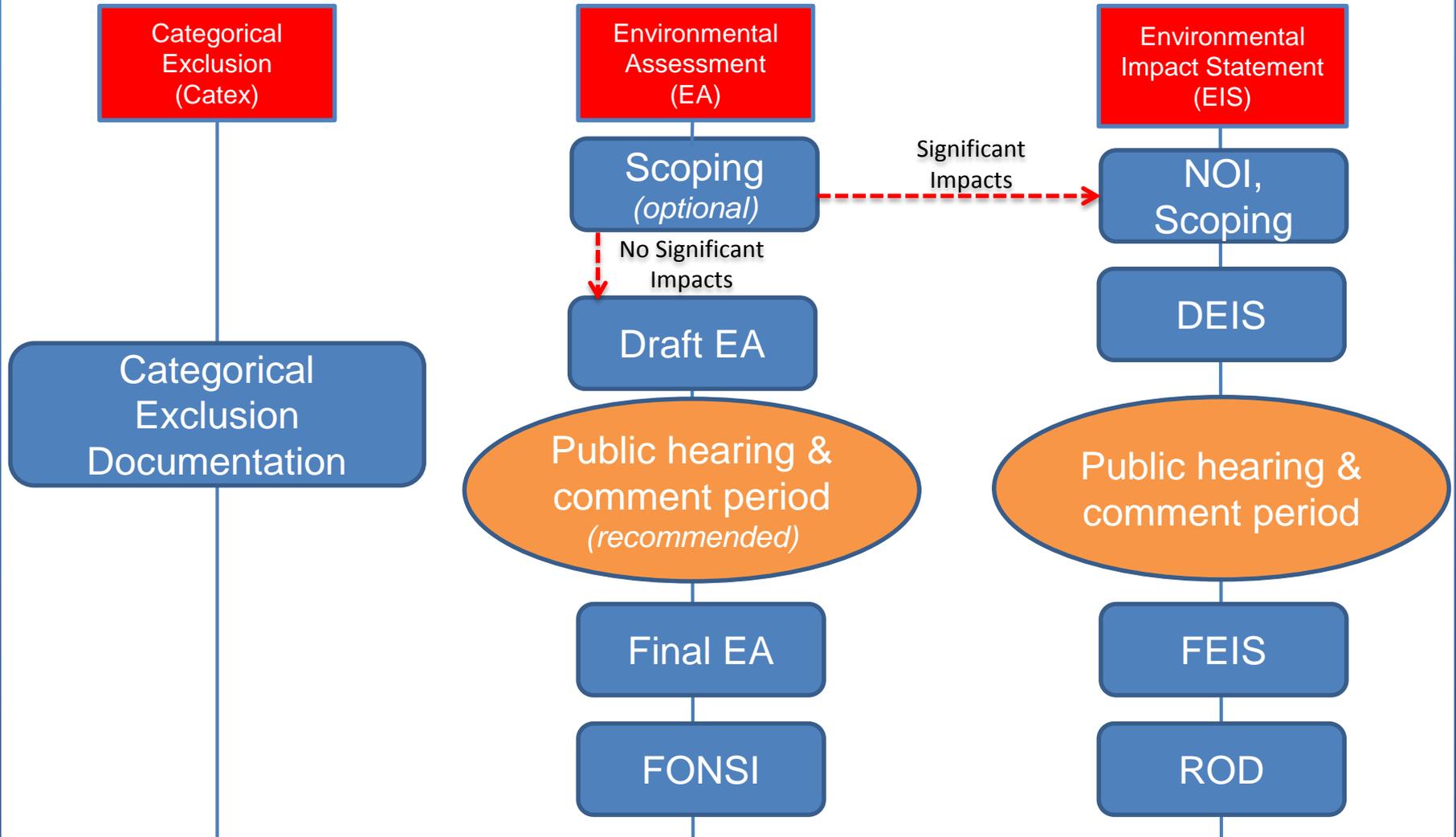
Environmental Process in NEPA/CEPA

The following outlines the key steps associated with the NEPA and CEPA process. All environmental documentation and processes will be prepared and conducted in accordance with both NEPA and CEPA regulations.





Type of NEPA Document

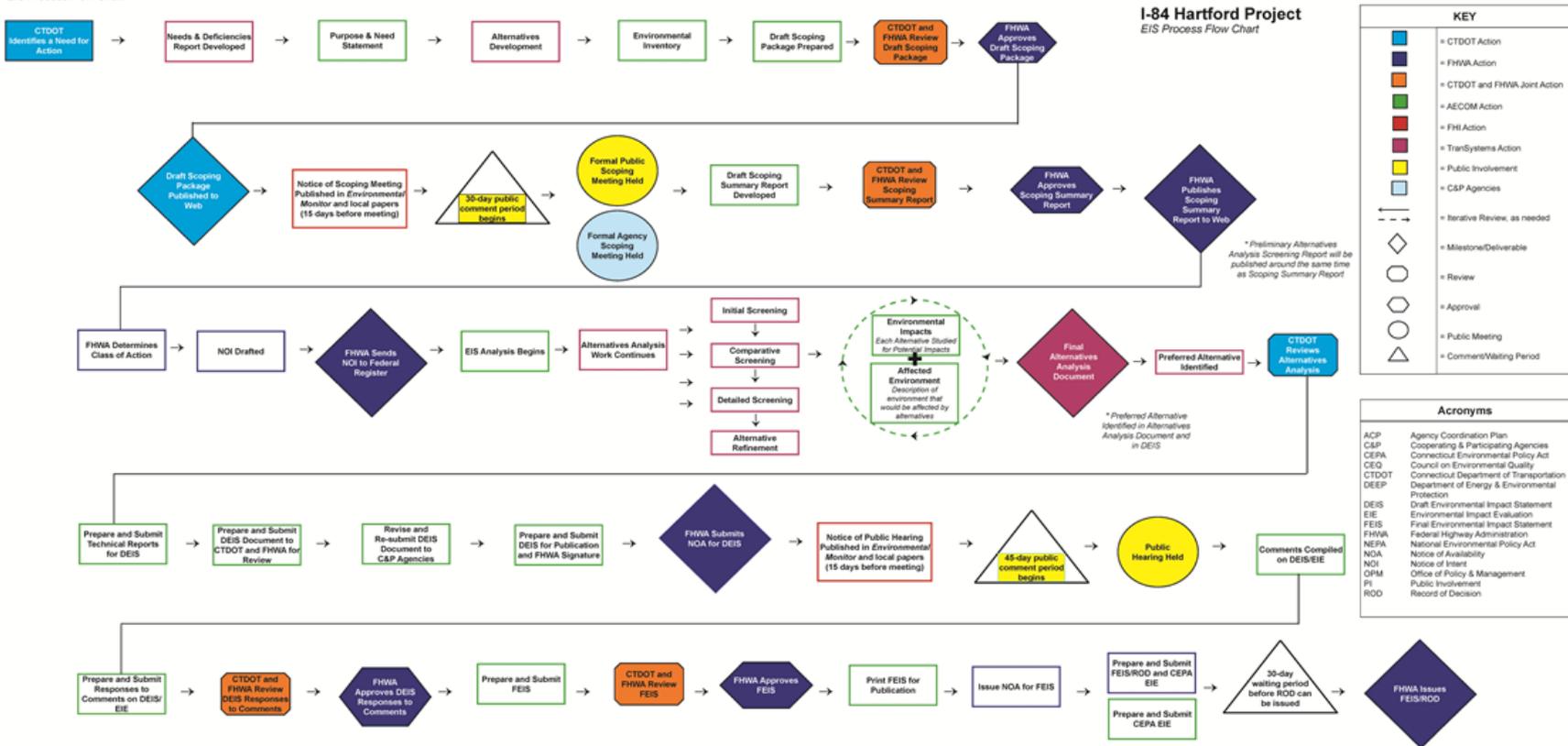


Project Implementation



The NEPA Process for an EIS

EIS Process Flow Chart



I-84 Hartford Project EIS Process Flow Chart

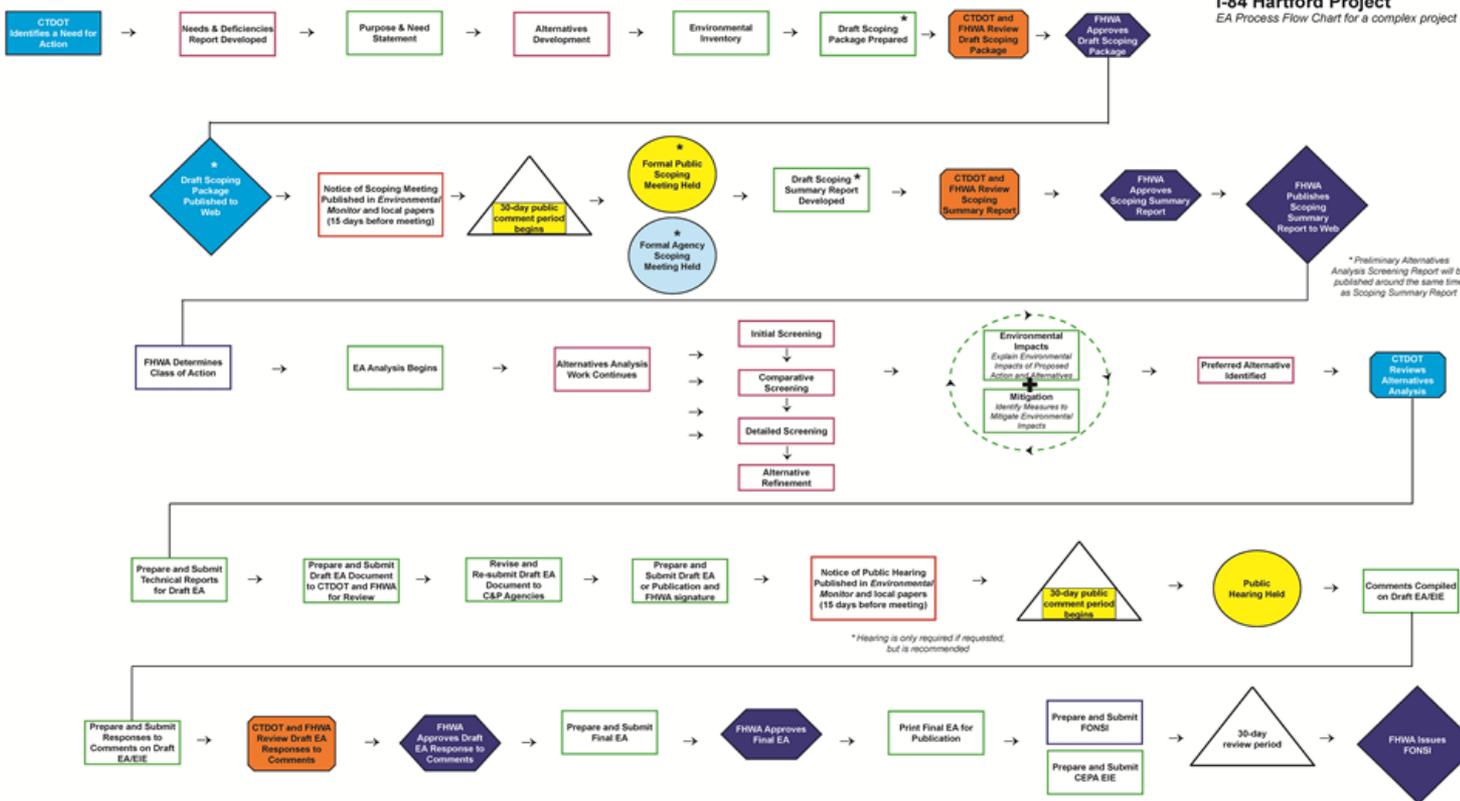
| KEY | |
|--|-----------------------------|
| ■ | CTDOT Action |
| ■ | FHWA Action |
| ■ | CTDOT and FHWA Joint Action |
| ■ | AECOM Action |
| ■ | FHI Action |
| ■ | TransSystems Action |
| ■ | Public Involvement |
| ■ | CSP Agencies |
| --- | Iterative Review, as needed |
| ◇ | Milestone/Deliverable |
| ○ | Review |
| ○ | Approval |
| ○ | Public Meeting |
| △ | Comment/Waiting Period |

| Acronyms | |
|----------|---|
| ACP | Agency Coordination Plan |
| CSP | Cooperating & Participating Agencies |
| CEPA | Connecticut Environmental Policy Act |
| CEQ | Council on Environmental Quality |
| CTDOT | Connecticut Department of Transportation |
| DEEP | Department of Energy & Environmental Protection |
| DEIS | Draft Environmental Impact Statement |
| EIE | Environmental Impact Evaluation |
| FEIS | Final Environmental Impact Statement |
| FHWA | Federal Highway Administration |
| NEPA | National Environmental Policy Act |
| NOA | Notice of Availability |
| NDI | Notice of Intent |
| OPM | Office of Policy & Management |
| PI | Public Involvement |
| ROD | Record of Decision |



The NEPA Process for an EA

EA Process Flow Chart



I-84 Hartford Project
EA Process Flow Chart for a complex project

| KEY | |
|------------------|-------------------------------|
| [Blue Box] | = CTDOT Action |
| [Dark Blue Box] | = FHWA Action |
| [Green Box] | = CTDOT and FHWA Joint Action |
| [Orange Box] | = AECOM Action |
| [Red Box] | = FHI Action |
| [Yellow Box] | = TransSystems Action |
| [Light Blue Box] | = Public Involvement |
| [Light Blue Box] | = C&P Agencies |
| [Dashed Arrow] | = Iterative Review, as needed |
| [Diamond] | = Milestone/Deliverable |
| [Circle] | = Review |
| [Hexagon] | = Approval |
| [Triangle] | = Public Meeting |
| [Triangle] | = Comments/Waiting Period |

| Acronyms | |
|----------|---|
| ACP | Agency Coordination Plan |
| C&P | Cooperating & Participating Agencies |
| CEPA | Connecticut Environmental Policy Act |
| CEQ | Council on Environmental Quality |
| CTDOT | Connecticut Department of Transportation |
| DEEP | Department of Energy & Environmental Protection |
| EA | Environmental Assessment |
| EIE | Environmental Impact Evaluation |
| FHWA | Federal Highway Administration |
| FONSI | Finding of No Significant Impact |
| NEPA | National Environmental Policy Act |
| NCA | Notice of Availability |
| NOI | Notice of Intent |
| OPM | Office of Policy & Management |
| PI | Public Involvement |
| ROD | Record of Decision |

* Not required, but recommended when project involves complex issues.

* Hearing is only required if requested, but is recommended

* Preliminary Alternatives Analysis Screening Report will be published around the same time as Scoping Summary Report



CEPA Process

- Scoping Required
- Environmental Impact Evaluation (EIE)
- Alternatives Analysis Process/Preferred Alternative
- Agency and Public Outreach Process
- Public Hearing and Comment Period
- Avoid, Minimize and Mitigate Impacts

ONE dually compliant Environmental Document



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Scoping



What is Scoping?

Scoping, an open process involving the public, federal, state and local agencies, is an early action in the NEPA/CEPA process to identify major and important issues to consider during the study.

- NEPA requirement for EIS, recommended for EA
- CEPA requirement for EIE

Scoping is a critical milestone in the environmental review process.





Scoping Process

- Scoping Notice
- Scoping Package
- Public Scoping Meeting (date)
- Agency Scoping Meeting (date)
- Scoping Comment Period (date to date)
- Scoping Summary Report

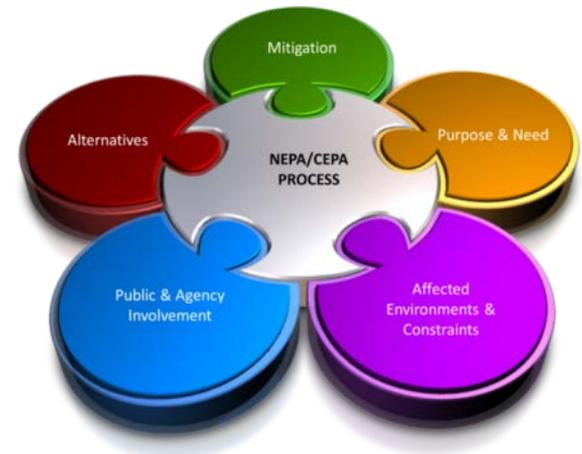
Preliminary Alternatives Analysis Screening Report will be released around the time of the Scoping Summary Report.

Purpose of Scoping

To get **YOUR** input and further define:

- Project Purpose and Need
- Goals and Objectives
- Study Area
- Range of Alternatives
- Types of Environmental and Socioeconomic Impacts to be Considered

...*An opportunity for the public to help shape the study and its **OUTCOMES.***



Public Scoping Meeting Format

- “Open House”
- Presentation
- Public Comment Session
- Taking your comments:
 - Sign up and speak
 - Write comments on comment forms and put in comment box
 - Entire meeting to be recorded by stenographer in addition to one-on-ones
 - Submit comments via email or in writing by (date)
 - Comment via project website and social media





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Purpose and Need



What is Purpose & Need?

- Describes the transportation problems we're trying to solve
- Limits the range of alternatives that are “reasonable, prudent and practicable”
- Assists with the eventual selection of a preferred alternative
- Is clear, well-justified, specific and comprehensive
- **P&N is the foundation for the selection of a course of action**

A Public Advisory Committee Working Group has been established to develop a comprehensive and effective P&N Statement for the I-84 Hartford Project.



Elements of Purpose & Need

What are the Problems we are Trying to Solve?

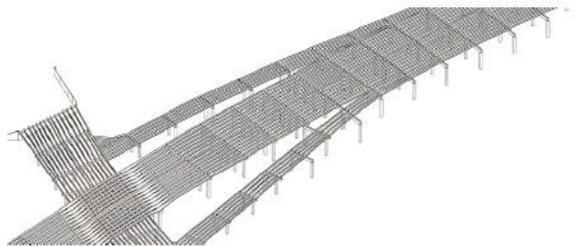
- Bridge Structure Deficiencies
- Traffic and Safety Deficiencies
- Mobility Deficiencies



What are the Goals and Objectives?

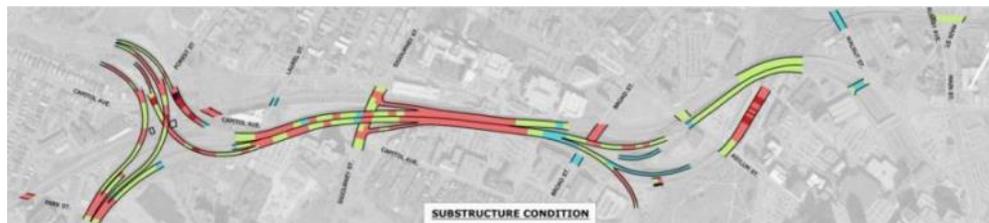
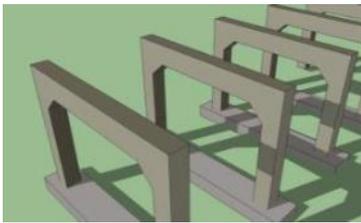
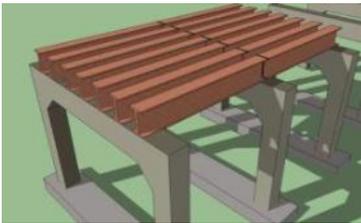
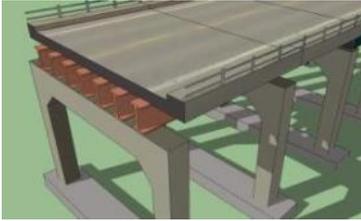
- Ensure long-term serviceability of corridor
- Maximize public investment in corridor
- Ensure better integration of the interstate with the urban environment

Bridge Structural Deficiencies



- Many of these bridges are reaching the end of their intended lifespan
- CTDOT spent over \$60M on repairs since 2004
- Bridges are safe to drive over but deterioration will continue

Rating of Bridge Elements

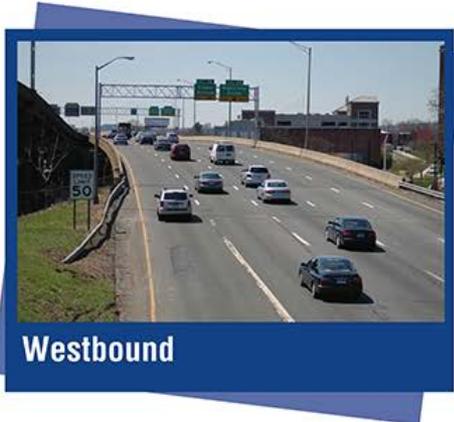


National Bridge Inventory Rating

| | | | |
|------------------|--|-------------|--|
| Very Good (8) | | Fair (5) | |
| Good (7) | | Poor (4) | |
| Satisfactory (6) | | Serious (3) | |

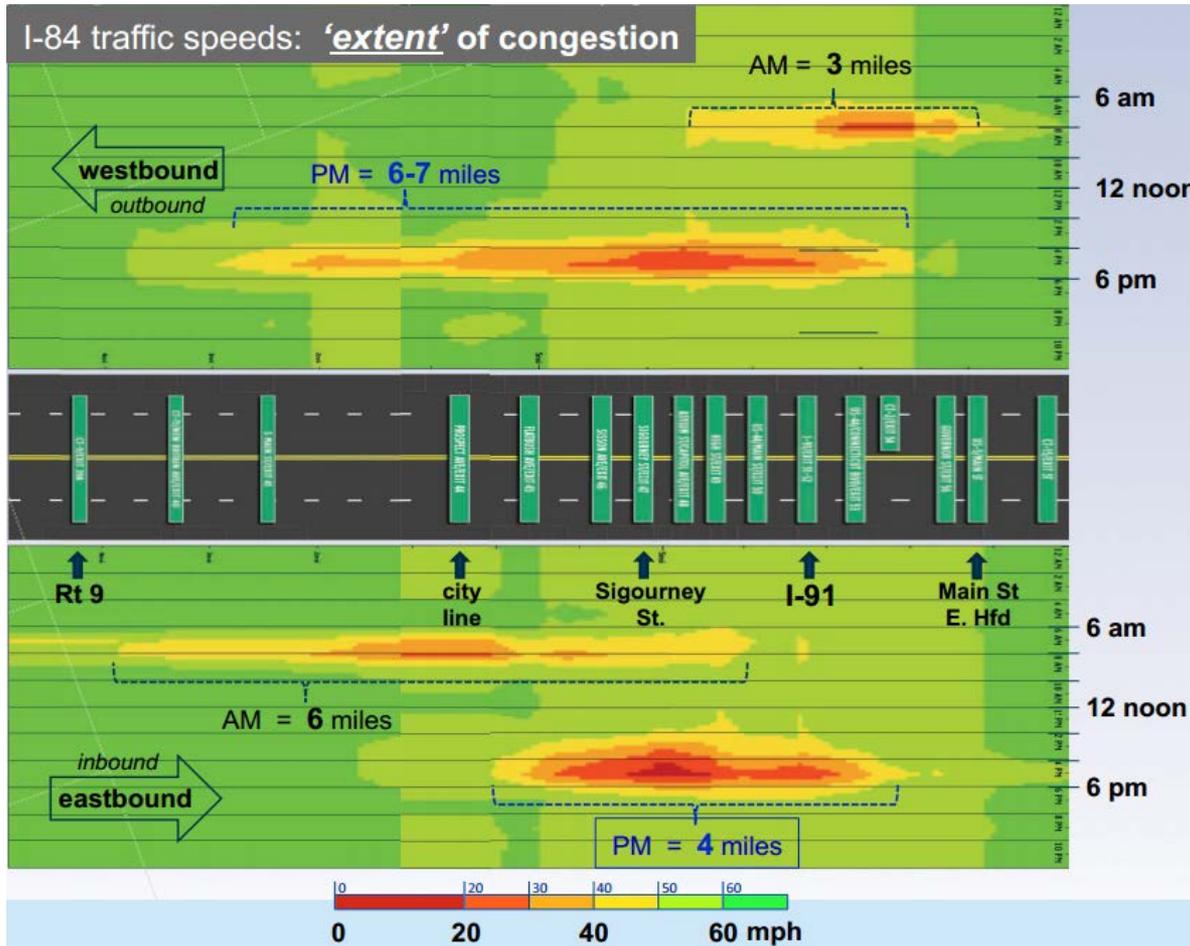
Operational Deficiencies

- Left-hand on- and off-ramps
- Multiple lane drops (“exit only”)
- Weave sections
- 8 full or partial interchanges in less than 3 miles





Traffic Congestion



Safety Deficiencies



— Accident rate four times the state average

- Narrow shoulder widths
- Nearly two accidents per day
- Significant traffic delays
- Poor pedestrian and bike accessibility on local streets



Community Challenges

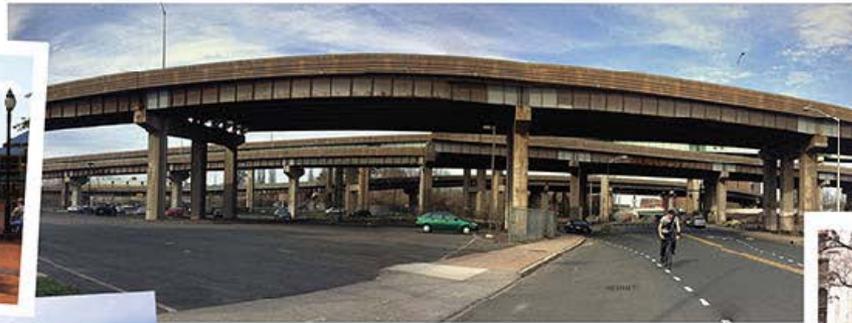


Image at left and top left courtesy of Heather Brandon



Image courtesy of Barbara Steele

Image courtesy of Archives and Special Collections, UConn Library





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Alternatives and the Alternatives Analysis Process



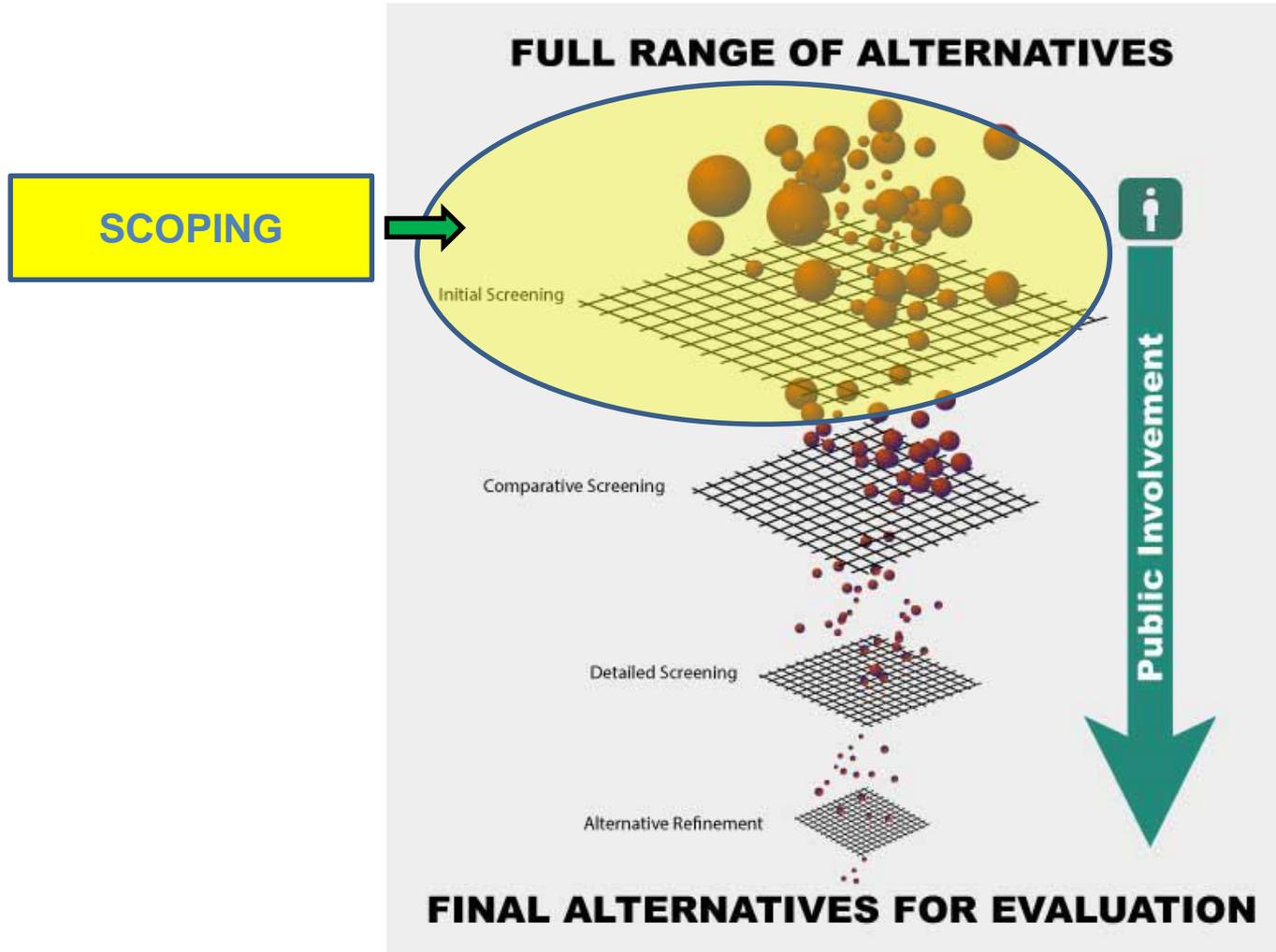


What are the Current Range of Alternatives?

- PA 1: No Build Alternative
- PA 2: Elevated Highway
- PA 3: Lowered Highway
- PA 4: Tunneled Highway

PA = Preliminary Alternatives

Alternatives Screening





Alternatives Evaluation Criteria

| Evaluation Criteria | No-Build | Alt 1 | Alt 2 | Alt 3 | Alt 4 | Alt 5 |
|---|----------|-------|-------|-------|-------|-------|
| Transportation Goals | | | | | | |
| Address Bridge Structural Deficiencies | | | | | | |
| Improve Operations and Safety of Corridor | | | | | | |
| Improve Mobility of Corridor | | | | | | |
| Improve Intermodal Connectivity Within Corridor | | | | | | |
| Impacts to Built Environment | | | | | | |
| Air Quality Impacts | | | | | | |
| Noise and Vibration Impacts | | | | | | |
| Energy Impacts | | | | | | |
| Land Use Impacts | | | | | | |
| Community and Socioeconomic Impacts | | | | | | |
| Environmental Justice Impacts | | | | | | |
| Cultural Resource Impacts | | | | | | |
| Section 4(f) Impacts | | | | | | |
| Section 6(f) Impacts | | | | | | |
| Visual and Aesthetic Impacts | | | | | | |
| Contamination and Hazardous Materials Impacts | | | | | | |
| Right-of-Way Impacts | | | | | | |
| Utility Relocation Impacts | | | | | | |
| Construction Impacts | | | | | | |
| Impacts to Natural Environment | | | | | | |
| Surface Water Impacts | | | | | | |
| Wetland Impacts | | | | | | |
| Endangered and Threatened Species Impacts | | | | | | |
| Economic Impacts | | | | | | |
| Construction Cost | | | | | | |
| Financial Plan | | | | | | |
| Economic Development Opportunities | | | | | | |
| Public and Stakeholder Support | | | | | | |



Goals & Objectives

| Goals and Objectives | No-Build | Alt 1 | Alt 2 | Alt 3 | Alt 4 | Alt 5 |
|---|----------|-------|-------|-------|-------|-------|
| Ensure the long-term serviceability of the corridor by: | | | | | | |
| Creating opportunities for connections to existing and future modes of transportation | | | | | | |
| Coordinating with the City and CRCOG towards a workable solution that is compatible with City and regional initiatives | | | | | | |
| Maximize the public investment in the corridor by: | | | | | | |
| Utilizing cost-effective solutions that maximize capital investment over lifespan of project | | | | | | |
| Reducing maintenance requirements and operations costs | | | | | | |
| Sequencing staged construction to minimize the impact on the traveling public and local community | | | | | | |
| Reconfiguring the interstate in a manner that increases opportunities for economic development | | | | | | |
| Implementing recycling strategies to reuse existing materials on site | | | | | | |
| Ensure better integration of the interstate with the urban environment by: | | | | | | |
| Reducing the physical impact of the interstate by reducing the footprint of I-84 and its ramps | | | | | | |
| Repairing the visual and physical connectedness of the areas that the interstate corridor divides | | | | | | |
| Using architectural features and details on the proposed structures and other design treatments that would improve the highway's aesthetic qualities as viewed from neighboring areas | | | | | | |
| Creating aesthetically pleasing spaces for those highway areas that are shared with or adjacent to local streets and properties | | | | | | |
| Supporting the City's urban design goals | | | | | | |



Placeholder

- PLACEHOLDER FOR ALL OF TRANSYSTEMS ALTERNATIVE SLIDES



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Public Involvement





Public Involvement Opportunities

- NEPA/CEPA Scoping Meetings
- NEPA/CEPA Public Hearing
- NEPA/CEPA Environmental Document Review
- Various NEPA/CEPA Public Comment Opportunities
- Public Information Meetings
- Website
- Email blasts and comments received through the website
- Public Advisory Committee meetings
- Working Group Meetings





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Next Steps





Next Steps



- Further refine range of alternatives
- Screen out alternatives that are not “reasonable, prudent and practicable.”
- Prepare responses to Scoping comments
- Prepare and issue Scoping Summary Report
- Prepare Preliminary Alternatives Analysis Screening Report
- Clarify appropriate level of environmental documentation (EA or EIS)



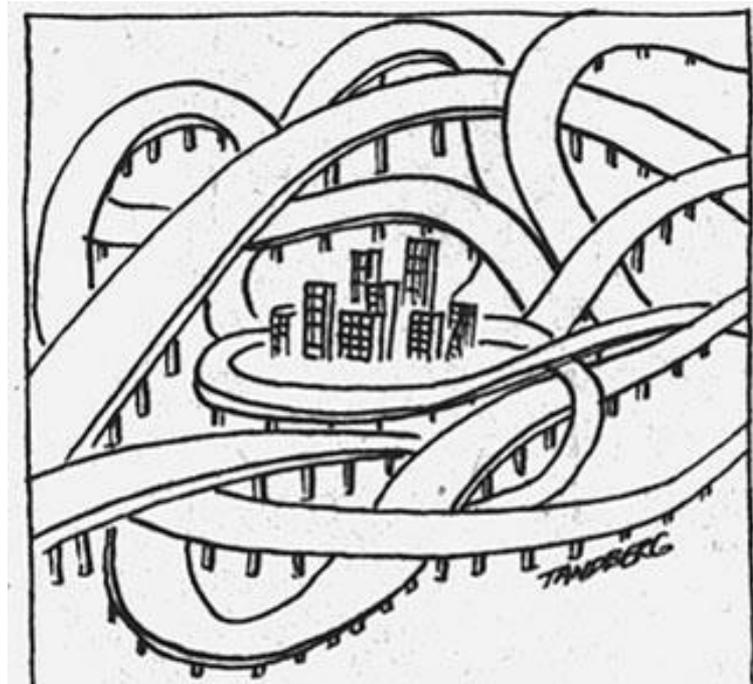
Your Comments





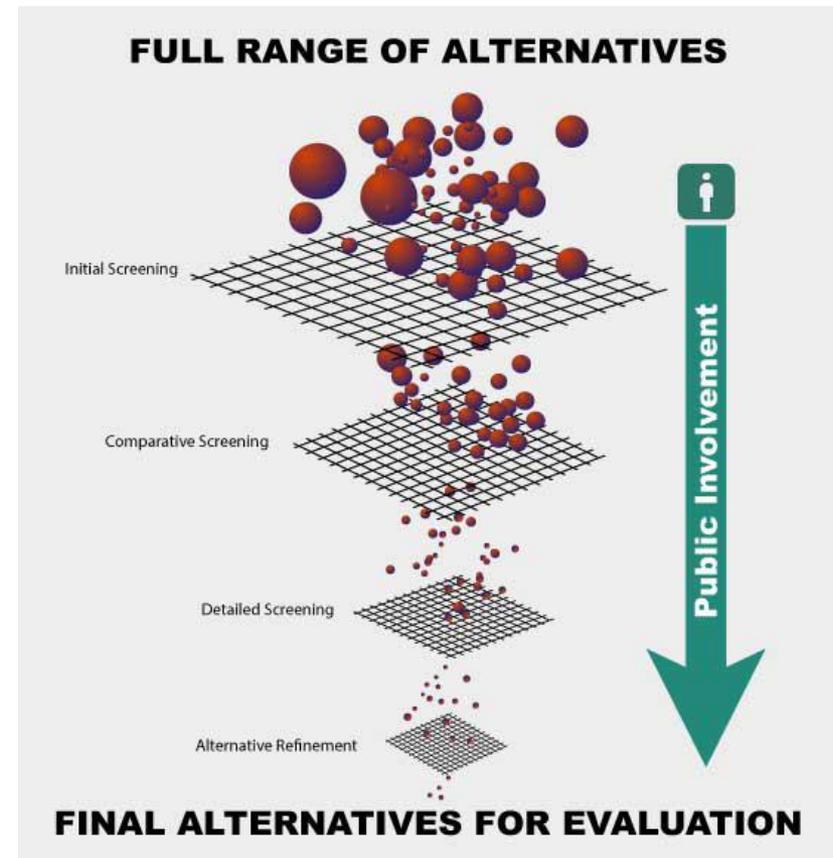
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Preliminary Alternatives



Alternatives development is iterative

- Define initial set of alternatives
 - Test/evaluate
 - Get input
- Refine alternatives
 - Test/evaluate
 - Get input
- Refine alternatives
-and so on.....





Preliminary Alternatives (PA)

1. PA 1: No Build Alternative
2. PA 2: Elevated Highway
3. PA 3: Lowered Highway
4. PA 4: Tunneled Highway



Please keep in mind.....

- Each alternative is preliminary
- Each will be further defined
 - Test
 - Evaluate results
 - Refine
- Each alternative will likely have many options [e.g., Alternative 2-b1; 2-b2, etc.]



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Alternatives Development

- Looking at several variations of the Preliminary Alternatives
- Testing for constructability, traffic, Goals and Objectives (P&N)
- Preliminary I-84 alignments are based on maintaining traffic during construction
- Reduction in number of interchanges to improve mainline traffic flow
- Modifications to local road network to improve pedestrian, bike and traffic flow within project limits



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Preliminary Alternative 1 – No-Build Existing Railroad Alignment

Key Features

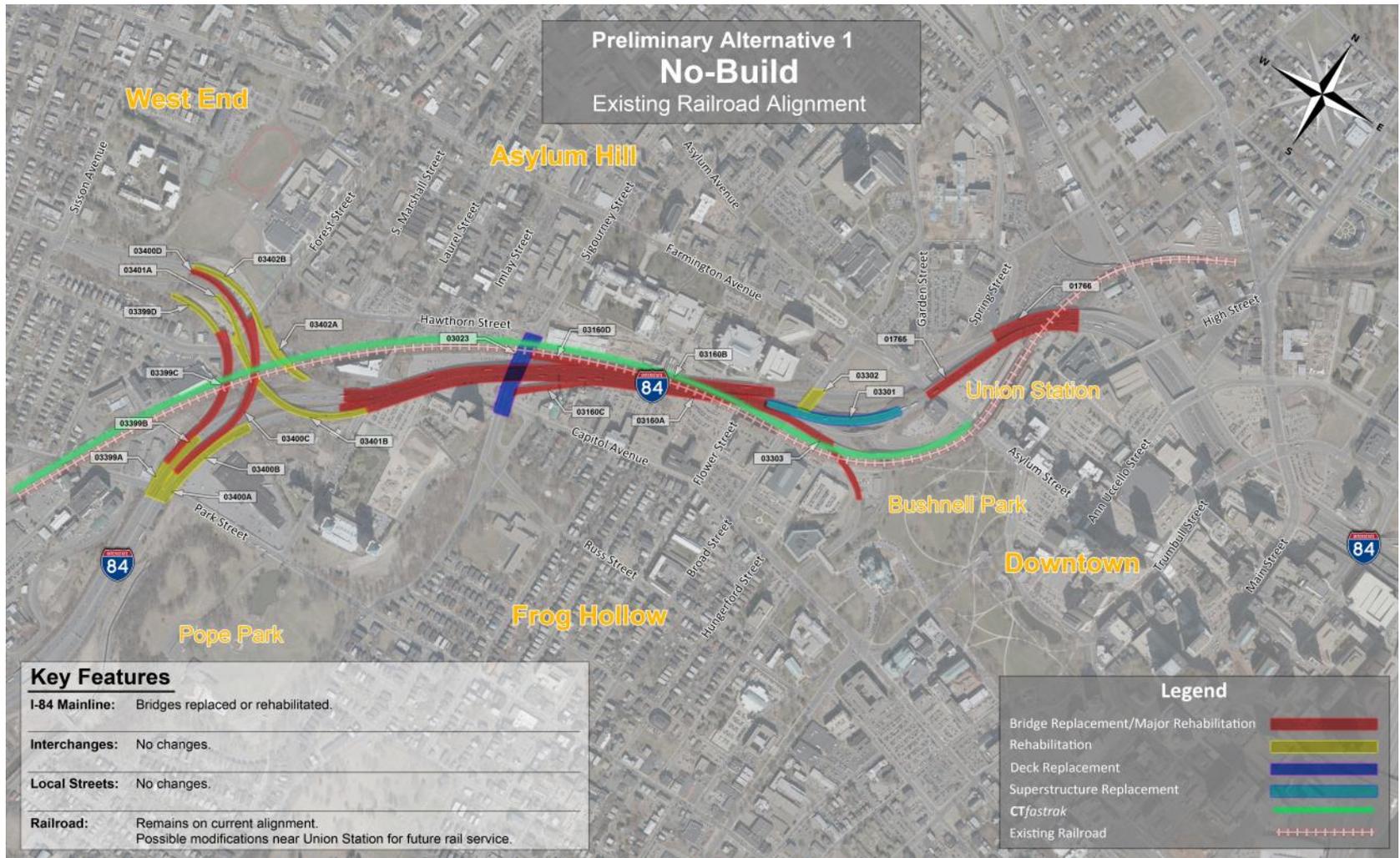
I-84 Mainline: Bridges replaced or rehabilitated

Interchanges: No changes

Local Streets: No Changes

Railroad: Remains on current alignment. Possible modifications near Union Station for future rail service.

Preliminary Alternative 1



Key Features

| | |
|-----------------------|---|
| I-84 Mainline: | Bridges replaced or rehabilitated. |
| Interchanges: | No changes. |
| Local Streets: | No changes. |
| Railroad: | Remains on current alignment. Possible modifications near Union Station for future rail service. |

Legend

| | |
|---|--|
| Bridge Replacement/Major Rehabilitation | |
| Rehabilitation | |
| Deck Replacement | |
| Superstructure Replacement | |
| CTfastrak | |
| Existing Railroad | |



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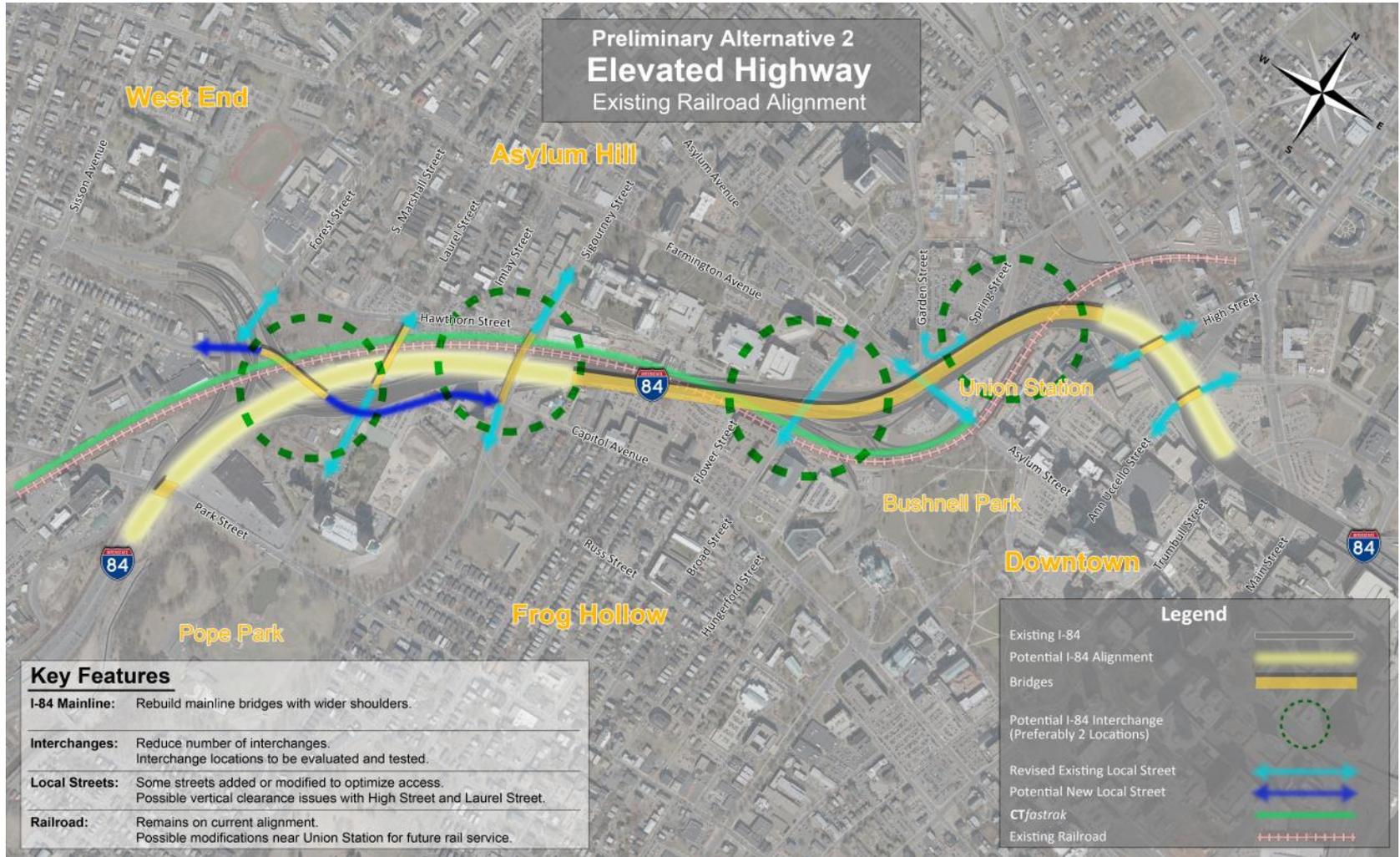
Preliminary Alternative 2 – Elevated Highway Existing Railroad Alignment

Key Features

- I-84 Mainline:** Rebuild mainline bridges with wider shoulders
- Interchanges:** Reduce number of interchanges
Interchange locations to be evaluated and tested
- Local Streets:** Some streets added or modified to optimize access
Possible vertical clearance issues at High St. and Laurel St.
- Railroad:** Remains on current alignment. Possible modifications near Union Station for future rail service.



Preliminary Alternative 2





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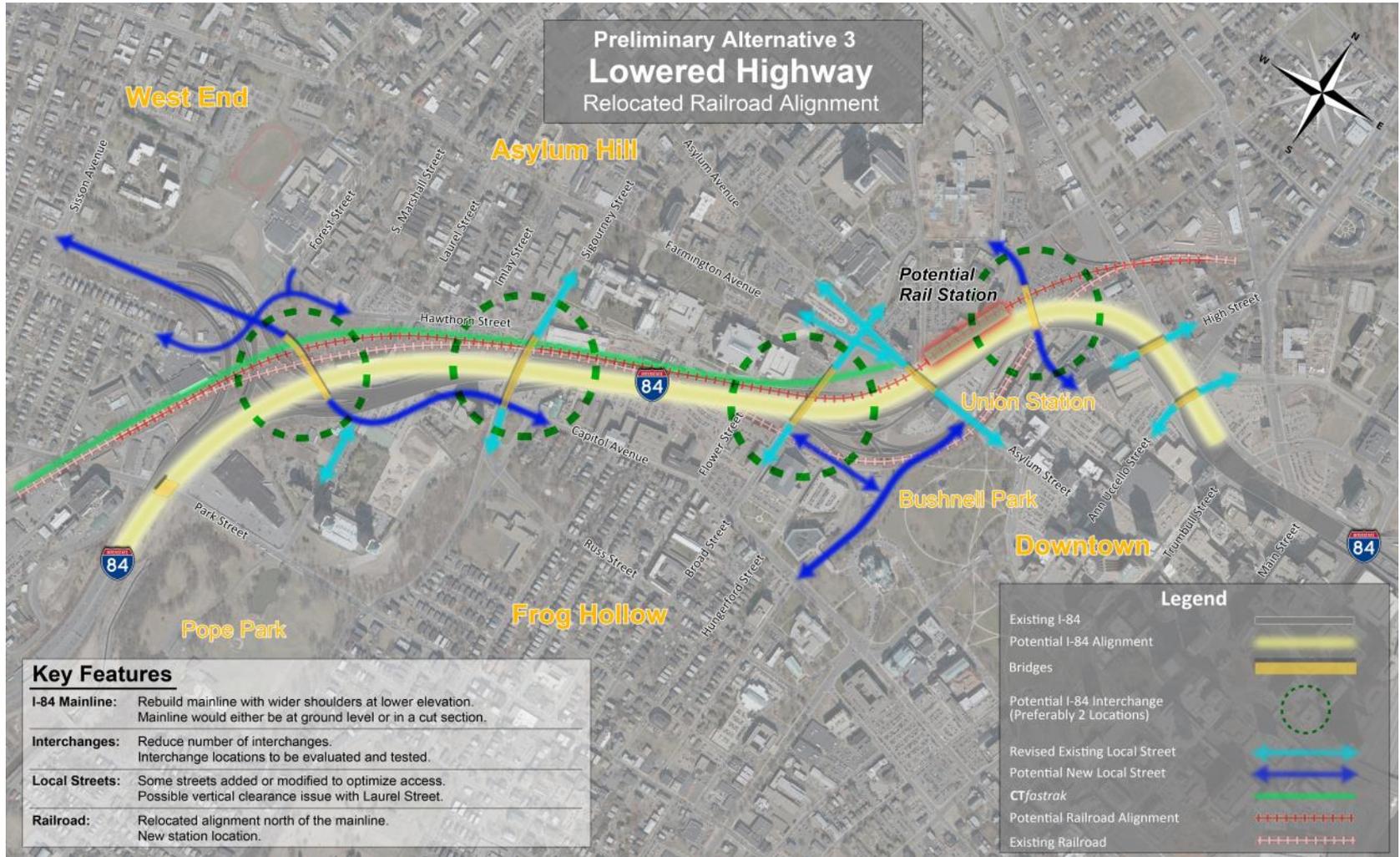
Preliminary Alternative 3 – Lowered Highway Relocated Railroad Alignment

Key Features

- I-84 Mainline:** Rebuild mainline with wider shoulders at lower elevation
Mainline would either be at ground level or in a cut section
- Interchanges:** Reduce number of interchanges
Interchange locations to be evaluated and tested
- Local Streets:** Some streets added or modified to optimize access
Possible vertical clearance issue with Laurel Street
- Railroad:** Relocated alignment north of mainline
New station location



Preliminary Alternative 3





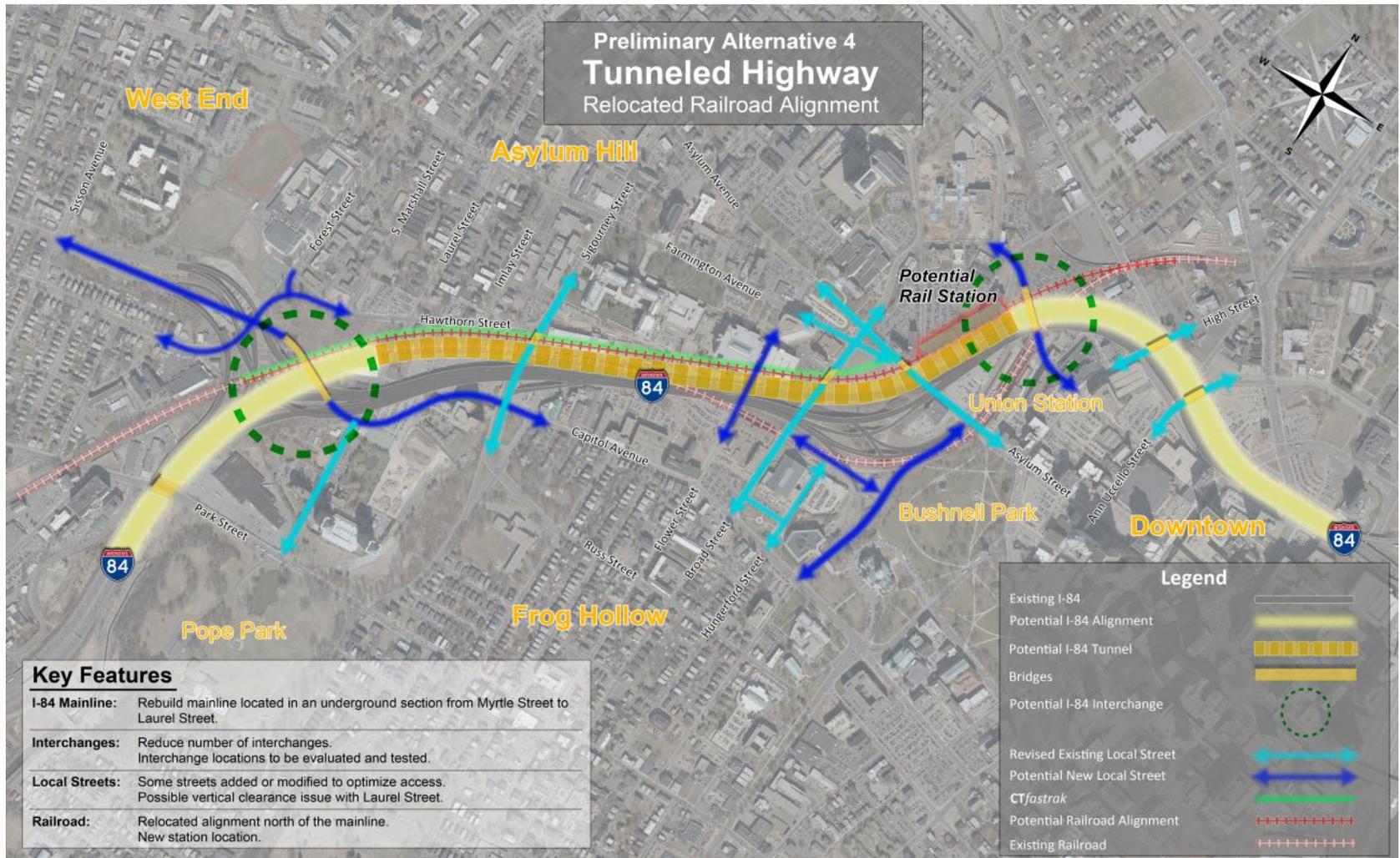
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Preliminary Alternative 4 – Tunneled Highway Relocated Railroad Alignment

Key Features

- I-84 Mainline:** Rebuild mainline in an underground section from Myrtle Street to Laurel Street
- Interchanges:** Reduce number of interchanges
Interchange locations to be evaluated and tested
- Local Streets:** Some streets added or modified to optimize access
Possible vertical clearance issue with Laurel Street
- Railroad:** Relocated alignment north of mainline
New station location

Preliminary Alternative 4





Rail Alternatives Coordination





Next Steps in Alternatives Analysis

1. Get more specific
 1. Interchange locations
 2. Lanes/shoulders
 3. Local streets
2. Evaluation of alternatives
 1. Traffic?
 2. Impacts?
 3. Public input?
3. All reasonable alternatives will advance through the NEPA/CEPA process



No Bypass Alternative

- We continue to get questions about a bypass
- We consistently respond with the following message:
 - The main reason for this project is the deteriorating condition of the I-84 bridges. This is our top priority.
 - Traffic analysis shows that the majority of peak hour I-84 trips begin or end in Hartford.
 - Strong opposition to a new road in 1970s. Unlikely to be less opposition today.



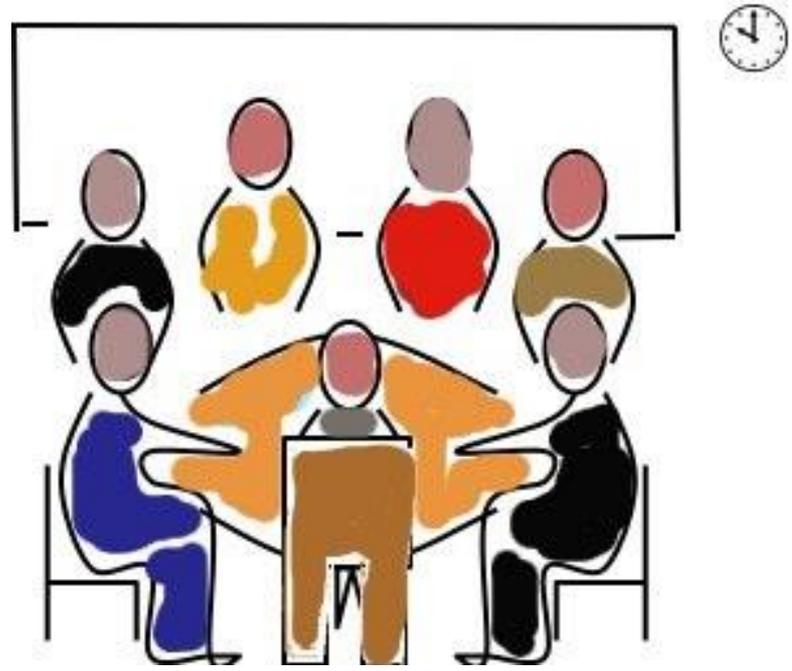
Cost Range

| Preliminary Alternative (PA) | Base | Low risk | High risk |
|------------------------------|-------------------------------|----------|-----------|
| | -----billions of dollars----- | | |
| PA 1: No Build Alternative | \$ 1.6 | \$ 1.9 | \$ 2.3 |
| PA 2: Elevated Highway | \$ 3.5 | \$ 4.3 | \$ 5.4 |
| PA 3: Lowered Highway | \$ 3.0 | \$ 3.8 | \$ 4.6 |
| PA 4: Tunneled Highway | \$ 6.5 | \$ 8.3 | \$ 10.4 |



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Working Groups





New Working Groups

- Two new working groups formed
 - Traffic and parking
 - Bicycle/pedestrian/transit
 - Urban design (coming soon!)
- Purpose/mission?
- When did they meet?
- What happened?



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Next Steps





Next Steps

- Get your input
- Refine alternatives
- Revise how we show/present alternatives



Thank You!

We deeply appreciate your time and your commitment to helping us reach the best possible solution for the State, the region and the City.

-Your I-84 Hartford Project Team