



I-84 HARTFORD PROJECT

I-84 Hartford Project **Open Planning Studio #12**

April 20, 2017





Meeting Agenda

1. I-84 Hartford Project alternatives update
2. Multimodal station area planning
3. I-84 / I-91 Interchange Study coordination

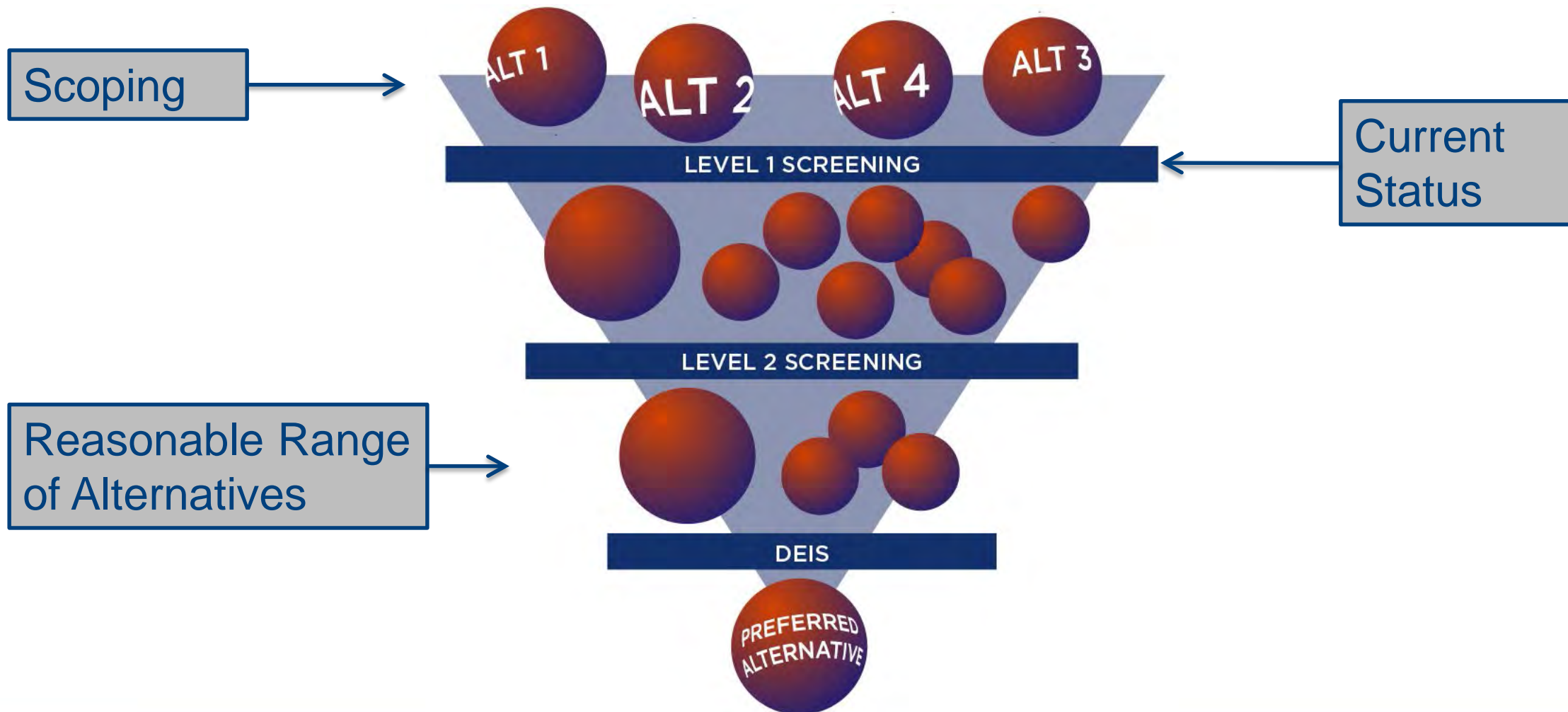


I-84 Hartford Project Alternatives Update





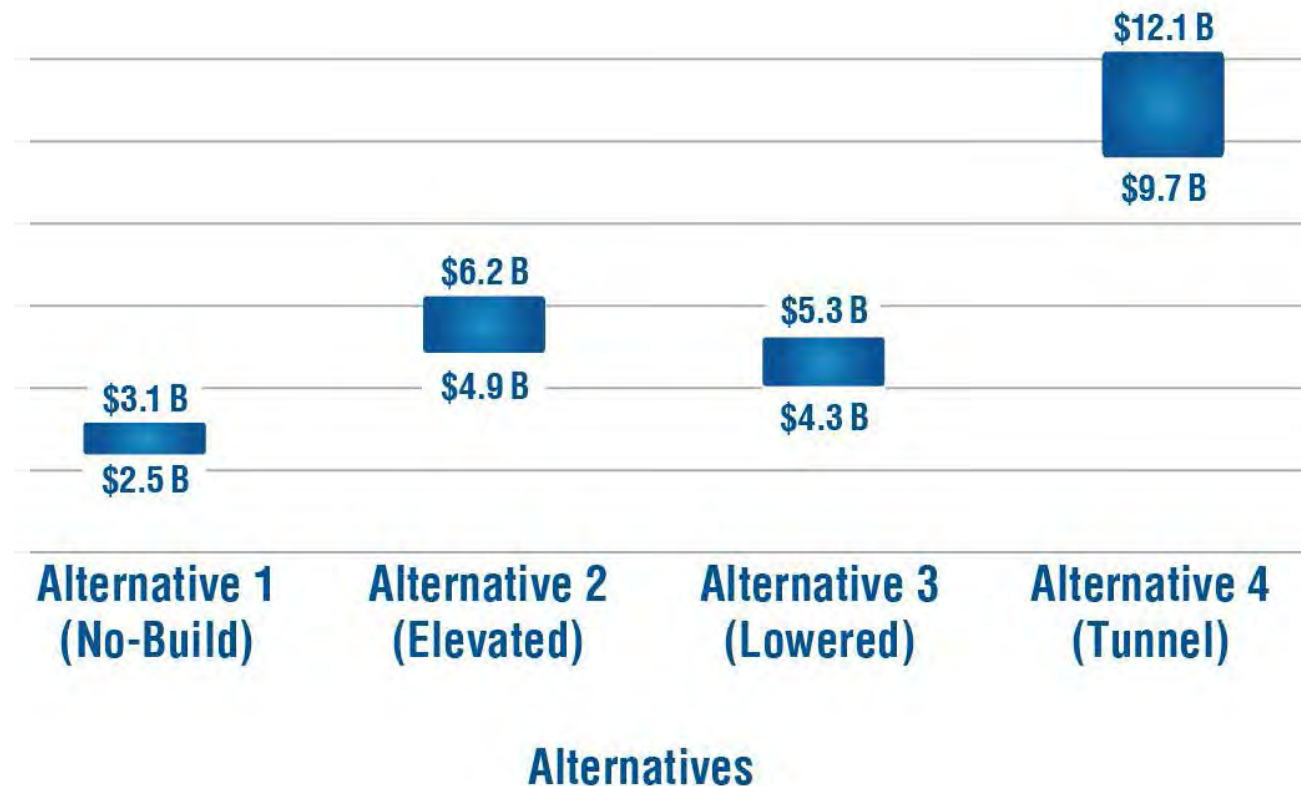
Alternatives Screening





Project Cost Estimates

- September 2015
 - Based on conceptual ideas
 - Risk workshop
- Early 2017
 - Design of Alt's progressed
 - Risk workshop
 - Cost range for Lowered Highway is unchanged





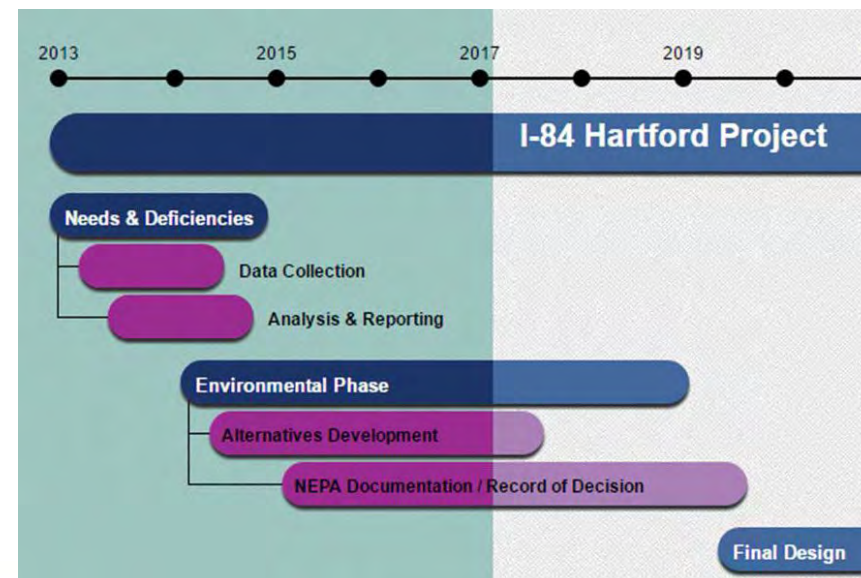
On-going Work

- Continue to refine the Lowered Highway Alternative
 - East end interchange options
 - Stage construction scenarios
- Multimodal station planning
- Environmental documentation process



Environmental Review Process

- On-going technical analysis
- Draft EIS out for public review, Summer 2018
- Public Hearing, end of 2018
- Final EIS, Summer 2019
- Record of Decision, Fall 2019





Draft EIS Format

- Purpose and Need
- Alternatives
- Agency Coordination and Public Outreach
- Existing Conditions, Impacts and Mitigation
- Indirect and Cumulative Impacts
- Construction Impacts
- Appendices





Multimodal Station Area Planning



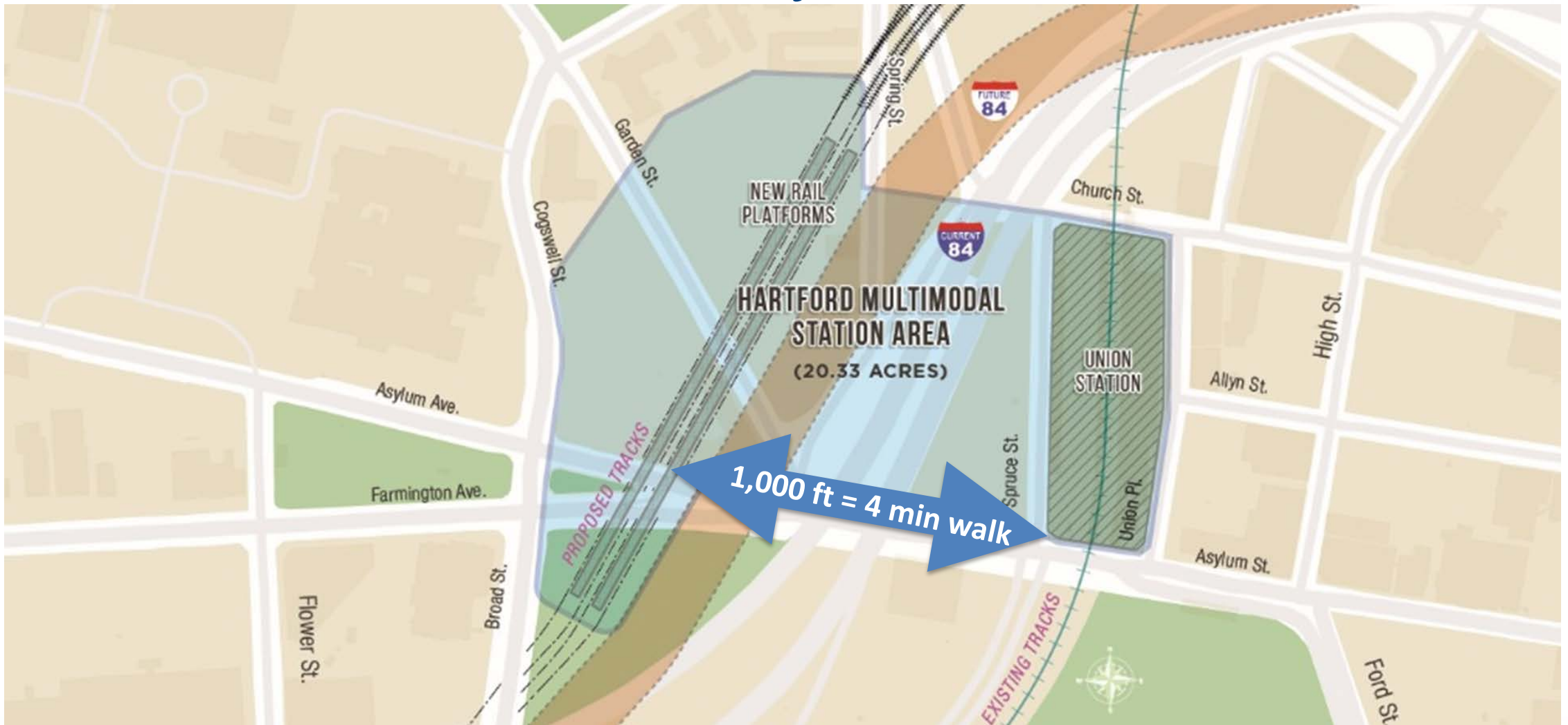


Railroad Corridor - ~~Proposed~~ Existing





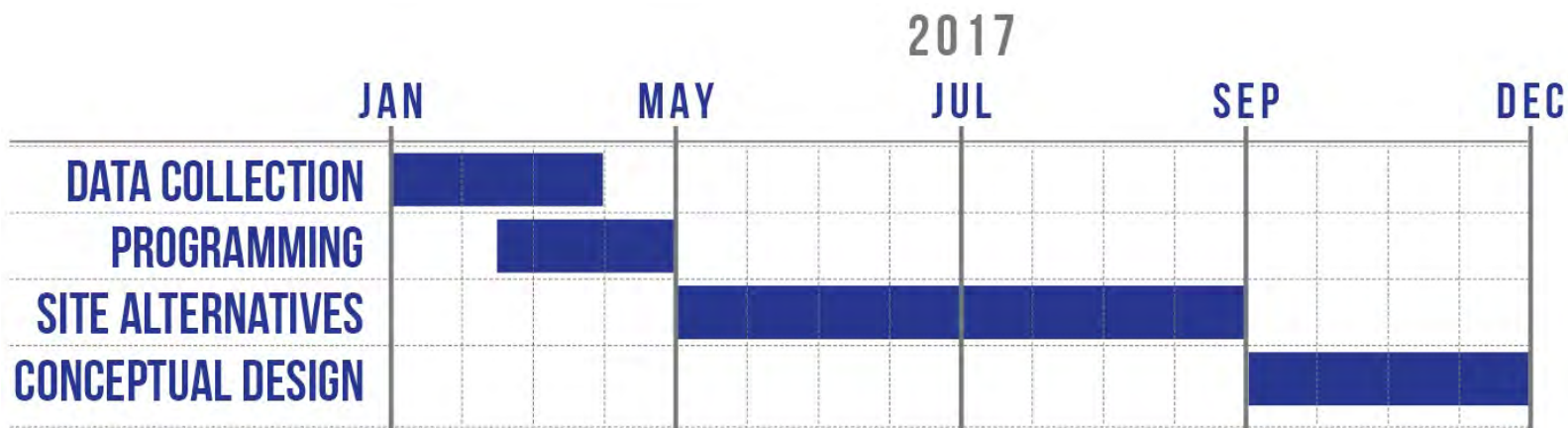
Multimodal Station Study Area





Hartford Multimodal Station Planning and Design

- Kicked off in January 2017
- 12 month effort
 - Define program
 - Develop site layout alternatives
 - Identify preferred site layout
 - Prepare conceptual design plans (15%)
- Status
 - Data collection is ongoing
 - Visioning / programming exercise is starting





I-84 HARTFORD PROJECT

Different Modes and Users





Programming the Hartford Multimodal Station

Six-step process

1. Establish goals and objectives
2. Research station design requirements
3. Gather / verify relevant information
4. Identify strategies, constraints, and opportunities
5. Determine quantitative requirements
6. Summarize the program





Gather / Verify Relevant Information

- What is the passenger load for each mode?
- What is transit equipment load / need?
- What are the customer service requirements?
- What are “back-of-house” needs?
- What amenities will be provided?
- What codes will drive programming decisions?
- What are access issues?



Known Program Elements

- Projected ridership*
 - Express rail (297,200 annual riders)
 - Corridor rail (1,032,600 annual riders)
 - Regional rail (46,800 annual riders)
- Platform size
 - Two platforms planned
 - 1,000' long, 24' wide, 4' above top of rail
- Parking displacement
 - 197 spaces in Union Station Spruce Street lot
 - Other parking impacts from I-84 Hartford Project (3,675 - 4,390 spaces)

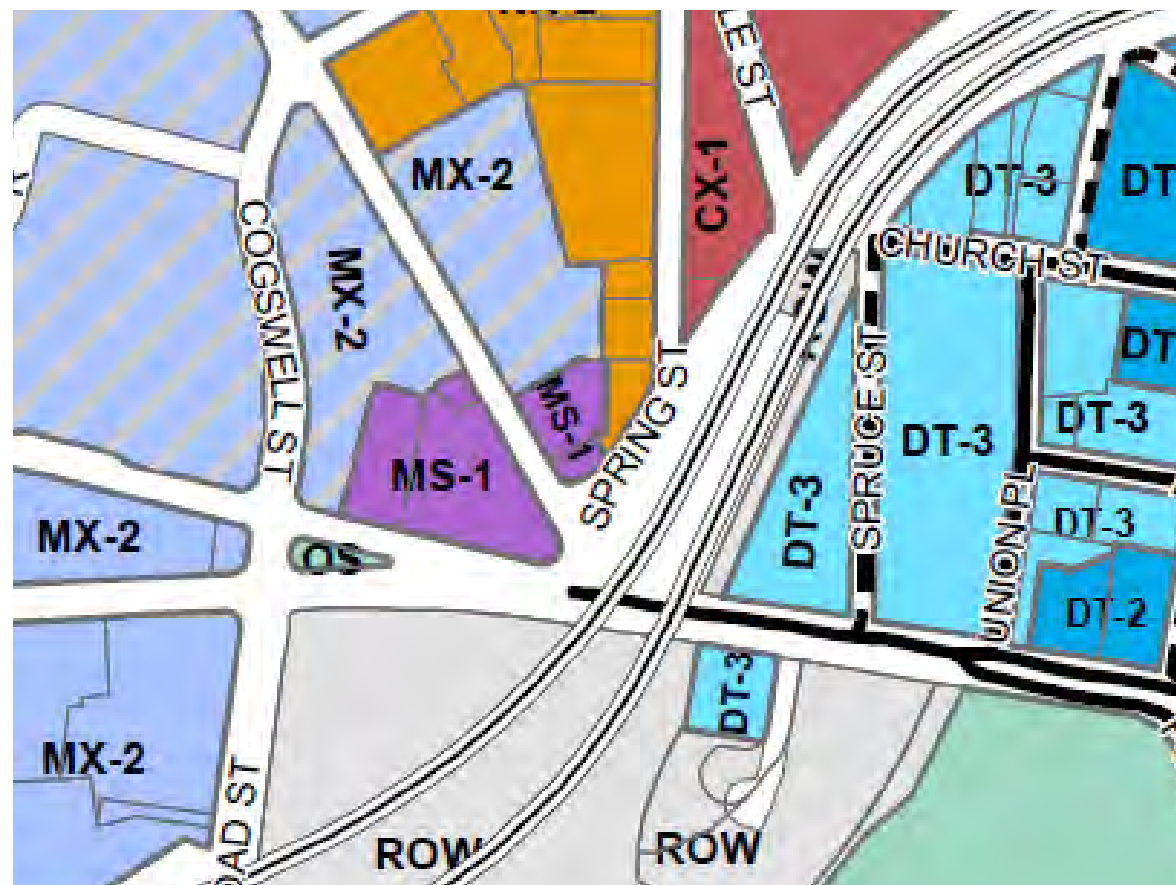


*Source= NEC FEIS

Known Program Elements

- Zoning

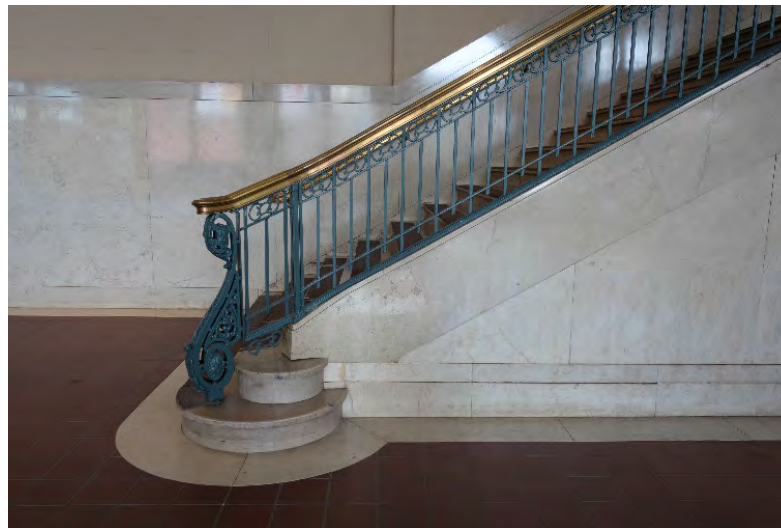
- New form based code allows for mixed use development
 - Downtown districts - DT-2 / DT-3
 - Main street districts - MS-1 / MS-2
 - Commercial industrial mix districts - CX-1





Known Program Elements

- Union Station
 - National Register of Historic Places





Transit Oriented Development Opportunities

What are the best ways to encourage development?

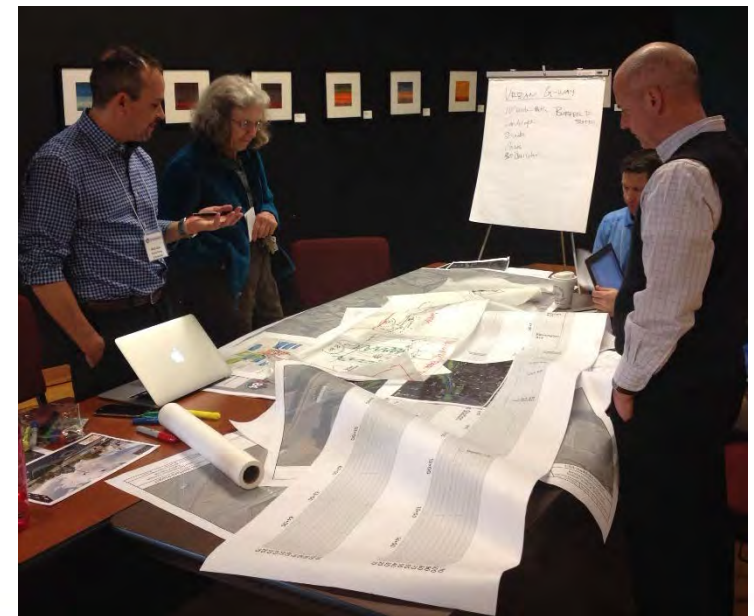
- Retail
- Restaurants
- Residential
- Office
- Lodging / hotels





Participate In Our Workshop!

- View preliminary concepts
- Take the survey
- Tell us your design goals and priorities



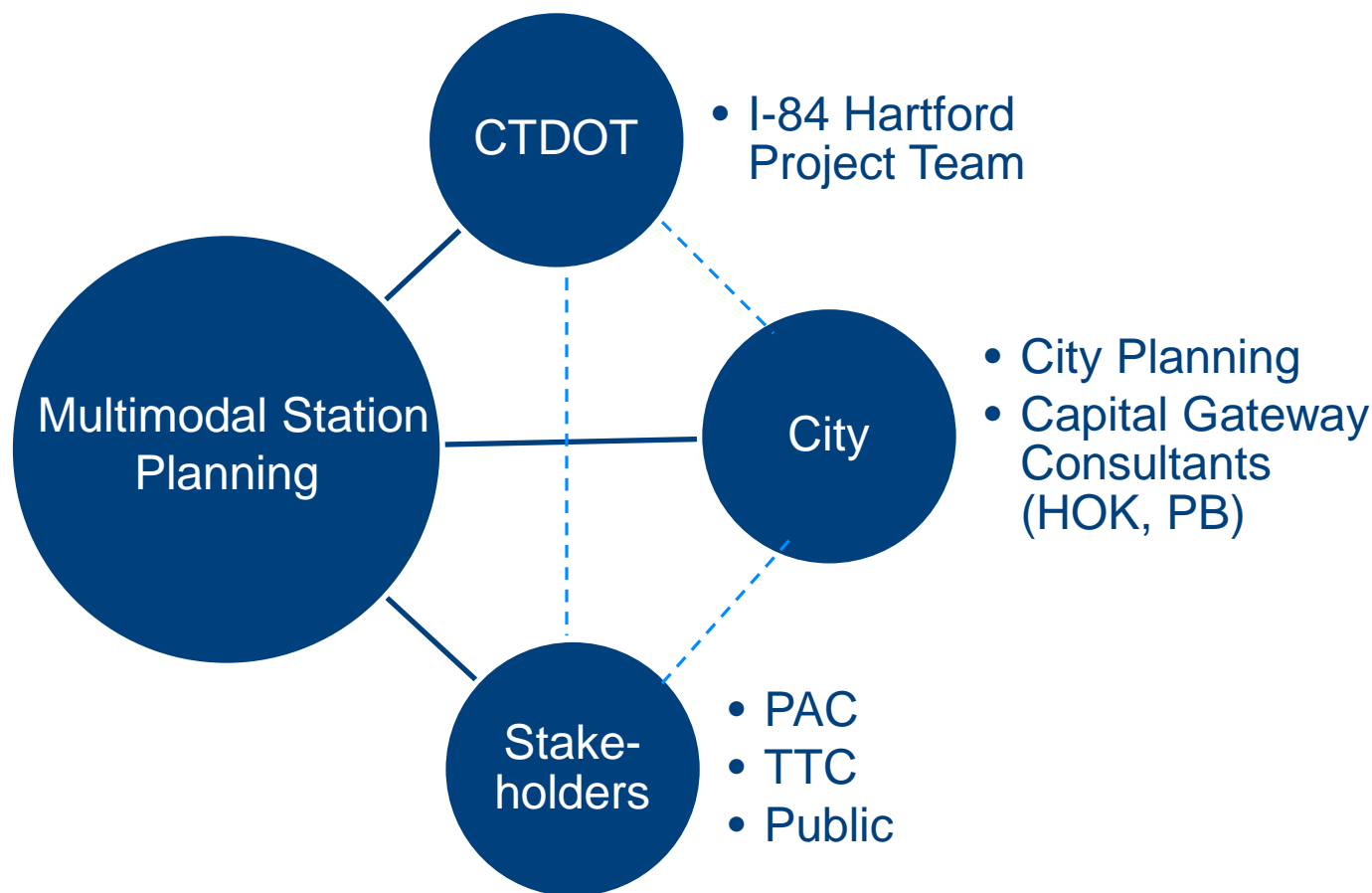


Next Steps

- Complete programming data gathering
- Conceptual site alternatives
- Preferred site concept (September)
- Transit operations discussion (October)
- 15% architectural drawings (December)



Multimodal Station Planning





Capital Gateway Master Plan

- Engaged A/E team of HOK & WSP/Parsons Brinckerhoff (PB)
- Envision a fitting new transit center for the Capital City
- Prepare a strategic station area master plan

Washington DC Union Station

HOK & PB Team



Denver Union Station

WSP | PB Experience





Capital Gateway Master Plan

- Maximize long-term economic development & city-scape opportunities
- Understand project area impacts; explore mitigation strategies



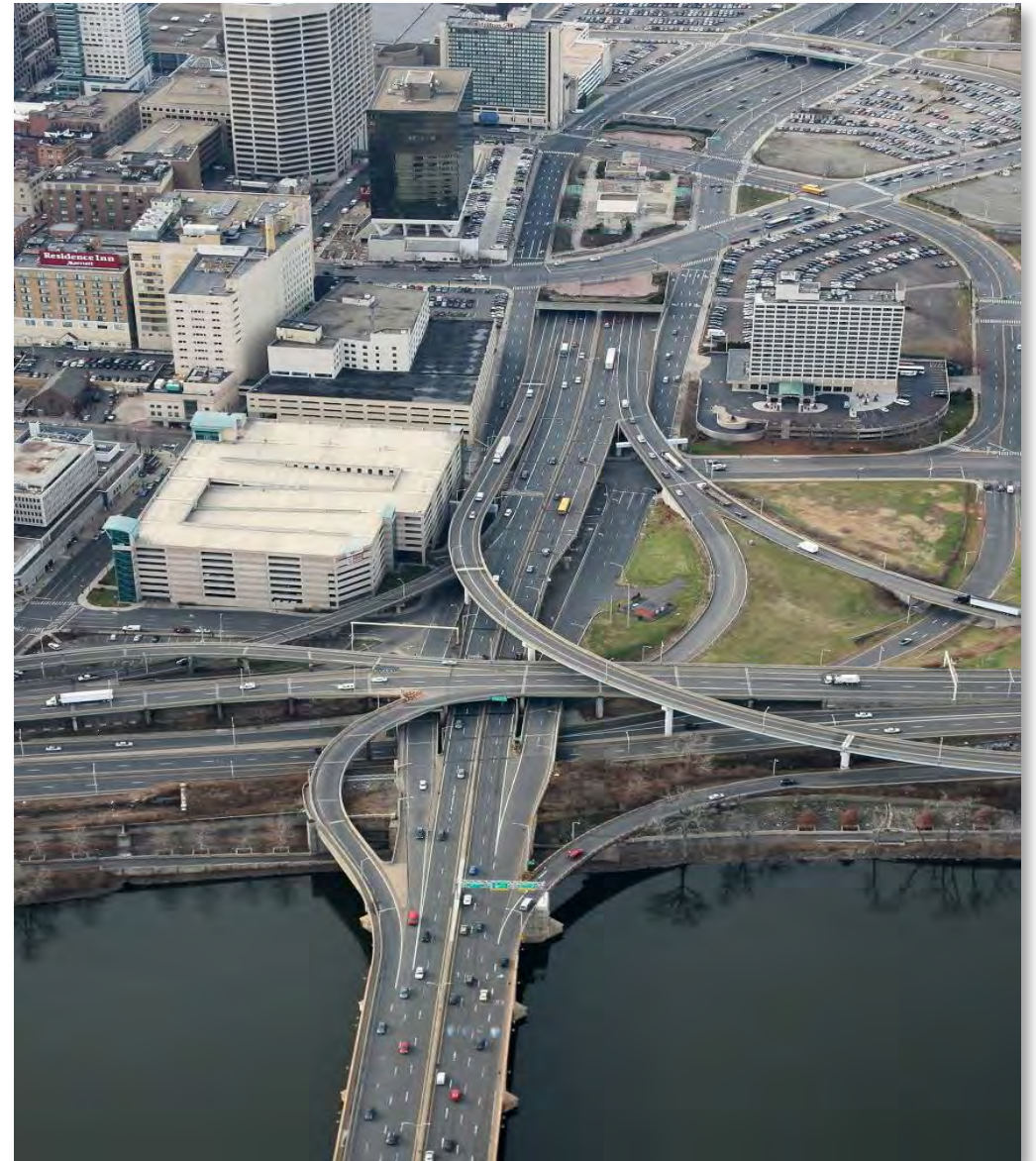


I-84 / I-91 Interchange Study



Background

- Constructed in the 1960s; modified in the late 1980s
- Serves 275,000 vehicles per day
- Physical and environmental constraints



Interchange Deficiencies

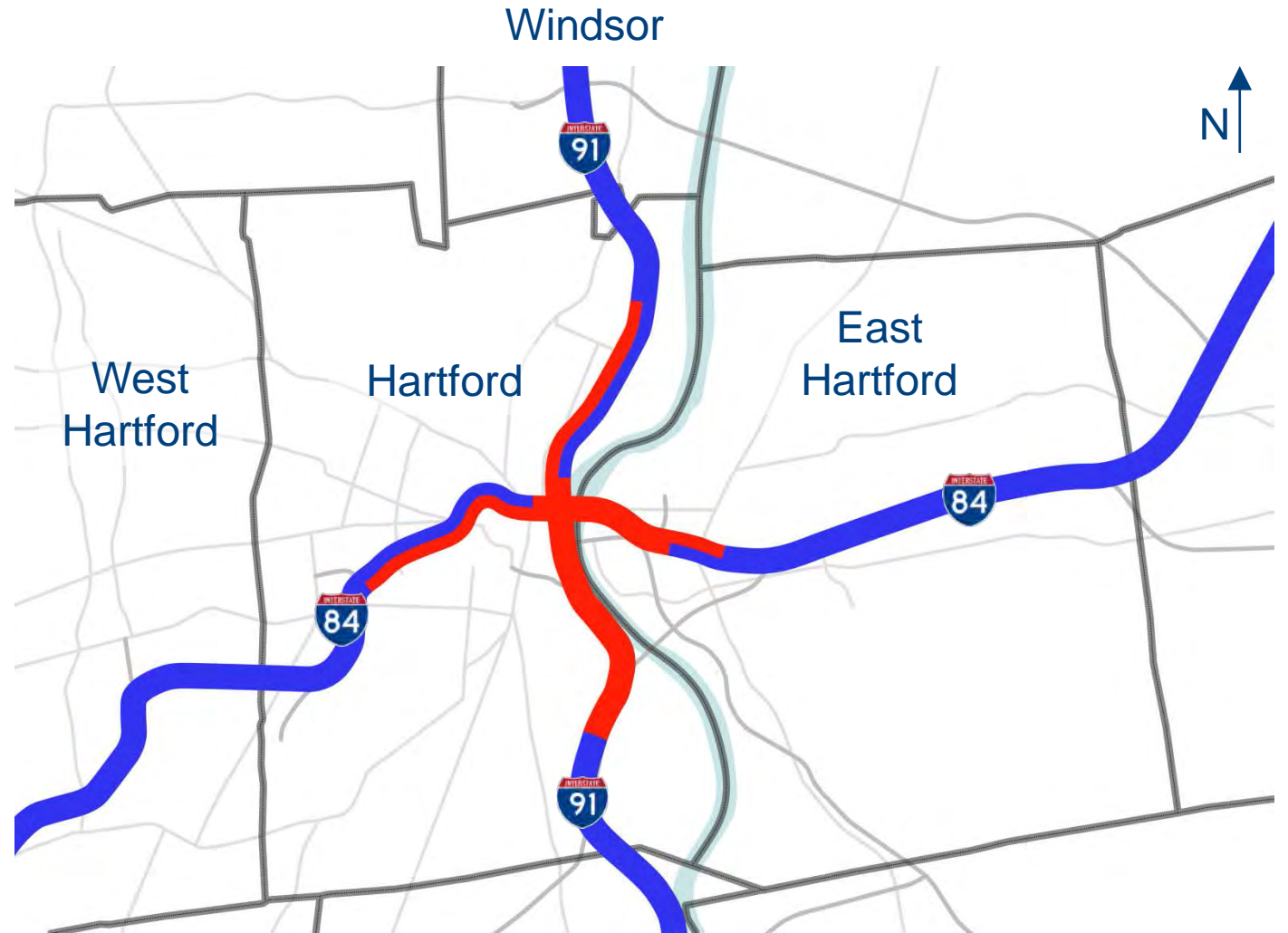
- Highway bottleneck
- Ramp capacity
- Interchange spacing

Legend:

Two through
lanes



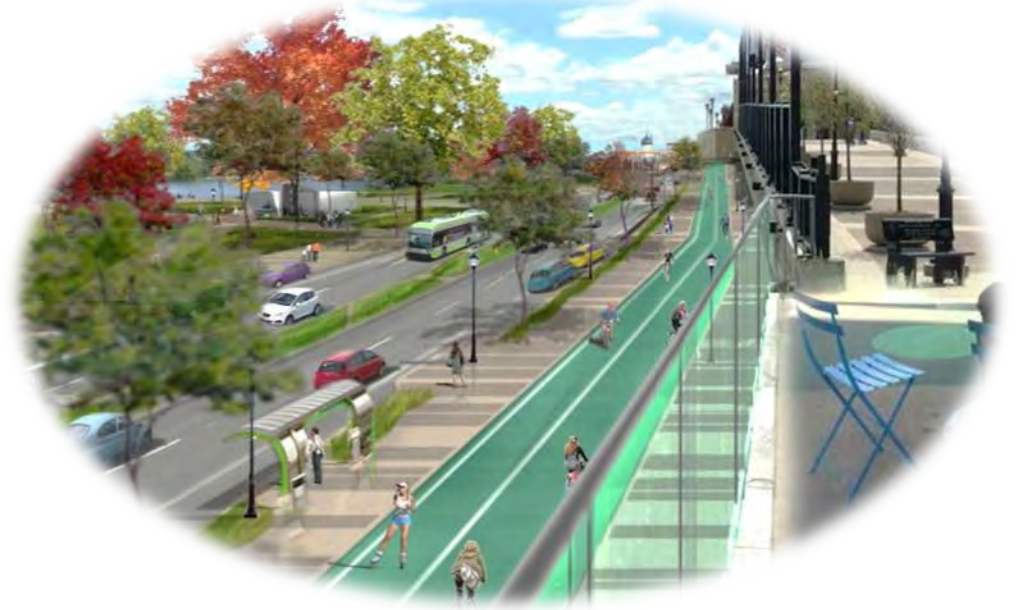
Three through
lanes



Study Approach

What is the **vision** for Hartford and East Hartford?

- Improved quality of life
- Enjoyment of the riverfront
- Recaptured land
- Development opportunities
- New public spaces
- Job creation



Study Approach

Transportation alternatives that could serve the vision:

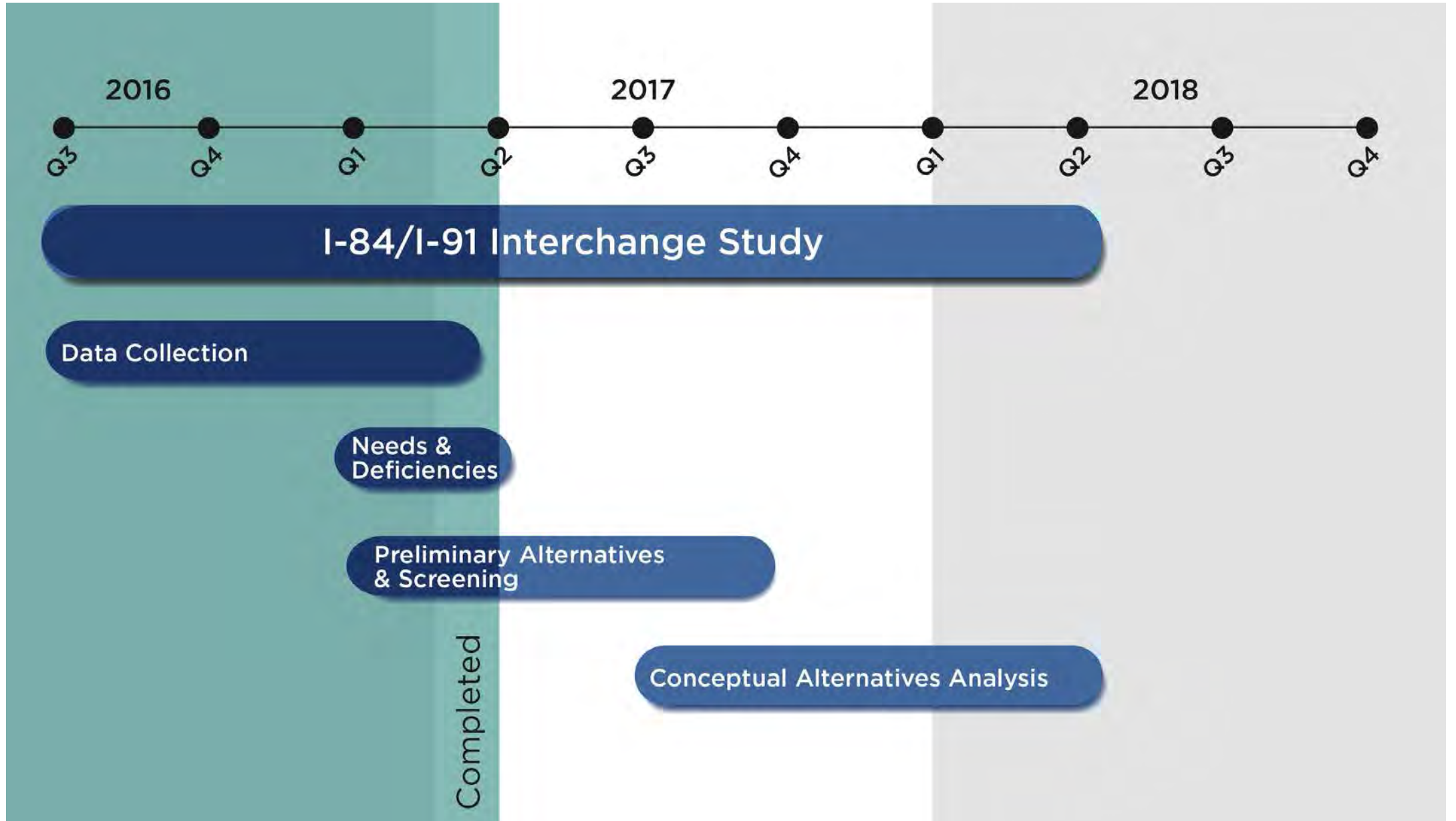
- Regional and local systems
- Highway, bus, and rail transport
- Intermodal and non-motorized options

Process / Schedule

- Estimated 18-month duration
- Three preliminary alternatives
 - Screening
- Remaining alternatives advanced to conceptual design

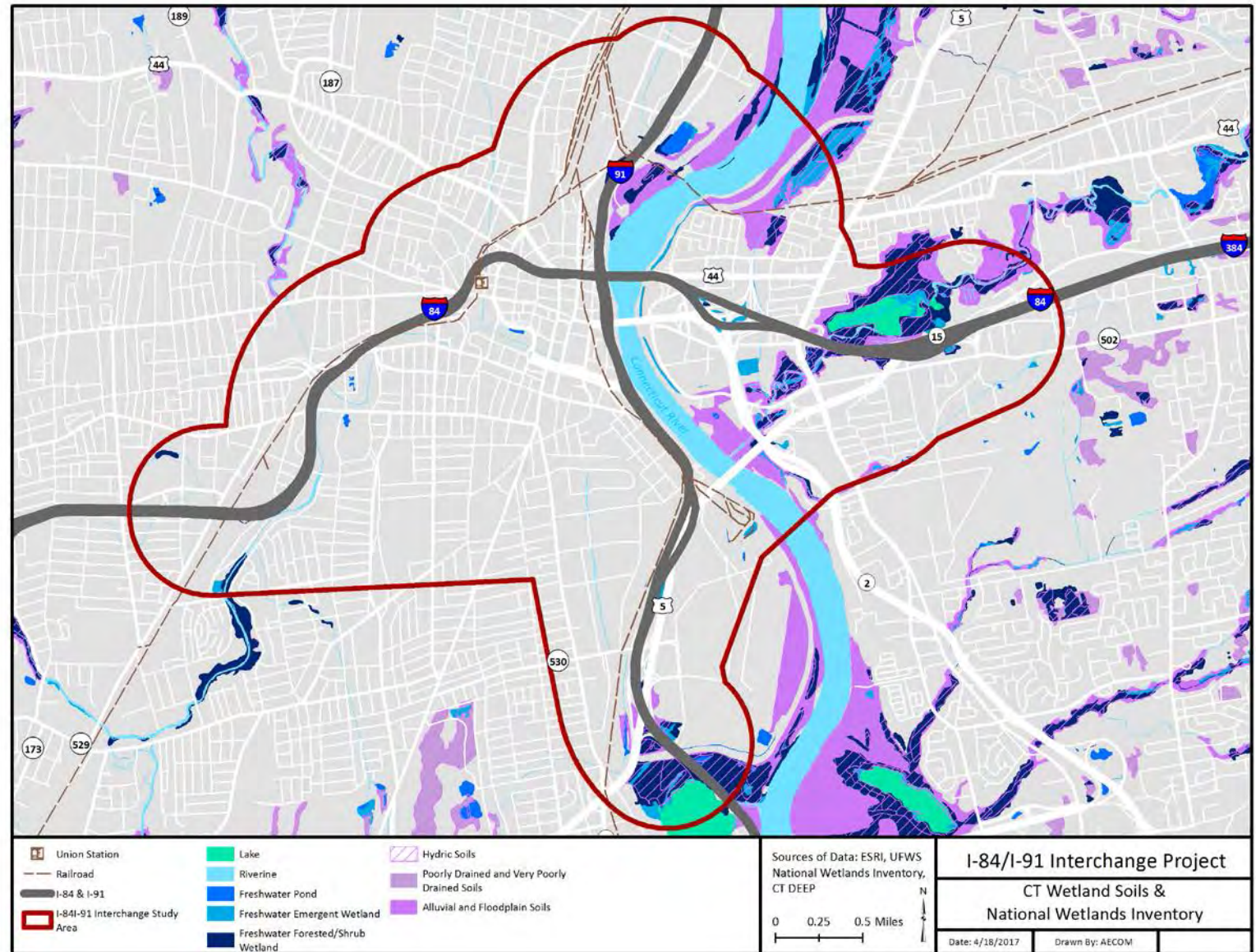


Process



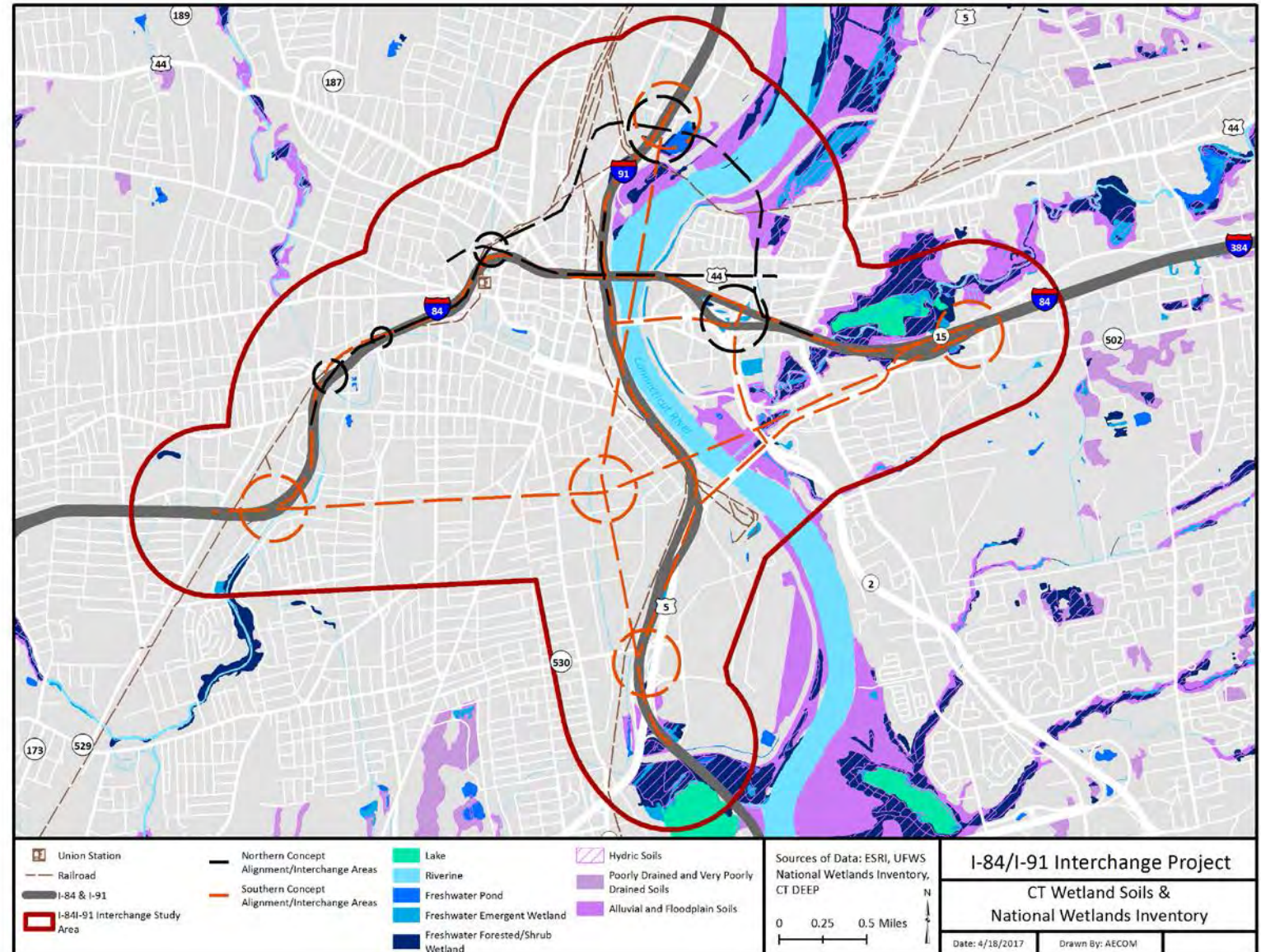
Wetlands: CT Soils / National Wetlands Inventory (NWI)

- Study area:
 - ~570 acres inland wetland soils / 390 acres hydric soils (CT DEEP)
 - ~875 acres NWI
- Connecticut and Hockanum Rivers



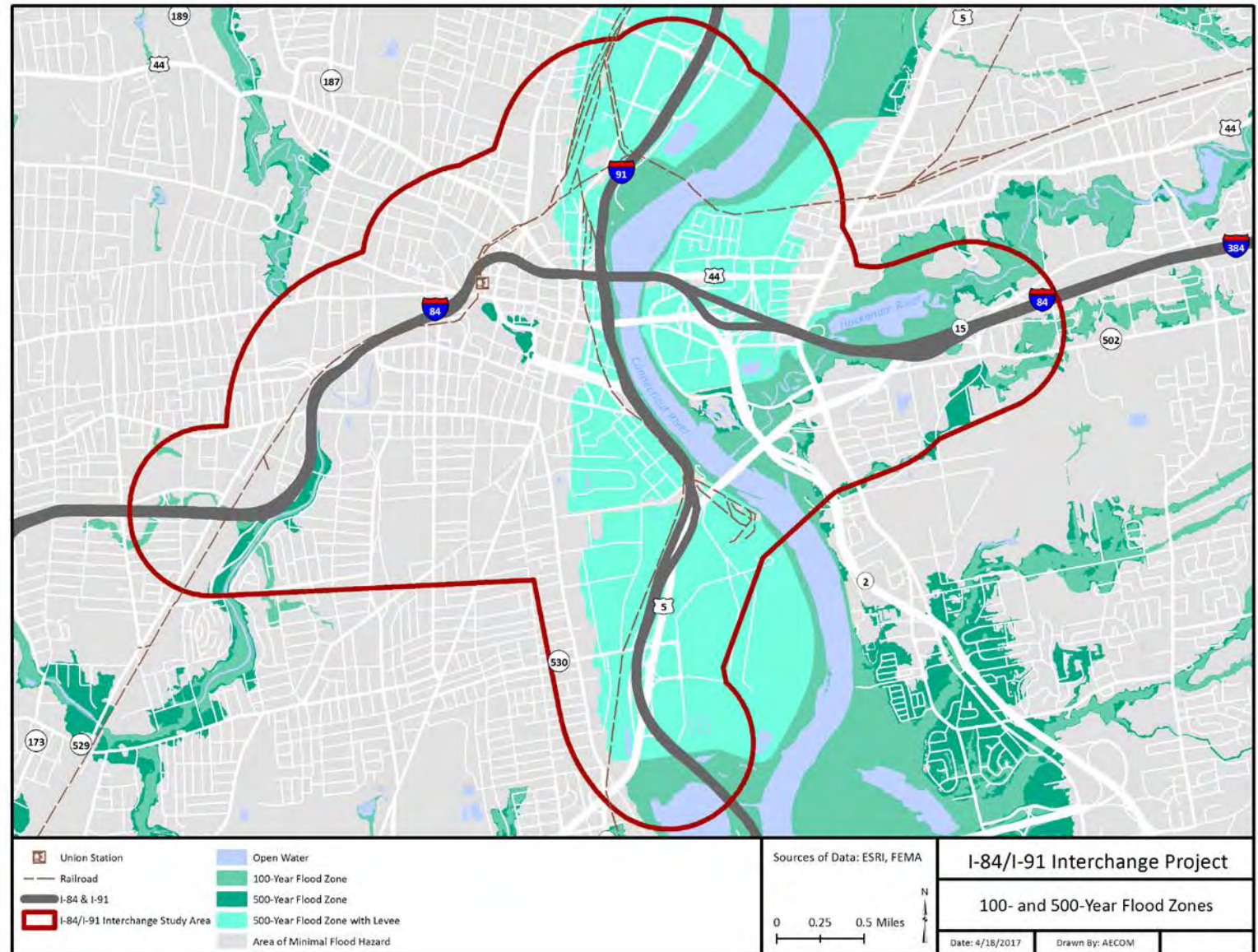
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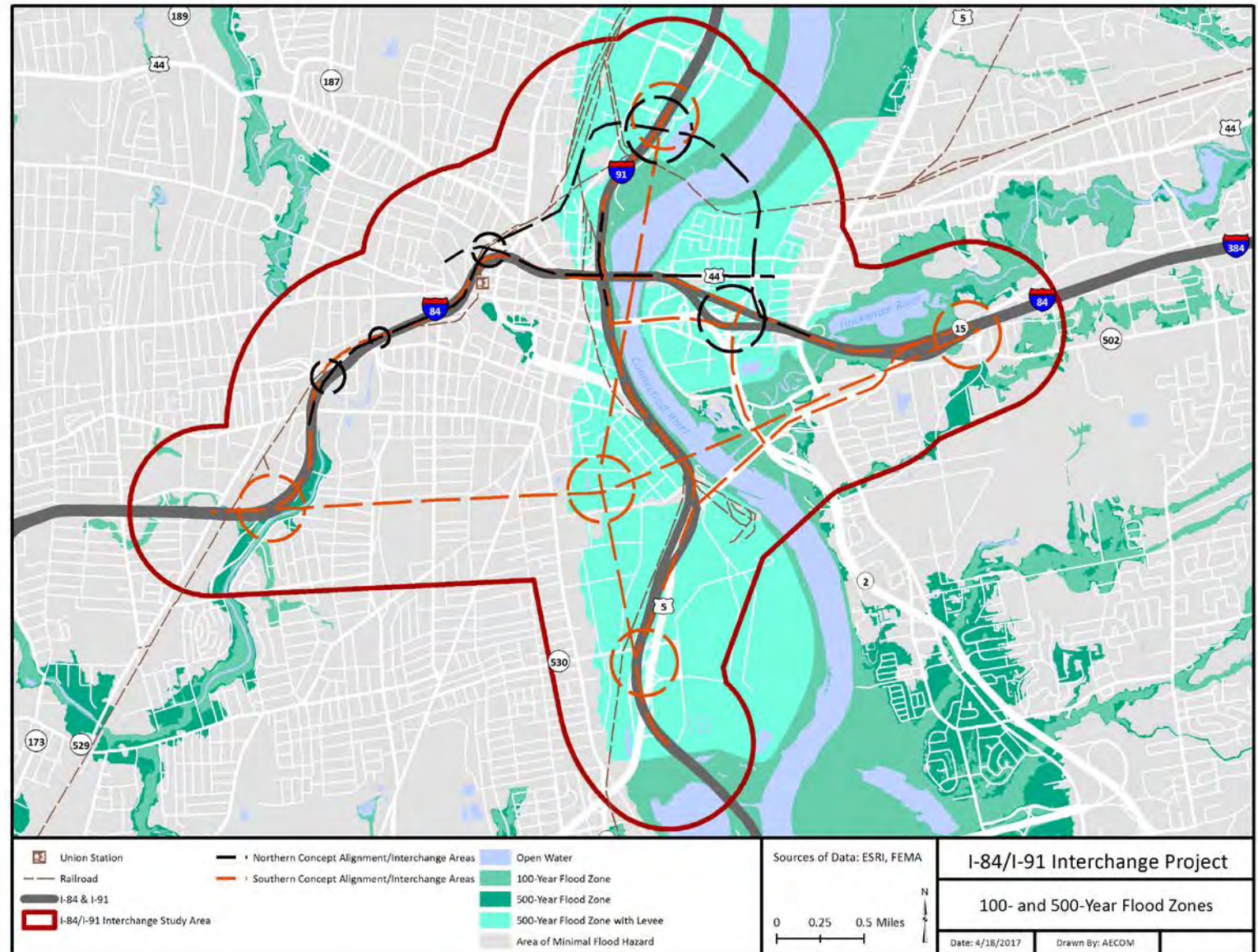
Flood Prone Areas

- Study area:
 - ~1,200 acres in 100-year flood zone
 - ~2,230 acres in 500-year flood zone; most protected by levee
- Connecticut and Hockanum Rivers



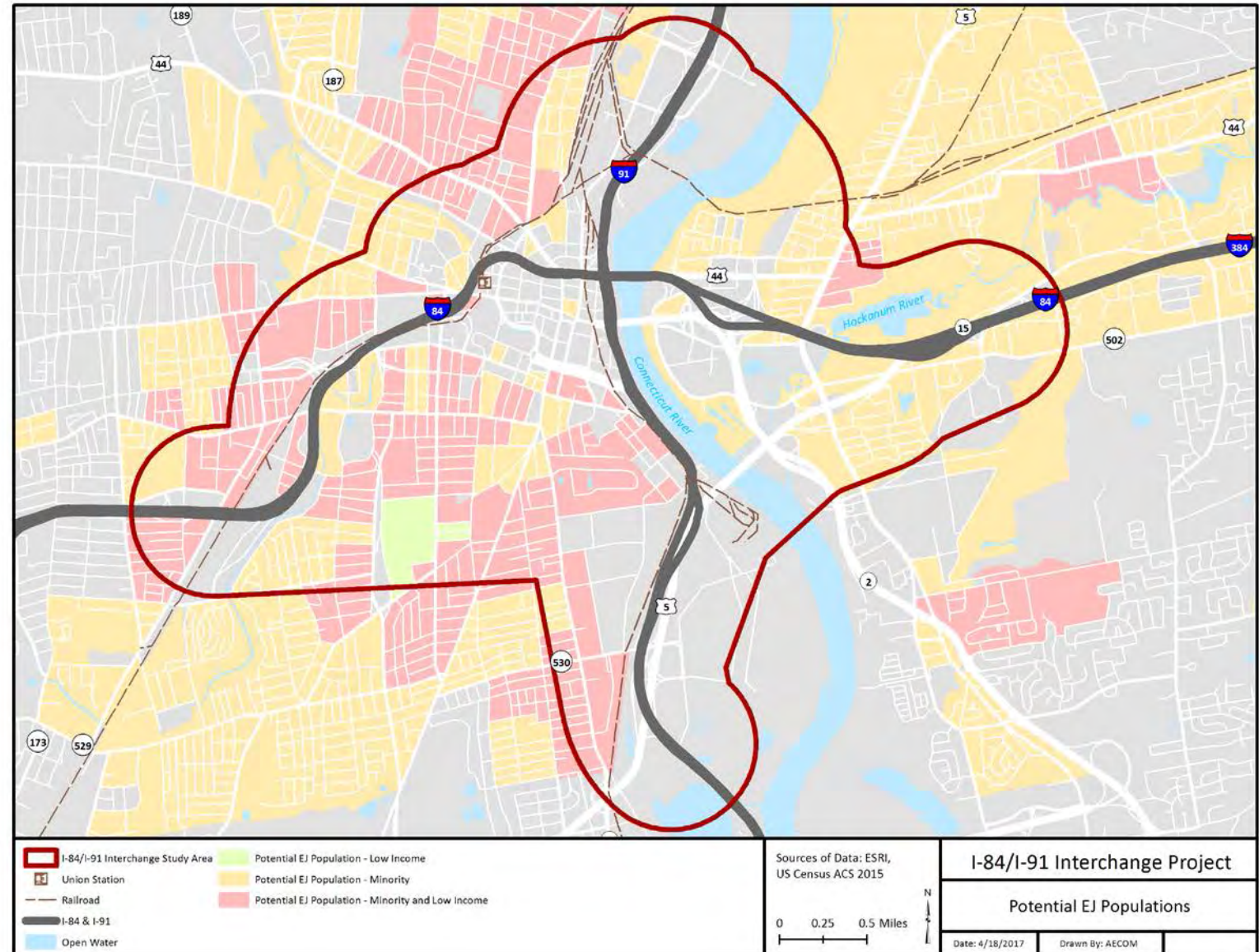
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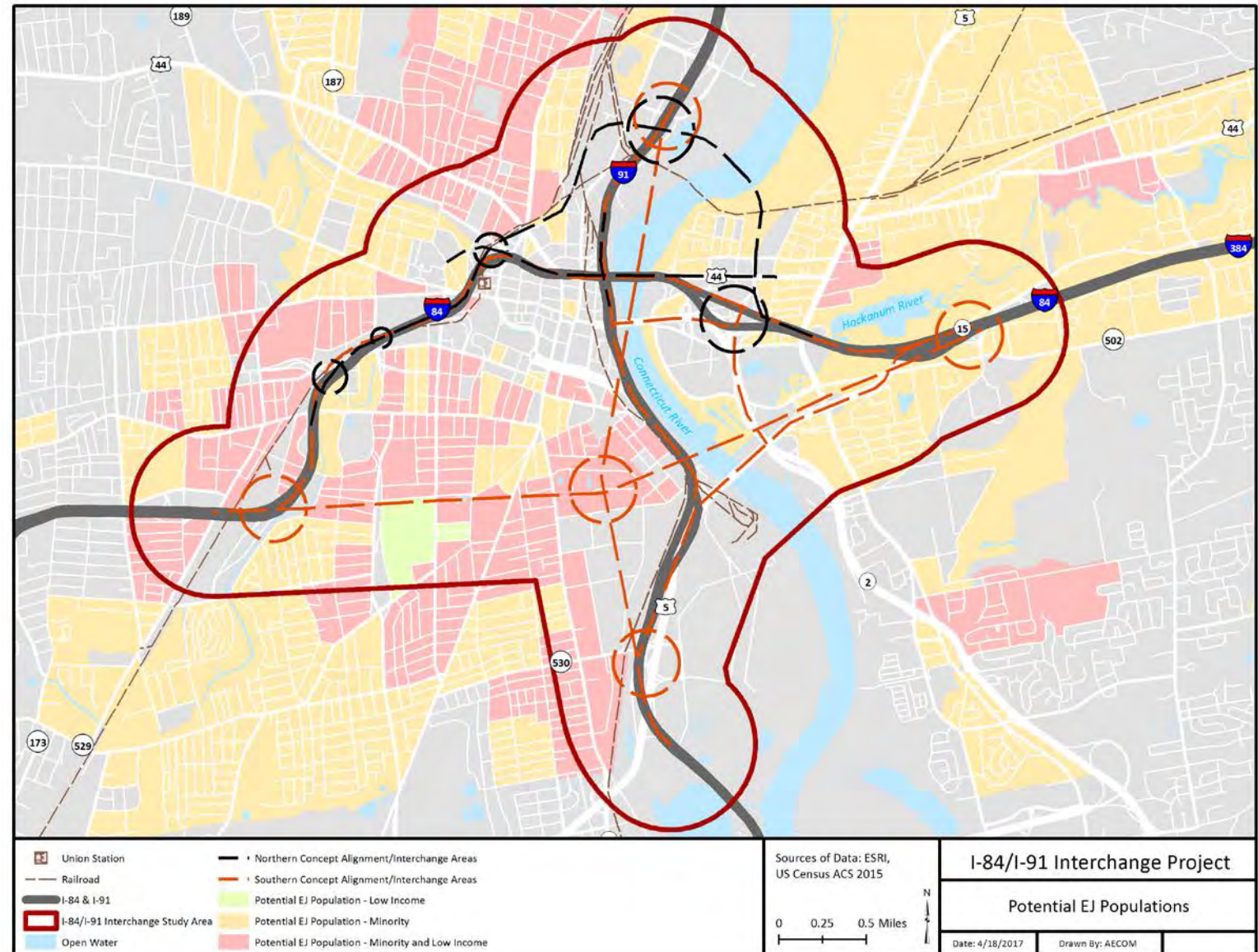
Potential EJ Population

- Minority: ~81% of population
 - Southwest of Downtown and East Hartford
- Low income: ~ 48% of population
 - Southwest of Downtown



Potential EJ Population

- Minority: ~81% of population
 - Southwest of Downtown and East Hartford
- Low income: ~ 48% of population
 - Southwest of Downtown



Study Screening Criteria

Each of the preliminary alternatives will be evaluated based on:

- Environmental impacts
- Socio and economic impacts and benefits
- Feasibility
- Mobility
- Cost

NEPA / CEPA Requirements

- NEPA EIS / CEPA EIE Required
- Potential significant impacts and permitting requirements
- Interchange project has independent utility
- Interchange project has its own Purpose and Need
- Dual NEPA / CEPA document and process

Expanding Opportunities in the Hartford Region by Rethinking the Transportation Network



Connecticut Department of Transportation

A Vision for the Future: Reshaping the Region's Core



- **Rethink transportation** systems to solve regional problems and unlock Hartford and East Hartford's potential
- **Achieve city and regional goals** for near and long-term growth
- **Spur economic development**, reinvestment, jobs, and improved quality of life
- **Reconnect Hartford and East Hartford** to the river and to each other
- **Support new public transit** and new public spaces



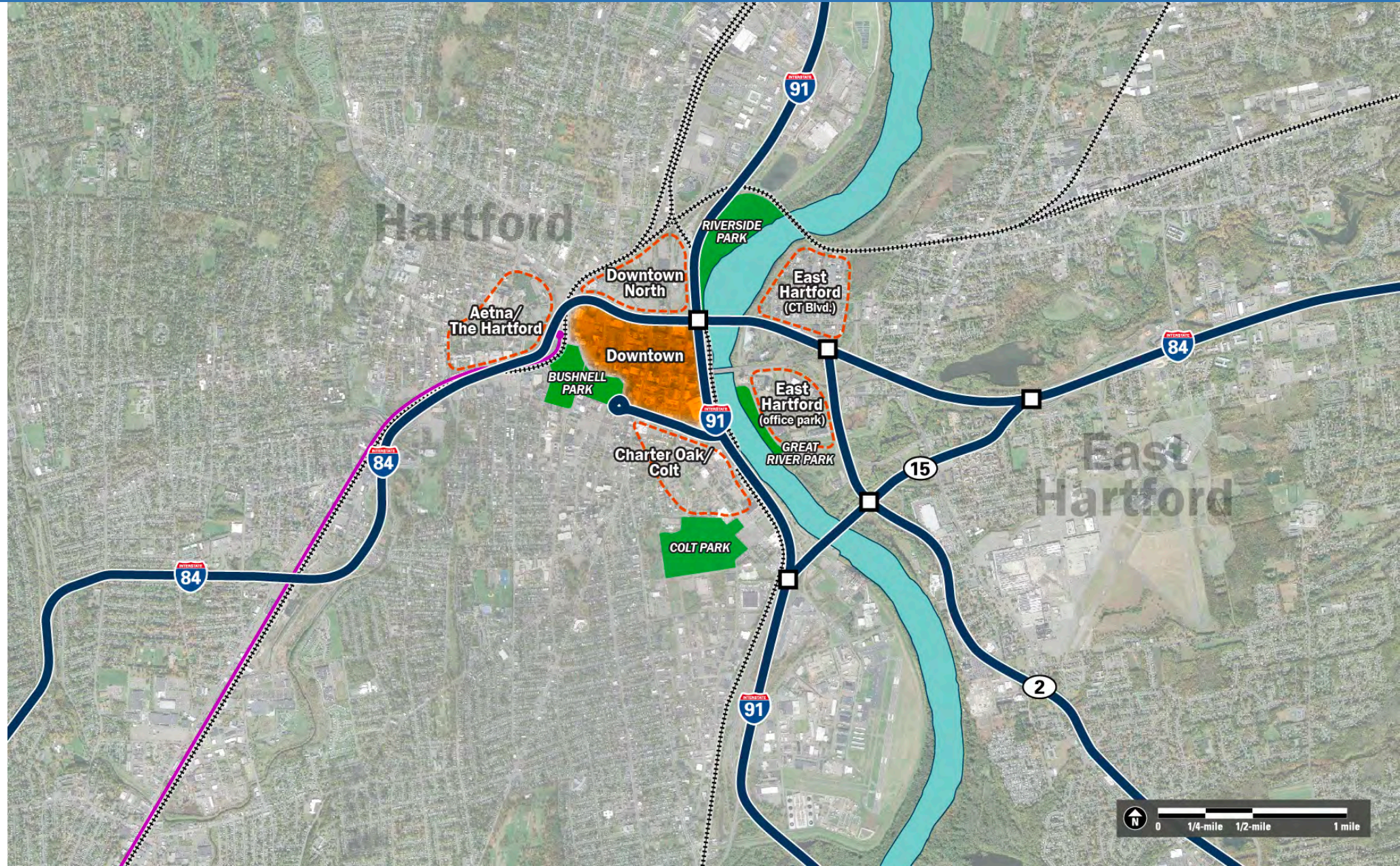
Current Condition: A Constrained and Fragmented Core



- The existing highway network is a constraint on downtown growth
- The network fragments the commercial and civic core – and limits each district's potential

LEGEND

- Highway
- Interchange
- Green space
- Downtown core
- - - Surrounding districts
- Rail
- CTfastrak



Challenges of Existing Infrastructure

I-84 VIADUCT

Aging infrastructure dividing the downtown core

I-84 DOWNTOWN

Barrier to economic growth

84/91 INTERCHANGE

Congestion generator at city gateway

I-91, RAIL CORRIDOR, AND FLOOD CONTROL

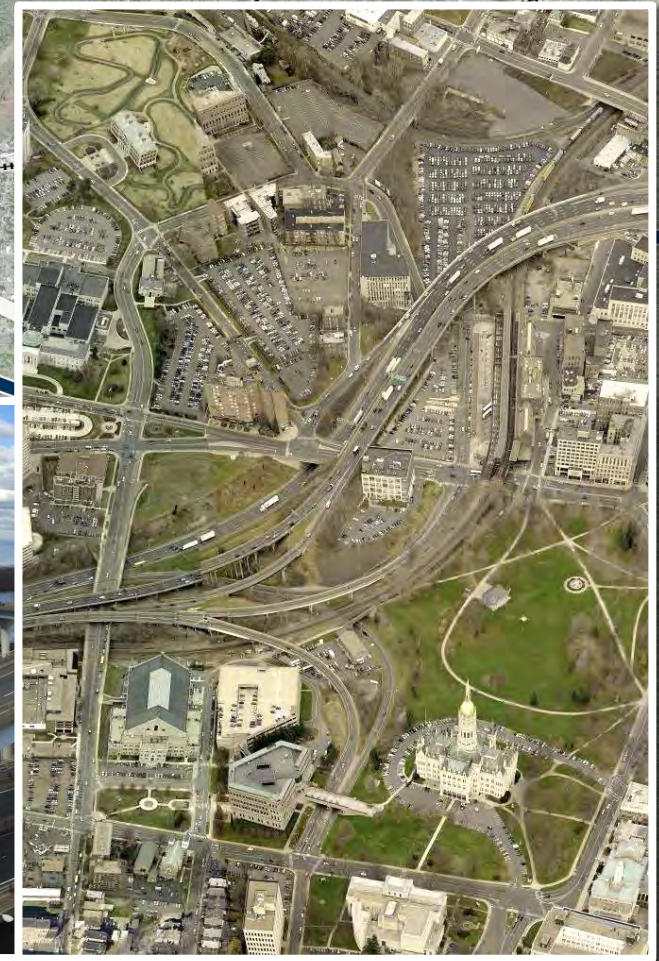
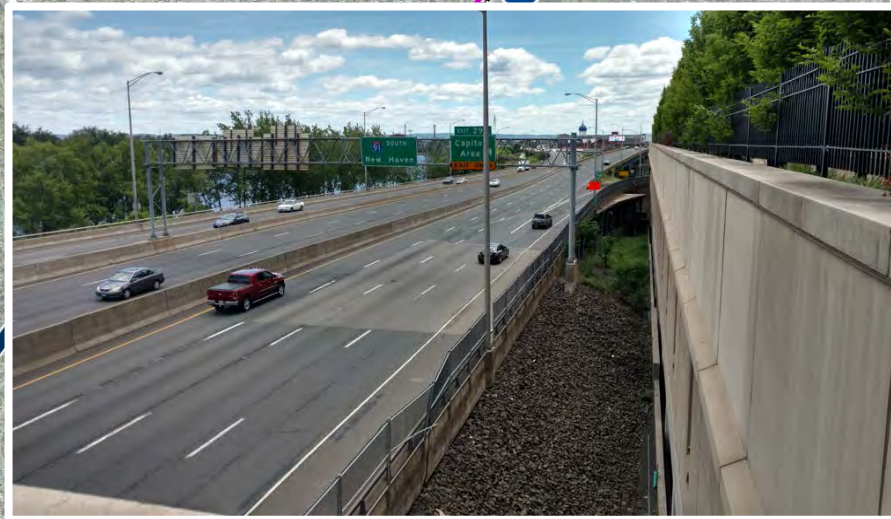
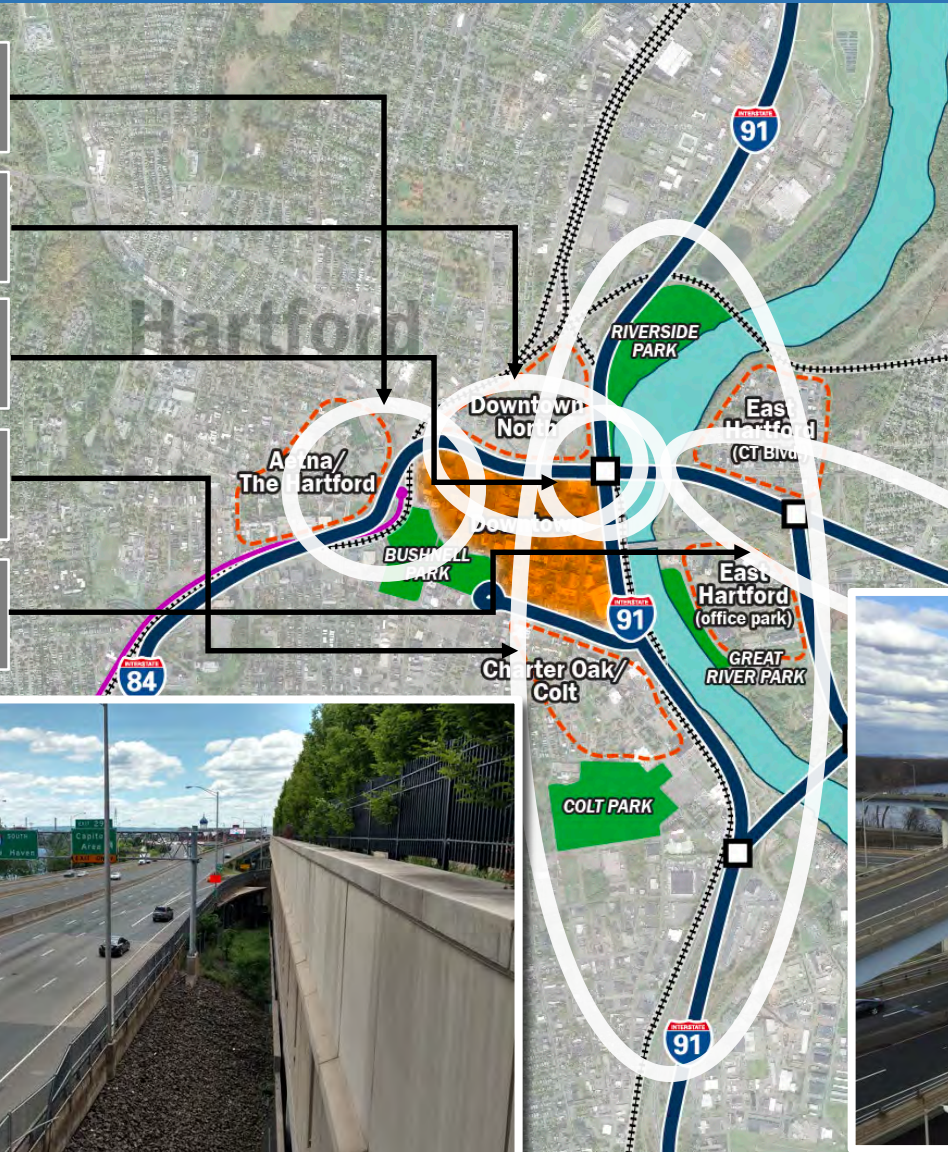
Barriers between downtown and the river

I-84 EAST HARTFORD

Highway infrastructure takes valuable land

LEGEND

- Highway
- Interchange
- Green space
- Downtown core
- Surrounding districts
- Rail
- CTfastrak

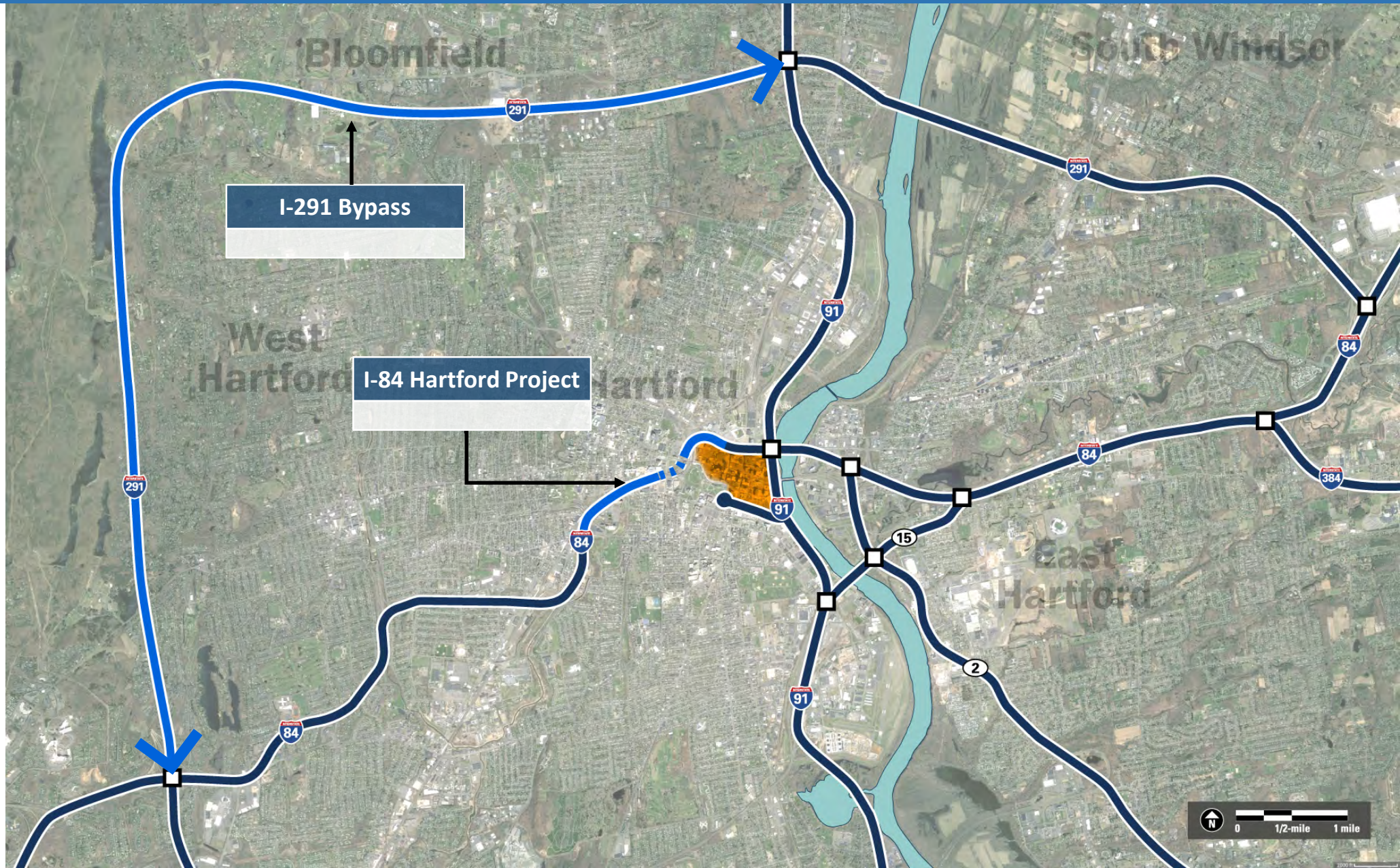


Previous Concept: I-291 Bypass (not implemented)

- **Potential bypass** to reduce the size of I-84 through Hartford
- **Only 5-10% of trips** would have been taken out of city center
- **Opposed** during planning and ultimately shelved

LEGEND

- Highway
- Interchange
- ⋯ Existing highway alignment
- Highway realignment
- ▬ Tunnel/cap



Highway Scenarios Currently Being Considered

Options for I-84 and I-91

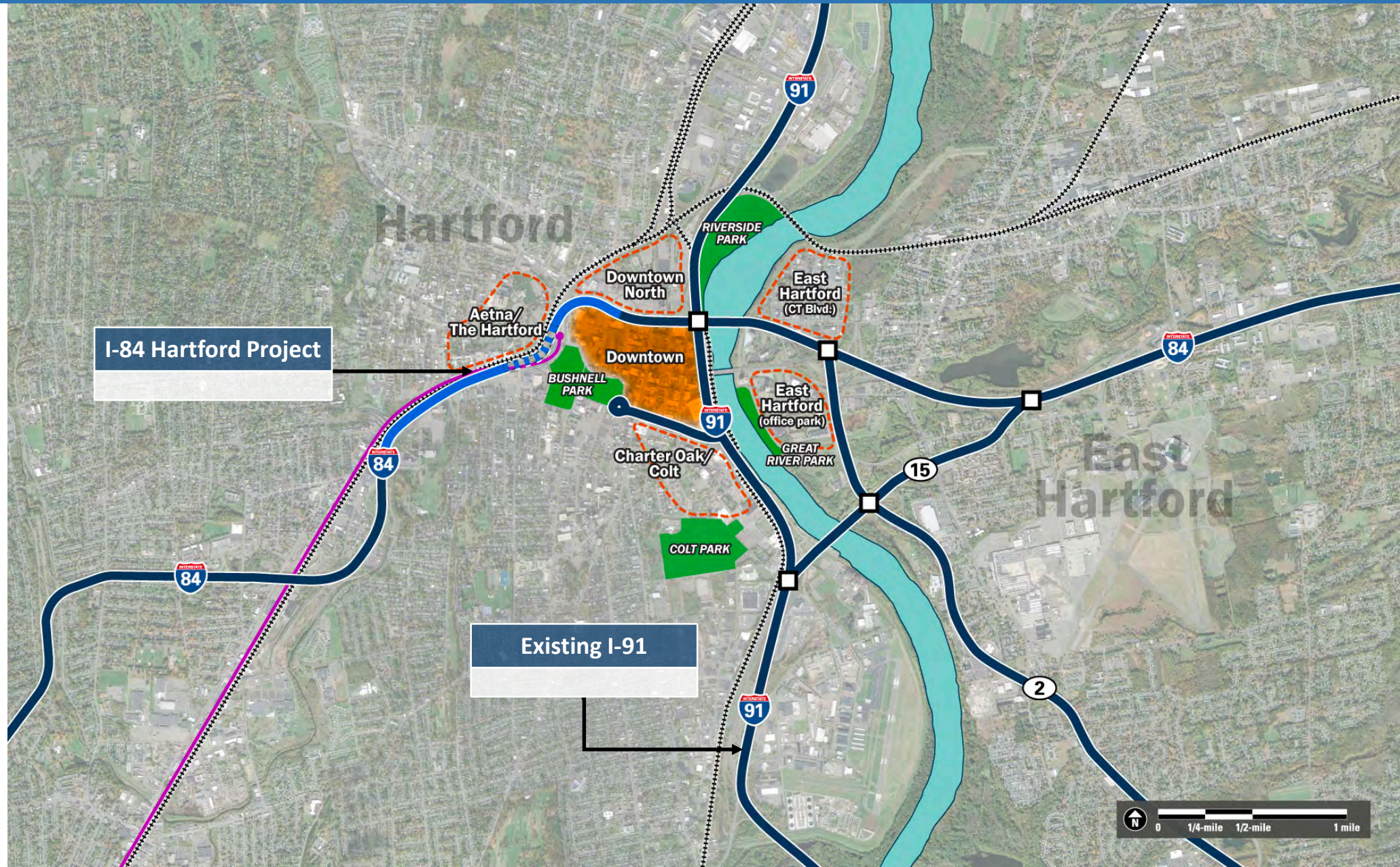
Existing Network



- I-84 Hartford Project is ongoing
- I-84 through downtown fragments the city's core
- I-91, the rail line, and the flood wall create a barrier between the city and river

LEGEND

- Highway
- Interchange
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- Downtown core
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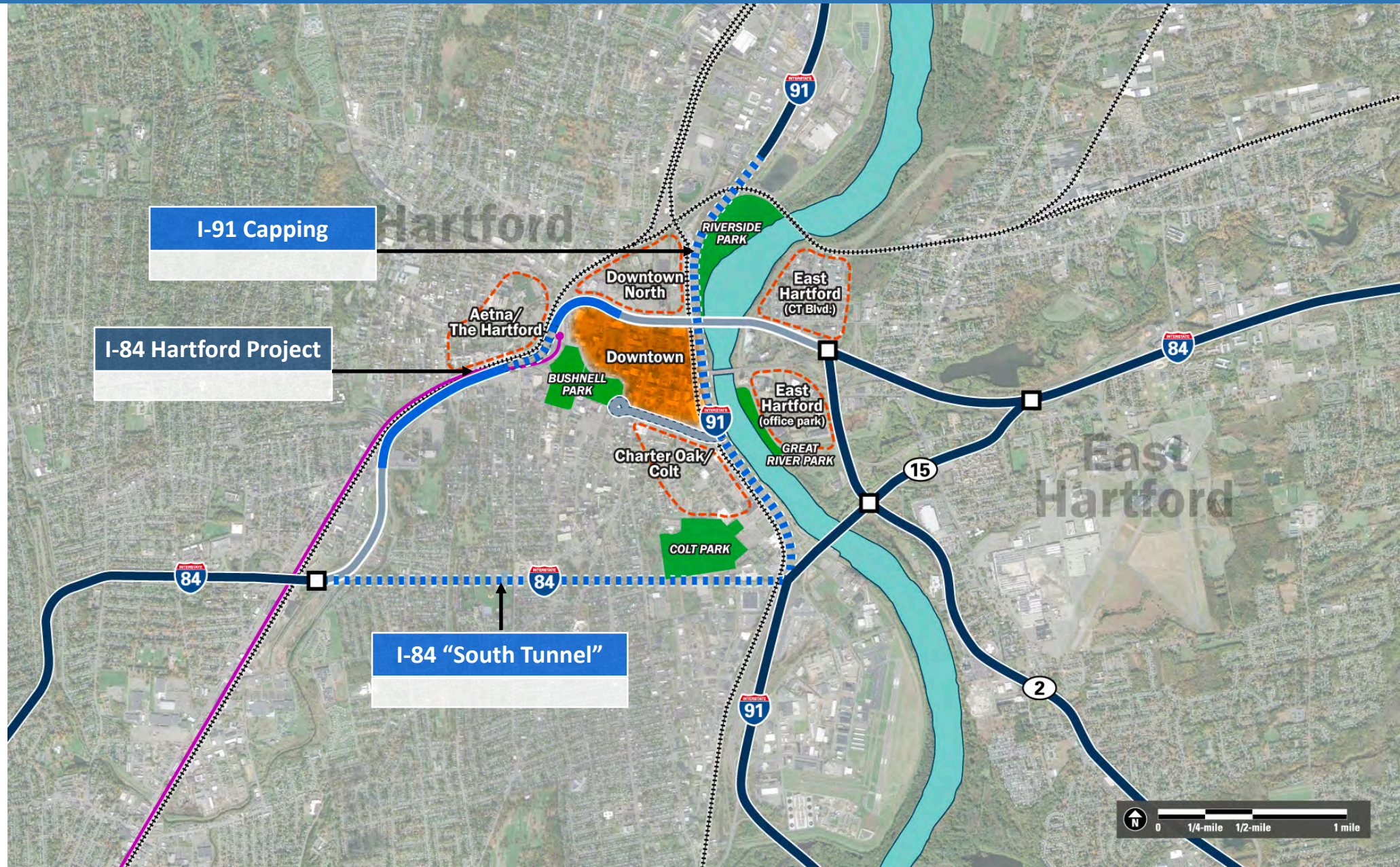


Scenario #1: I-84 “South Tunnel” and I-91 Capping

- A new I-84 “South Tunnel” is shown as a southern bypass between Flatbush Ave. and the Charter Oak Bridge
- I-91 is capped in key locations between the Charter Oak Bridge and Riverside Park

LEGEND

- Highway
- Interchange
- Tunnel/cap
- Urban arterial
- Green space
- Downtown core
- Surrounding districts
- Rail
- CTfastrak



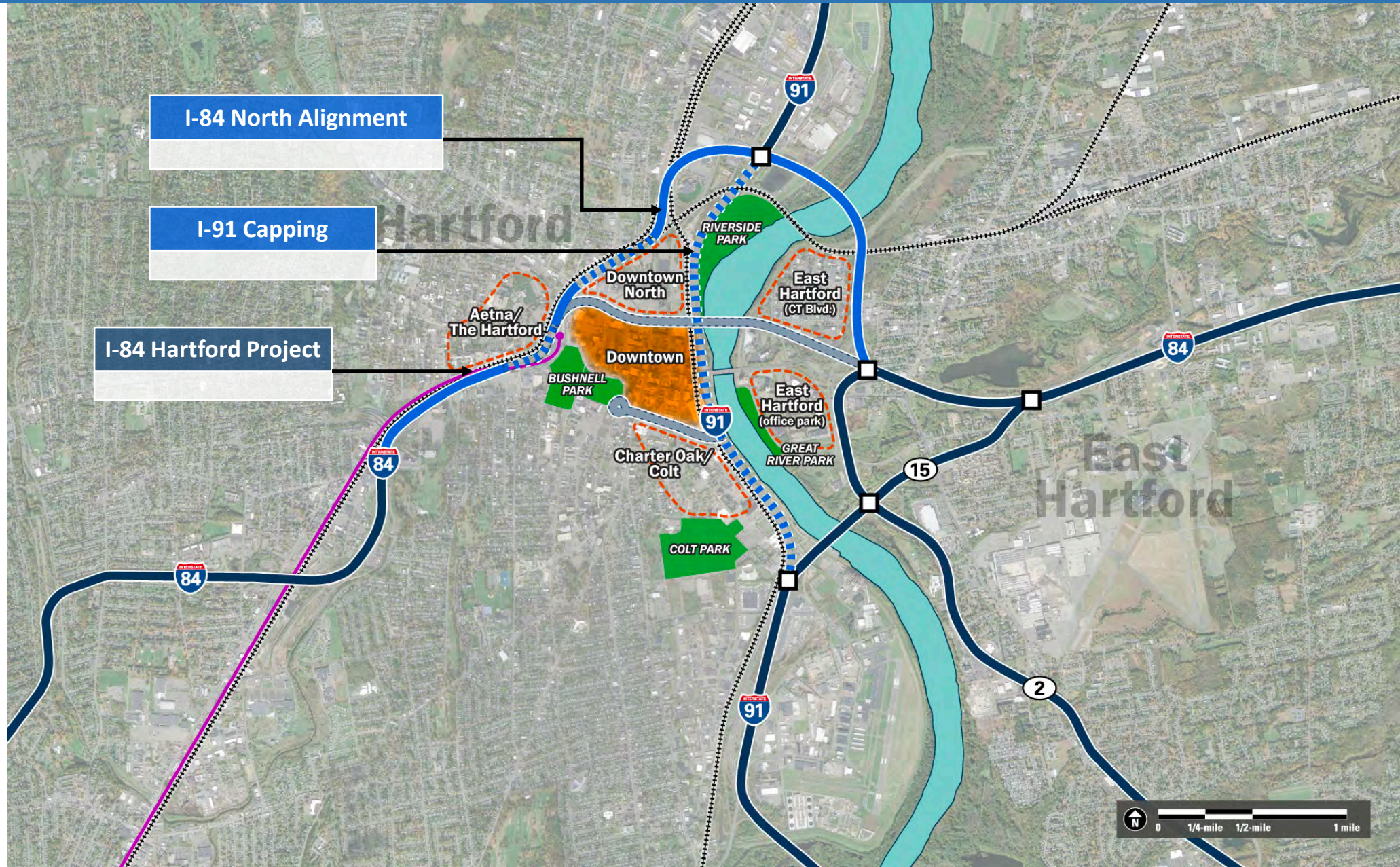
Scenario #2: I-84 “North Alignment” and I-91 Capping



- A new I-84 “North Alignment” is shown that relocates the 84/91 interchange out of the city center
- New bridge over the CT River
- I-91 is capped in key locations

LEGEND

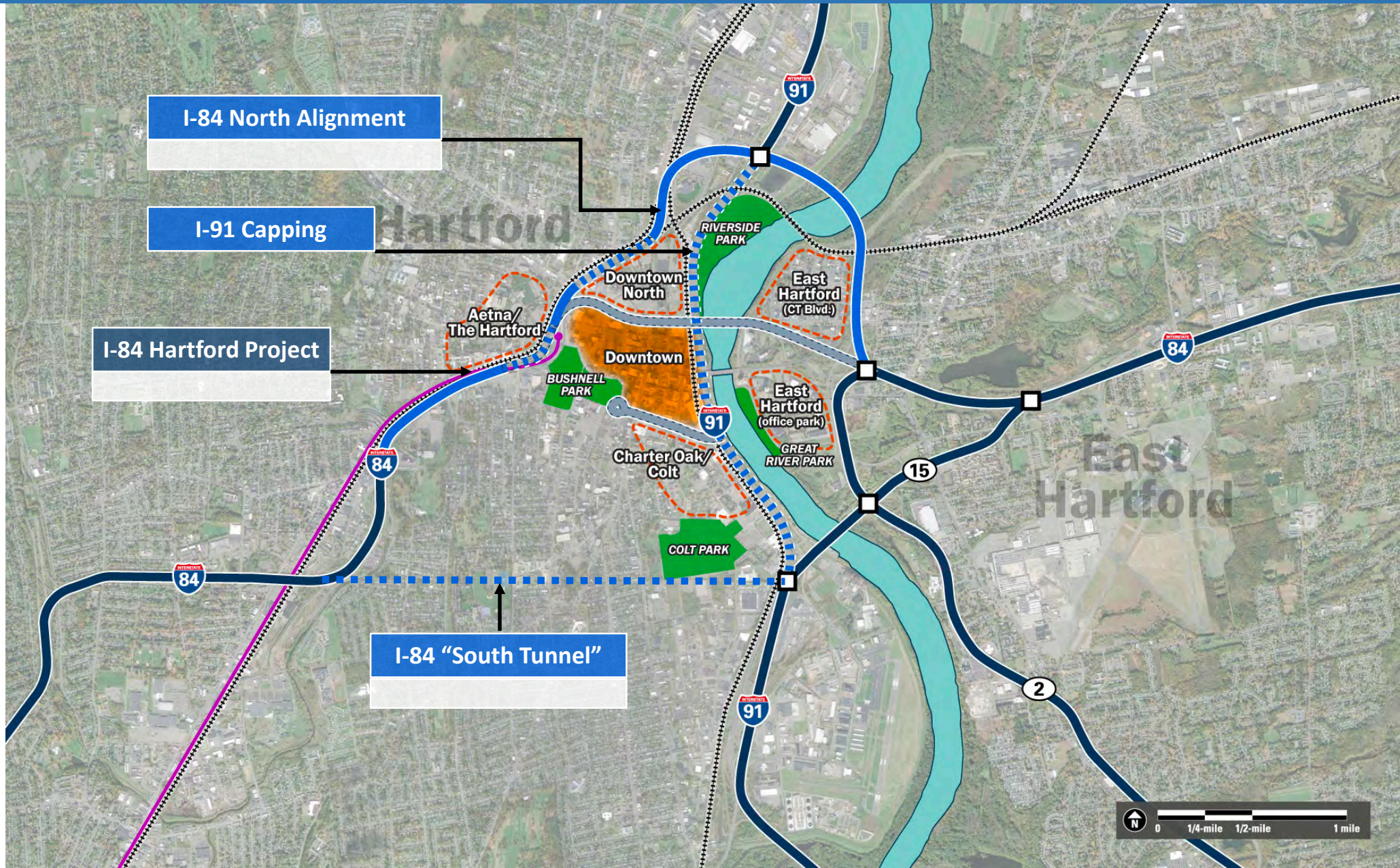
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- ⋯ Existing highway alignment
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- Green space
- Downtown core
- - - Surrounding districts
- ⋯ Rail
- CTfastrak



Combined scenarios

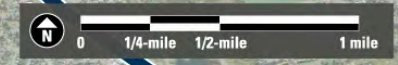


- Conceptual level of work to date
- Additional analysis needed to determine feasibility of options or combination of options



LEGEND

- Highway
- Interchange
- ⋯ Existing highway alignment
- Highway realignment
- Tunnel/cap
- Urban arterial
- Green space
- Downtown core
- Surrounding districts
- ⋯ Rail
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Reimagining the Riverfront

For Hartford and East Hartford

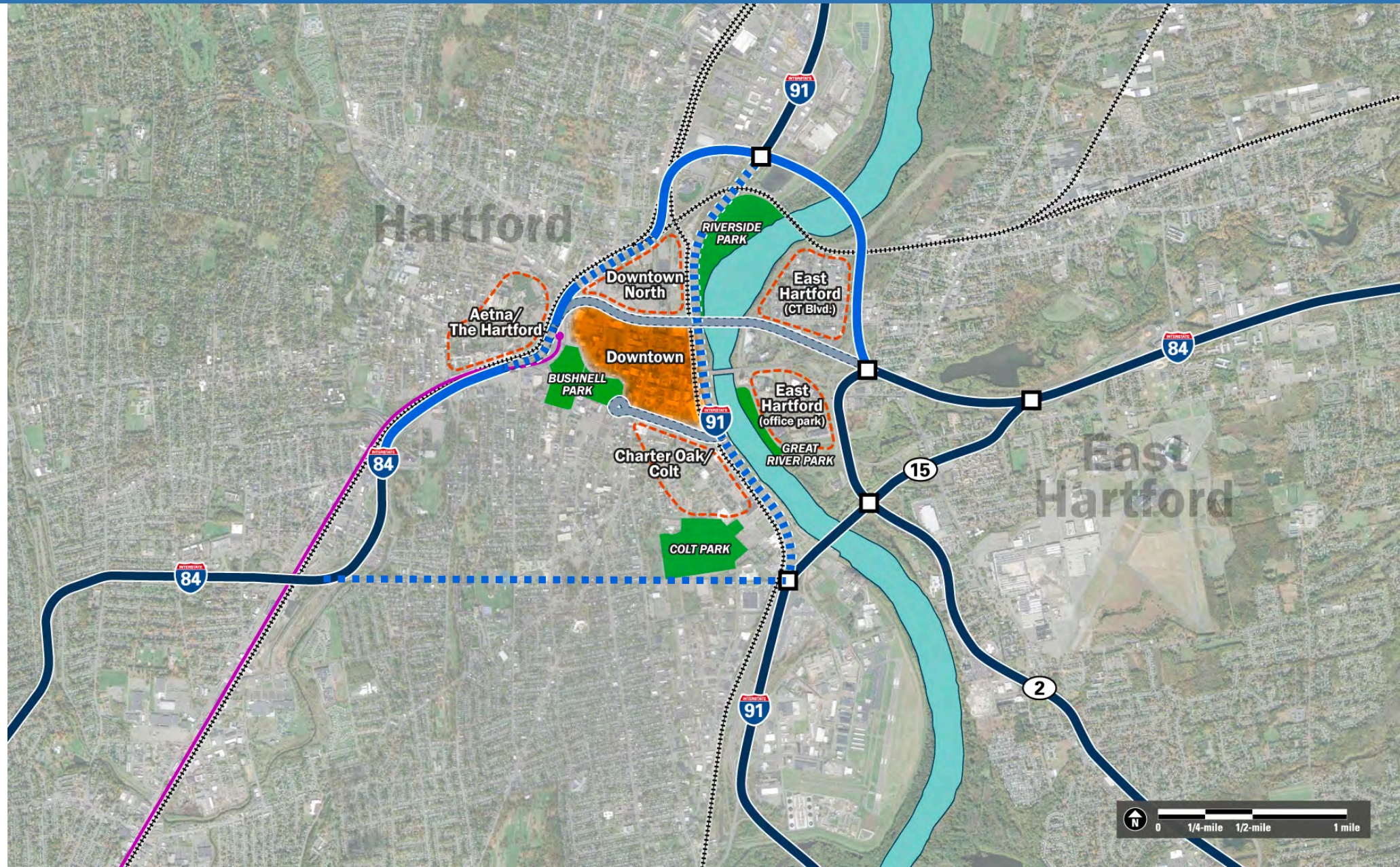
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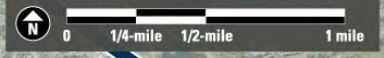
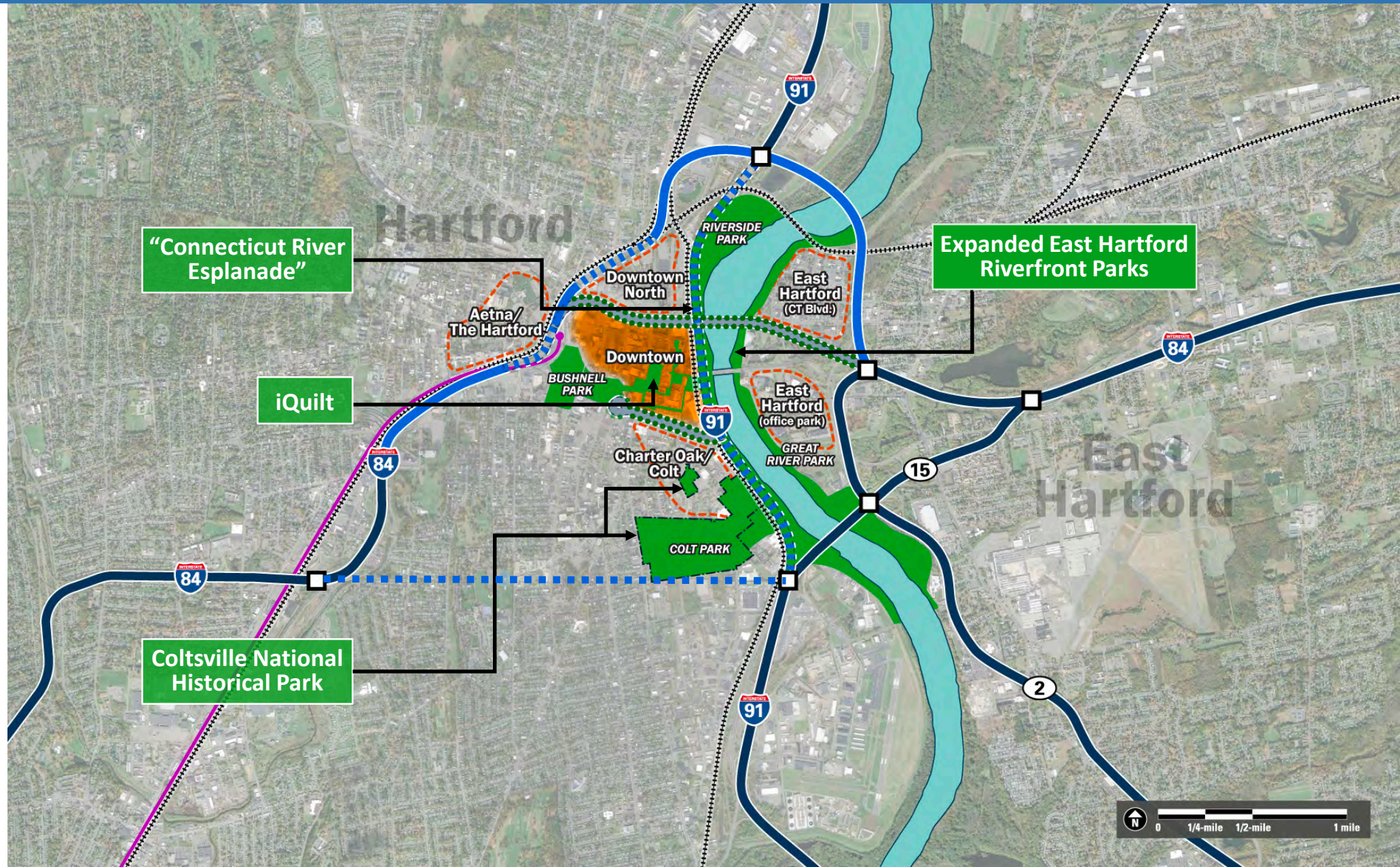
Removing the I-91 barrier creates a new riverfront park



- New “Connecticut River Esplanade”
- Hartford’s reconnection to the water
- Creates an overall network with East Hartford
- Links destinations and creates recreation loops

LEGEND

- Highway
- Interchange
- Existing highway alignment
- Highway realignment
- Tunnel/cap
- Urban arterial
- Green space
- Downtown core
- Surrounding districts
- Coltsville National Historic District
- Rail
- CTfastrak



Current view



Potential view



Existing flood wall elevation

Connecticut River Esplanade

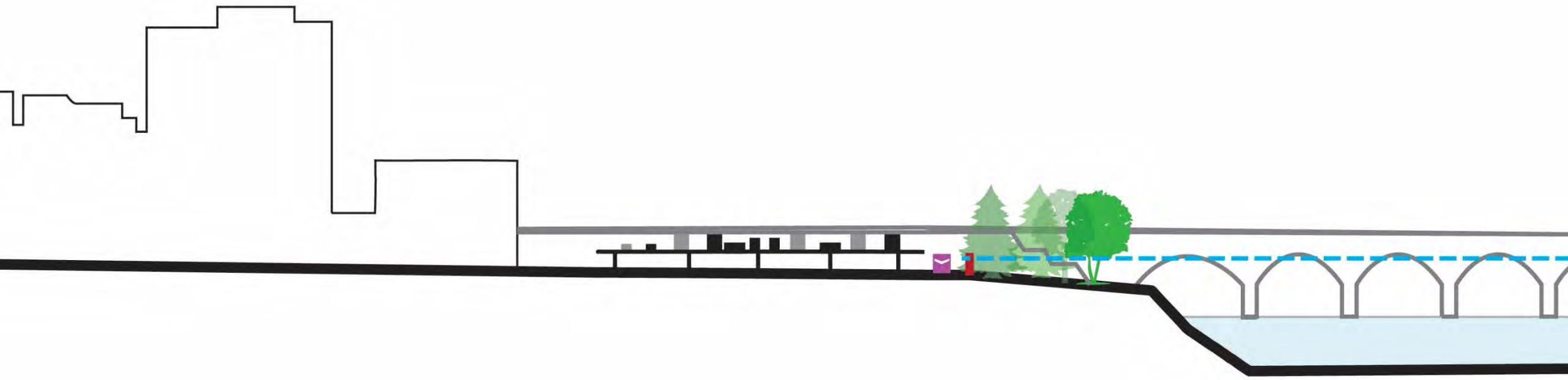
Colt Armory redeveloped

Public transit

Transit-oriented development

Connecticut River

Riverfront: Existing



Downtown Hartford

**I-91
elevated
barrier**

**Rail/
Flood Wall**

Connecticut River

Riverfront: Potential



Downtown Hartford

Rail

**I-91
under cap
(+ Connecticut
River Esplanade)**

Flood Wall

Connecticut River

Promoting Economic Development

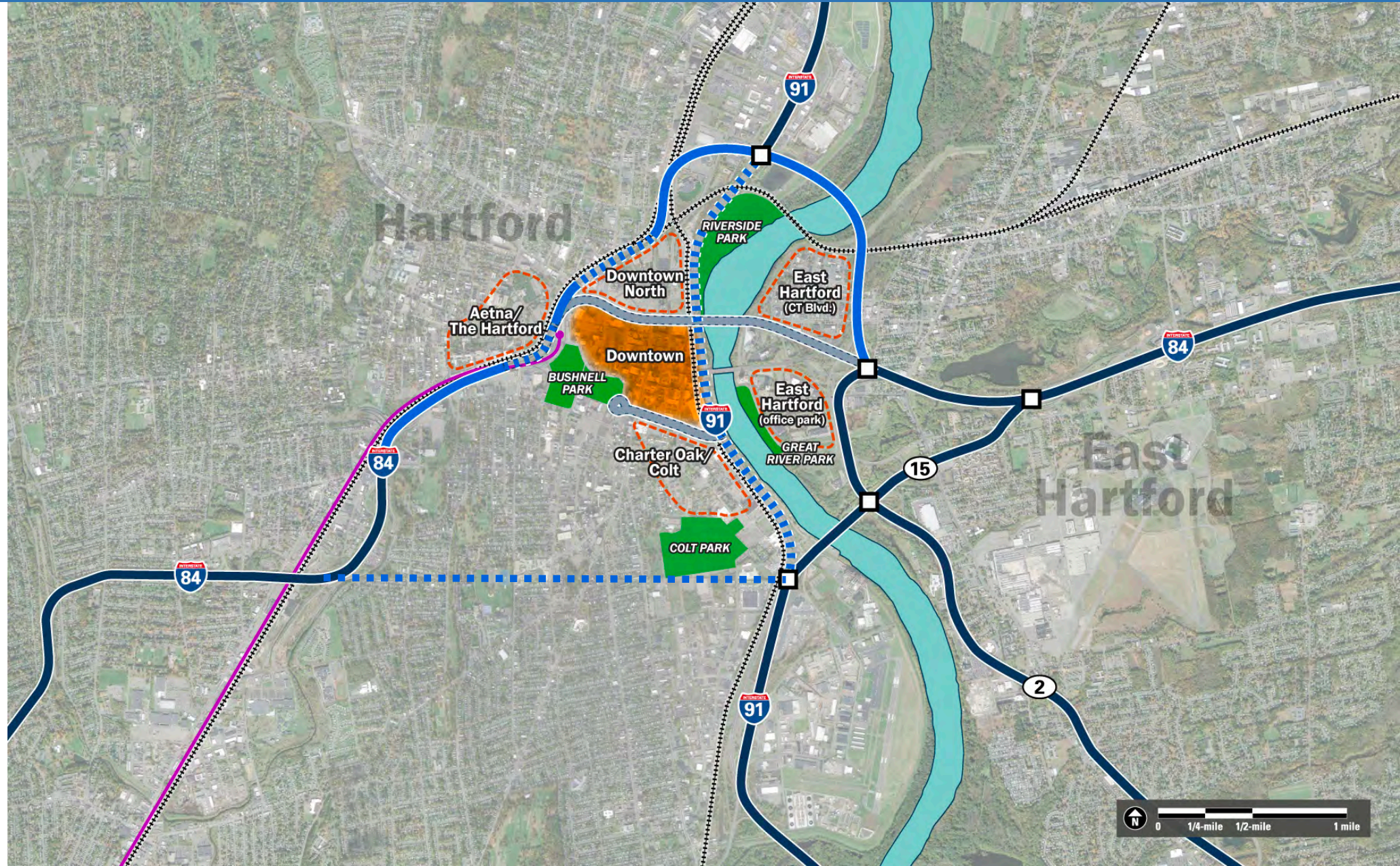
In Hartford and East Hartford

Combined scenarios



LEGEND

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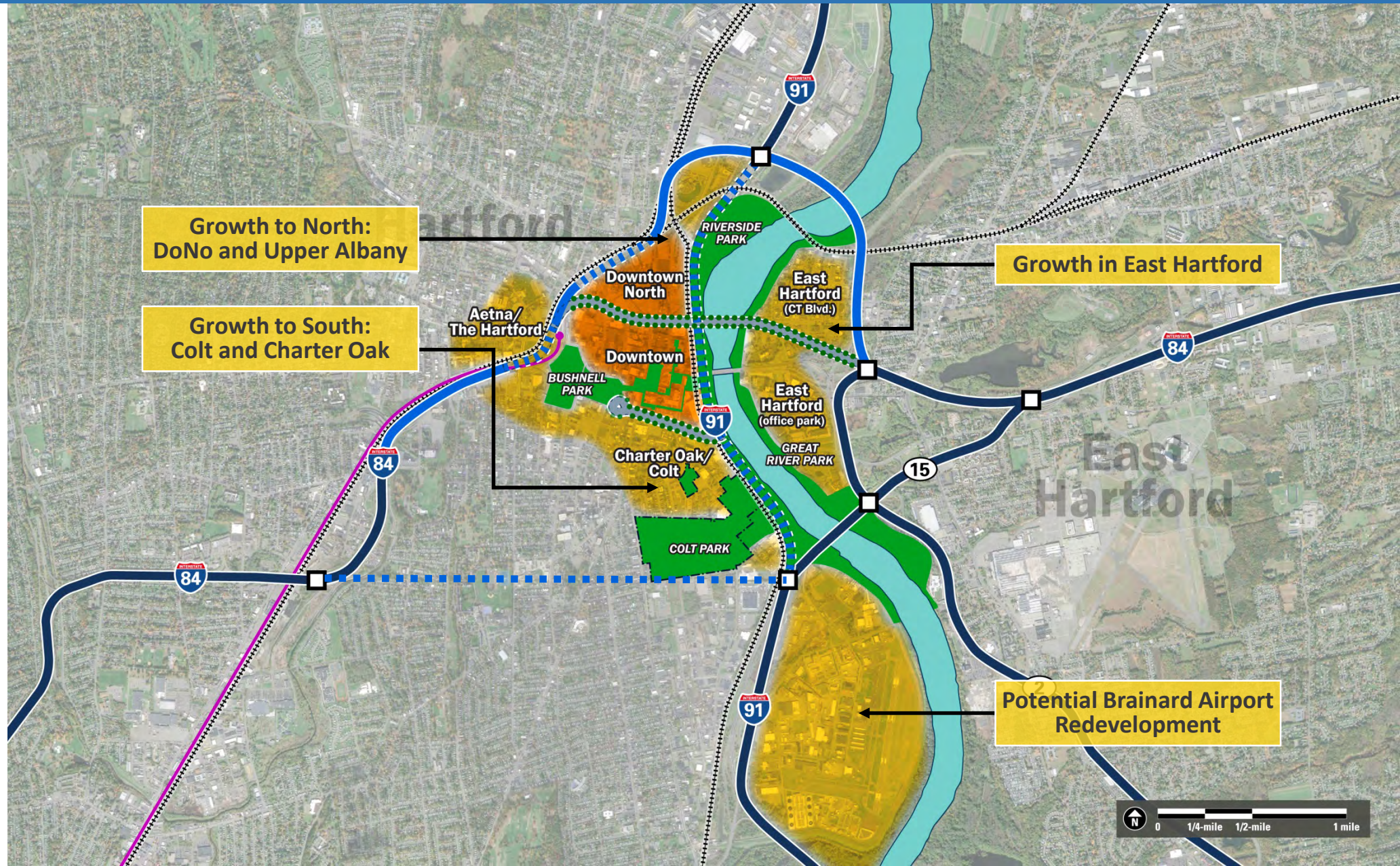


Economic development tied to the green network

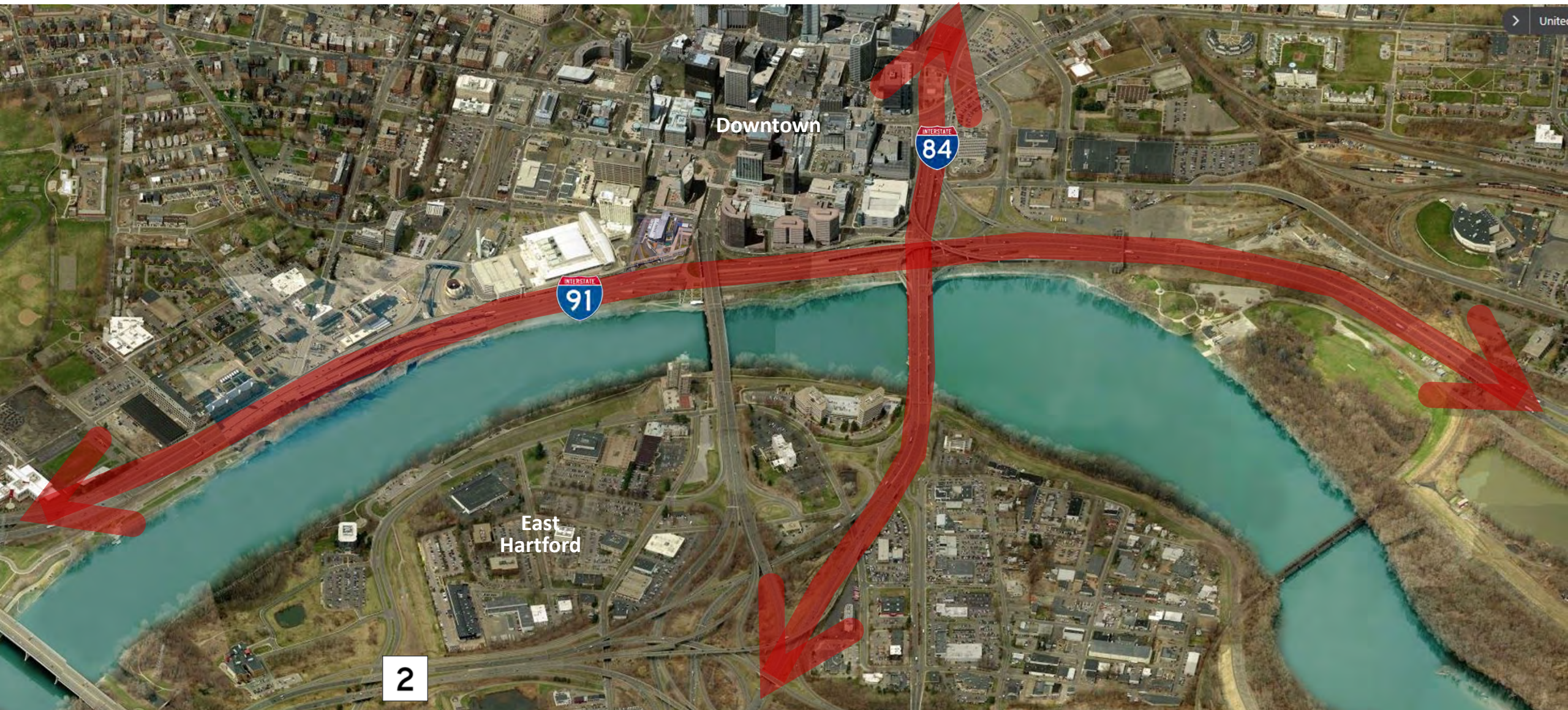
- Growth in Hartford could potentially occur to the north, west, and south
- Growth in East Hartford could occur north and south of CT Blvd. with a mix of uses taking advantage of the waterfront

LEGEND

- Highway
- Interchange
- Existing highway alignment
- Highway realignment
- Tunnel/cap
- Urban arterial
- Green space
- Downtown core
- City growth
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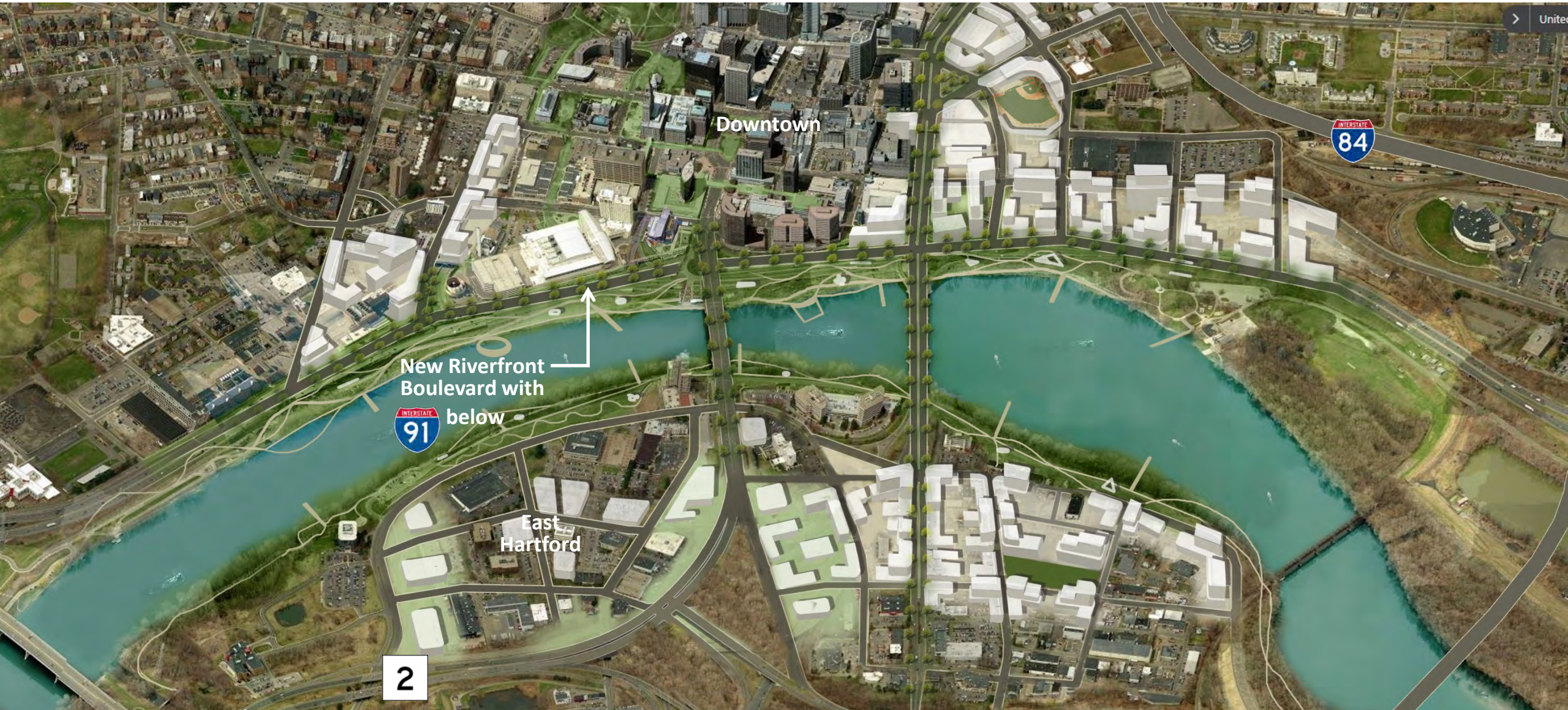


Existing transportation network limits the city's potential



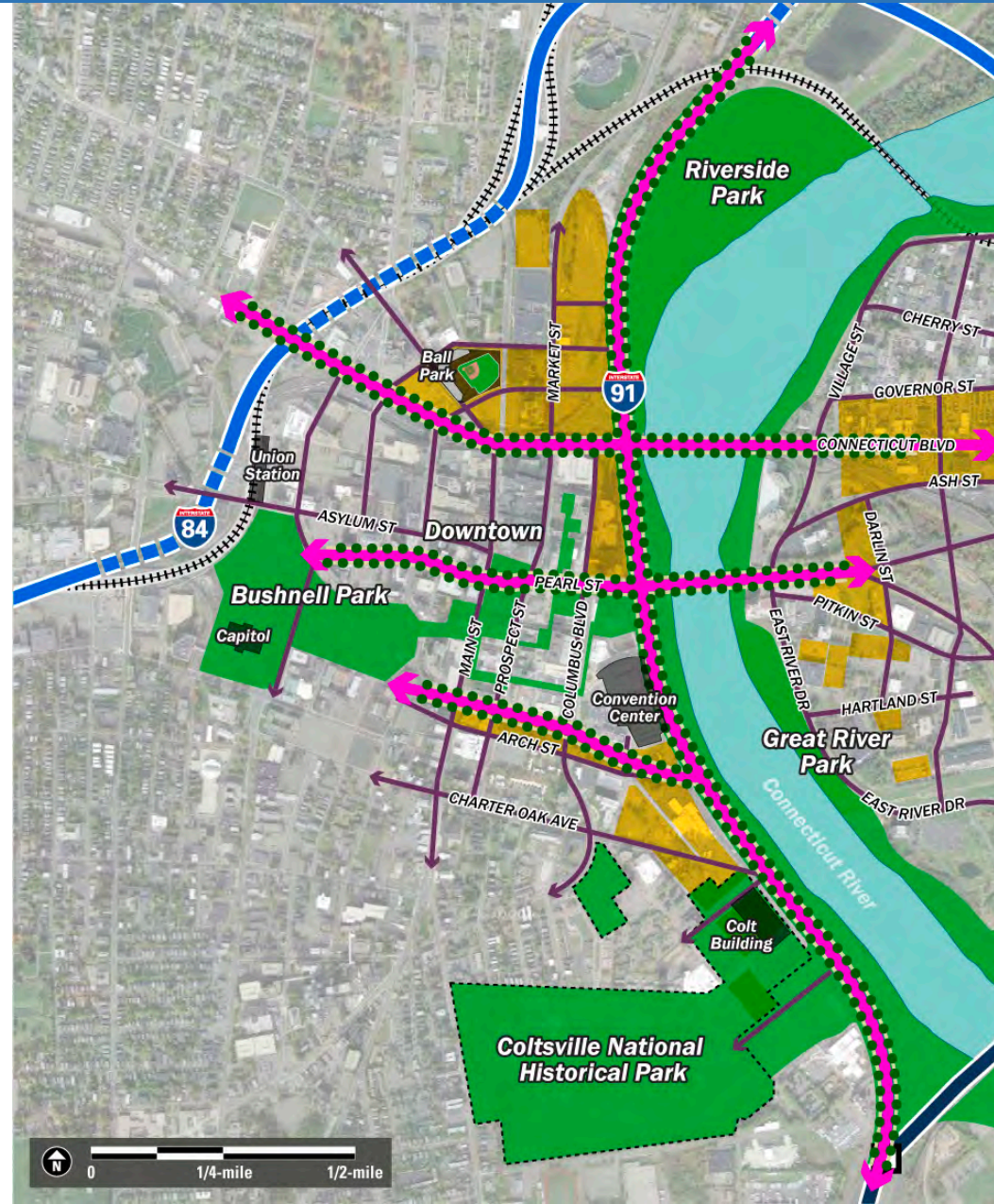
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Transformed riverfront catalyzes development on both sides



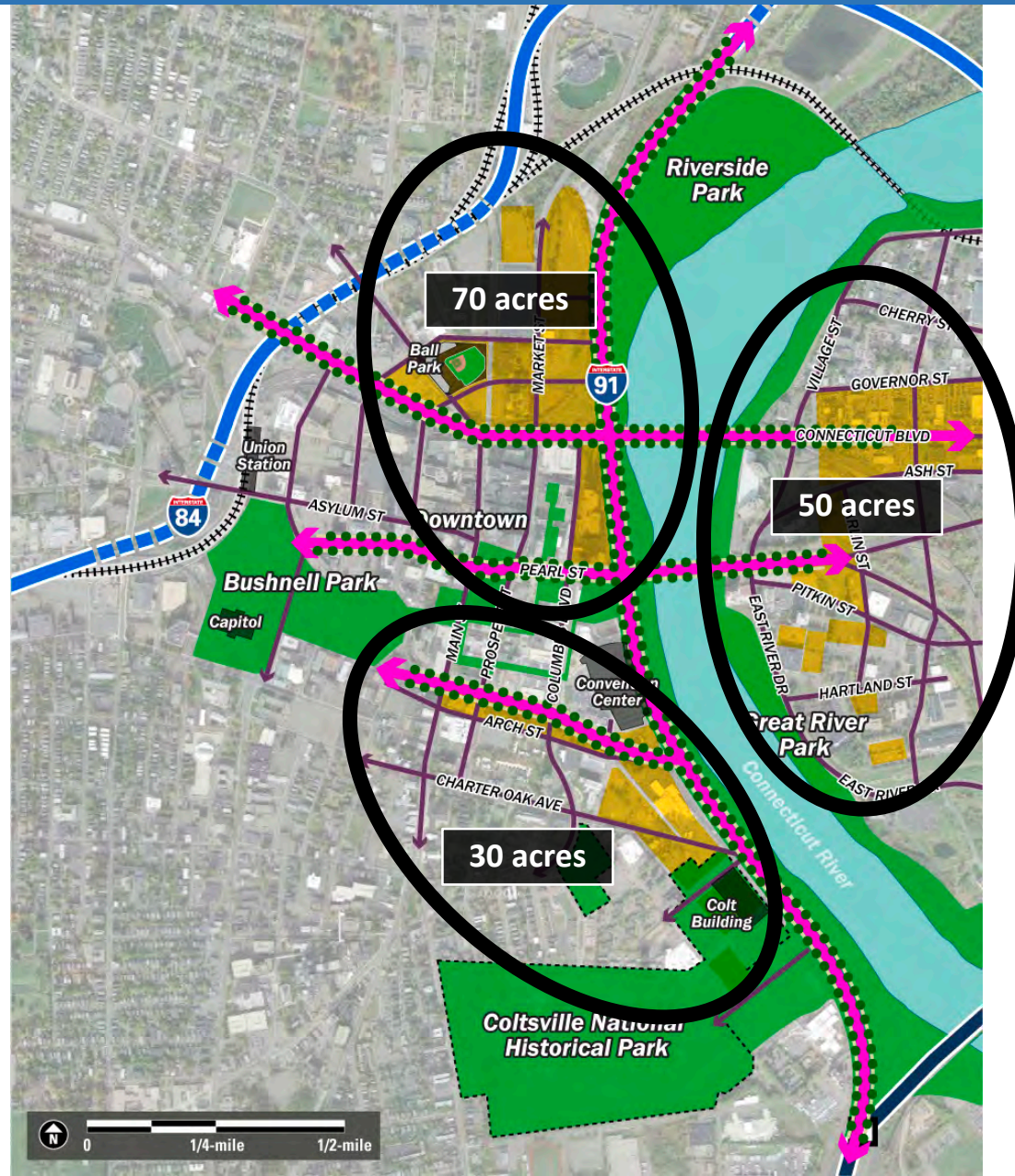
Potential redevelopment sites

- A high-level analysis of sites shows potential areas for city growth and revitalization
- Other areas may be possible
- Current uses, ownership, market demand and development economics will be critical factors



Potential redevelopment sites

- Approximately 150 acres of development or redevelopment potential



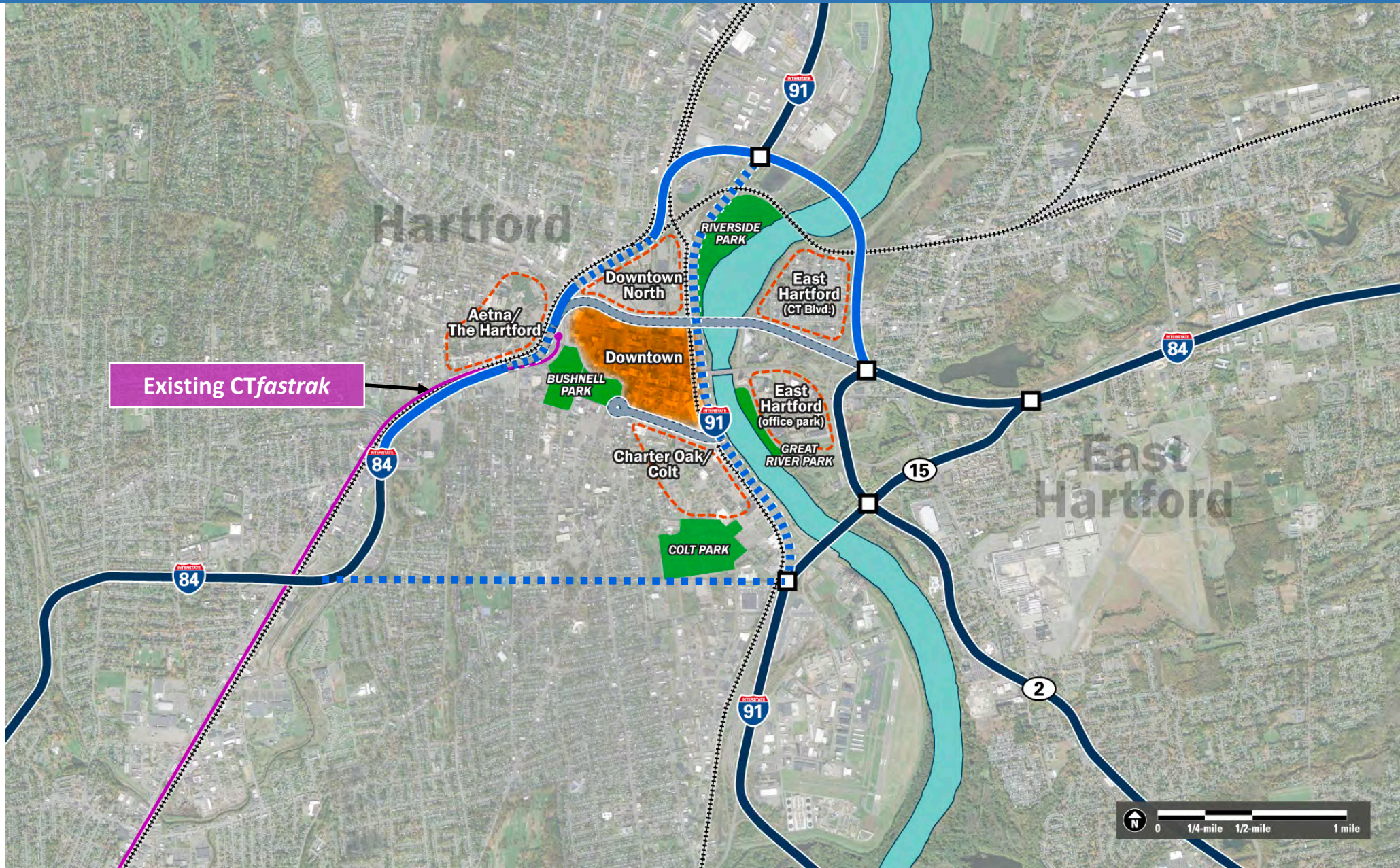
Integrating Public Transit

Making connections east/west and north/south

Combined scenarios

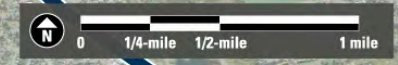


- **CTfastrak** has exceeded ridership goals and expansion to the east is ongoing



LEGEND

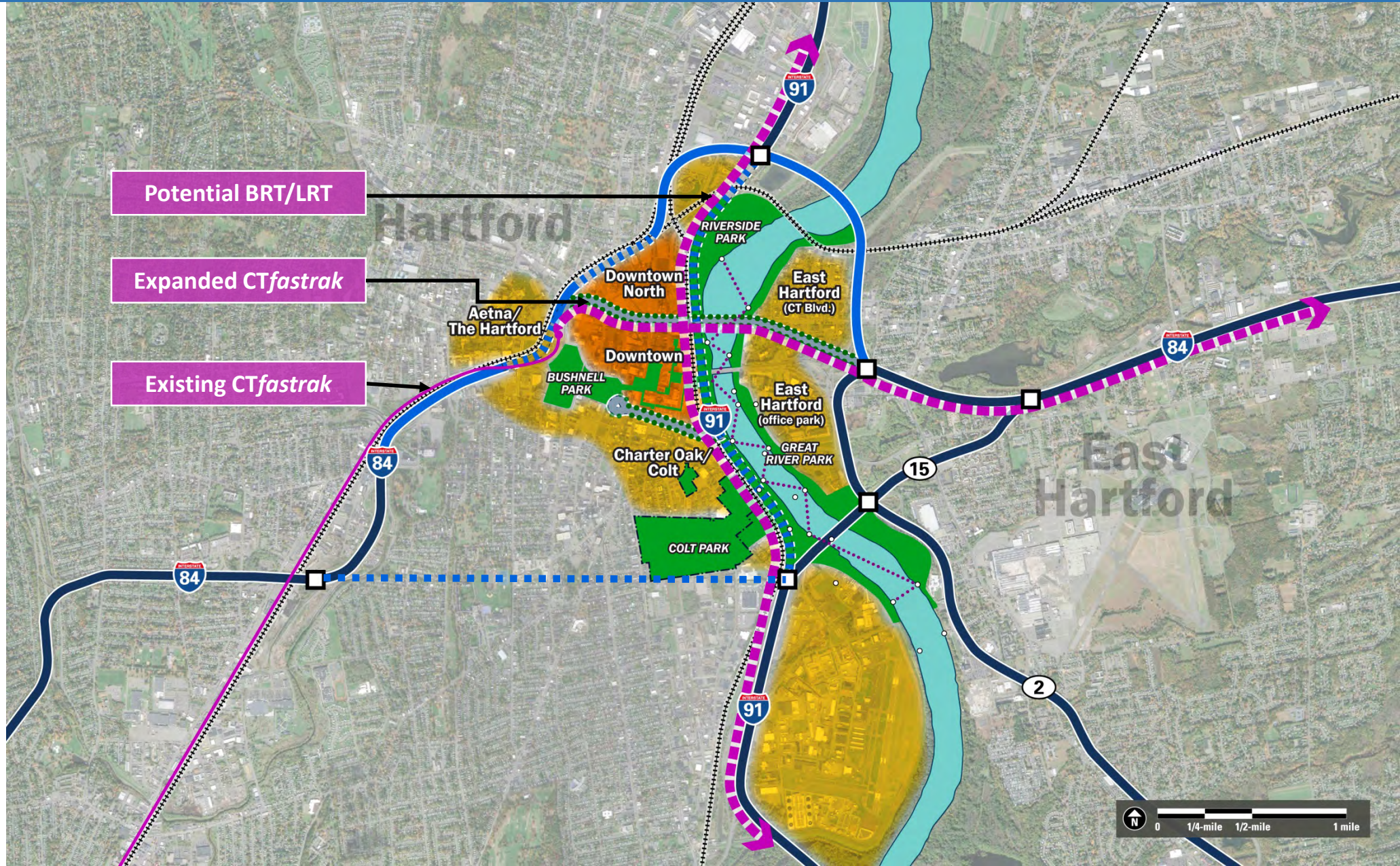
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The public transit network can be further enhanced

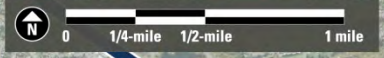


- Enhanced public transit could occur north/south along a new riverfront, tying together key destinations and residential areas



LEGEND

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- Downtown core
- City growth
- Coltsville National Historic District
- Rail
- CTfastrak
- Expanded/potential BRT
- Water-based transit



Current view



Potential view

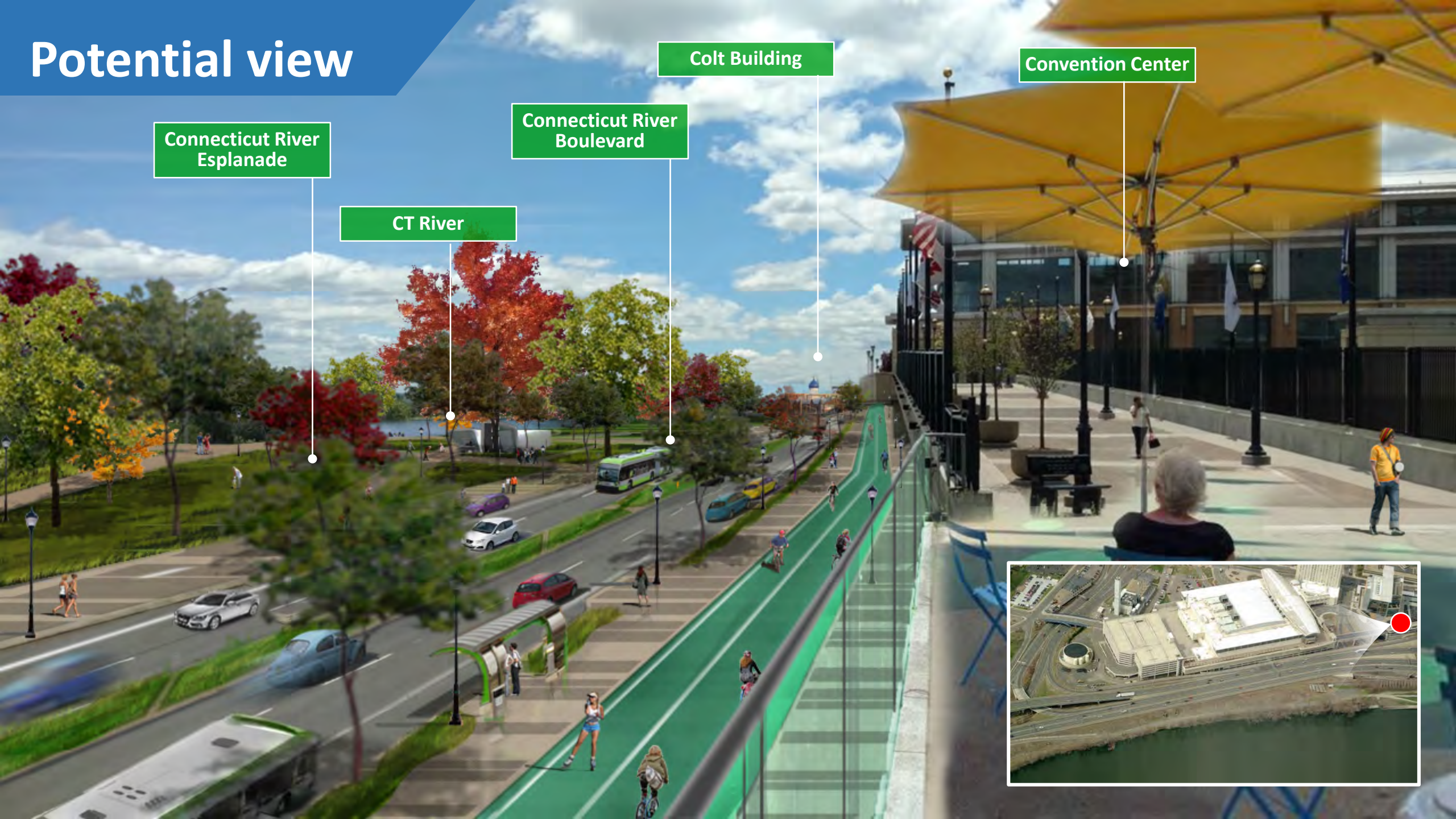
Connecticut River Esplanade

CT River

Connecticut River Boulevard

Colt Building

Convention Center



Key Transformations

In Hartford and East Hartford

Key Transformations

CONNECTICUT RIVER ESPLANADE

World-class waterfront

I-84 HARTFORD PROJECT

Reconnecting a divided downtown

BULKELEY BOULEVARD

A new “Main Street” between Htfd and E. Htfd

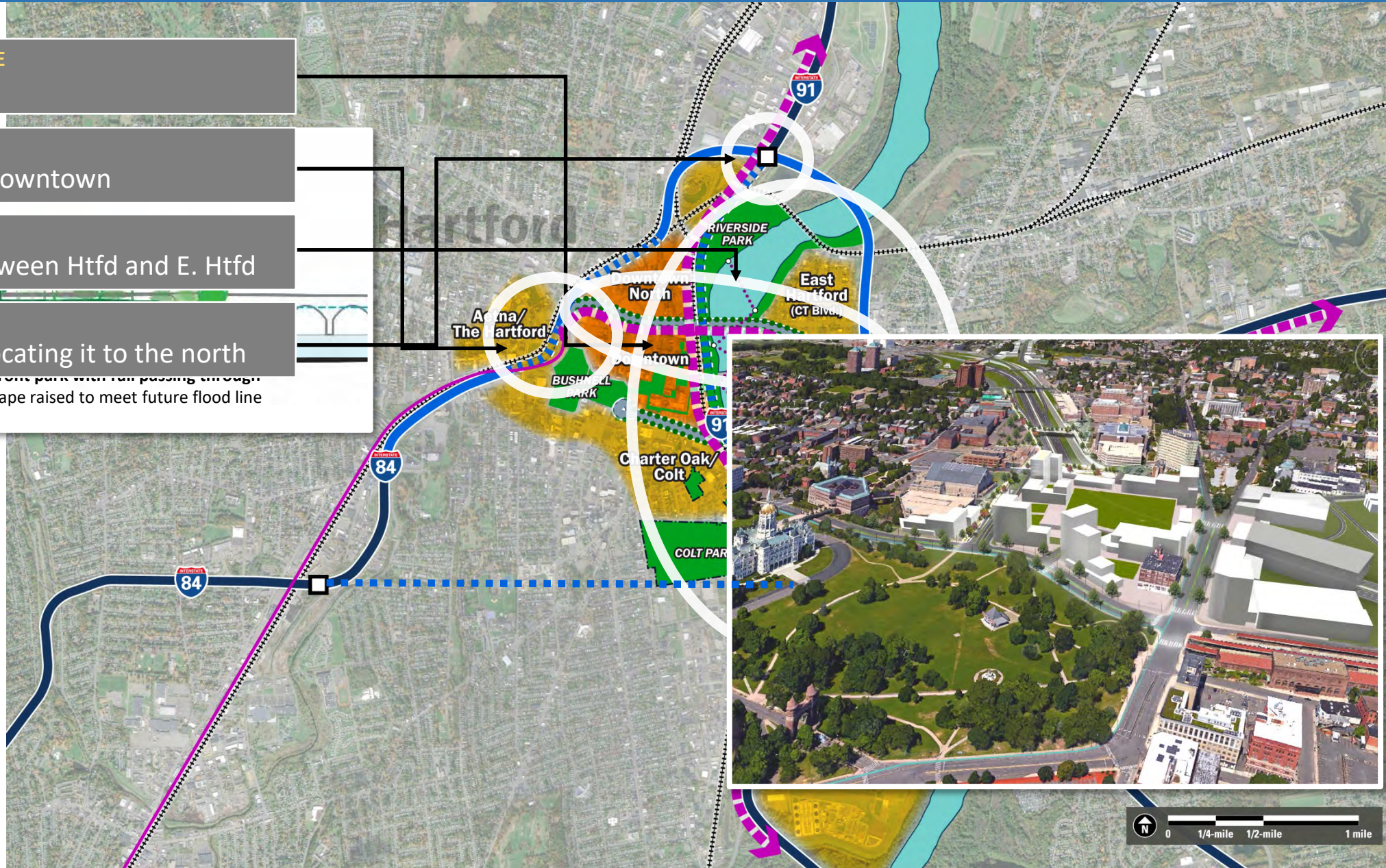
84/91 INTERCHANGE

Easing congestion by relocating it to the north

Opportunity for prime waterfront development
 Investment park with rail passing through landscape raised to meet future flood line

LEGEND

-  Highway
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-  Highway realignment
-  Tunnel/cap
-  Urban arterial
-  Green space
-  Downtown core
-  City growth
-  Coltsville National Historic District
-  Rail
-  CTfastrak
-  Expanded/potential BRT
-  Water-based transit



Tangible Results for East Hartford

- **A transformed transportation network** to free up valuable land for growth
- **A transformed riverfront** to expand the amenities of Great River Park and catalyze development
- **Approximately 50 acres of development** in the form of new construction or redevelopment along Connecticut Blvd and the Business Park
- **Significant job creation**
- **Reconnecting to Downtown Hartford** and creating economic and recreational synergies



Tangible Results for Hartford

- **A transformed transportation network** to support urban growth, not constrain it
- **A transformed riverfront** as the centerpiece of a thriving Capitol city
- **Approximately 100 acres of development** in the form of new construction or redevelopment
- **Significant job creation**
- **45 acres of new green space** in the form of a new “Connecticut River Esplanade”



Participate In Our Workshop!

- Tell us your vision for transportation in the greater Hartford region
- Share your ideas for how big, or small, this project should be
- Discuss which impacts and opportunities most interest you





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