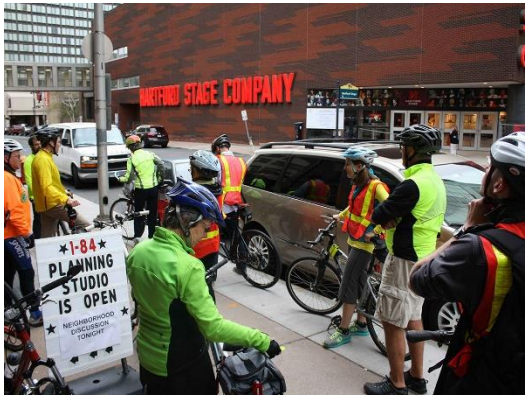
I-84 HARTFORD PROJECT

I-84 Hartford Project
Public Advisory Committee Meeting #19

March 28, 2019

Meeting Agenda

1. Welcome / Introduction of New Members (5 min)
2. Construction Staging (50 min)
3. Environmental Documentation (15 min)
4. Next steps (5 min)
5. Capital Gateway Master Plan (15 min)



Welcome / Introduction of New Members

New PAC Members

- Lt. Eric Murray, State Police – replacing Lt. Marc Petruzzi
- Bert Orr, St. Francis Hospital – replacing Mark Teare
- Nakisha Strickland, CREC – replacing Christine Vierira
- Keith Chapman, Town of East Hartford - replacing Tim Bockus
- Rich Gentile, Town of East Hartford alternate
- Ariana Basche, Trinity College - replacing Karolina Kwiecinski

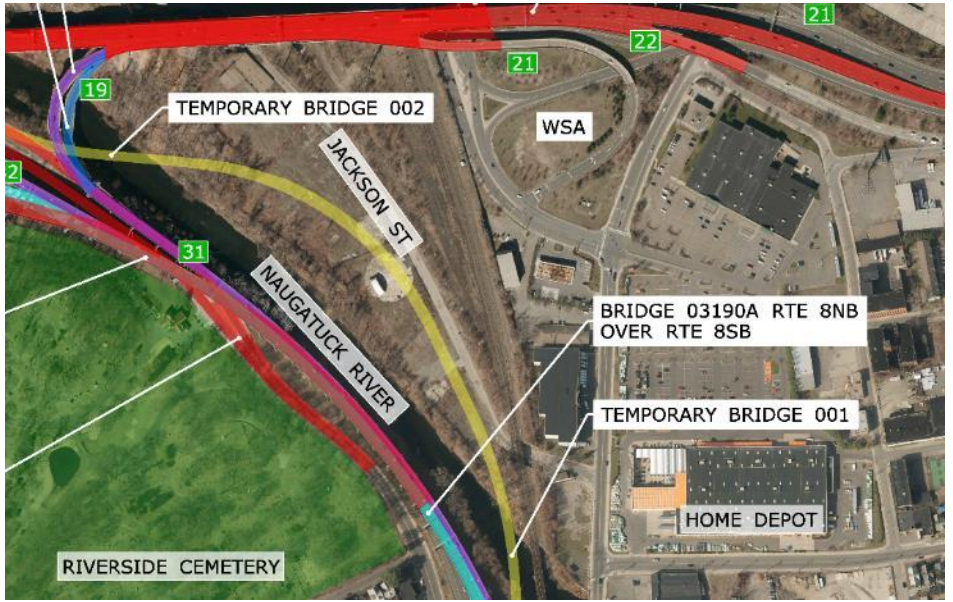
Construction Staging

Transportation Demand Management

- Temporary Traffic Control
- Transportation Operations
- Public Information and Outreach

Temporary Traffic Control Strategies

- Construction phasing / staging
- Ramp relocations
- Night / weekend work
- Off-site detours / other improvements
- Accelerated techniques



There are Two Ways to Construct a Road Project

1) Conventional construction

OR

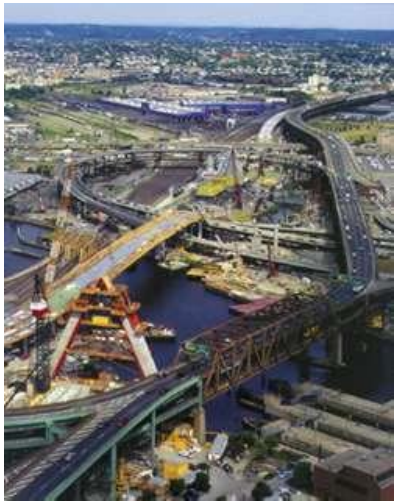
2) Accelerated construction

Features of Conventional Construction

- Construct new bridge elements on site
- Maintains traffic
- Has longer duration (typically)
- Can be costly because of temporary roads / bridges and longer duration
- I-84 will likely be a mix of conventional and accelerated

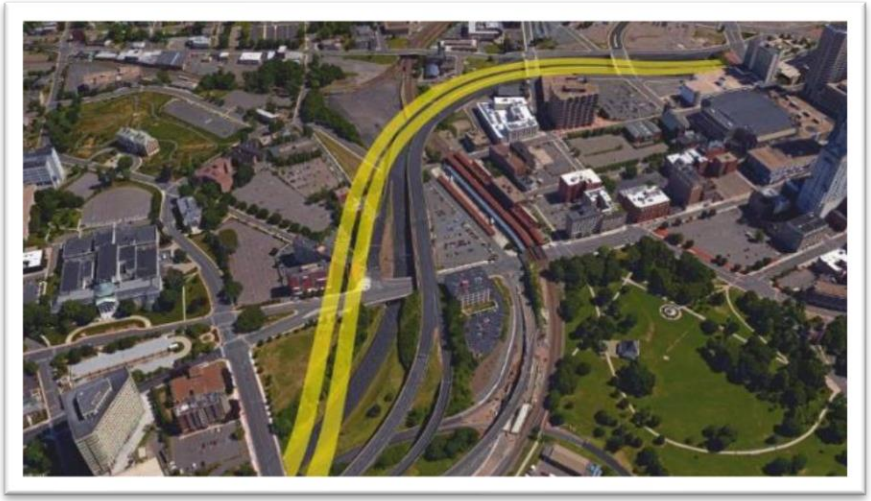
Examples in New England

- Pearl Harbor Memorial Bridge (Q-bridge), New Haven
- I-84 Waterbury widening
- Boston Central Artery



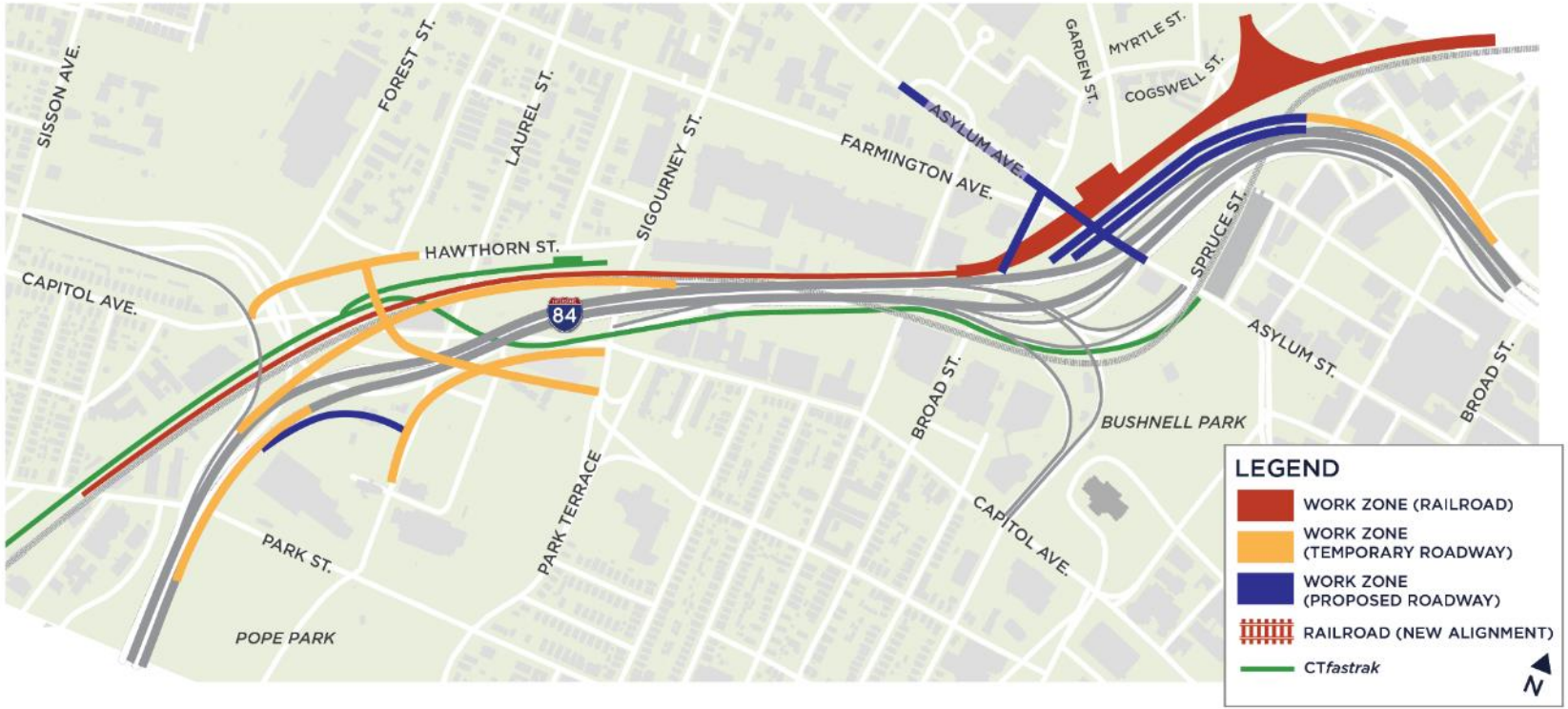
One Example of I-84 Lowered Highway Construction

- Relocate railroad and CT***fastrak*** first
- Utilize off-line highway construction to maintain capacity
- Requires additional analysis



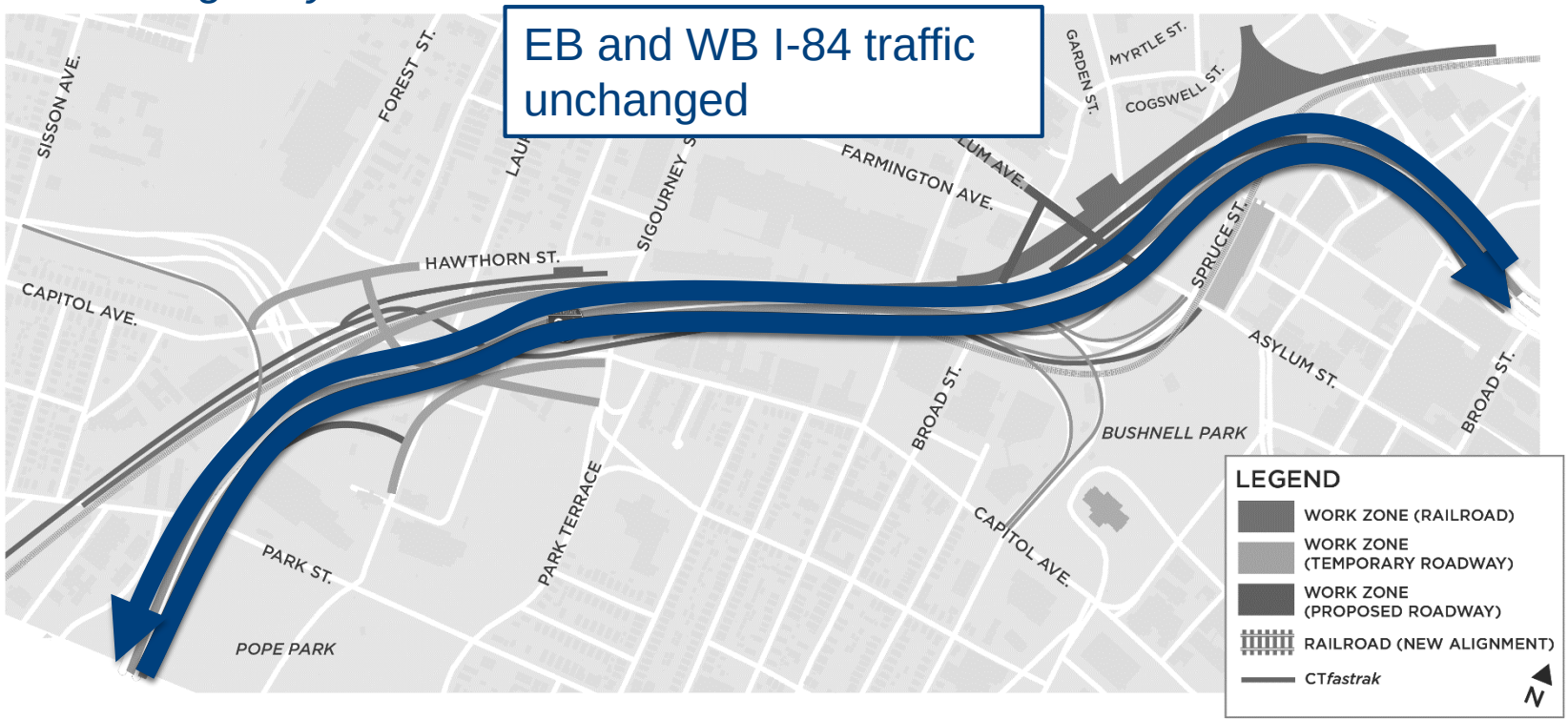
Lowered Highway Construction Example

*Phase 1: Railroad / CT**fastrak** / Multimodal Station*



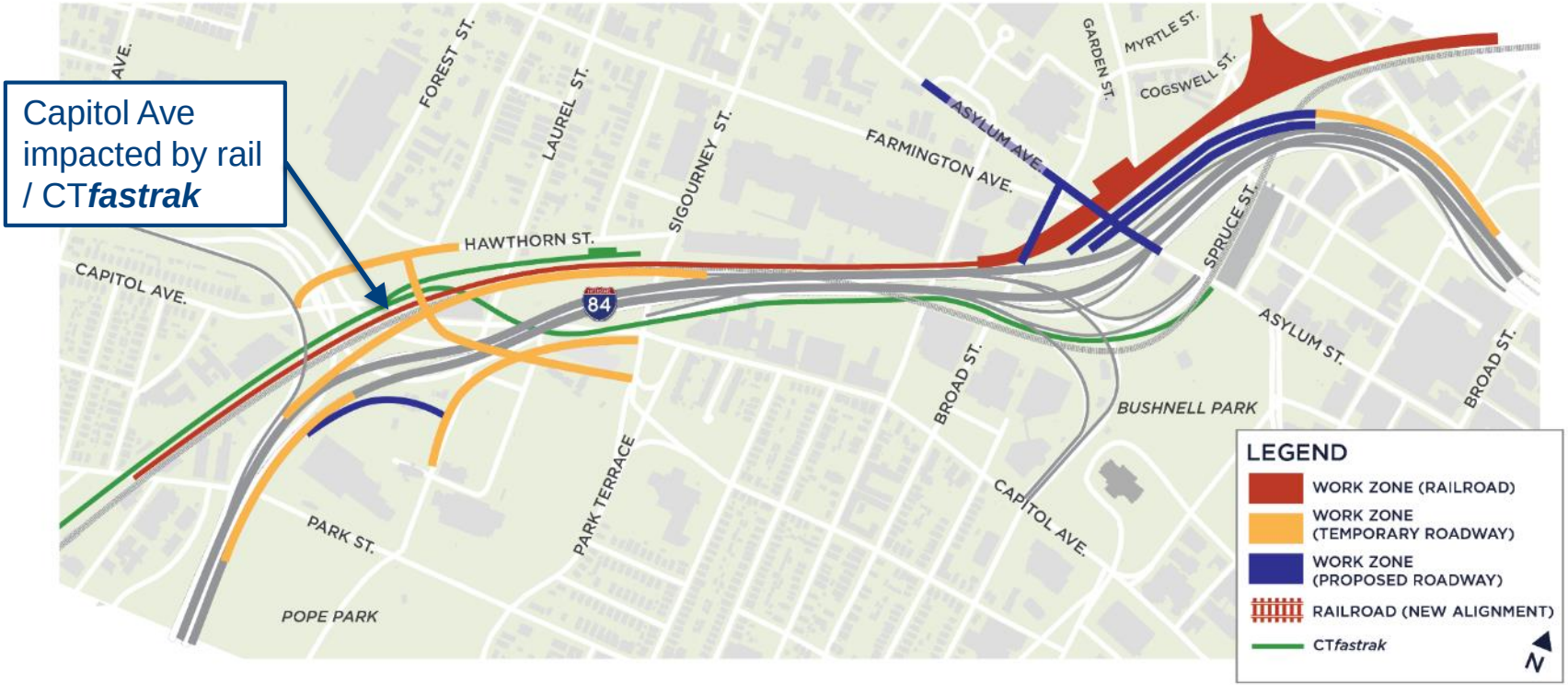
Lowered Highway Construction Example

Phase 1: Highway Traffic Patterns



Lowered Highway Construction Example

Phase 1: Potential Capitol Avenue Detour



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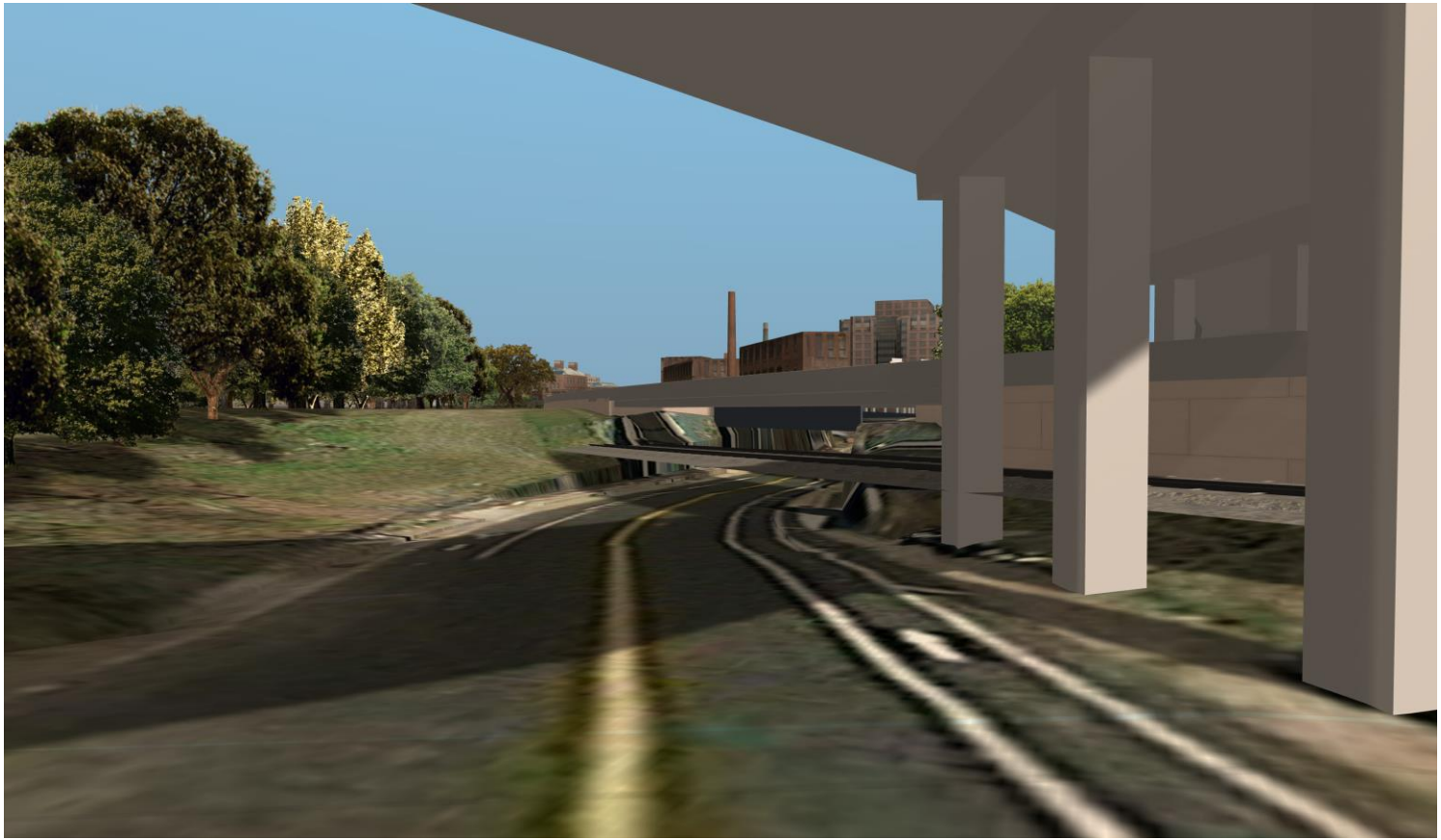

Lowered Highway Construction Example

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Lowered Highway Construction Example

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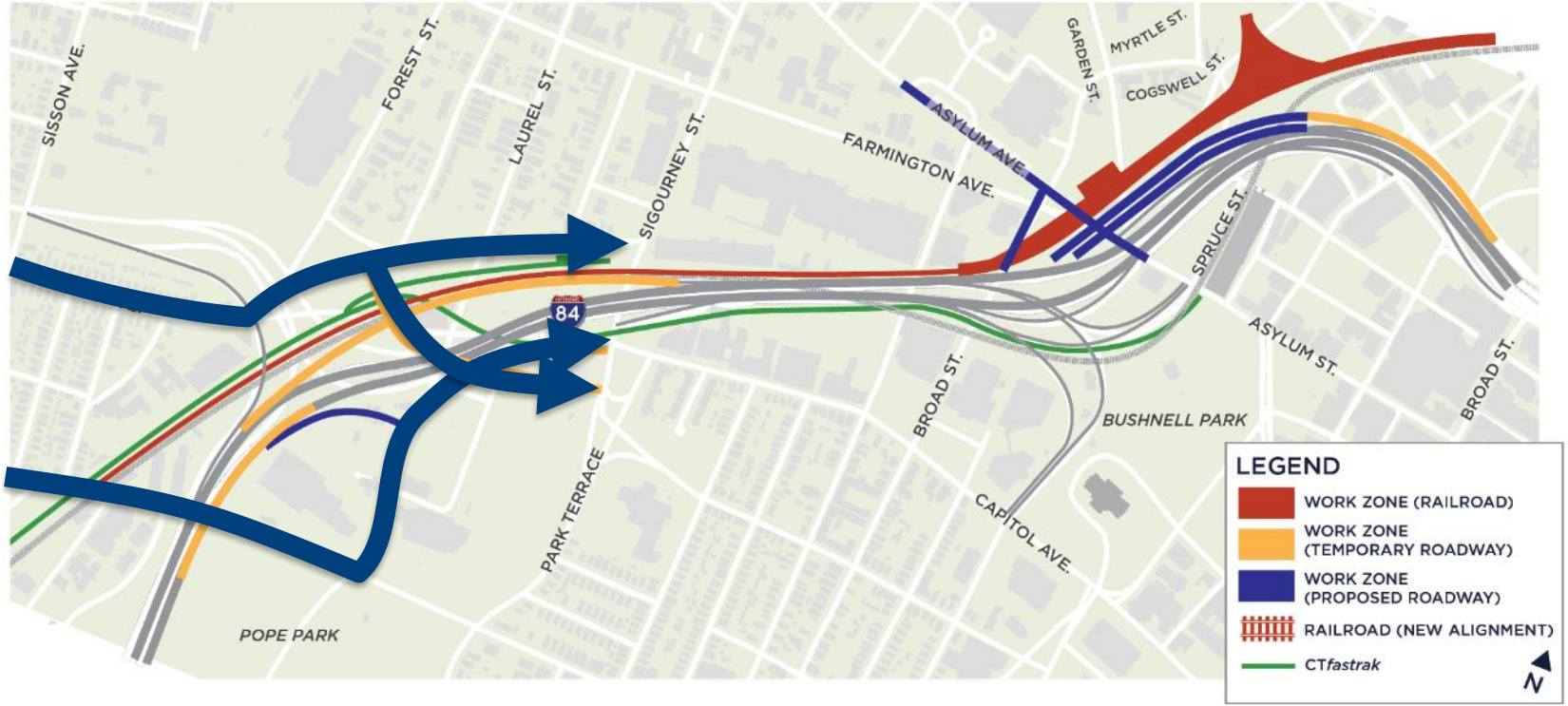
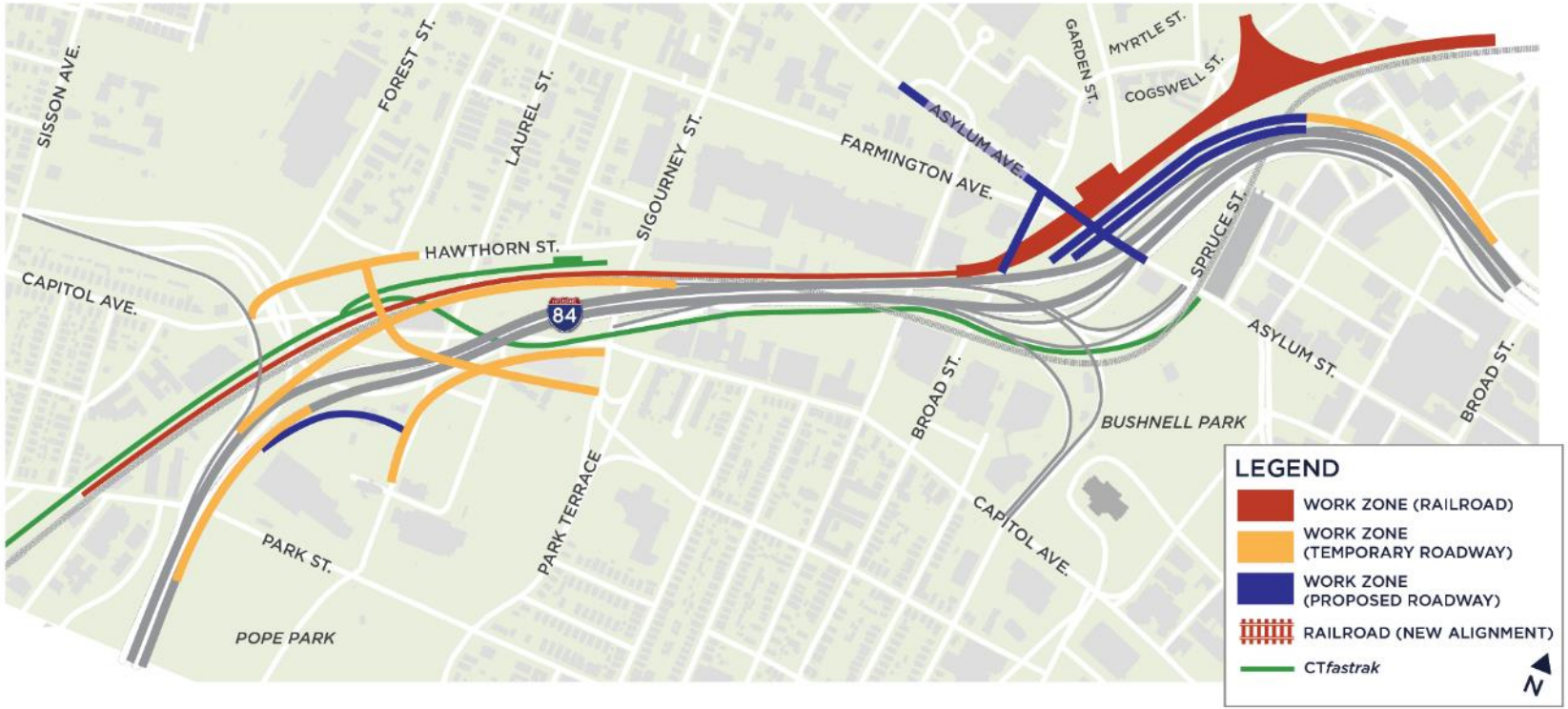


Lowered Highway Construction Example

*Phase 1: Railroad / CT**fastrak** / Multimodal Station*

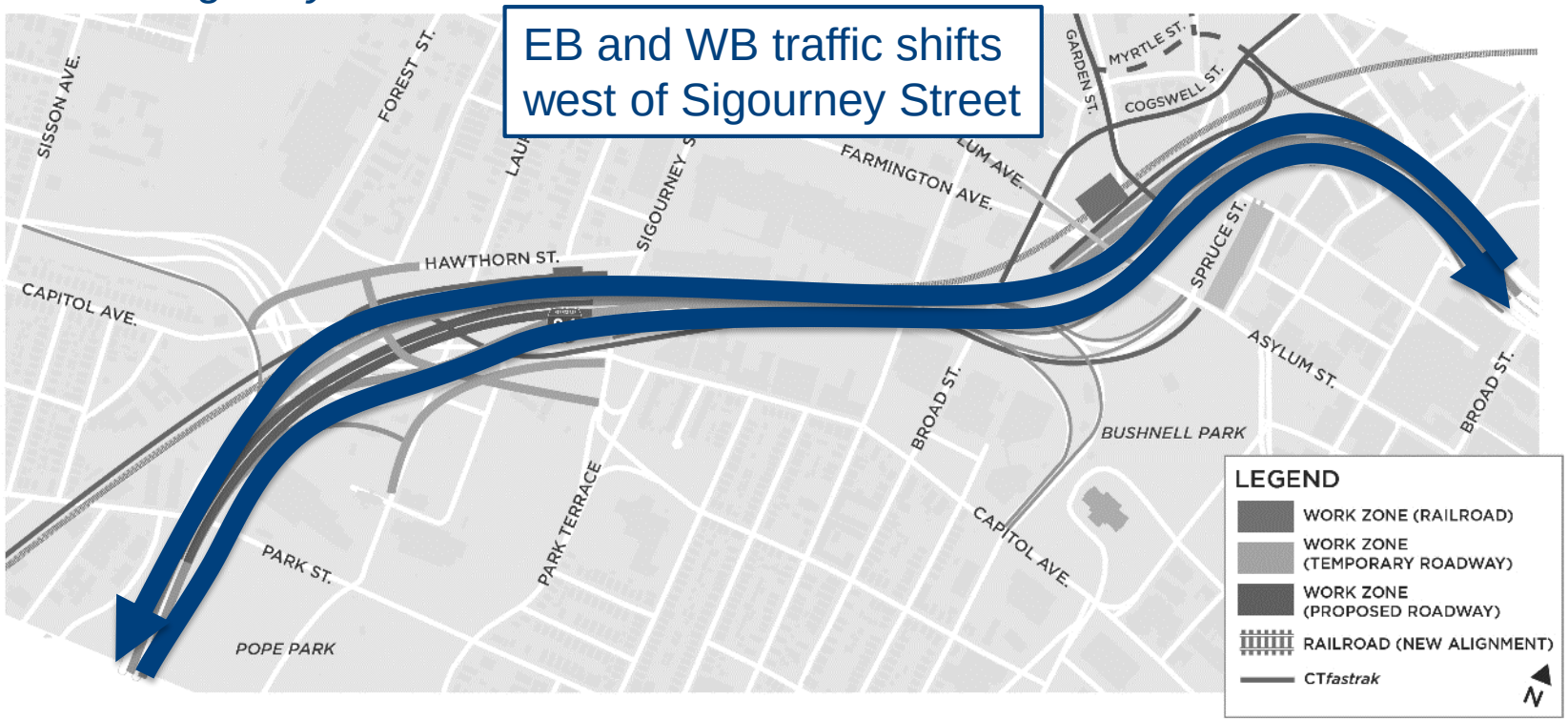


Lowered Highway Construction Example

Phase 2: Western I-84 / Asylum Hill Local Roads

Lowered Highway Construction Example

Phase 2: Highway Traffic Patterns



Lowered Highway Construction Example

Phase 2: Western I-84 / Asylum Hill Local Roads

Lowered Highway Construction Example

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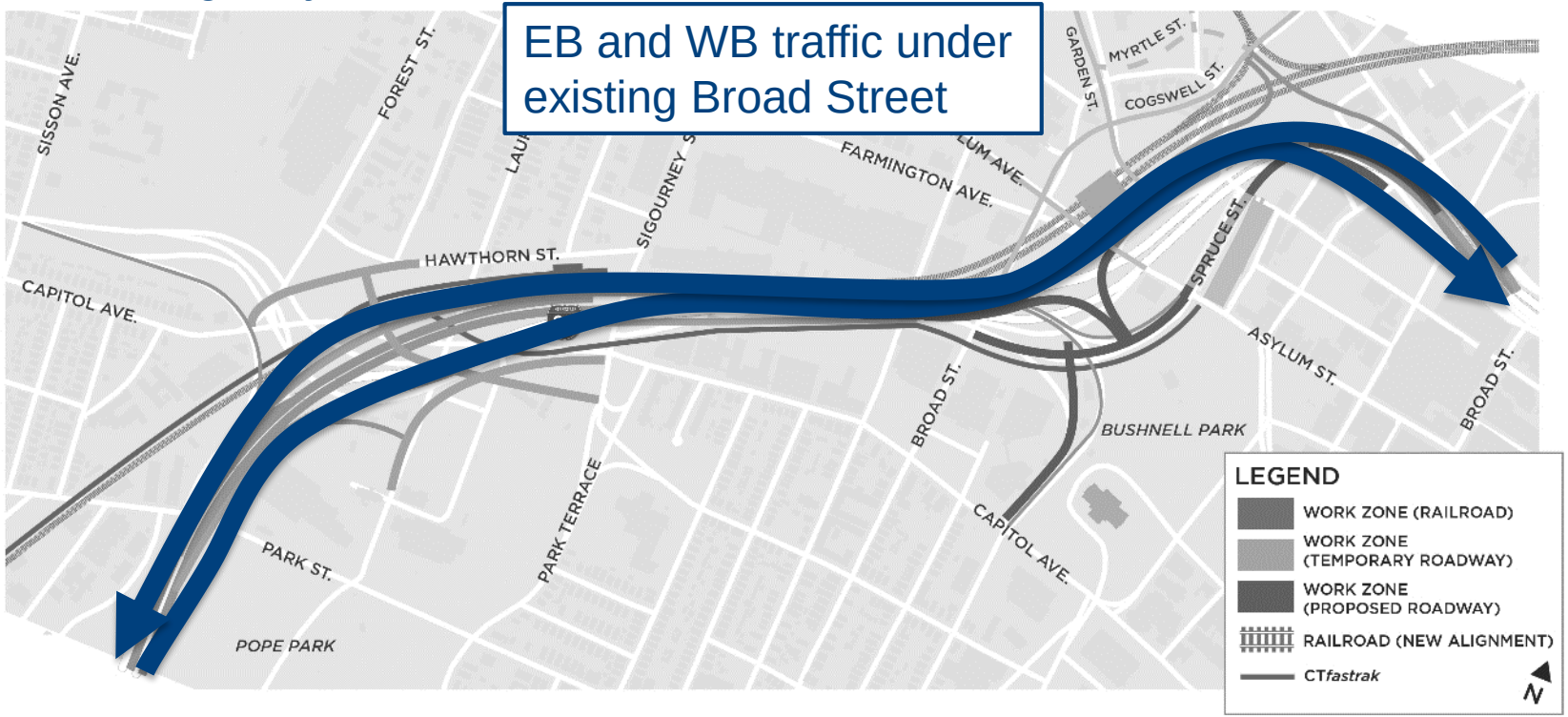
Lowered Highway Construction Example

Phase 3: New local roads and interchange near Bushnell Park

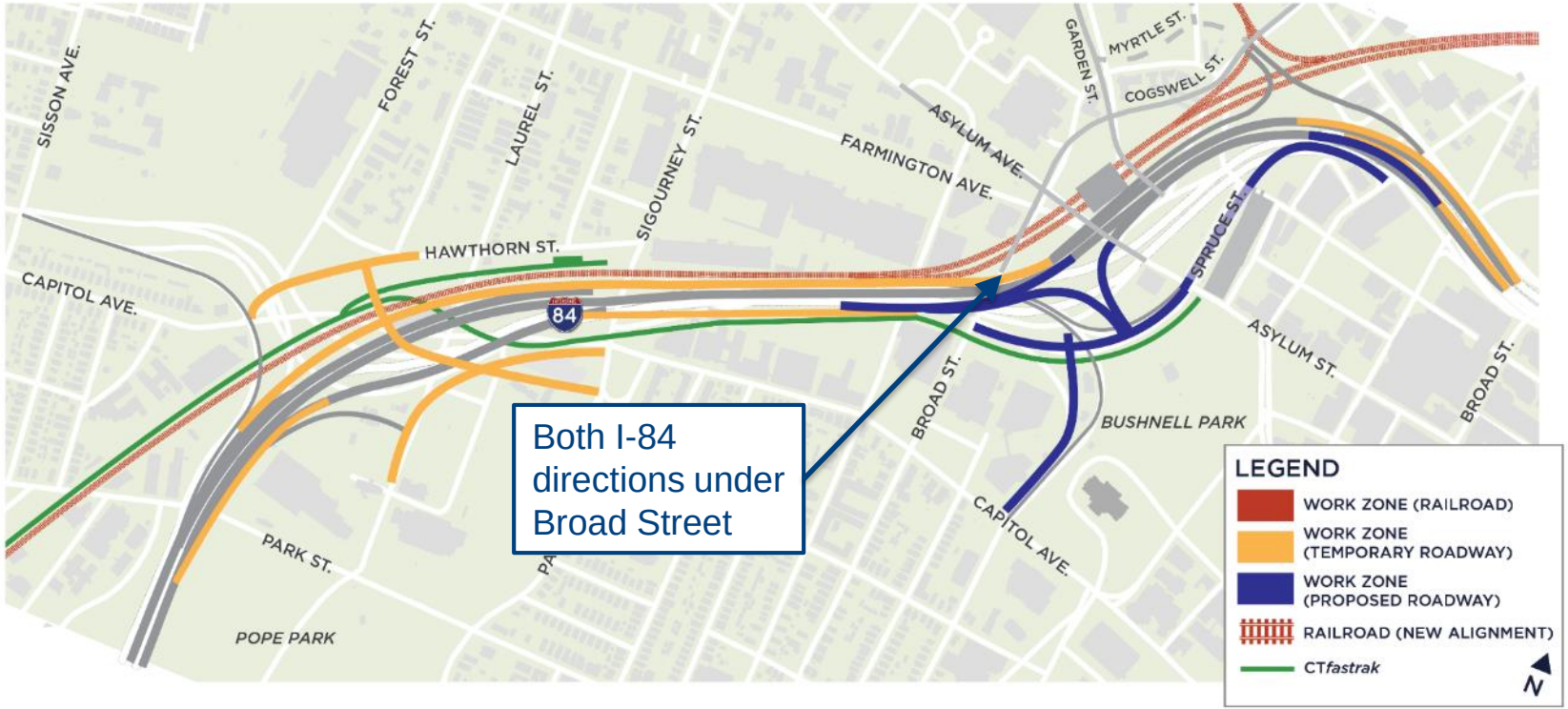
Lowered Highway Construction Example

Phase 3: Highway Traffic Patterns



Lowered Highway Construction Example

Phase 3: New Local Roads and Interchange Near Bushnell Park



I-84 HARTFORD PROJECT

Lowered Highway Construction Example

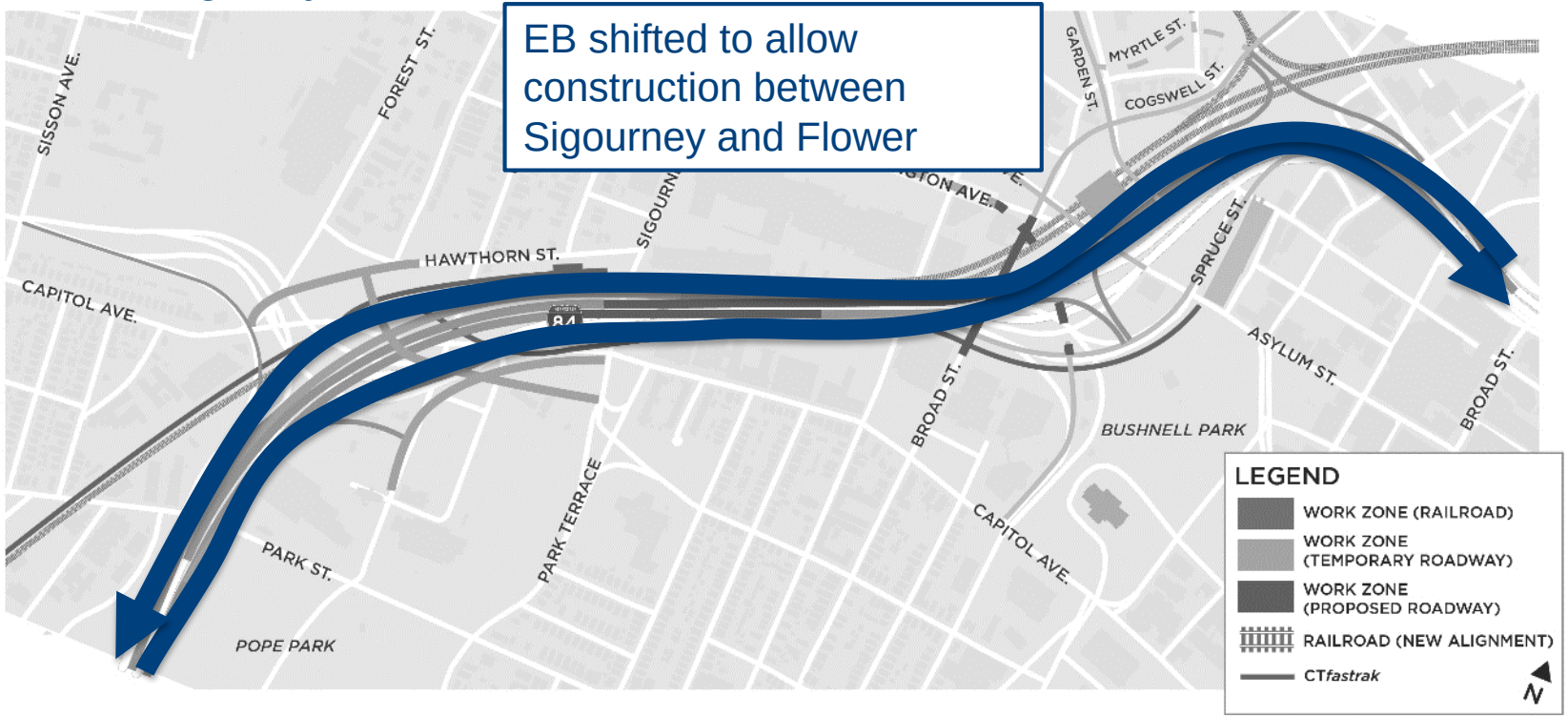
Phase 3: New Local Roads and Interchange Near Bushnell Park

Lowered Highway Construction Example

Phase 4: Complete Middle Section of I-84 / Broad St

Lowered Highway Construction Example

Phase 4: Highway Traffic Patterns



Lowered Highway Construction Example

Phase 4: Complete Middle Section of I-84 / Broad St

Lowered Highway Construction Example

Phase 5: Final Ramp Construction and Capitol Ave

Lowered Highway Construction Example

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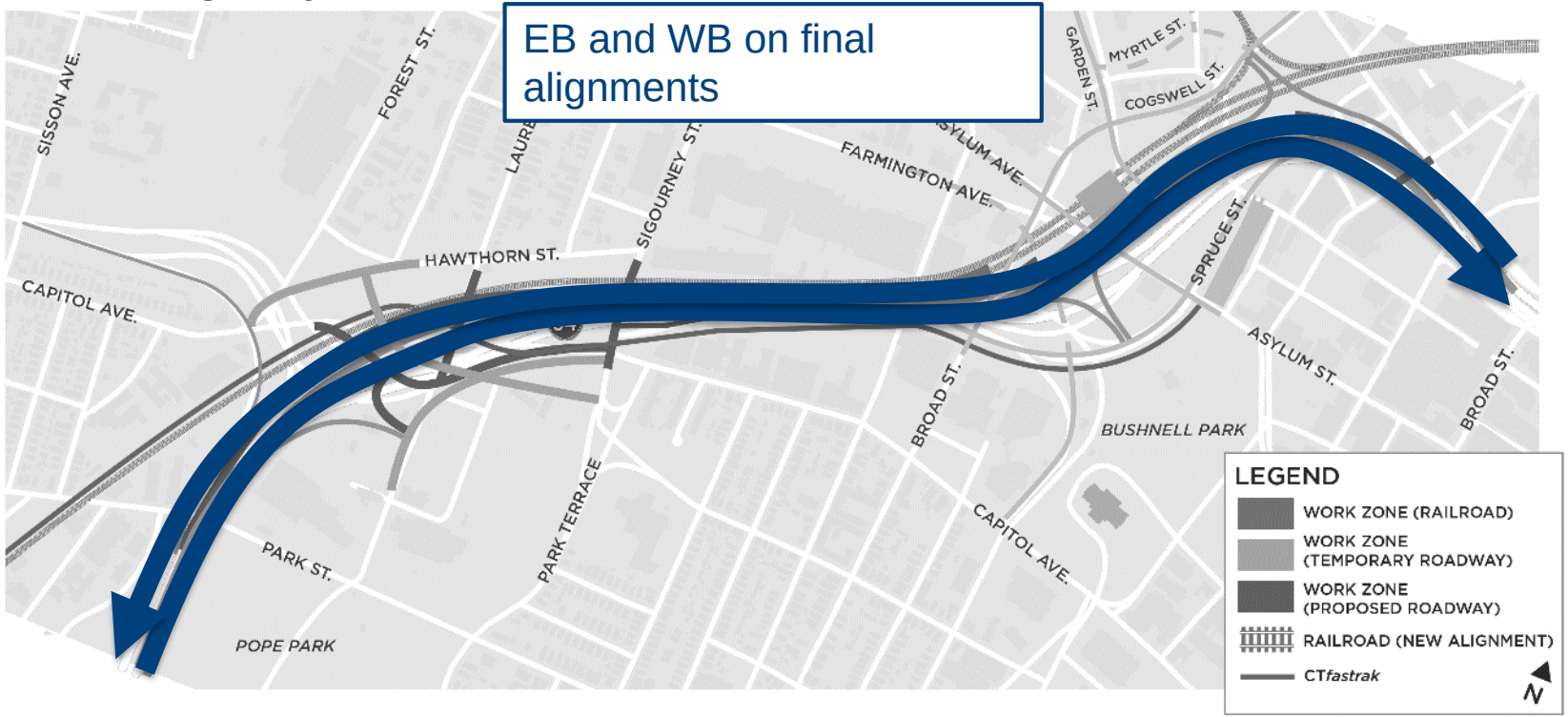
Lowered Highway Construction Example

Phase 5: Highway Traffic Patterns

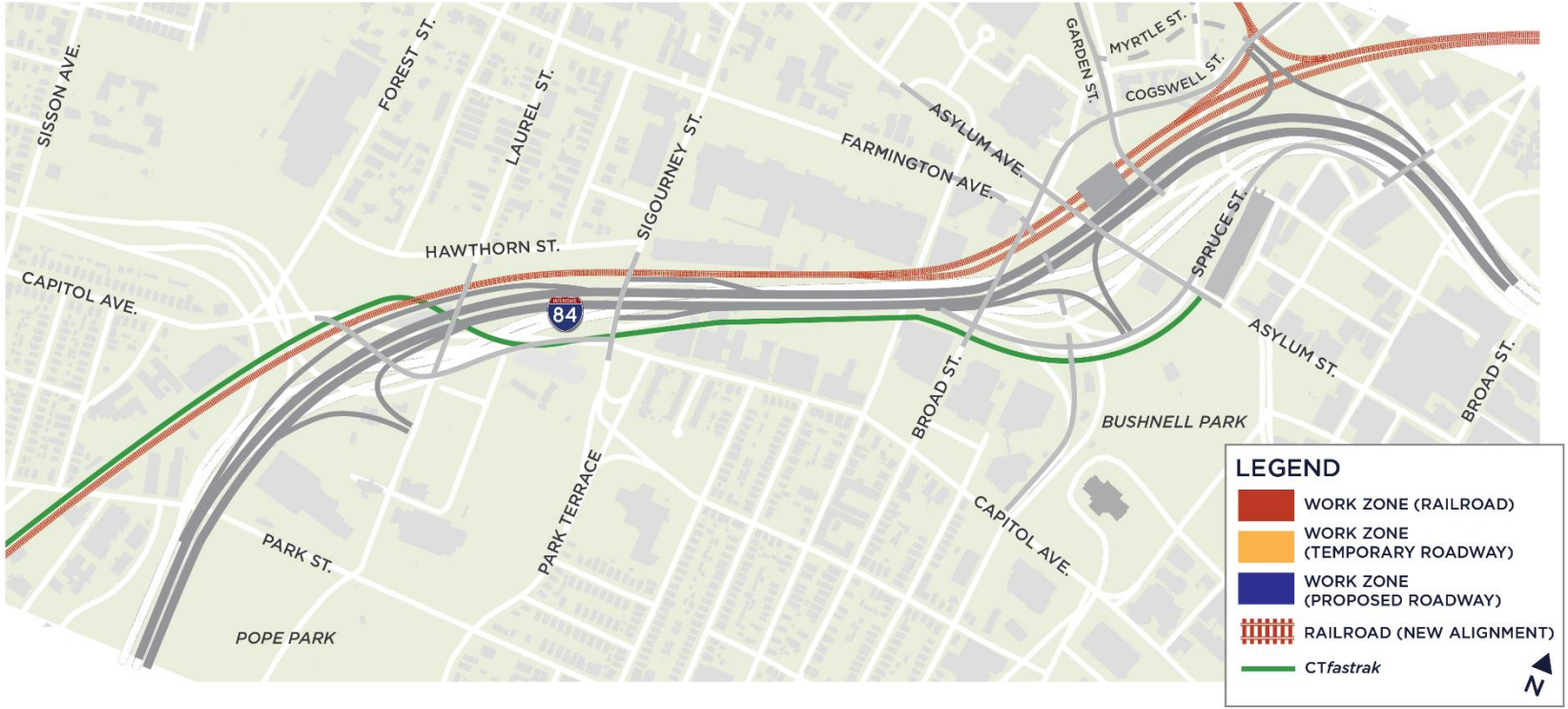


Lowered Highway Construction Example

Phase 5: Final ramp construction and Capitol Avenue

Lowered Highway Construction Example

Construction Complete



Features of Accelerated Construction

- Construct many elements offsite, called prefabrication
- Has some periods of partial / full lane or road closures
- Has shorter duration (typically)
- Can be less costly, because of limited temporary construction and shorter construction duration

Examples of Accelerated Construction in CT

- Bridge over I-84, Southington
- Route 1 bridge replacement over I-95, Stamford (expected in June 2019)

Lowered Highway Construction Example

- Can practicably and feasibly be built
- Likely be conventional with some accelerated elements
- Does not have to have a negative impact upon the economy and people of Hartford

For large projects in urban areas, multi-year construction:

- I-880, West approach of the San Francisco Bay Bridge
- Boston Central Artery Tunnel
  https://www.fhwa.dot.gov/majorprojects/lessons_learned/central_tunnel.cfm
- Seattle Alaskan Way Viaduct
  https://www.fhwa.dot.gov/majorprojects/lessons_learned/awv_ev__lessons_learned62508.pdf
- Oakland's Cypress Freeway
  https://www.fhwa.dot.gov/publications/publicroads/98marapr/cypress.cfm
- New Mexico “Big I“
  https://www.fhwa.dot.gov/majorprojects/lessons_learned/collaborative.pdf#page=45
- I-81 in Syracuse, NY (NEPA study) https://www.dot.ny.gov/i81opportunities/about
- South Capitol Street Corridor Project, Washington DC

I-84 HARTFORD PROJECT

THE SAN FRANCISCO-OAKLAND
BAY BRIDGE SEISMIC SAFETY PROJECTS

CALTRANS · BAY AREA TOLL AUTHORITY · CALIFORNIA TRANSPORTATION COMMISSION

FACT SHEET

West Approach

Seismic safety work involves completely removing and replacing this one-mile section of freeway in its original footprint, as 280,000 vehicles continue to travel over it each day!

PROJECT OVERVIEW

The West Approach refers to a one-mile stretch of Interstate 80 linking San Francisco to the Bay Bridge. It is delineated by Fifth Street and the San Francisco anchorage on Beale Street. Seismic safety work on the West Approach involves completely removing and replacing this one-mile section of freeway in its original footprint, as 280,000 vehicles continue to use the bridge each day!

As part of this $429 million retrofit-by-replacement project to rebuild the West Approach, the double-deck roadways from 3rd Street to the anchorage are being rebuilt so that each deck will have independent columns and foundations.

CONSTRUCTION ELEMENTS

Of the many seismic retrofit projects planned for the Bay Bridge, efforts to rebuild the West Approach occur in the most densely populated area. Some of the work, which has mobilized enormous demolition and construction equipment from all over the country, takes place within feet (or even inches!) of apartment buildings and offices South of Market Street in San Francisco. In an effort to keep traffic moving and to minimize neighborhood disruptions, the project is being performed through a series of six highly complex phases of demolition and construction.

Key Facts

- *Project Start Date: 2003*
- *Anticipated Completion Date: 2009*
- *Construction Contractor: Tutor-Saliba Corporation*
- *Year that the San Francisco-Oakland Bay Bridge opened to traffic: 1936*

A WHOLE NEW APPROACH

A one-mile stretch of I-80 approaching the bridge, and two on- and three off-ramps, will be demolished and completely rebuilt. The work required to rebuild the West Approach is being performed through elaborately choreographed stages, as each section of the one-mile freeway is demolished and rebuilt one section at a time. To ensure public safety, the work often requires major lane reconfigurations, traffic shifts, and temporary deck closures. Vehicles are detoured onto temporary roadways as the original structures are demolished and rebuilt. When the new structures are completed, traffic is once again shifted and the temporary structure is demolished.

Work on the West Approach is one of a series of seismic safety projects to strengthen the Bay Bridge. Seismic retrofit work on the bridge's West Span was completed in 2004. Work to completely replace the original eastern span started in 2002. Replacing it will be a dramatic Self-Anchored Suspension (SAS) span, a 1.2-mile long Skyway and a touchdown near the Oakland Toll Plaza. A temporary transition structure at Yerba Buena Island will be required, to allow traffic to safely use the existing bridge and tunnel while the tie-in to the new bridge is completed. After these seismic safety projects are completed, the original eastern span will be demolished.

For more information about the West Approach, visit www.baybridgeinfo.org

SCHEDULING IS KEY

Most of the major demolition and construction work is scheduled at a time when it will be least disruptive to the 280,000 vehicles crossing the bridge each day. However, as with any project of this magnitude, traffic backups and neighborhood impacts are likely to occur. Bridge builders continue to go to extreme lengths to minimize these impacts by scheduling work over weekends and at night. Sometimes it means consolidating work into a condensed time frame. Often, hundreds of workers must toil around-the-clock to get the job done before heavy commute-hour traffic begins.

LABOR DAY CLOSURE

The most challenging work on the West Approach occurred over Labor Day weekend in 2006, when a 1,000-foot segment of roadway on the upper deck was removed in just 77 hours. The roadway is being replaced with a new, seismically upgraded structure. This required the erection of a system of steel beams and columns to support 400 feet of the lower deck; the removal of steel and concrete reinforcements, including 25-ton structural steel bolsters and 22-ton steel columns; the processing of concrete and steel; and the removal of many tons of debris. Extensive plans were also made for dust control, safety monitoring, milestone tracking, and risk mitigation. The work also involved the cooperation of numerous transportation agencies, airports, emergency service providers and many cities and counties.

KEEPING EVERYONE INFORMED

Keeping neighbors, motorists, and the general public informed has been key during major demolition and construction work on the West Approach. Outreach efforts include community meetings, door-to-door canvassing, the staffing of a project hotline, mailings, public service announcements, and media and legislative outreach.

The work on the West Approach over Labor Day weekend required the project's most extensive outreach campaign, beginning several weeks in advance of the closure and intensifying as it neared. The campaign extended from Mendocino to Bakersfield. It included television, radio, and print announcements; the distribution of nearly one million fact sheets to airports, hotels, hospitals and other venues; and extensive canvassing of residential and commercial neighborhoods.

Because of this comprehensive public outreach, motorists avoided the bridge over Labor Day weekend, and workers were able to finish this enormous task on time!

This is one in a series of fact sheets available on the San Francisco-Oakland Bay Bridge Seismic Safety Projects published by the

BAY BRIDGE PUBLIC INFORMATION OFFICE
311 Burma Road, Oakland, CA 94607
Tel: (510) 286-7167
email: info@baybridgeinfo.org

PS03040/IM

Transportation Operations

- Transit service / incentives
- Off-site operational multi-modal improvements
- Work zone ITS
- Monitoring and information

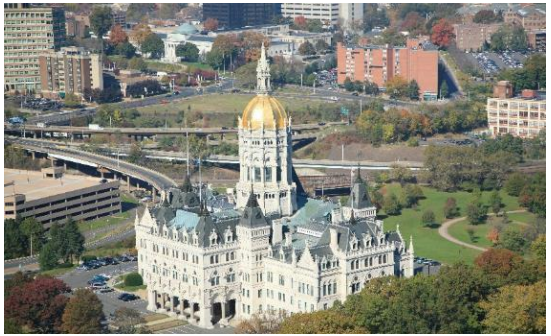
Transit Options

- CT*rail* / CT*fastrak* open during highway work
- Promote transit / reduce SOV
- Free / reduced fares?

Outreach to the Public (e.g. Q-Bridge, New Haven)

Public / Motorist Awareness

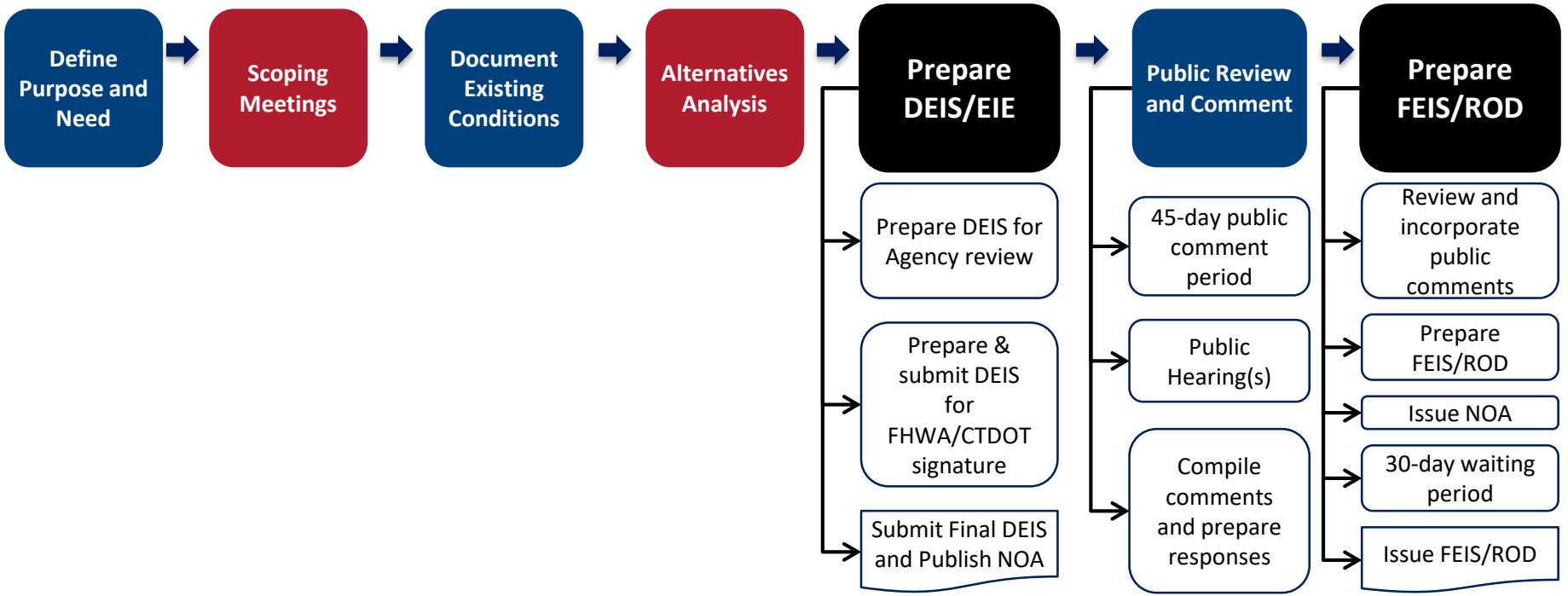
- Press / media / brochures
- Communication on traffic shifts
- Internet (e-blasts / website)
- Promotion of other modes / transportation options
- Coordination with major employers / key stakeholders



Environmental Documentation

NEPA / CEPA Process

WE ARE HERE



NEPA / CEPA Process

Prepare DEIS/EIE

- CTDOT/FHWA prepares DEIS Chapters and Tech Reports
- Cooperating & Participating Agencies review
- CTDOT/FHWA Provides Legal Sufficiency Review
- CTDOT Prepare & Submit Draft EIS/EIE for FHWA/CTDOT Signature
- Distribute Final DEIS and Publish NOA for Public Review

Public Review and Comment

- 45-day Public comment period (input via project website, email, US mail, Public Hearings)
- CTDOT conducts joint NEPA/CEPA Public Hearing(s)
- CTDOT compiles comments/ prepare responses for inclusion in FEIS/ROD

Prepare FEIS/ROD

- CTDOT reviews responses to public DRAFT EIS/EIE comments
- CTDOT prepares FEIS/ROD incorporating responses to comments
- CTDOT Prepares CEPA Mitigation Checklist
- CTDOT/FHWA Provides Legal Sufficiency Review
- Issue NOA
- 30-day waiting period
- Issue Final EIS/EIE and ROD signed by CTDOT and FHWA

Objectives of NEPA Process on I-84 Hartford Project

- Document impacts
- Document mitigation and environmental commitments
- Recommend a Preferred Alternative (highway alignment and local interchanges)
  - Introduce additional corridor features as part of the Preferred Alternative (e.g. CT***fastrak*** alignment, multimodal station area, trident road connections)
- Produce ROD

Objectives of the Design Process

- Focus on details
- Continue public involvement
- Produce final design

Next Steps

How You Can Stay Involved

- Continue to follow the project
  - E-bulletins, newsletters, events
- Review the DEIS
- Attend the DEIS hearing
- Submit comments
  - In person and / or in writing
- Participate in any PAC meetings /
- working sessions during the design process

Capital Gateway Master Plan

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