I-84 HARTFORD PROJECT

CONSTRUCTION CONSIDERATIONS

How Might I-84 Be Rebuilt?

CONVENTIONAL CONSTRUCTION

- Typically has longer duration
- Bridge elements are constructed on site
- Requires temporary construction, increasing costs

ACCELERATED CONSTRUCTION TECHNOLOGIES

- Typically has shorter duration
- Many elements constructed off site, a.k.a. “prefabrication”
- Less or no temporary construction or associated costs

Example of Accelerated Construction Technologies on I-84 in Southington, CT

Transit may help alleviate single occupancy congestion

How Could Traffic Be Managed?

- Influences alignment (on vs. off alignment)
- Affects construction approach
- Consider section or lane closures on I-84
  - Expedite construction
  - Improve safety
  - Minimize or avoid property impacts
  - Reduce community/economic impacts
  - Reduce costs
- Reduce traffic volume
  - Explore transit options
    - » Gather ridership data
    - » Promote transit to reduce single occupancy vehicles
    - » Obtain free or reduced fares?
- Car pool
- Modify work schedules
- Improve alternate routes
- Other strategies

Conventional construction requires additional safety measures during construction

I-84 HARTFORD PROJECT

MOBILITY: BICYCLE AND PEDESTRIAN ANALYSIS

We have gathered data and input from:

- 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

We are:

- Incorporating data and information into the traffic model
- Making connections between the number of intersection lanes and walkability/bikeability

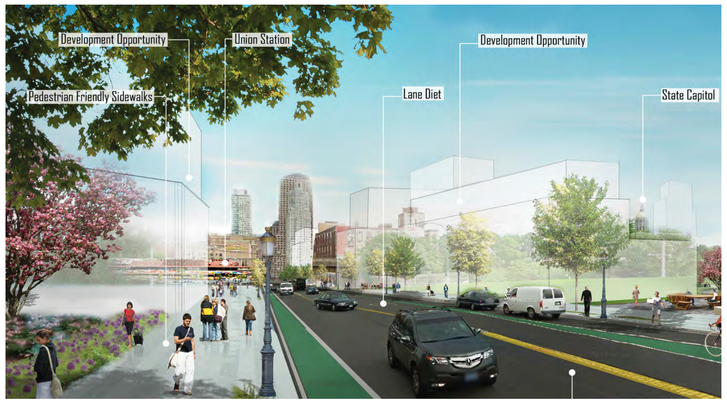
We will continue to consider the following input from users:

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

All of the options that will be further assessed have benefits for bicyclists and pedestrians!

Broad Street (view south)

Capitol Avenue (view east)



Asylum Avenue (view east)

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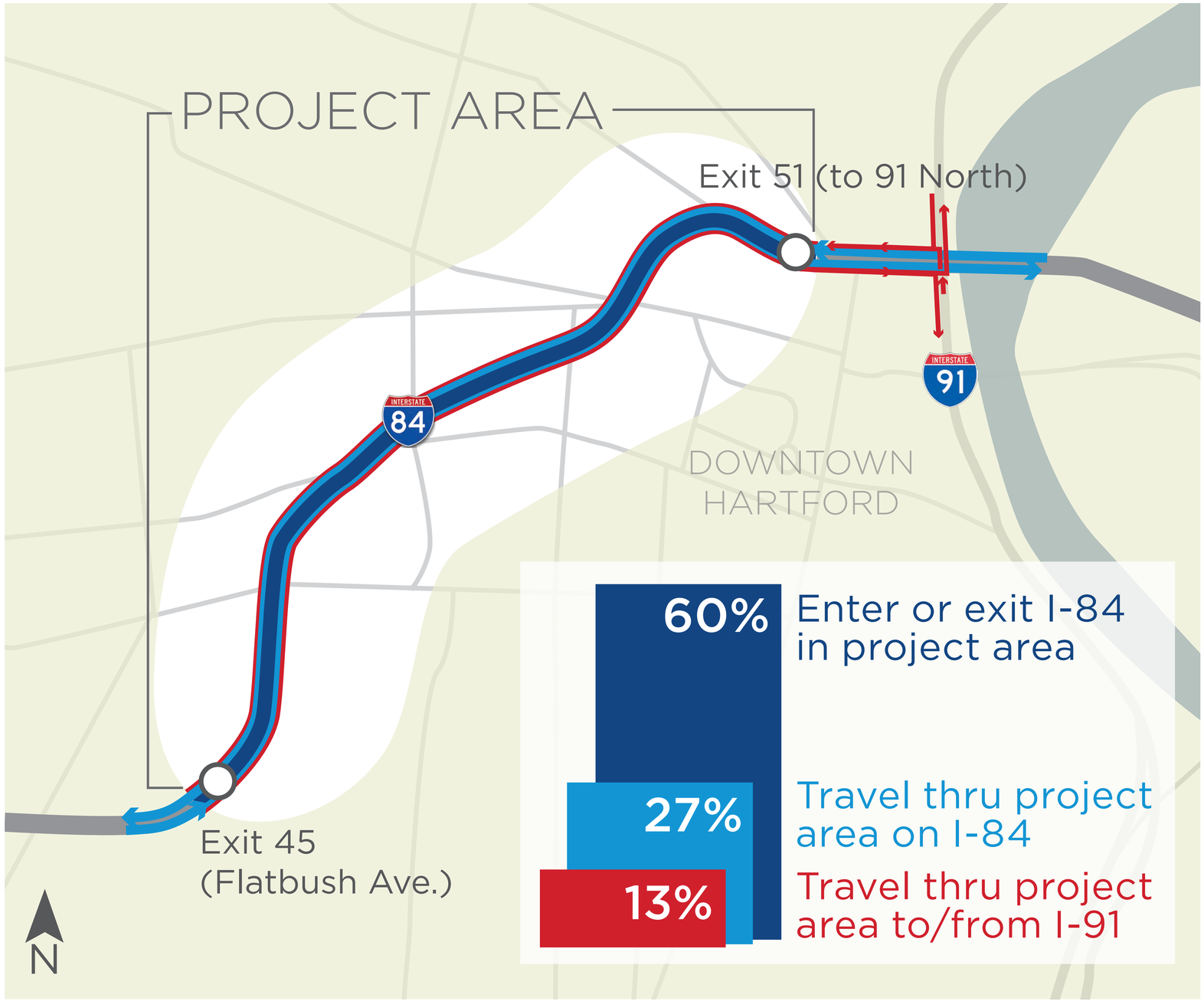
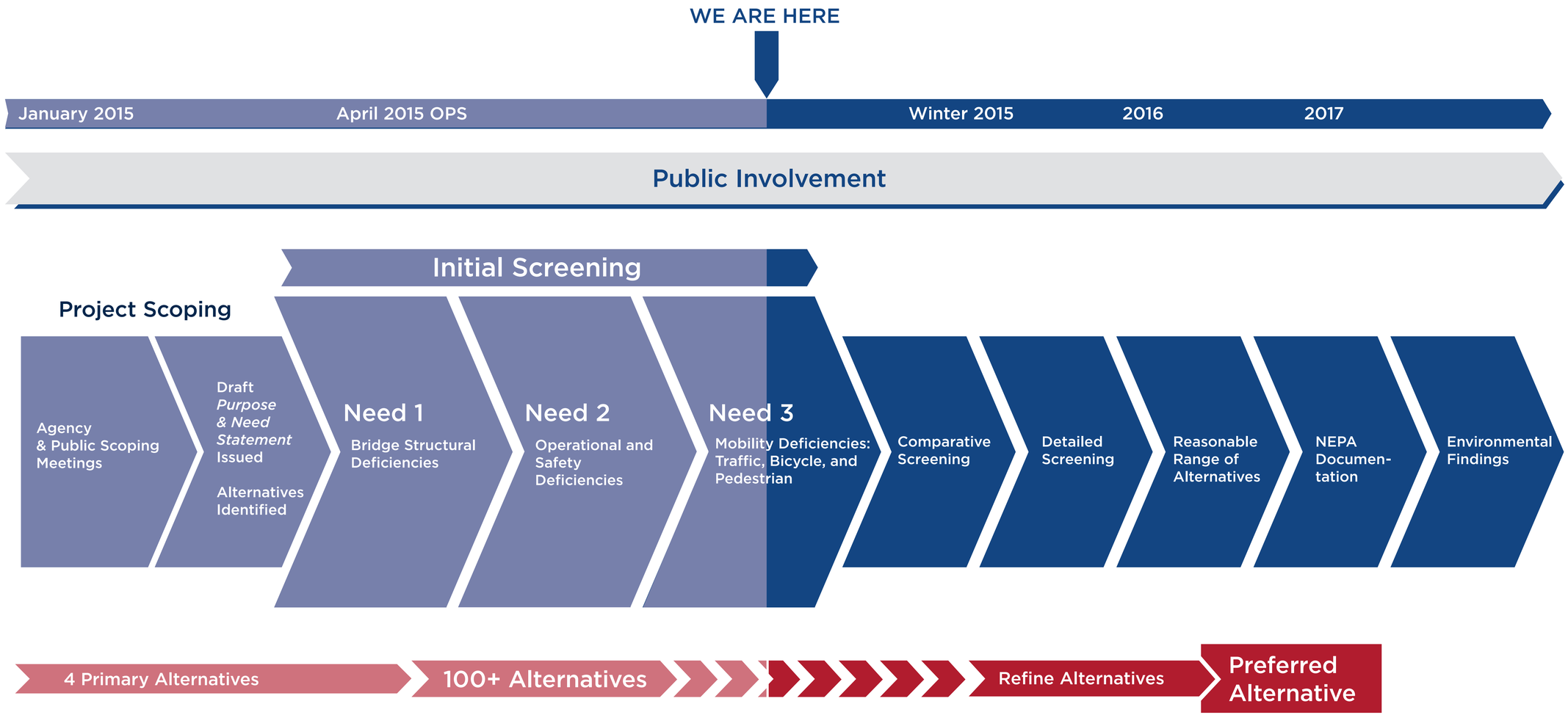
PEAK LOCAL TRAFFIC DISTRIBUTION



I-84 HARTFORD PROJECT
PROGRAM OVERVIEW



Timeline is not to scale

I-84 HARTFORD PROJECT
FAST FACTS

Facts & Figures

30 Acres of Bridge Deck

occupies **270** acres

Constructed in **1960-69** (prior to NEPA)

8 Full or partial interchanges

Elevated viaduct over **2** locations

Project Location

Projected Costs

$2 Billion ▶ No-Build

$4-6 Billion ▶ Replace viaduct ▶ Eliminate viaduct & lower I-84 (relocate railroad)

$10-12 Billion ▶ Construct tunnel

Objectives

Improve conditions for bicyclists and pedestrians

Redesign local streets as needed

Repair freeway's damage to community

Seek opportunities for economic development

Redesign I-84 mainline & interchanges to improve

Traffic Operations

Safety

Purpose & Need

Bridge and Structural Deficiencies

Operational and Safety Deficiencies

Mobility Deficiencies

Schedule

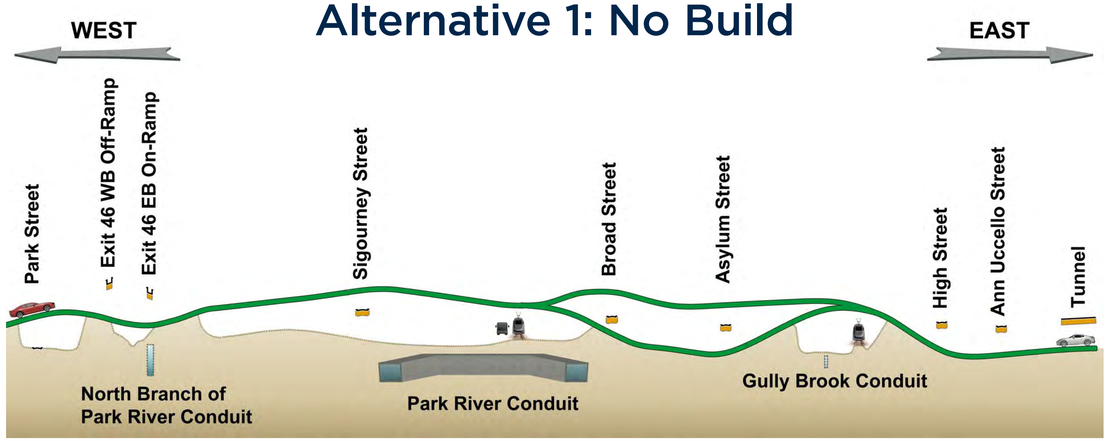
Dates are approximate

- 2012 — Planning study began, following HUB of Hartford
- 2016 — Narrow alternatives down
- 2017 — Conclude NEPA (EA or EIS)
- ~2021 — Start Construction
- ~2028 — Complete Construction

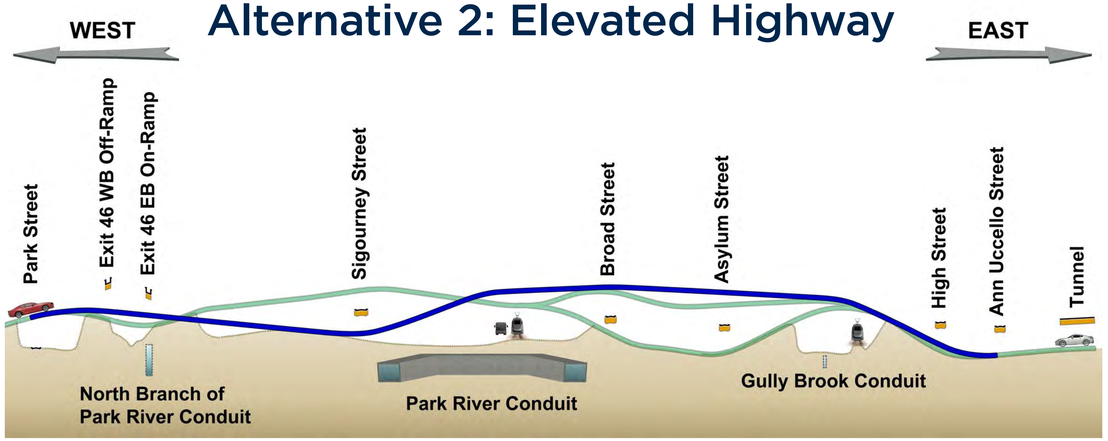
I-84 HARTFORD PROJECT

MAINLINE ALTERNATIVES: VERTICAL ALIGNMENT

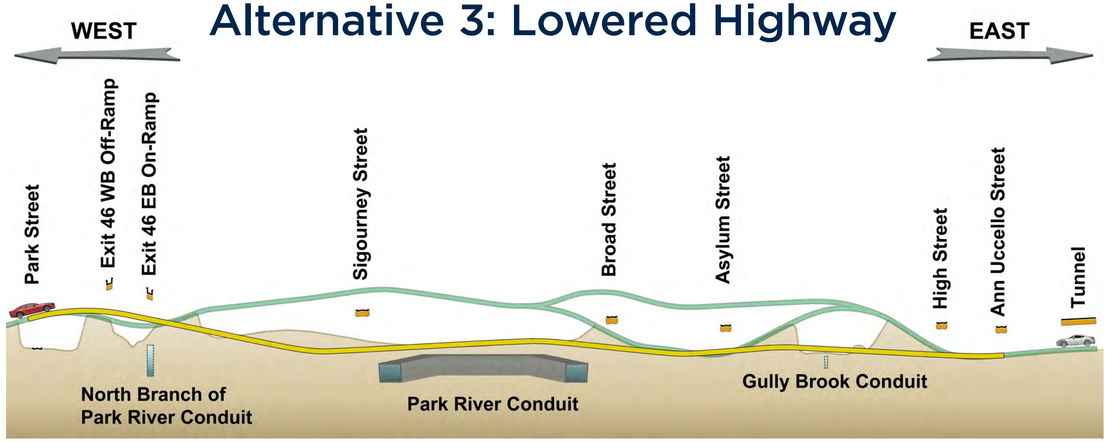
Alternative 1: No Build



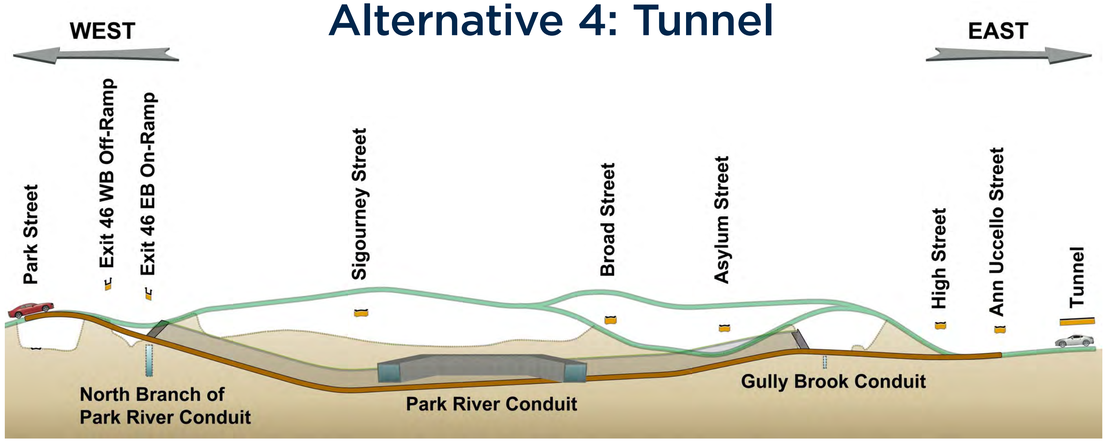
Alternative 2: Elevated Highway



Alternative 3: Lowered Highway



Alternative 4: Tunnel



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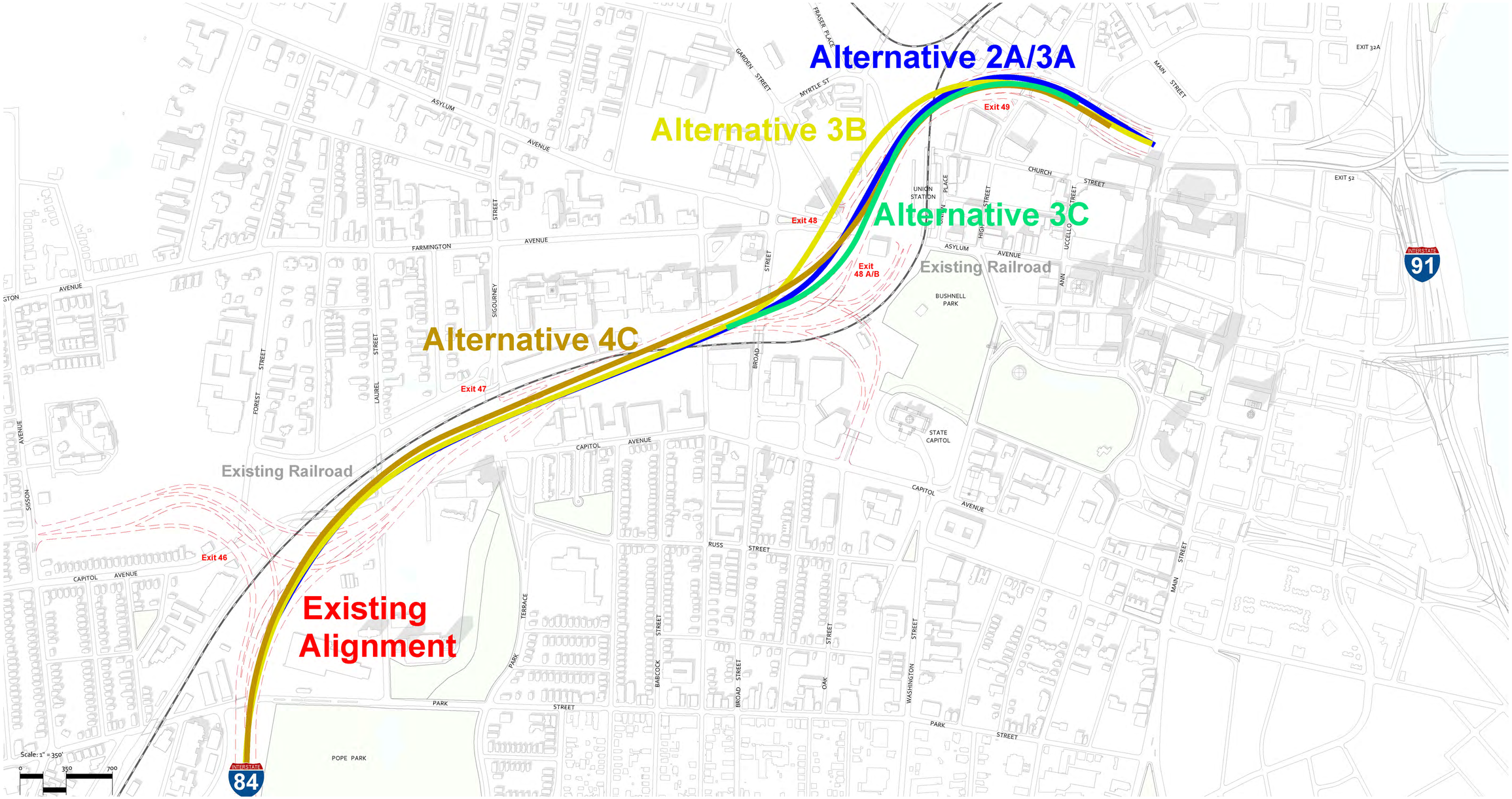
MAINLINE ALTERNATIVES: HORIZONTAL ALIGNMENT



I-84 HARTFORD PROJECT
POTENTIAL BUILDING IMPACTS

8 Aetna Mechanical Facilities
151 Farmington Avenue

Potentially Impacted By: Alternative 3 (All Options) and Alternative 4 (All Options)

10 Aetna Flower Street Garage
151 Flower Street

Potentially Impacted By: Alternatives 4A & 4C

11 Capitol View Apartments
600 Asylum Avenue

Potentially Impacted By: Alternative 3B (All Options) & Alternative 4 (All Options)

12 39-45 Spring Street

Potentially Impacted By: Alternative 2A-E2(S), Alternative 3A (All Options Except 3A-E1-1 & -E1-2), Alternatives 3B & 3C (All Options) & Alternative 4 (All Options)

13 49-51 Spring Street

Potentially Impacted By: Alternative 2A-E2(S), Alternative 3A-E4 & E5(S) Alternatives 3B & 3C (All Options) & Alternative 4 (All Options)

14 87-101 Spring Street

Potentially Impacted By: Alternative 3A (Except 3A-E4), Alternative 3B (All Options) & Alternatives 4A & 4B

3 Capitol Archives & Record Storage
133 Laurel Street

Potentially Impacted By: All Alternatives

2 753 Capitol Avenue

Potentially Impacted By: Alternative 2/3 W3 (Both Options)

1 Quality Appliances
1390 Park Street

Potentially Impacted By: Highway Lowered Beneath Park Street

15 2 Fraser Place

Potentially Impacted By: Alternative 3B-E3(S)

16 41 Walnut Street

Potentially Impacted By: Alternatives 3A, 3B & 4 (All Options)

17 450 Church Street

Potentially Impacted By: Alternative 3B-E1(S)

4 Knox Parks/GROW Hartford
75 Laurel Street

Potentially Impacted By: Alternative 2/3 W1, W5 & W6

5 State Parking Garage
25 Sigourney Street

Potentially Impacted By: Alternative 2/3 W1, W2, W4, W5 & W6

6 Capitol District Energy Center
490 Capitol Avenue

Potentially Impacted By: All (S) Options & Alternatives 4B & C

7 DAS Pump House
470 Capitol Avenue

Potentially Impacted By: All Alternatives

9 Hartford Courant
285 Broad Street

Potentially Impacted By: Alternative 2A-E1

18 70-84 Union Place

Potentially Impacted By: Alternative 3B-E1(S)

Alternative F1 (Relocation North of Realigned I-84):
Illustrative Station Area Site Plan

Alternative F2 (Relocation North of Realigned I-84):
Illustrative Station Area Site Plan