

Planning for the I-95 Stamford Improvements and Metro-North / Myrtle Ave Bridge Reconstruction

Project Advisory Committee Meeting #2

September 26, 2023



I-95 Stamford
Planning and Environment Linkages Study



Housekeeping Items



- Meeting is recorded and will be posted on website
- Presentation is posted to project website at www.i95stamford.com/pac
- Participants can video conference in or call in via phone
- Two ways to communicate during discussion periods:
 - Raise your hand to verbally state question / comment
 - Type question / comment into the chat to be read and answered aloud by study team

CTDOT Study Team



Mike Calabrese, PE
Division Chief

Nilesh Patel, PE
Principal Engineer

Jonathan Dean, PE
Project Manager

Joe Belrose, EIT
Project Engineer

Today's Presenters



Jonathan Dean, PE
Project Manager, CTDOT



Andrew Lessard, PE
Bridge Engineer, Stantec Consulting



Mike Paiewonsky, AICP
Environmental Planner, Stantec Consulting



Emily Valentino, PE, PTOE,
RSP
*Project Manager, Stantec
Consulting*



Marcy Miller, AICP
Community Engagement Lead, FHI Studio

PAC Introductions



Stamford Traffic

Stamford Mayor's Office

Cove Neighborhood Association

East Side Partnership

West Side Neighborhood Revitalization Zone

Western CT Council of Governments

Glenbrook Neighborhood Association

Stamford Chamber

Mill River Park Collaborative

American Automobile Association

UConn Stamford

Motor Transport Association of Connecticut

Stamford Americans with Disabilities Act Advisory Council

South End Neighborhood Revitalization Zone

People Friendly Stamford

Charter Communications

Downtown Stamford

Empire Reality Trust

Stamford Hospital

Stamford Historical Society

Agenda



1. Welcome & Introductions
2. Needs and Deficiencies Analysis
3. Purpose & Need
4. Next Steps / Study Schedule
5. Discussion
6. Adjourn



Since Our June 2023 PAC Meeting

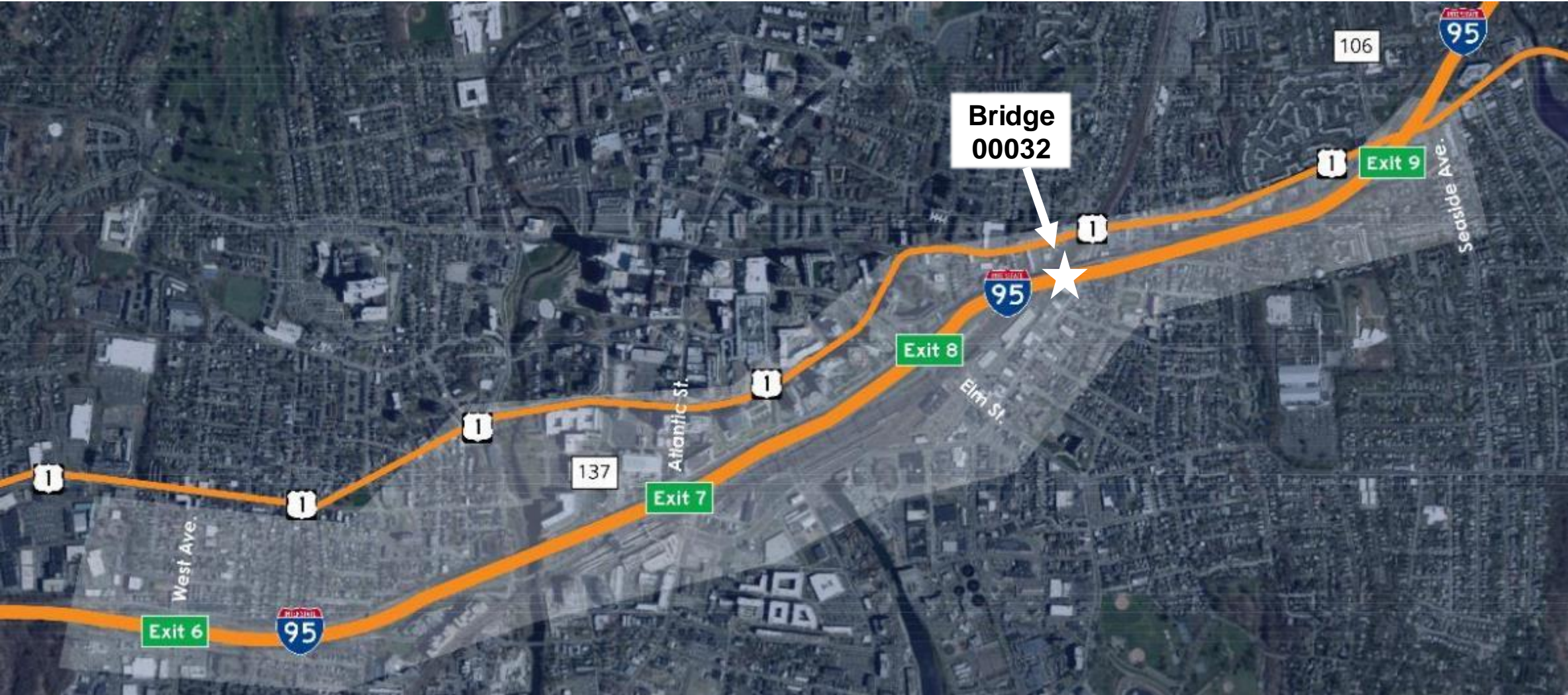


- Pop up events (3)
- Met with *CTtransit* about routes and service
- Met with City staff about on-going economic development
- On-going study analysis



Needs and Deficiencies Analysis

Study Corridor



Bridge Deficiencies

Bridge Elements Overview



Deck:

- Portion of bridge that directly carries traffic

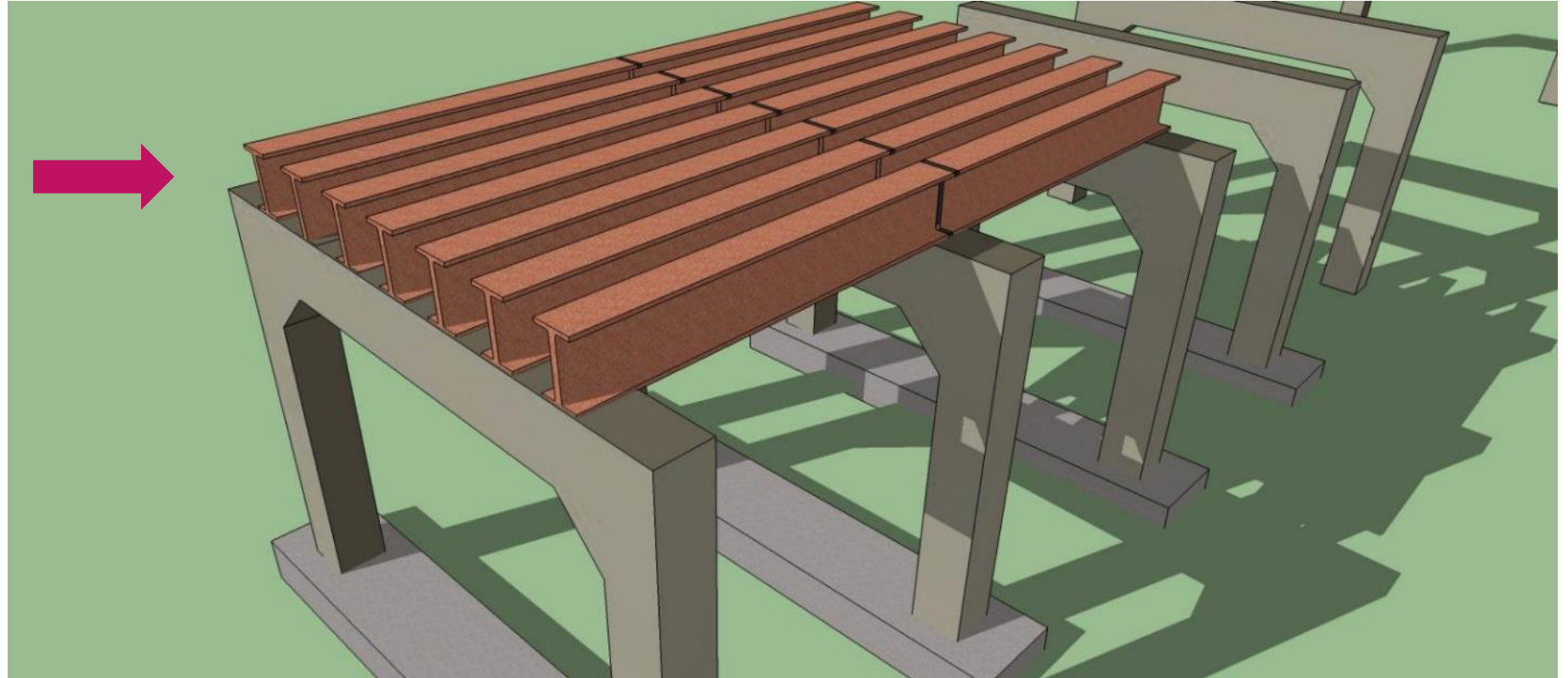


Bridge Elements Overview



Superstructure:

- Portion of bridge that supports deck
- Distributes loads to the substructures

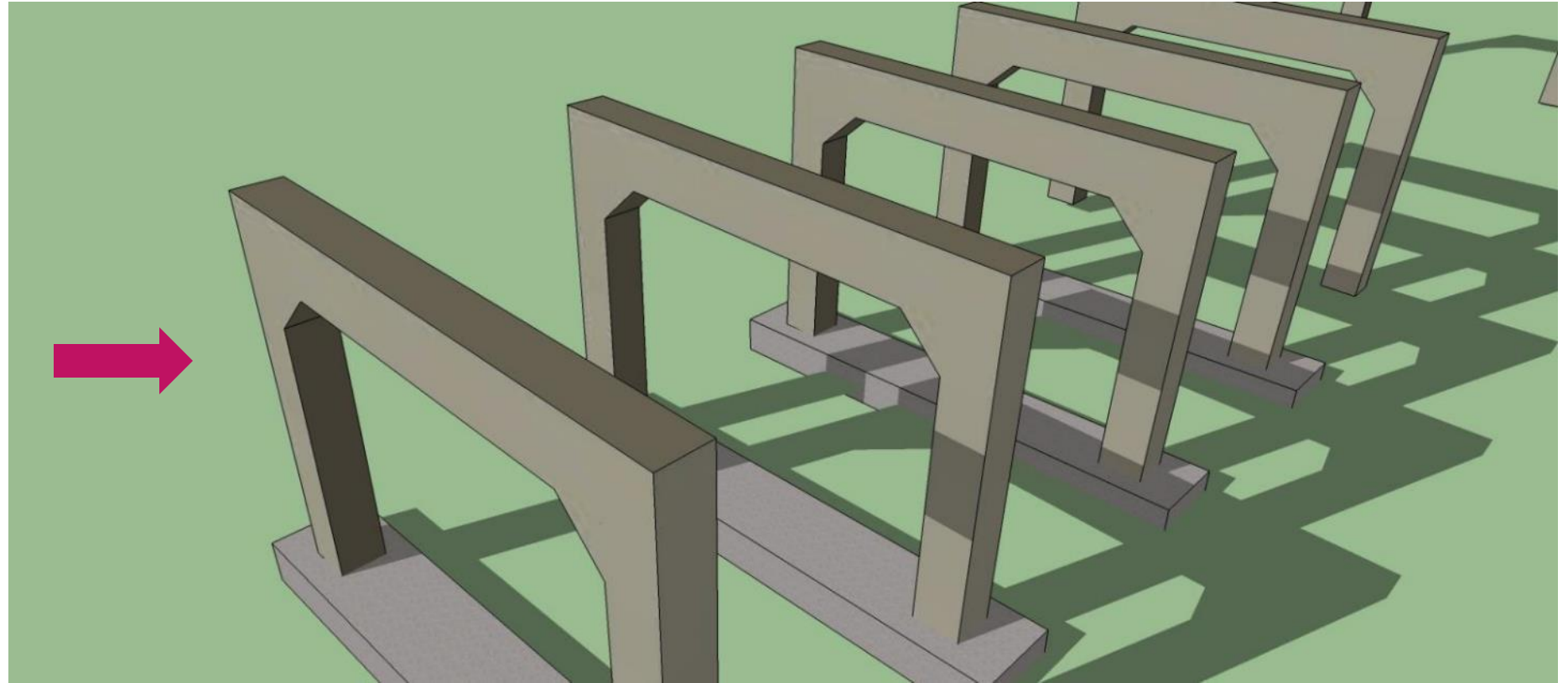


Bridge Elements Overview



Substructure:

- Portion of bridge that supports superstructure
- Distributes all bridge loads to the ground



Bridge Deficiencies

Bridge Safety and Inspections



- CT bridges inspected every two years
- Given rating 0 – 9
- Bridges in study area are rated from Good (6) to Poor (4)
- Safe to drive on
- Regular maintenance required
- Major upgrades are required

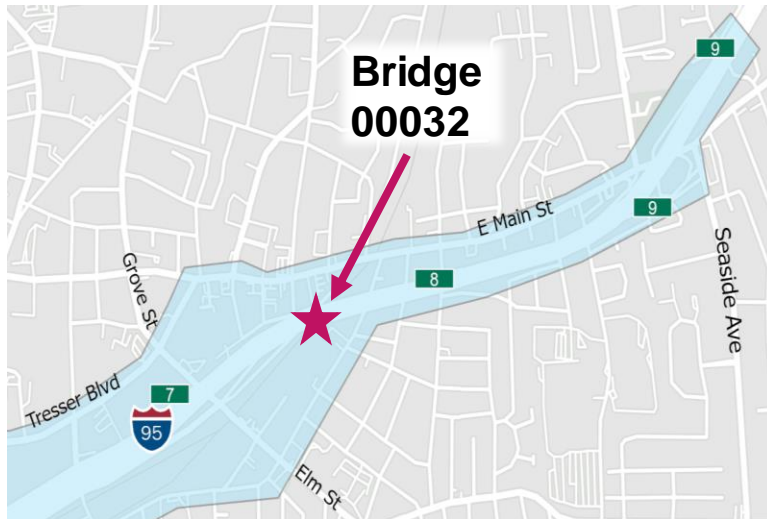
Bridge Condition: NBI Ratings and State of Good Repair	
9 Excellent	SOGR
8 Very Good	
7 Good	
6 Satisfactory	
5 Fair	
4 Poor	
3 Serious	
2 Critical	
1 Imminent Failure	
0 Failed	

Bridge Deficiencies

Bridge 00032: I-95 over MNRR, S State St and Myrtle Ave



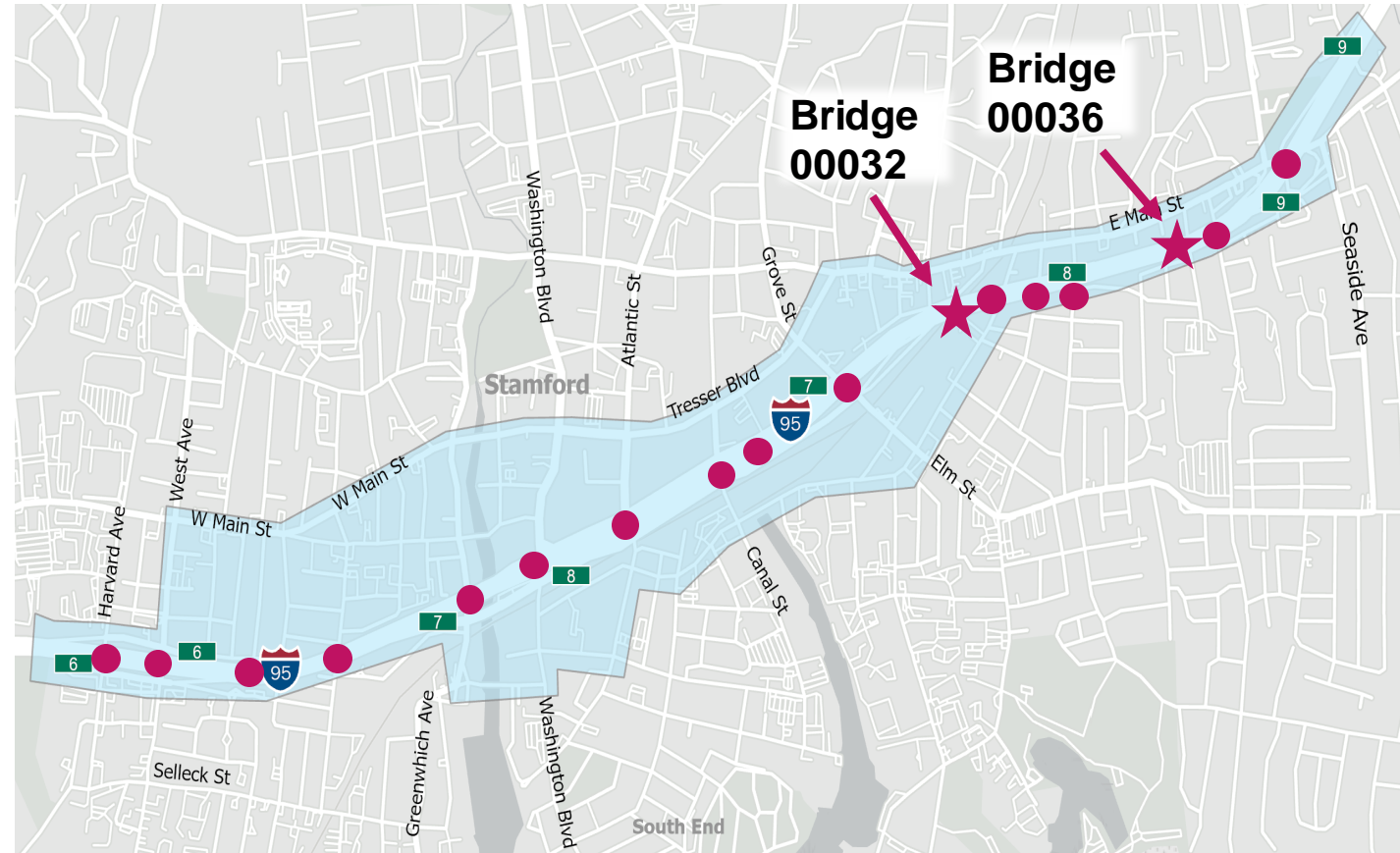
- Deck, superstructure, and substructure in Poor condition
- Bridge roadway width is too narrow



Bridge Deficiencies



- Bridge 00032, I-95 over Metro North Railroad (MNR) and Myrtle Ave:
 - Deck
 - Superstructure
 - Substructure
 - Deck geometry
- Bridge 00036, Blachley Rd over I-95:
 - Deck geometry



Bridge Deficiencies

Bridge 00032: I-95 over MNRR, S State St and Myrtle Ave



Superstructure

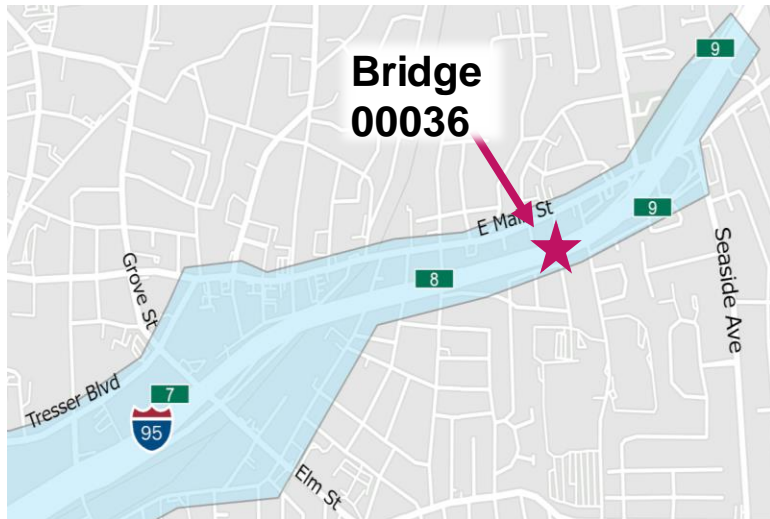


Bridge Deficiencies

Bridge 00036: Blachley Rd Over I-95



- Bridge roadway width is too narrow



I-95 Mainline Deficiencies

Mainline Deficiencies

Examples



- Several elements do not meet current design standards:
 - Short stopping sight distance on mainline and ramps
 - Insufficient acceleration and deceleration lane lengths
 - Narrow shoulder widths
 - Inadequate travel lane cross slope leads to poor drainage
 - Insufficient horizontal curve length – tight curves

Mainline Deficiencies

Short Stopping Distance

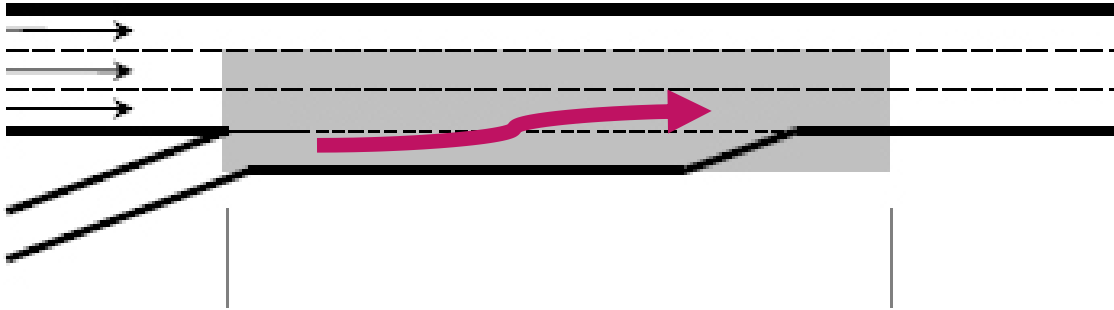


Southbound I-95 short
stopping sight distance

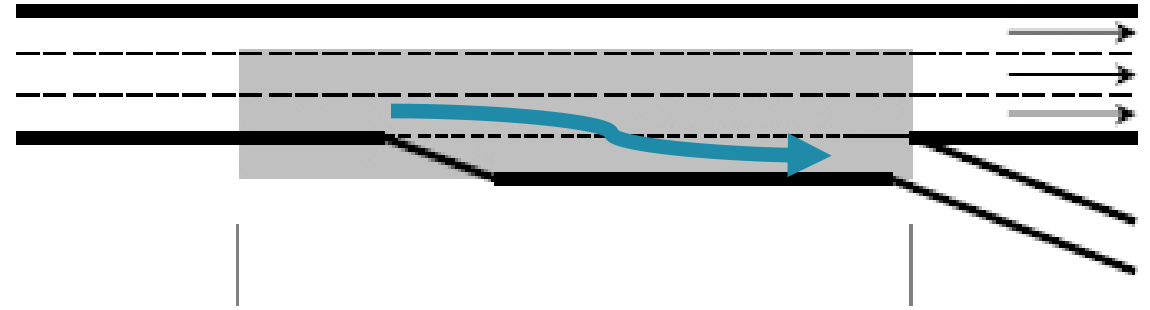


Mainline Deficiencies

Acceleration / Deceleration Lanes



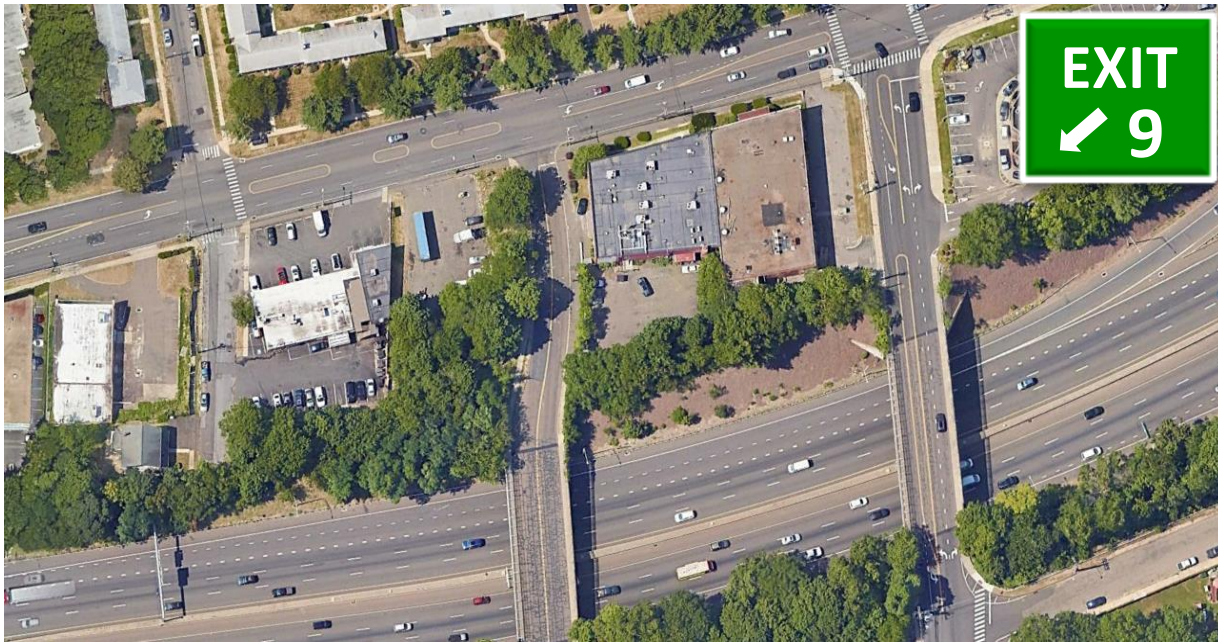
Merging & Acceleration Lane



Diverging & Deceleration Lane

Mainline Deficiencies

Insufficient Acceleration / Deceleration Lane Lengths



Southbound Exit 9 On-Ramp from Route 1

Insufficient acceleration length

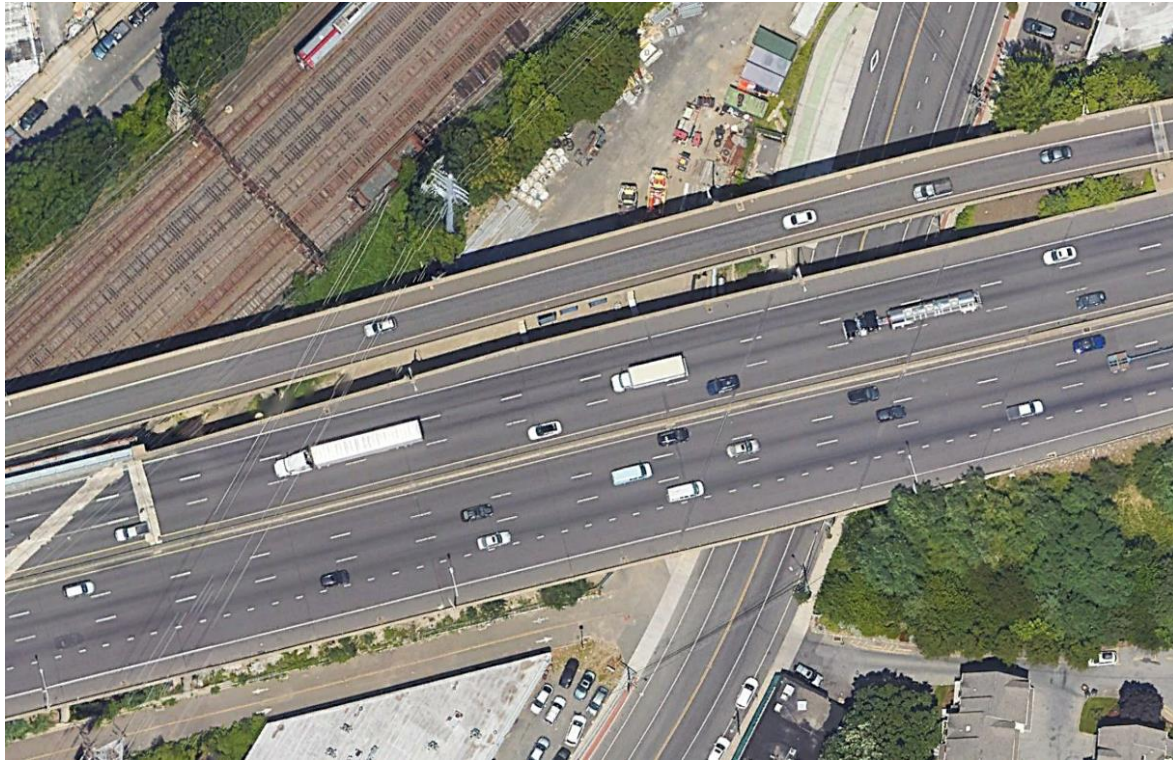


Northbound Exit 9 Off-Ramp to Seaside Ave

Insufficient deceleration length

Mainline Deficiencies

Narrow Median and Shoulder Widths



Insufficient median and shoulder width



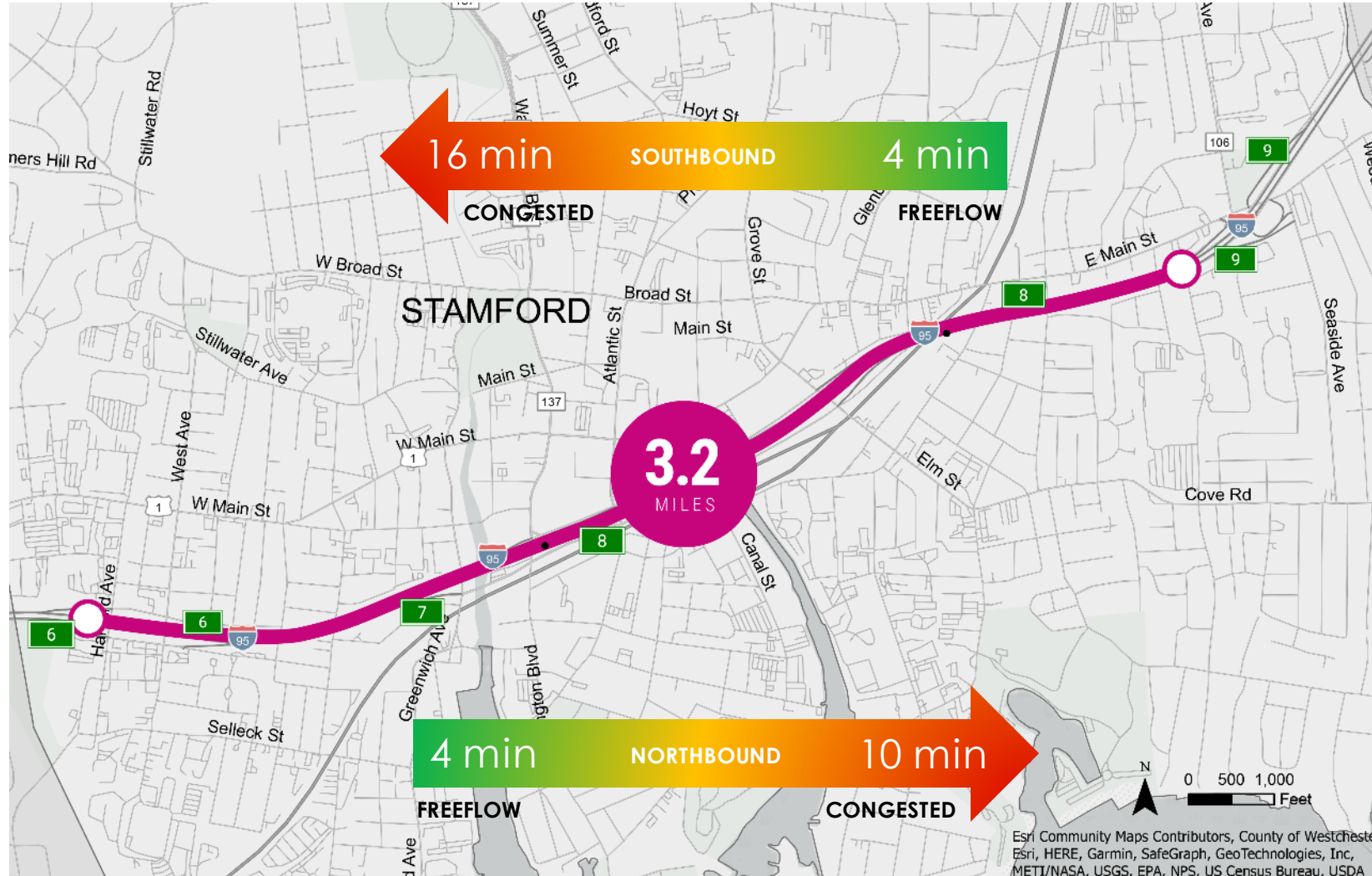
Narrow shoulders

Mainline Deficiencies

Travel Time



- Non-congested, free-flow:
 - Both directions: 4 min, 68 mph
- Congested, peak times:
 - Southbound morning: 16 min, 12 mph
 - Northbound evening: 10 min, 19 mph



Mainline Deficiencies

Level of Service (LOS) Classifications



LOS A / LOS B

LOS C / LOS D

LOS E / LOS F

Best

Acceptable

Failing / deficient

No delays

Minimal / moderate delays

Significant delays

Mainline Deficiencies

LOS Analysis: Southbound Morning Peak



Legend

Study Area

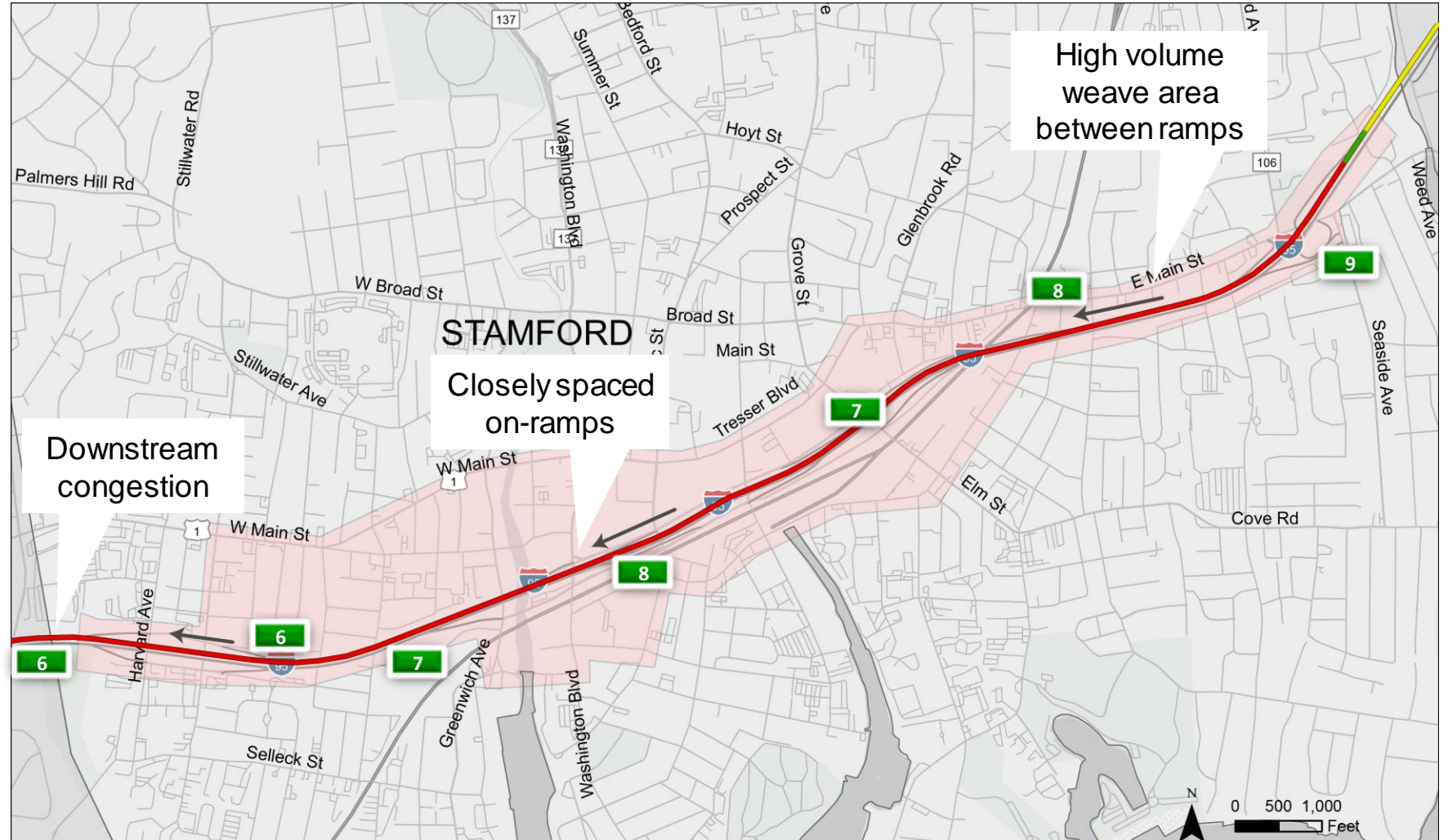
Direction of Flow

Interstate Segment Level Of Service
South-bound Weekday AM

LOS A/B

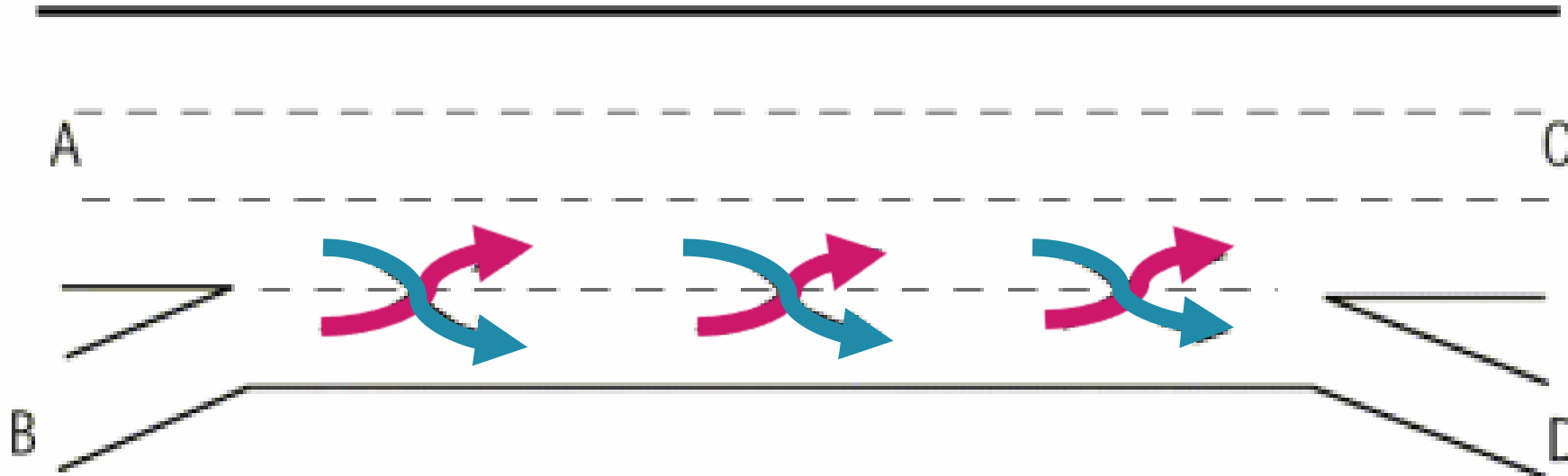
LOS C/D

LOS E/F



Mainline Deficiencies

Weaving Travel Lane Diagram



Mainline Deficiencies

High Volume Weave Area: Morning Peak



High volume weave area caused by traffic entering the mainline at ramps combined with mainline lane drop



Mainline Deficiencies

Closely Spaced On-Ramps: Morning Peak



Mainline Deficiencies

LOS Analysis: Northbound Evening



Legend

Study Area

Direction of Flow

Interstate Segment Level Of Service
North-bound Weekday PM

LOS A/B

LOS C/D

LOS E/F



Mainline Deficiencies

High Volume Weave Area: Evening Peak



High volume
weave area
between
ramps



Mainline Deficiencies

Closely Spaced On-Ramps: Evening Peak

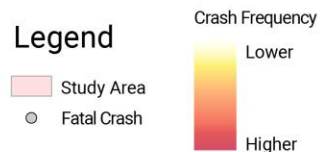
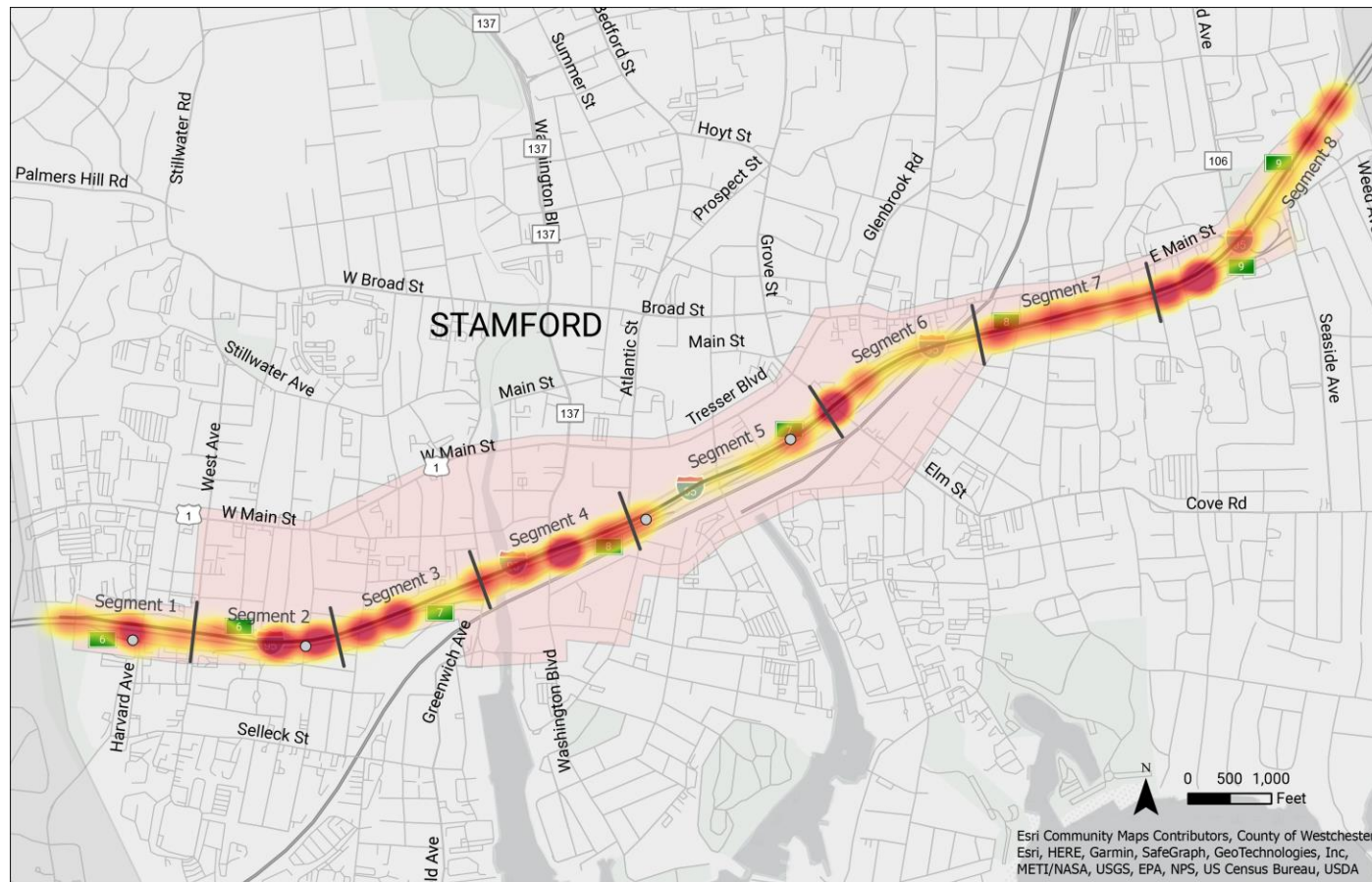


Mainline Deficiencies

Crash Analysis



- 2016-2021 data
- Mostly rear-end or overtaking crashes
- Clusters on curves and ramp merges
- 4 fatalities



Local Road Deficiencies

Local Roadway Deficiencies

PEL Scope of Work Review



- Review multimodal conditions along project corridor
 - Existing transit service, pedestrian and bicycle conditions
- Identify potential infrastructure improvements to:
 - Transit access (bus and rail)
 - Pedestrian connectivity
 - Bicycle connectivity
 - Safety
- Evaluate multimodal project impacts
- Evaluate travel demand impacts



Local Roadway Deficiencies

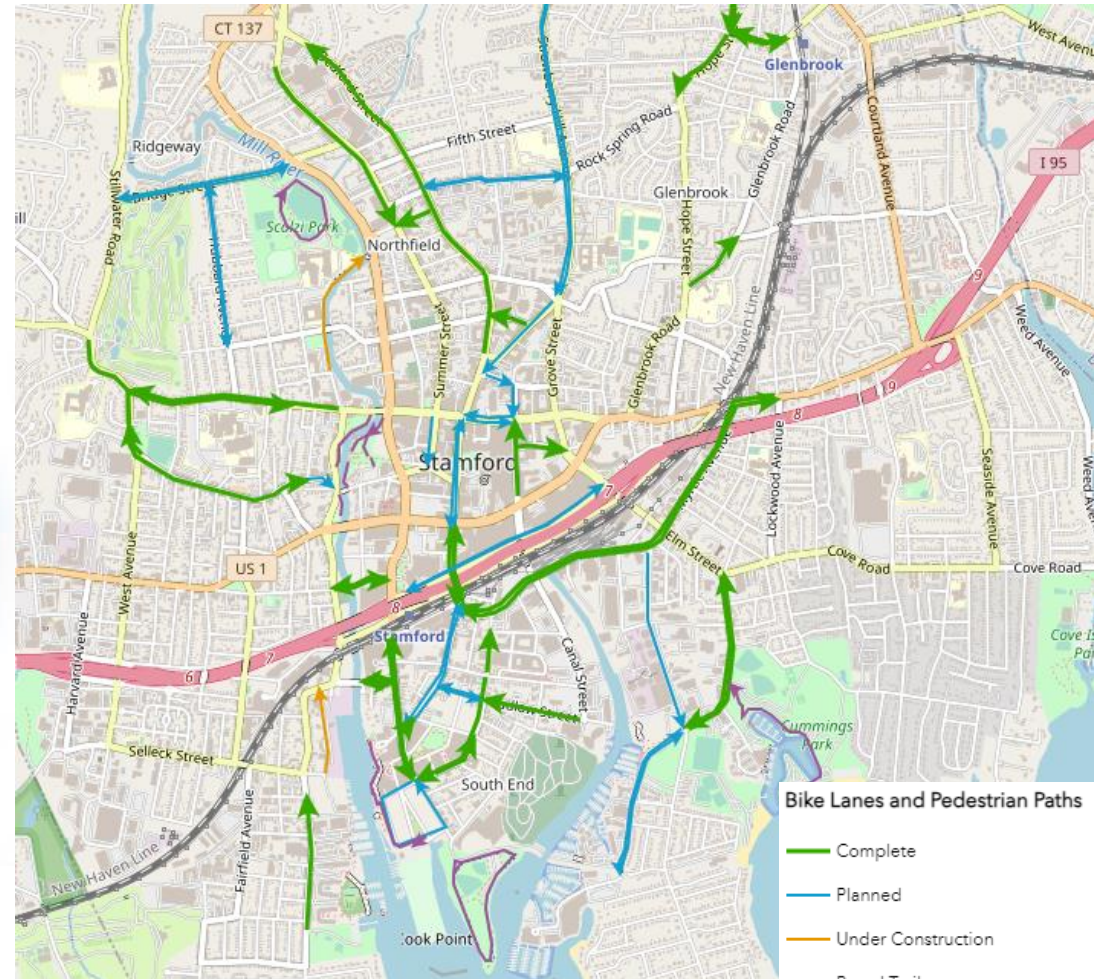
Existing Bicycle and Pedestrian Facilities





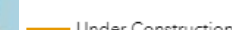


Existing Bicycle Network

-  Paved Trail
-  Unpaved Trail
-  Bike Lane
-  Shared Lane Markings
-  MTA Stations

0 0.5 1 Miles



Bike Lanes and Pedestrian Paths

-  Complete
-  Planned
-  Under Construction
-  Paved Trail
-  Other

Local Roadway Deficiencies

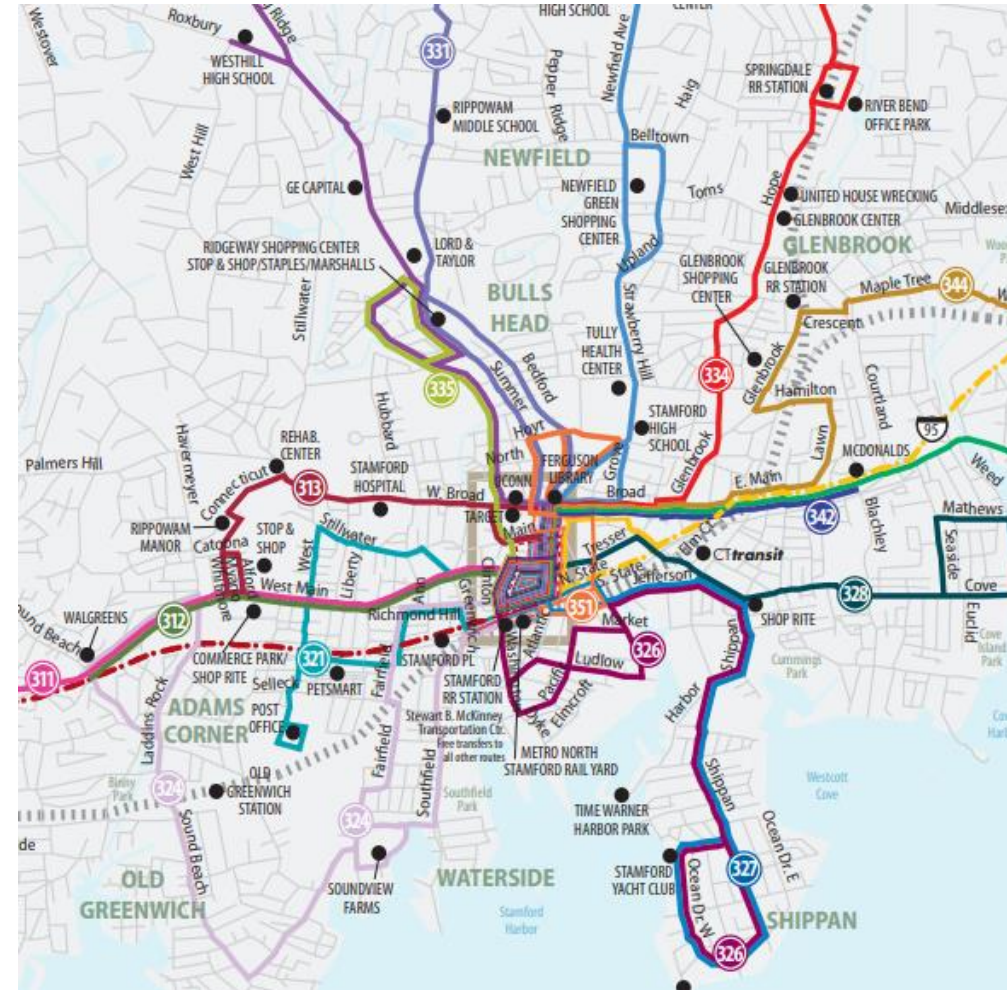
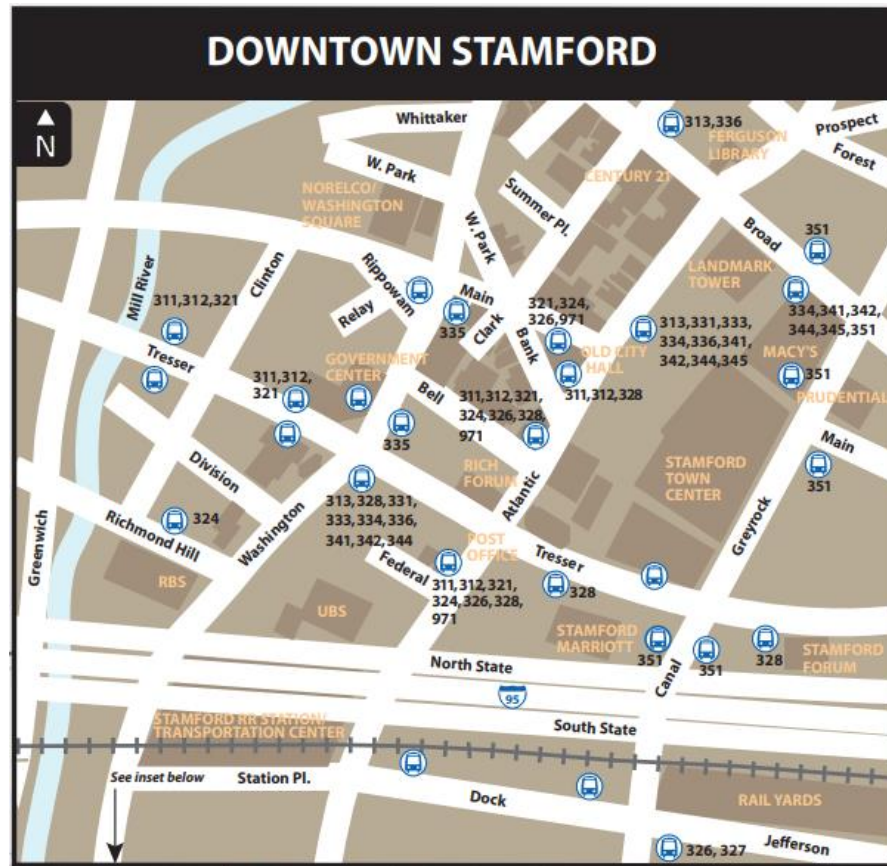
Existing Bus Service



CT transit

Service operated by CT transit
Stamford 203-327-7433; www.cttransit.com

311 Port Chester	334 Hope Street
312 West Main Street	335 Washington Boulevard
313 West Broad Street	336 Long Ridge Road
321 West Avenue	341 Norwalk
324 Fairfield Avenue	342 East Main Street
326 Pacific Street	344 Glenbrook Road
327 Shippan Avenue via Transitway	345 NCC Flyer
328 Cove Road	351 Stamford Connector: Downtown Loop
331 High Ridge Road	971 I-BUS Express Stamford/White Plains
333 Newfield Avenue	

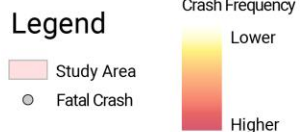
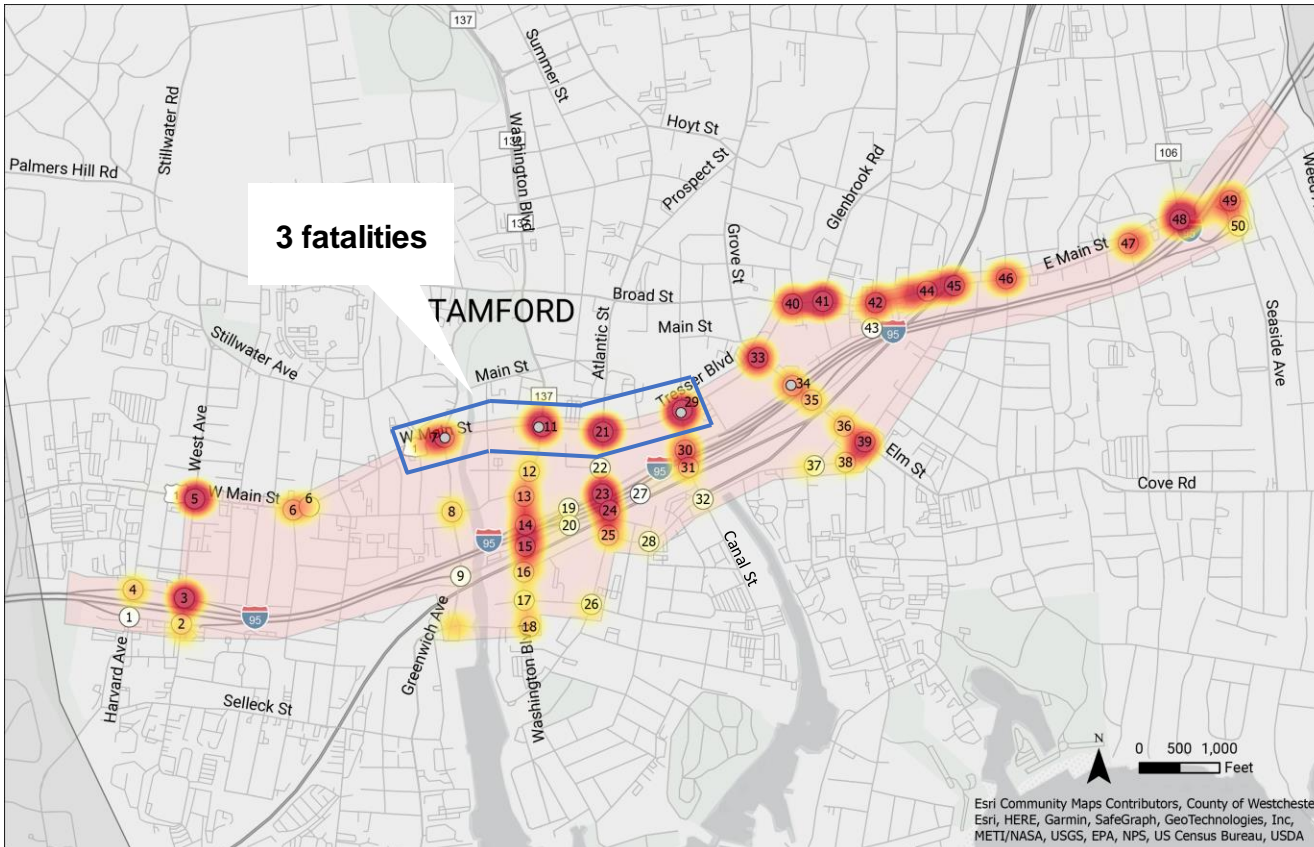


Local Roadway Deficiencies

Crash Analysis



- 2016-2021
- Four (4) fatalities
- Tresser Blvd between Greenwich Ave and Canal St has predominantly rear end crashes

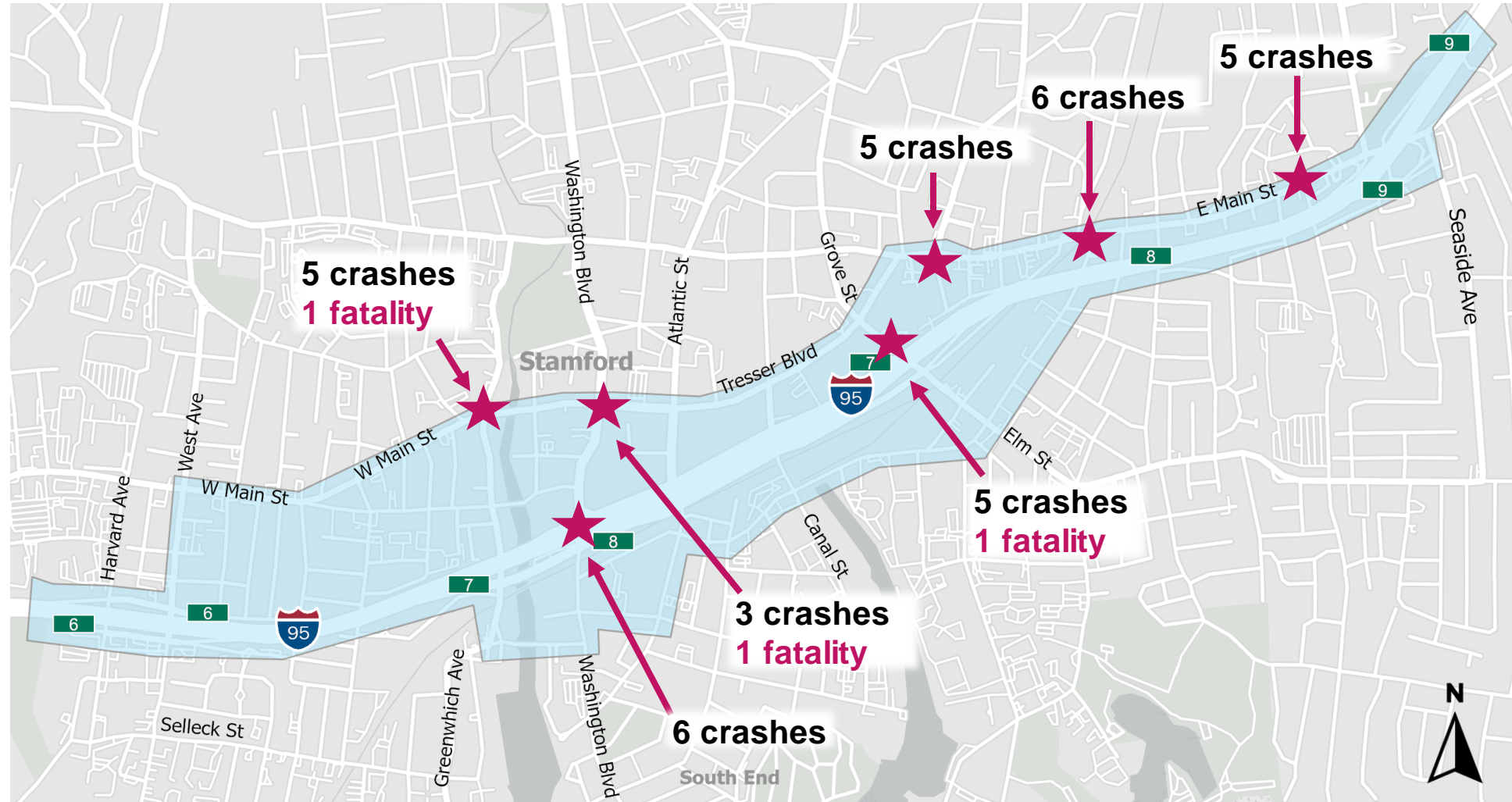


Local Roadway Deficiencies

Bicycle and Pedestrian Crashes



- 34 of the 50 intersections have at least one (1) pedestrian and / or bike crash
- Three (3) fatalities



Local Roadway Deficiencies

Bicyclist & Pedestrian Deficiencies



Limited connectivity



Limited bicycle facilities from east to west north of I-95



Long pedestrian crossings



Non-ADA compliant sidewalk and crossing features



Limited lighting under bridges



Limited transit amenities

Local Roadway Deficiencies

Limited Bicycle / Pedestrian Connectivity



- Sharrows on a narrow travel lane on short segment of Elm Street under I-95 overpass with no connectivity
- Pedestrian accommodations are minimal and unwelcoming



Image Credit: Google, July 2023

Local Roadway Deficiencies

Limited Lighting Under Bridges



Elm St and N State St intersection:

- Sidewalk on only one side
- Five (5) bike and ped crashes and one (1) fatality



Image Credit: Google, July 2023

Local Roadway Deficiencies

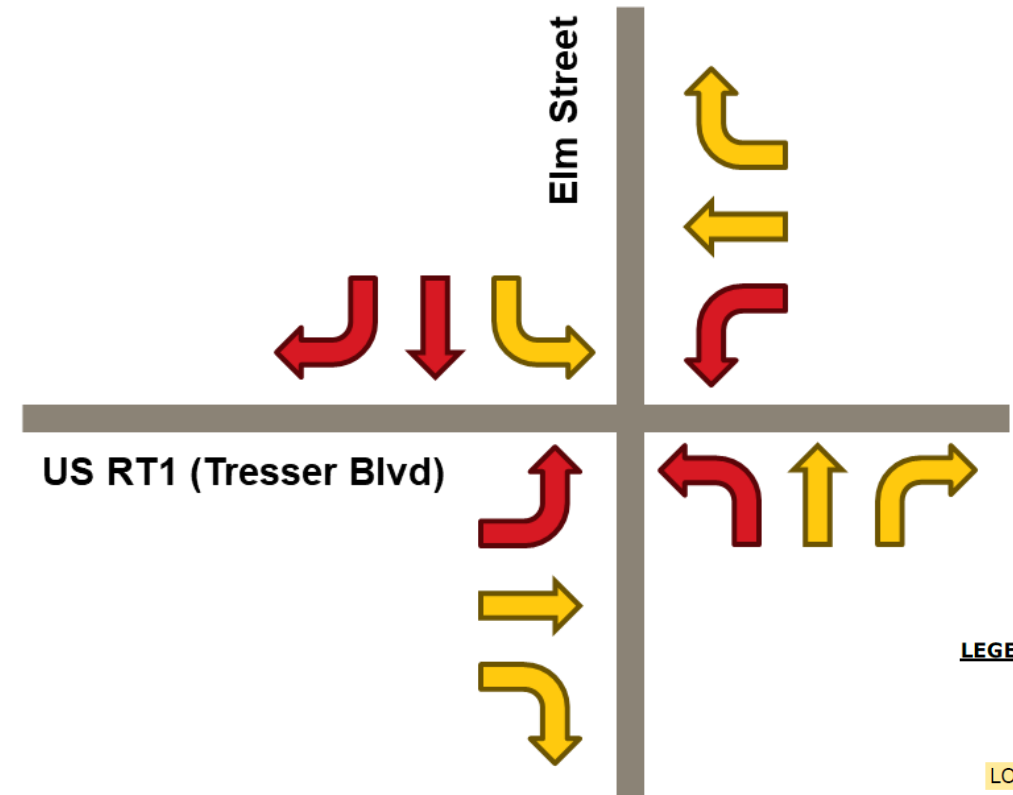
Elm St at Tresser Blvd



- Multiple movements operate with below acceptable delay
- Long crosswalks without pedestrian refuge



Intersection LOS Diagram (AM Peak)



Local Roadway Deficiencies

Washington Blvd at Tresser Blvd

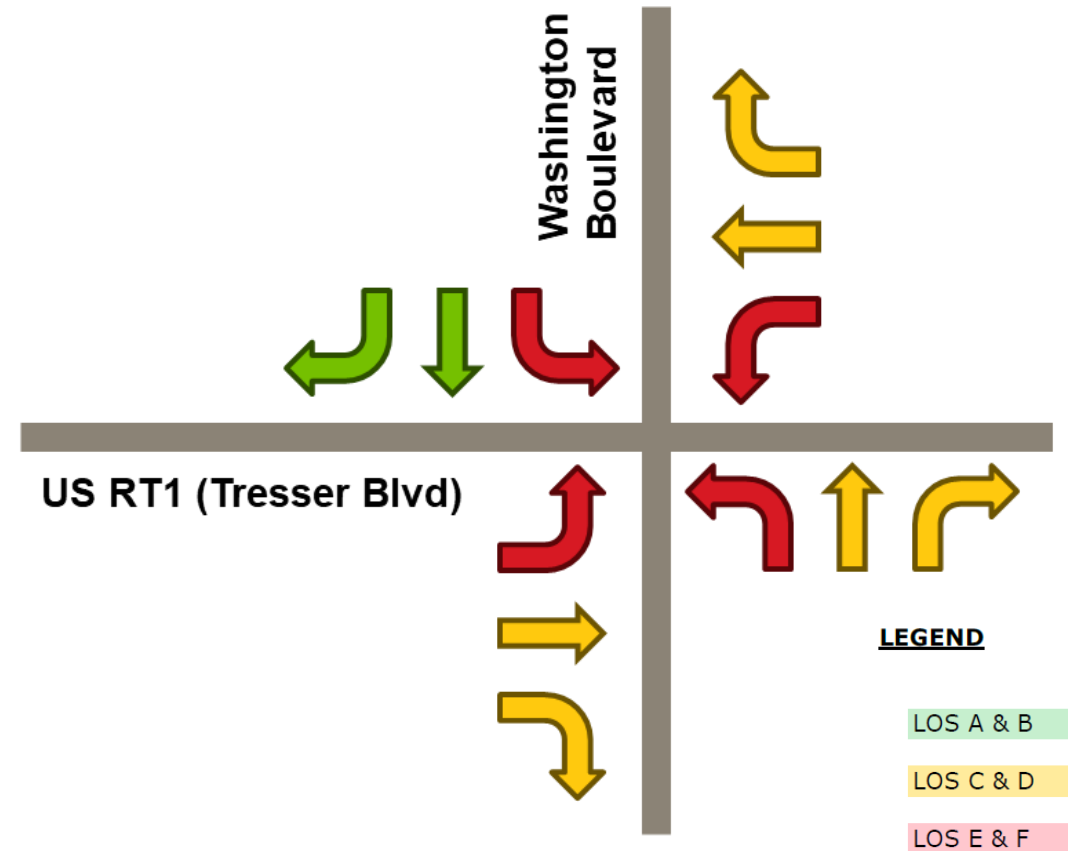


- Multiple movements operate with below acceptable delay
- Narrow pedestrian refuge
- One (1) bicycle / pedestrian fatality



Narrow pedestrian refuge

Intersection LOS Diagram (AM Peak)

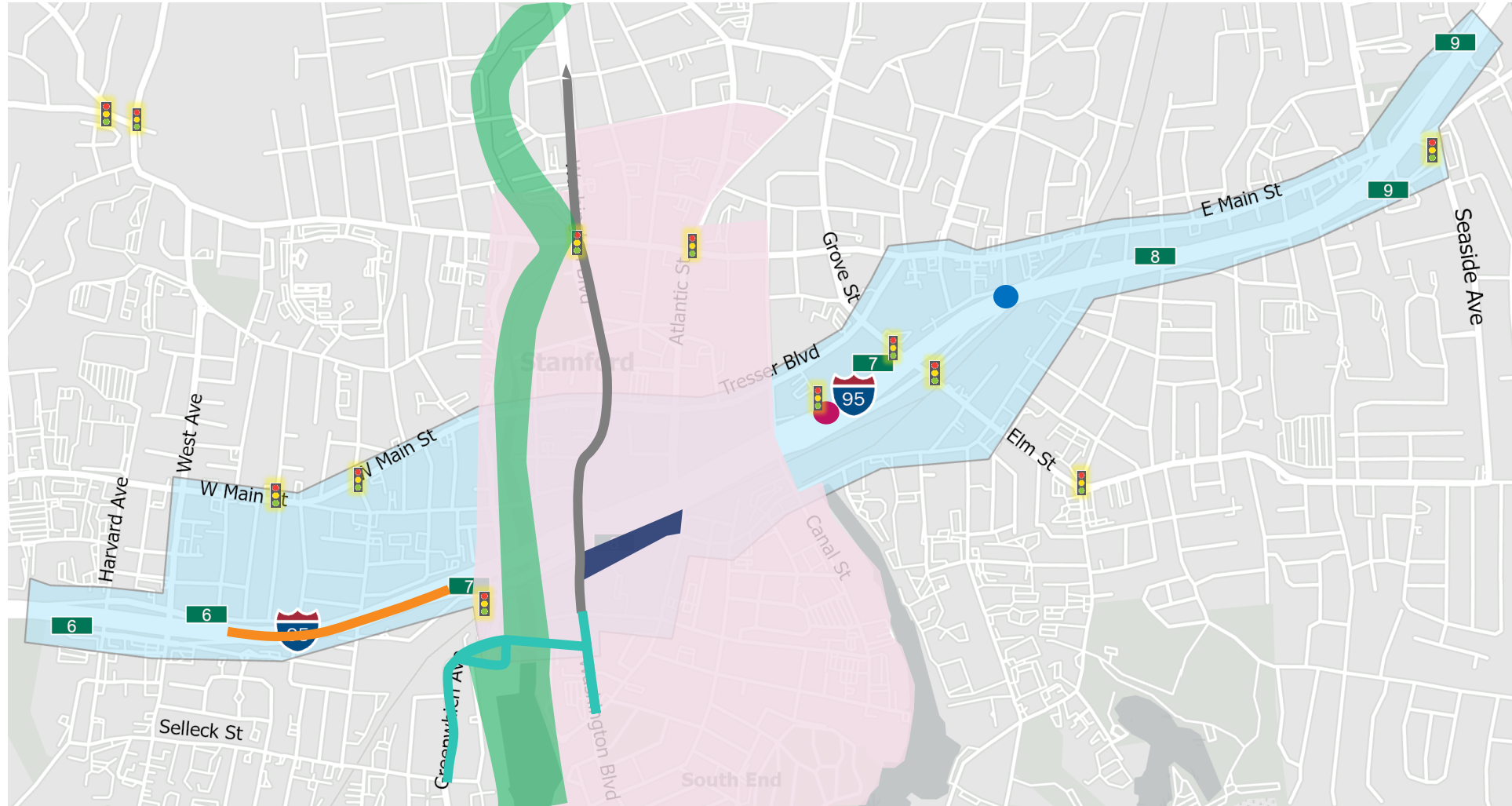


Local Roadway Deficiencies

Projects / Studies in Planning Process



- I-95 Exit 6 to 7 auxiliary lanes
- N State St multimodal gateway improvements
- Stamford Transportation Center (STC) Master Plan
- Washington Blvd Road Safety Audit
- Stamford Wayfinding Implementation Plan
- State St Green Path (The Lafayette)
- Greenwich Ave Corridor Improvements
- City of Stamford signal upgrades
- Mill River Park Master Plan



Local Roadway Deficiencies

Projects Underway or Planned / In Design



- Washington Blvd safety improvements
- Bedford/ Forest pedestrian safety plaza
- Lower Summer St pedestrian promenade
- Pacific St village project
- East Side pedestrian safety project

Projects outside map extent:

- Springdale TOD Implementation
- Pepper Ridge Neighborhood Planning Project



Draft Preliminary Purpose & Need

Draft Preliminary Purpose and Need



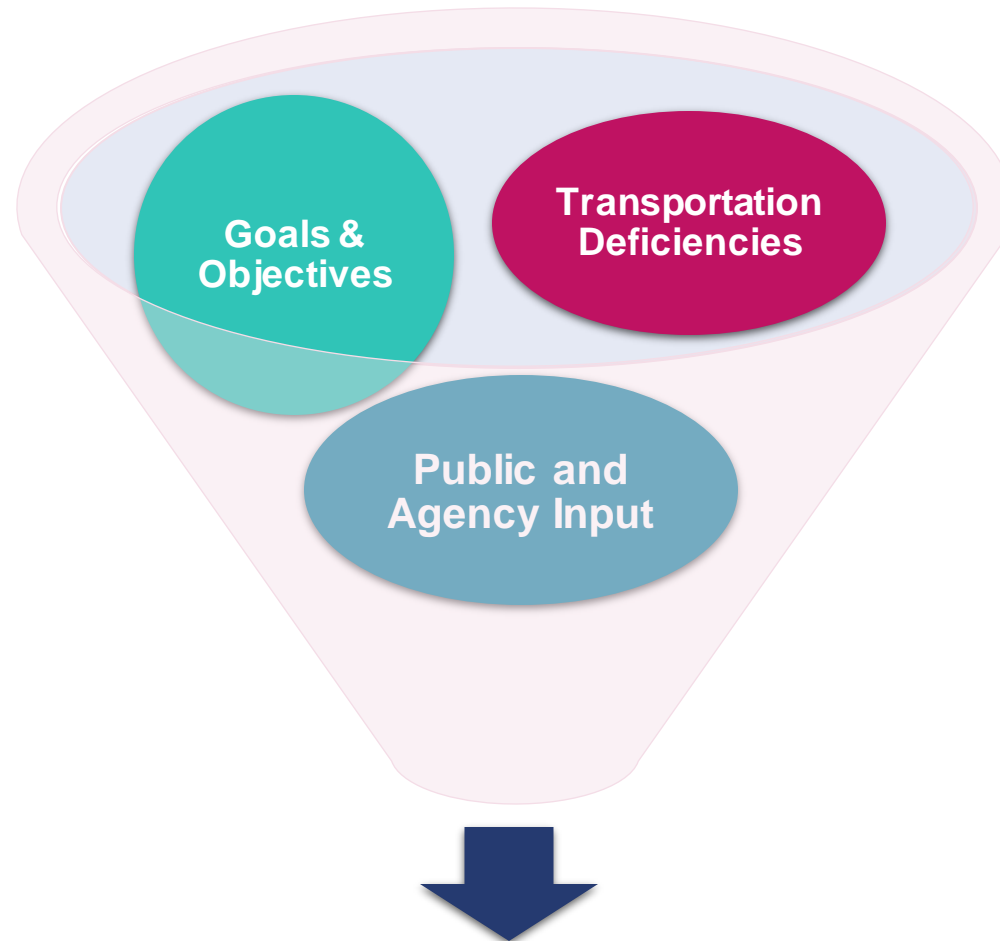
What is Purpose and Need?

1. Defines the transportation problem
2. Defines a universe of alternatives: reasonable, prudent, practical
3. Guides the alternatives analysis process
4. Clear, well-justified, specific, comprehensive

Purpose and Need establishes required parameters for alternative development, evaluation, and elimination. Other considerations (e.g., cost, impacts) will also apply to alternative evaluation.



Draft Preliminary Purpose and Need



Purpose and Need Statement

Study Vision & Goals



The CTDOT intends to develop a **corridor vision** on Interstate 95 between Exits 7 and 9 that will address the replacement of the I-95 bridge over Metro North Railroad and Myrtle Avenue, as well as improve safety, operations, and mobility along the I-95 corridor and on the surrounding local roadway network.

Study goals include improving connectivity and livability within the corridor, enhancing mobility equity and economic vitality, and minimizing impacts to both the natural and built environments.



Draft Preliminary Purpose and Need



Primary Purposes of project include:

- Increase mobility along a 3.2-mile section of I-95 within the study area between Interchanges 7 and 9
- Improve the crossing of I-95 over Metro North Railroad and Myrtle Avenue such that the crossing is in a state of good repair

All developed Alternatives must satisfy primary Purpose and Need to advance through study.

Draft Preliminary Purpose and Need



Other desirable outcomes of project include:

- Increase mobility for all users underneath I-95 and along local roadway network immediately adjacent to I-95 in study area
- Improve transportation facilities to provide increased opportunities for transportation choice and ease of use for local communities, including attention toward traditionally underserved communities
- Reduce impact to local and regional community by minimizing construction duration and disruption



Next Steps / Study Schedule

Study Analysis Next Steps



1. Universe of Alternatives
 - High-level possible solutions (e.g., No-Build, improve existing, tunnel, etc.)
 - Evaluation matrix
2. Project-level Range of Alternatives
 - Primary Purpose and Need
 - Other desirable outcomes
3. Agency package materials
4. Public workshop preparation materials
 - Draft “Preliminary Purpose and Need”
 - Universe of Alternatives
 - Initial ideas for project-level Range of Alternatives



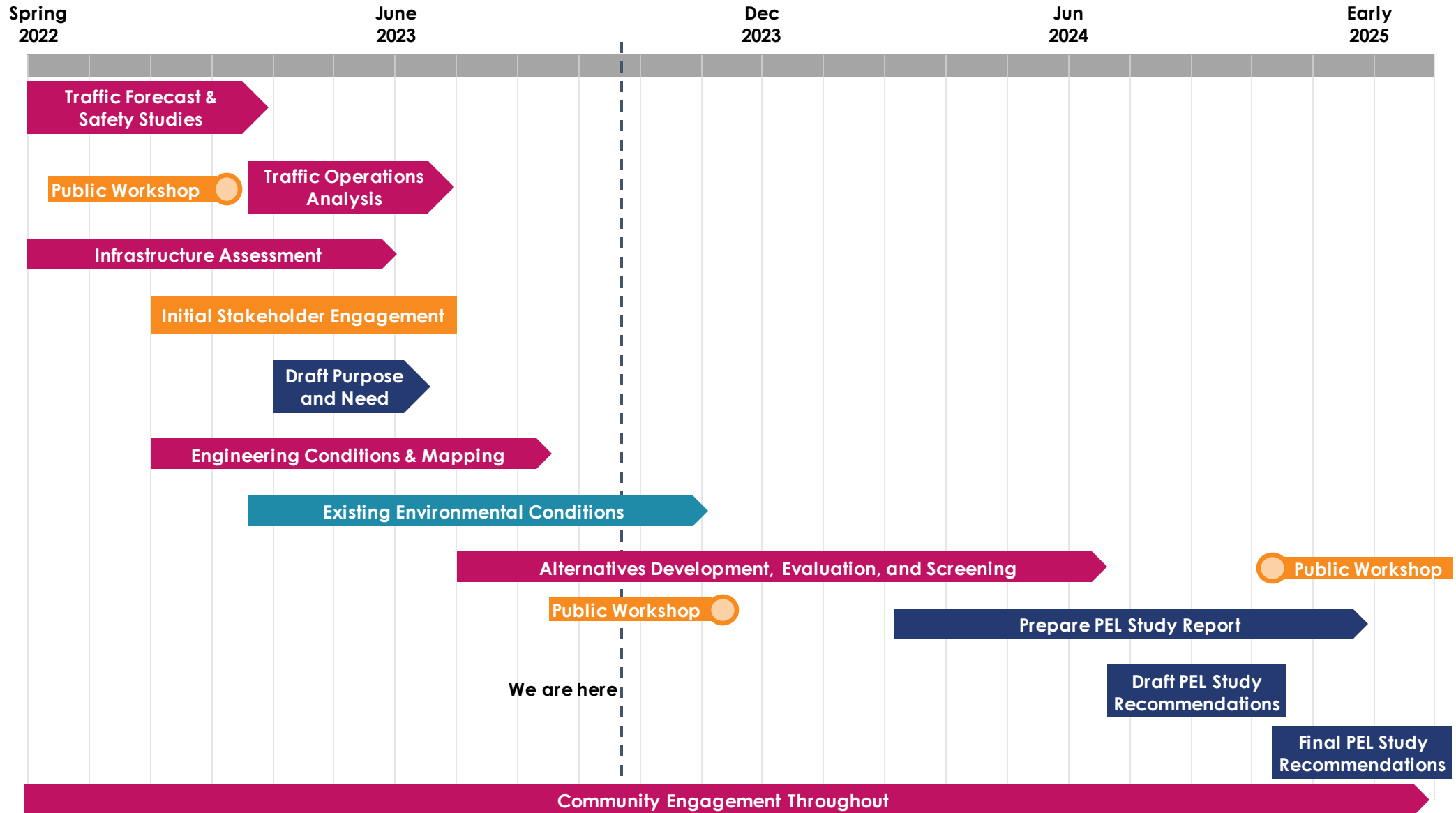
Engagement Next Steps



- PAC Meeting 3 (Oct / Nov 2023)
- Public Workshop (late 2023)
- Continued stakeholder outreach
- Website www.i95stamford.com
- Social media notifications (4 platforms)
- E-bulletins
- Comments, responses, and contact distribution lists



I-95 Stamford PEL Study: Major Components



Discussion



Thank you for your time!



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Call us at 203-993-6529

Attend future **meetings!**

Visit our **website** and provide comments at [i95stamford.com](https://www.i95stamford.com)

Email Jonathan Dean, PE
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