

The Flex Lane on I-84 in Danbury



CONNECTICUT



What is a Flex Lane?

The Flex Lane is an innovative, yet proven solution to improve traffic flow and safety by repurposing the median shoulder into a temporary travel lane during the busiest times with the following improvements:

- ✓ Full camera coverage
- ✓ New overhead sign gantries
- ✓ Variable speed limit signage
- ✓ Flex Lane drainage improvements

A better commute—sooner



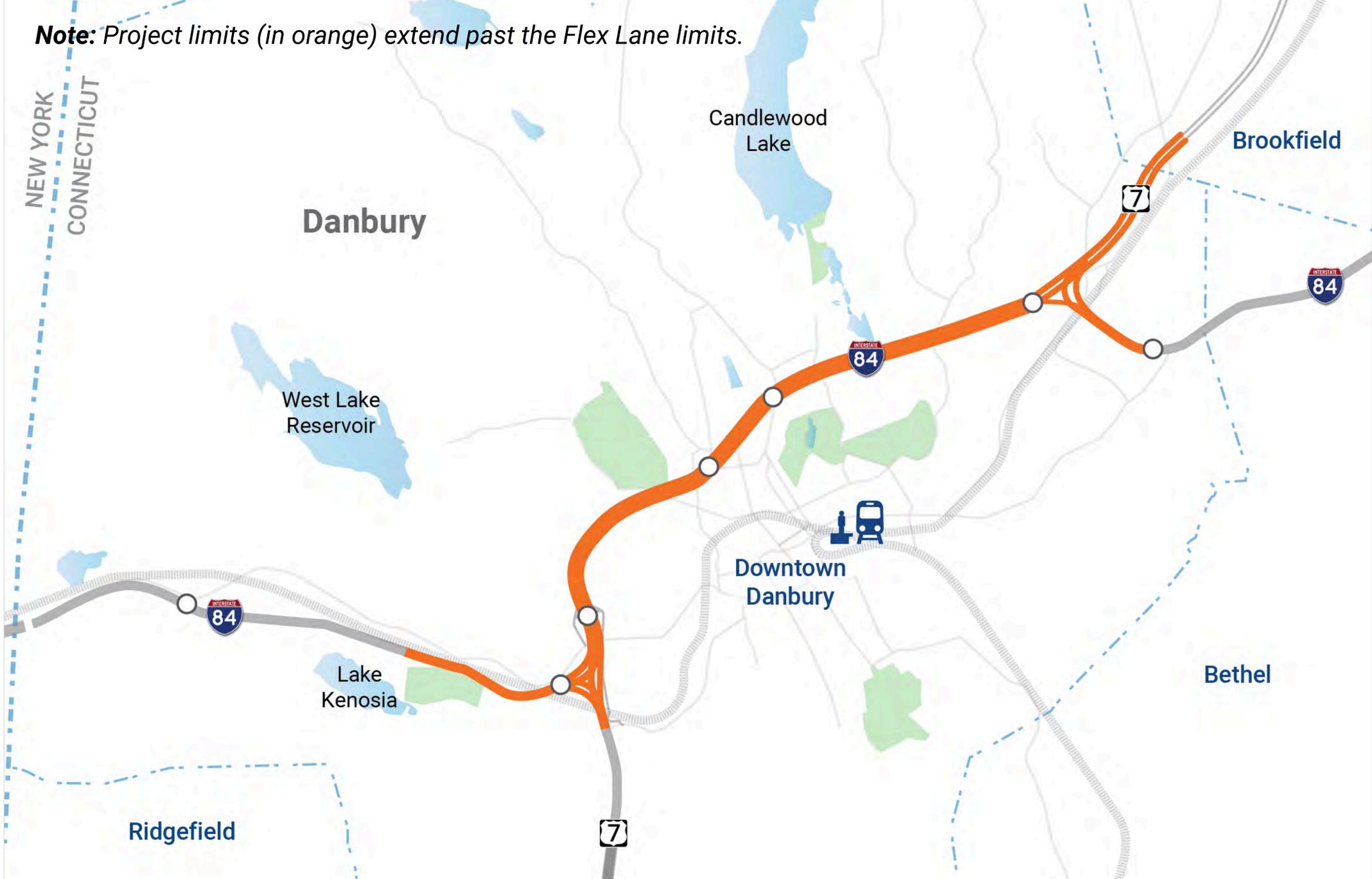
Shorter construction timelines



No additional right-of-way needed



Fewer traffic disruptions



Purpose & Need



CONNECTICUT



The purpose of this project is to *reduce congestion and improve mobility* on I-84, Route 7 and the adjacent roadway network.



The proposed operational improvements are expected to:



Improve traffic flow



Increase reliability



Provide more capacity during rush hours



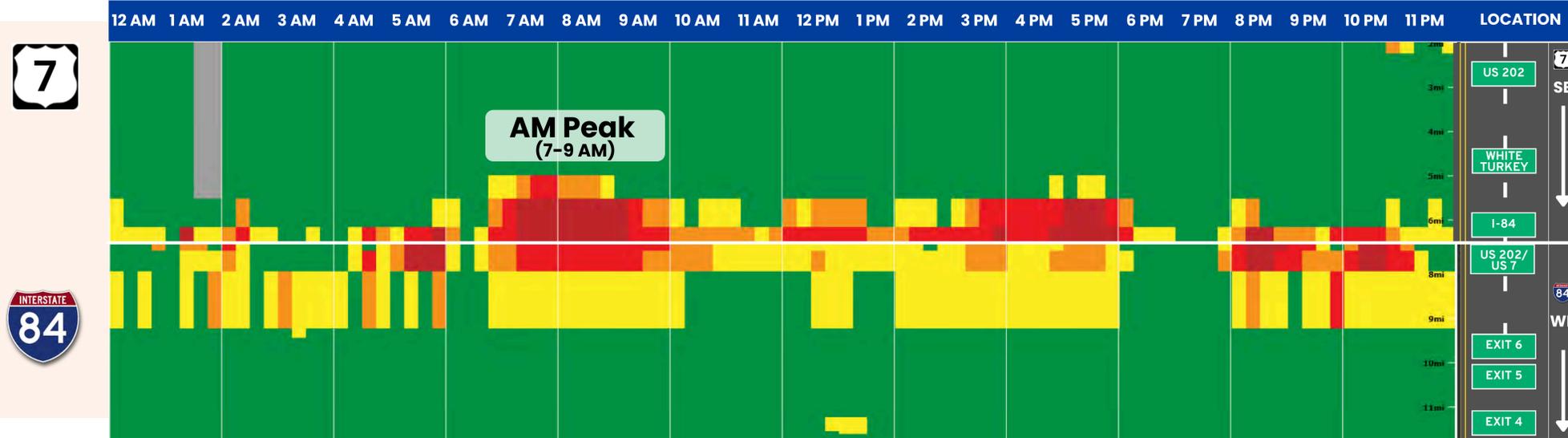
Reduce the number of congestion-related crashes



When and where does traffic congestion occur?



CONNECTICUT



Route 7 Southbound/I-84 Westbound



Morning traffic congestion is observed in the **westbound direction** as commuters travel to work (toward New York).



This traffic is heaviest where Route 7 southbound meets I-84 at Exit 7.



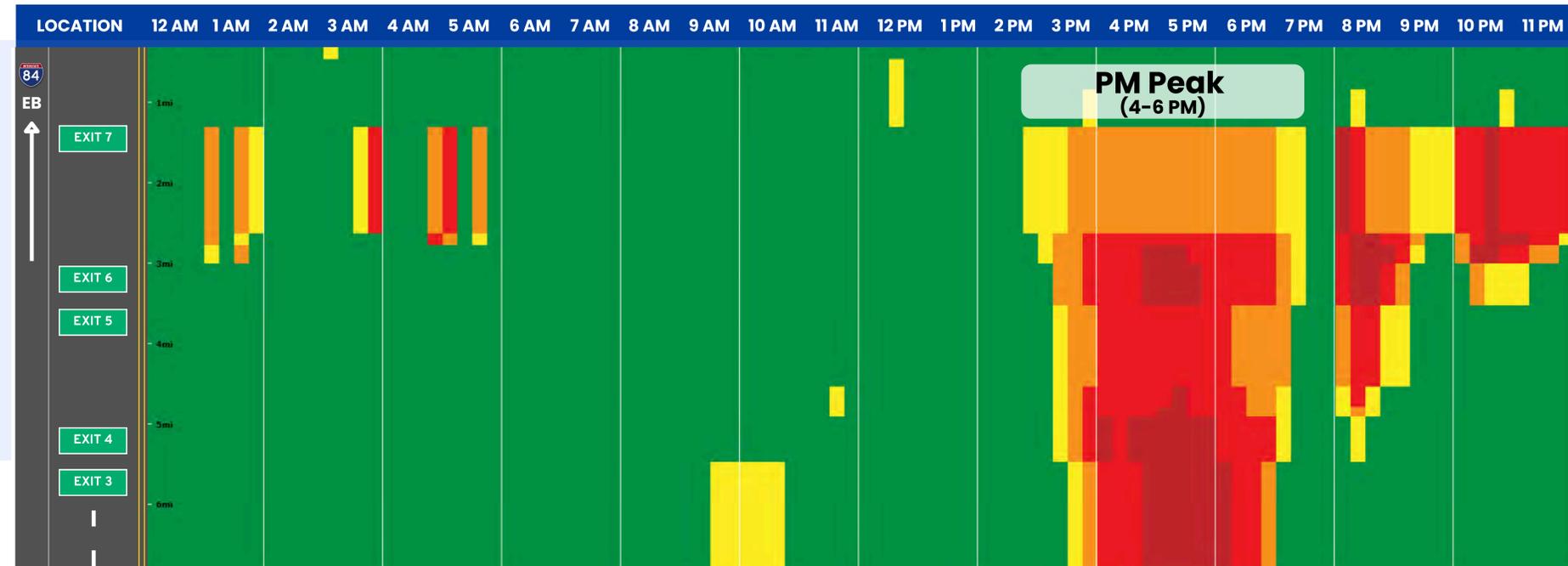
I-84 Eastbound



Evening traffic congestion is observed in the **eastbound direction** as commuters return home from work (toward Waterbury).



The evening congestion extends back to the New York state line.



Note: Based on April 2024 Data
Source: Regional Integrated Transportation Information System (RITIS)

Estimated Travel Time Improvements



CONNECTICUT



Current (2024)

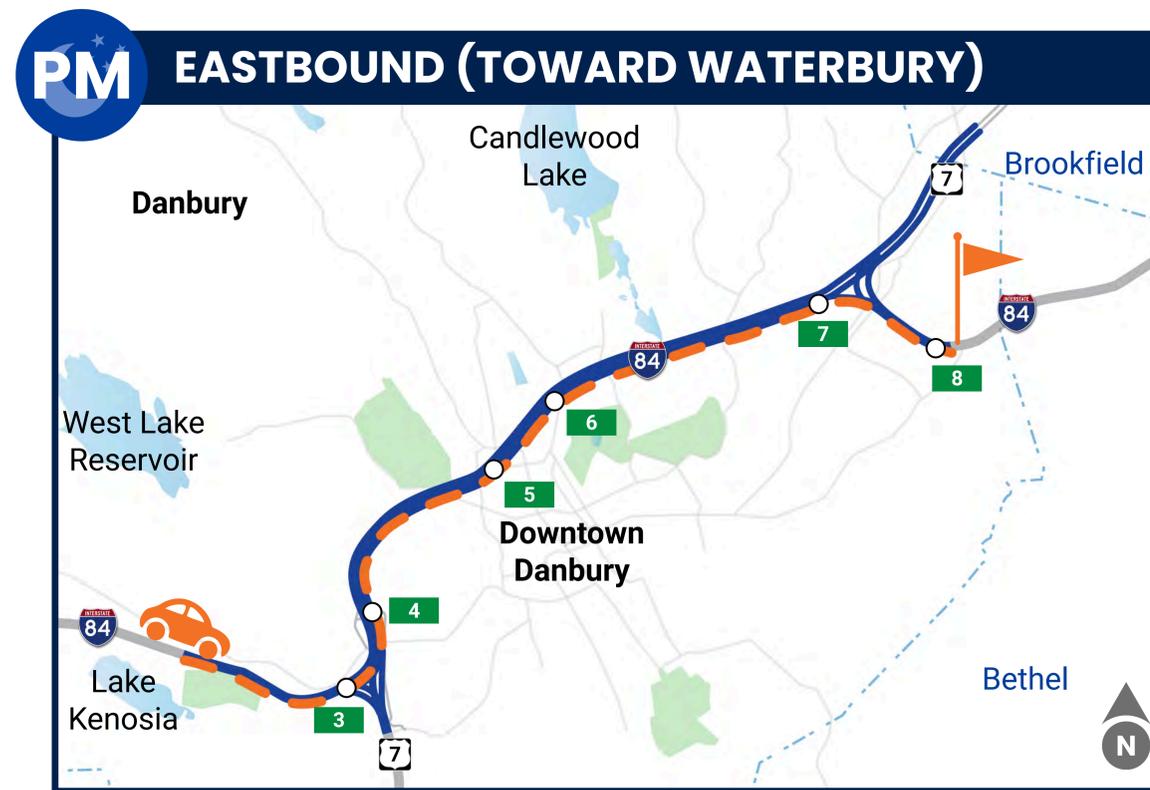
9 minutes

Flex Lane (2030)

7 minutes

22% reduction in travel time

Source: VISSIM Analysis



Current (2024)

31 minutes

Flex Lane (2030)

8 minutes

74% reduction in travel time

Source: VISSIM Analysis

Proven Success in Other States



Madison, WI

- ✓ Reduced travel times by **45%** in 2023
- ✓ **~20%** reduction in crashes

Source: The Cap Times, June 2, 2024; Spectrum News 1, July 13, 2023

Beltline



Ann Arbor, MI

- ✓ Congestion reduced by **11% northbound & 16% southbound**
- ✓ **~17%** reduction in crashes

Source: Evaluation of an Active Traffic Management System with Part-Time Use of the Inside Shoulder, January 2022

US 23



Columbus, OH

- ✓ I-670 commute times are **cut in half**

Source: "SmartLane Saves Time and Improves Reliability for Central Ohioans", AASHTO 2024

I-670



Cincinnati, OH

- ✓ Travel times have **improved by ~10%** since opening in June 2024

Source: Ohio Department of Transportation

I-275

About the Proposed Flex Lane



CONNECTICUT

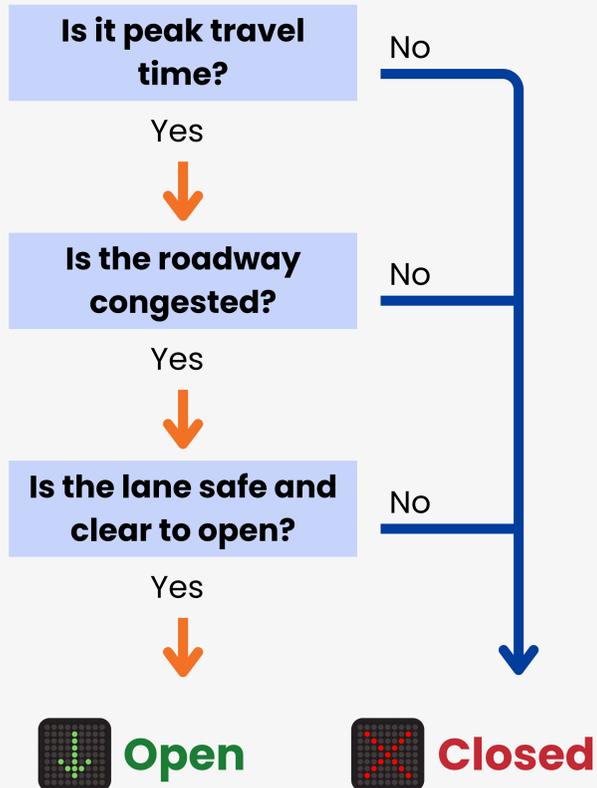


When would it open/close?

During morning and evening rush hours, CTDOT would monitor traffic *in real time* to decide when to open or close the lane.

How would that decision be made?

A series of criteria would determine the status of the Flex Lane:



Proposed Roadway Configuration

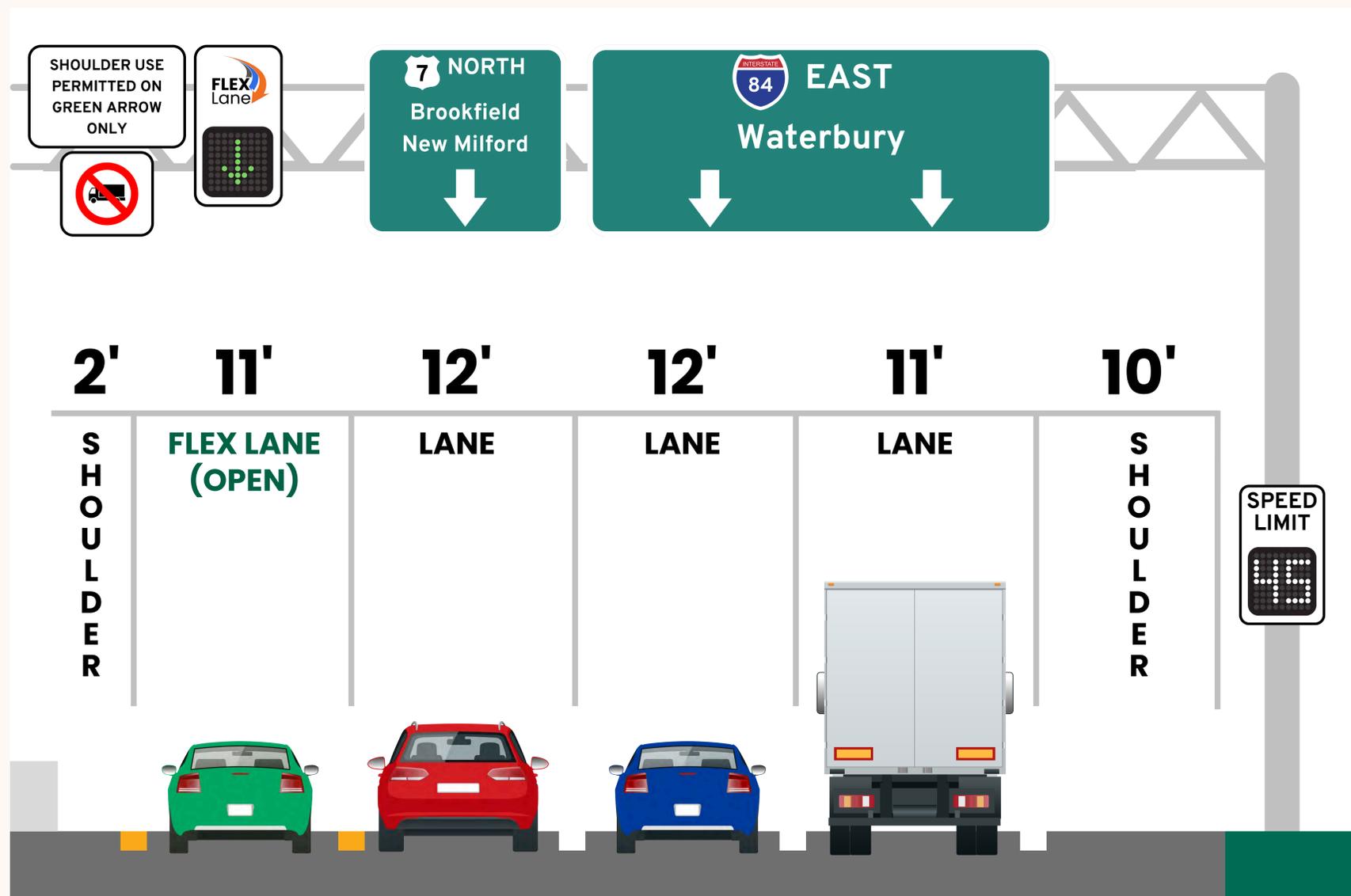


Illustration depicts eastbound travel direction

How would I know if it's open?

Signs over and along the Flex Lane route would indicate its status:

- Flex Lane is open
- Flex Lane is closing soon, change lanes
- Flex Lane is closed

What would the speed limit be?

SPEED LIMIT
When the Flex Lane is open, *a lower speed limit* would be in place across all lanes in that direction.

When the Flex Lane is closed, the speed limit would *remain the same as it is now* (50-55 mph).

SPEED LIMIT

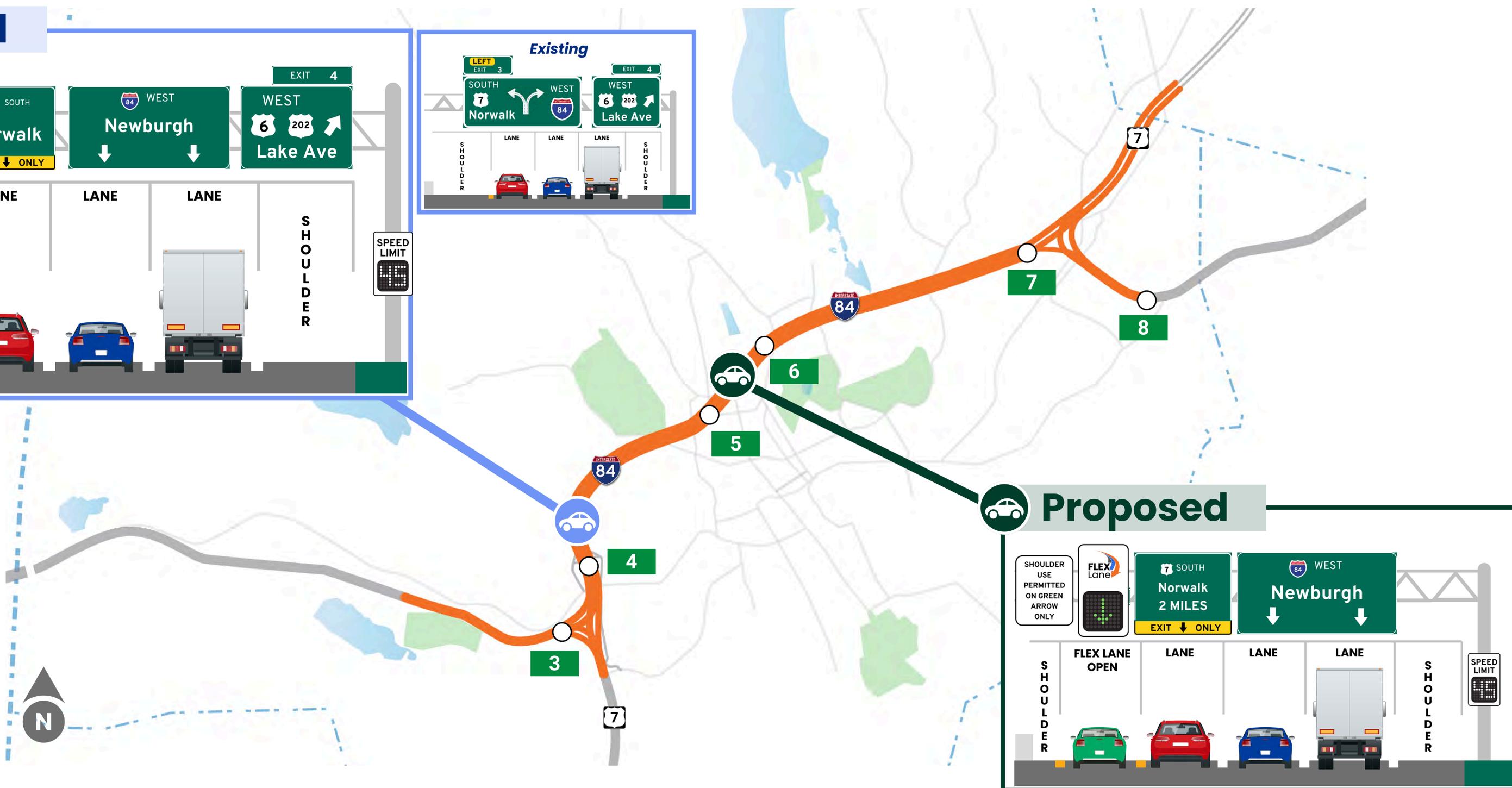
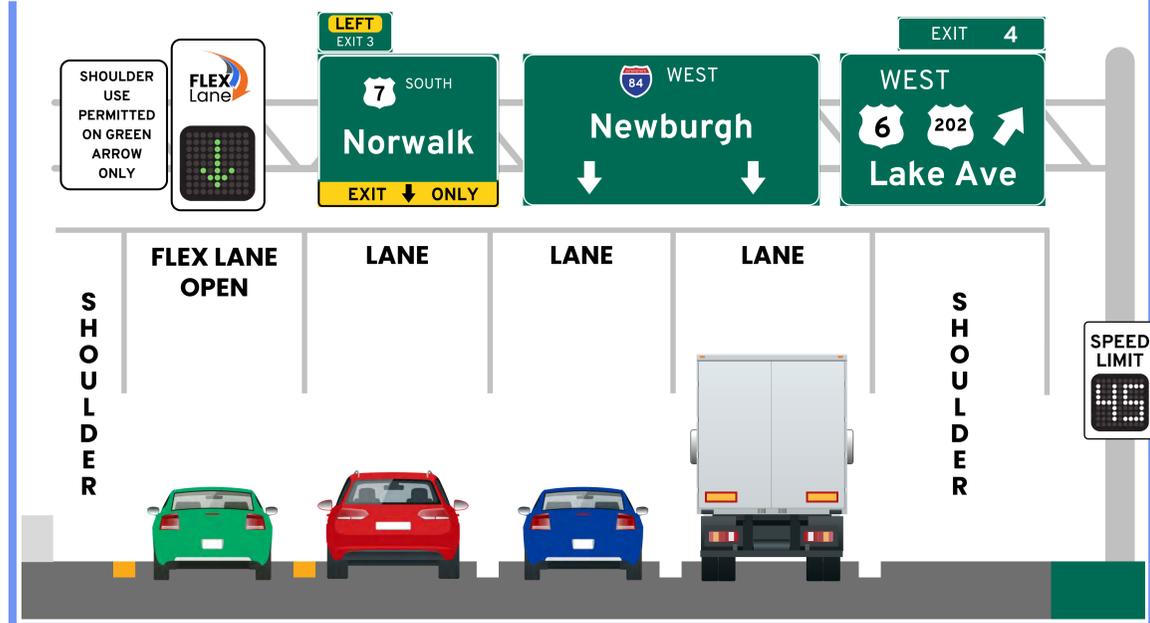
Westbound I-84 (Toward NY)



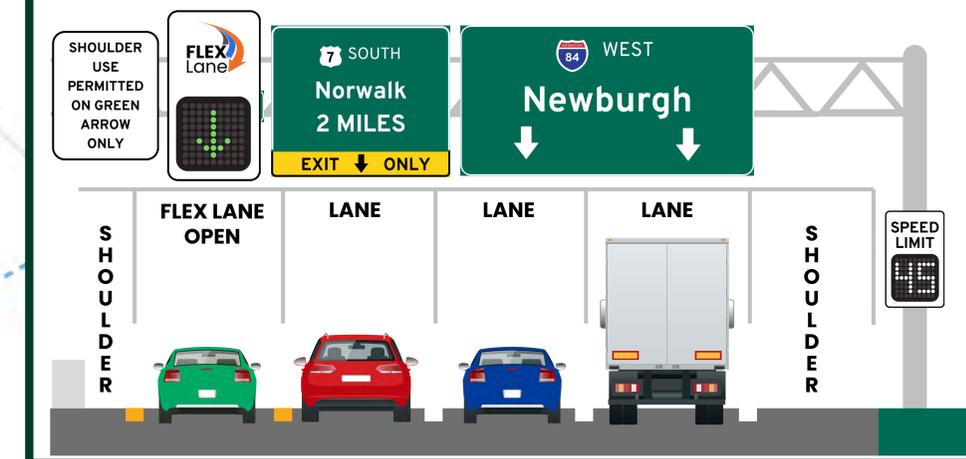
CONNECTICUT



Proposed



Proposed



Displays are for illustrative purposes only and are not sized to scale.

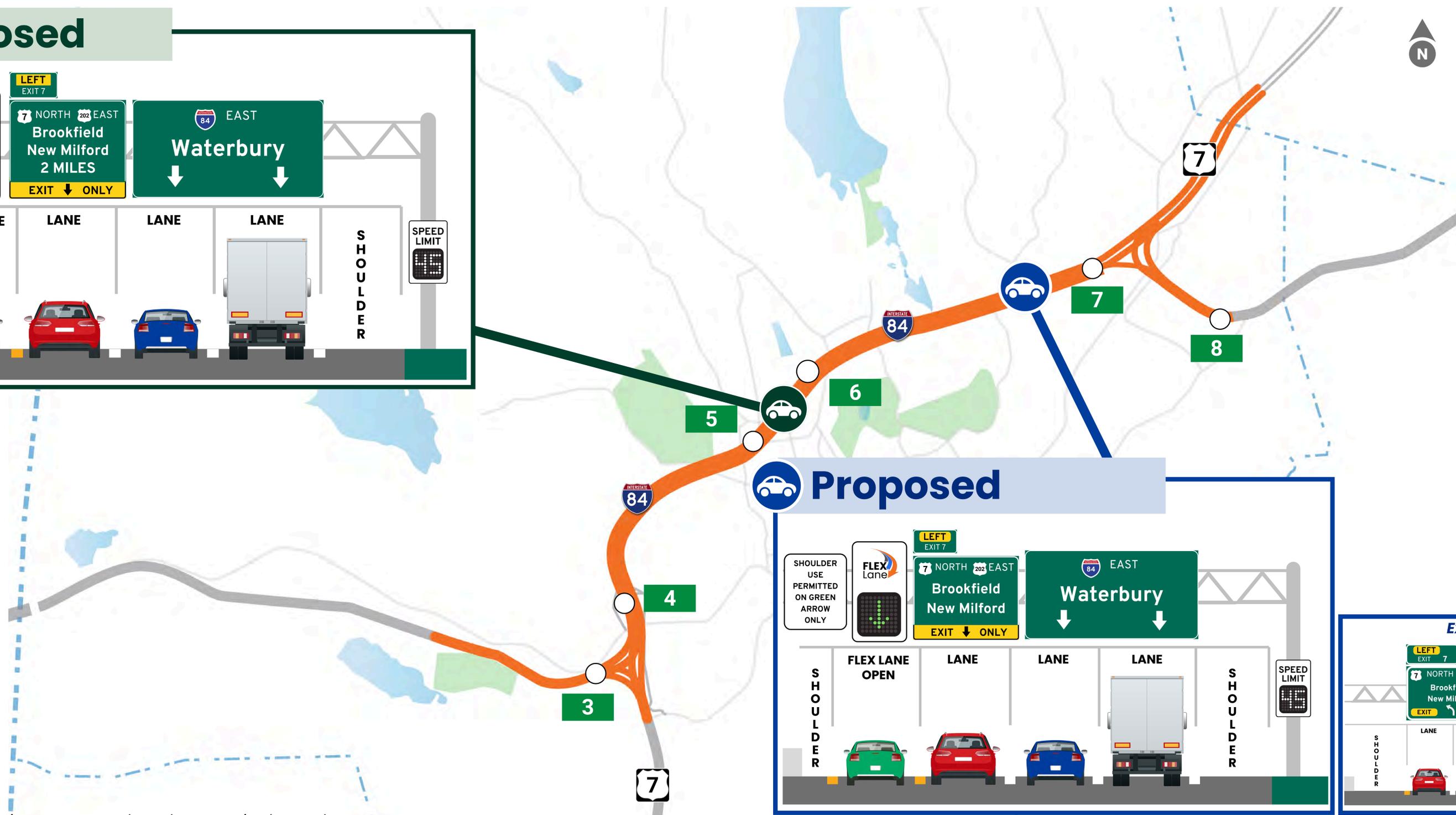
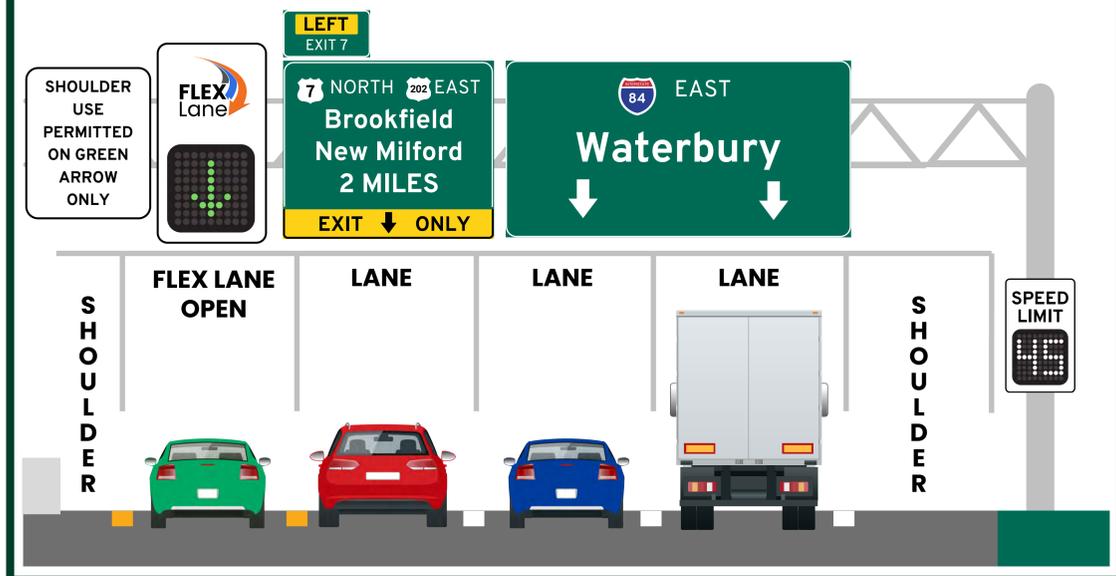
Eastbound I-84 (Toward Waterbury)



CONNECTICUT



Proposed



Proposed



Existing

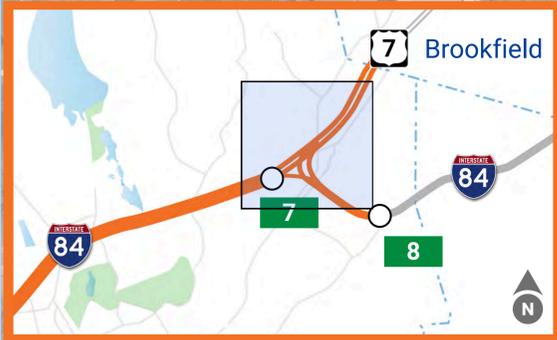


Displays are for illustrative purposes only and are not sized to scale.

Proposed Route 7 Southbound Improvements



Existing

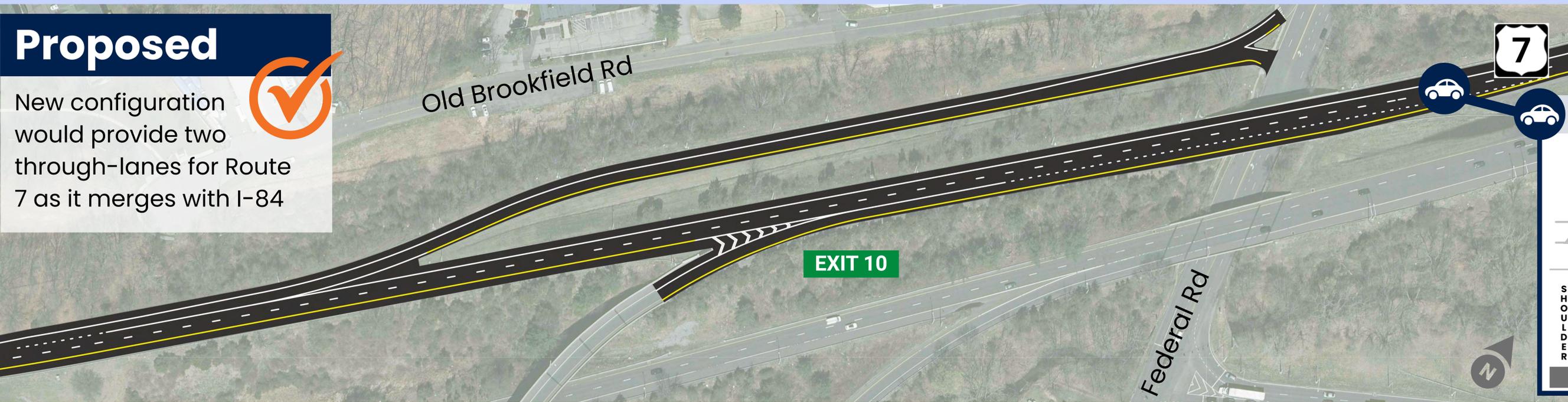


Existing



Proposed

New configuration would provide two through-lanes for Route 7 as it merges with I-84



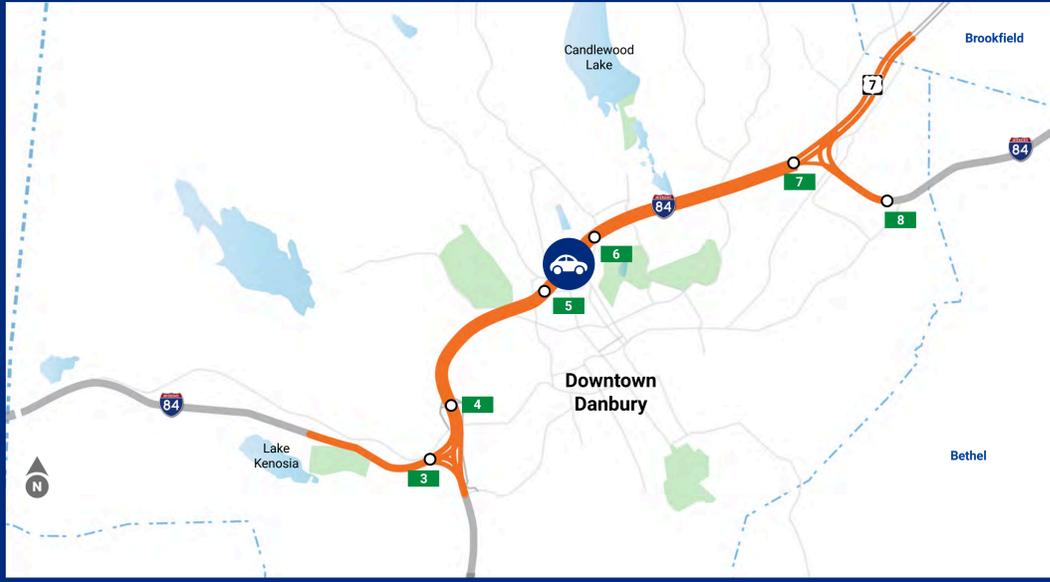
Proposed



How would the Flex Lane look?



CONNECTICUT



Displays are for illustrative purposes only and are not sized to scale.

Noise Analysis Process



CONNECTICUT



How does CTDOT evaluate potential noise impacts?



Measure Existing Noise Conditions

Noise monitoring was conducted in November 2025



Validate Traffic Noise Model

Calculate existing and future noise levels



Identify Noise Impacts

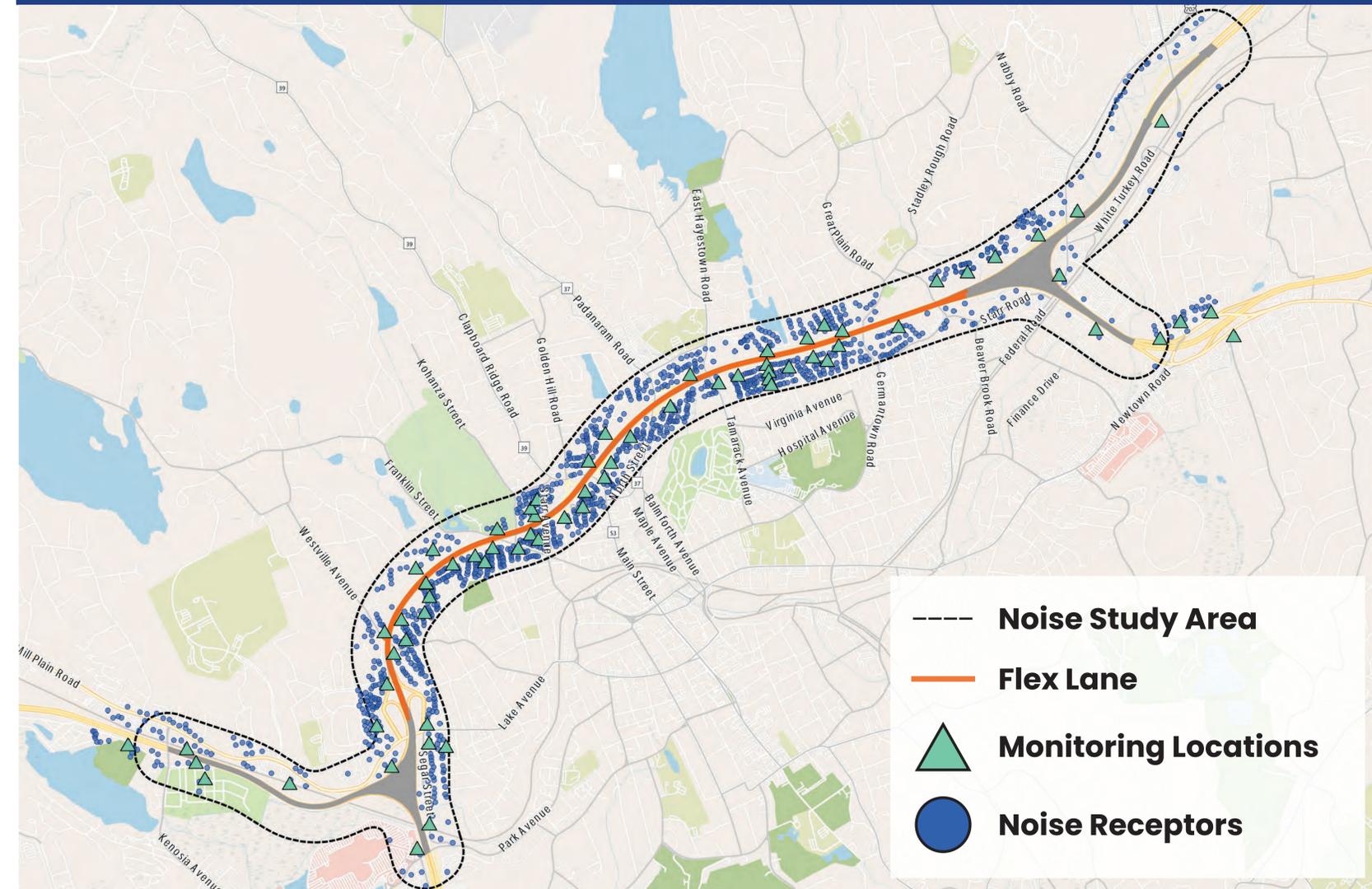
Identify predicted noise impacts



Consider Noise Abatement Measures

If impacted, determine if abatement/noise walls are feasible and reasonable

NOISE MONITORING LOCATIONS*



*Noise Monitoring is used to validate the existing-condition Traffic Noise Model and not to determine existing noise levels.

The proposed project is classified as a Type I project. Type I projects include, but are not limited to, construction of a new highway, additional traffic lane(s), or projects that result in a substantial alteration of the horizontal or vertical alignment (per 23 CFR 772 & CTDOT's Noise Policy).

Project Costs & Schedule



CONNECTICUT



\$ The estimated construction cost for the project is \$250M.



What are "State of Good Repair" Investments?

The traveling public on Connecticut's highways expect mobility and connectivity, which depend on keeping our transportation system in a **state of good repair**. That means continually **improving the safety and condition of our roadways**.

This part of the estimated project cost includes things like:

- ✓ Routine pavement preservation & improvements
- ✓ Median reconstruction
- ✓ Wrong-way detection systems
- ✓ Drainage & guiderail upgrades
- ✓ Illumination & signage upgrades

Project Schedule

