



PUBLIC INFORMATION AND CEPA SCOPING MEETING

**WESLEYAN UNIVERSITY - BECKHAM HALL
45 WYLLYS AVENUE
MIDDLETOWN, CT 06459
APRIL 30, 2024**



REMOVAL OF THE TRAFFIC SIGNALS ON ROUTE 9



7 P.M. PRESENTATION BEGINS

CTDOT HIGHWAY DESIGN TEAM

MICHAEL CALABRESE, P.E.

DIVISION CHIEF
(860) 594-3189

MICHAEL.CALABRESE@CT.GOV

STEPHEN HALL, P.E.

PROJECT MANAGER
(860) 594-2591

STEPHEN.HALL@CT.GOV

WILLIAM NICOLLE, P.E.

PROJECT ENGINEER
(860) 594-2593

WILLIAM.NICOLLE@CT.GOV

SAMUEL BEAN

PROJECT DESIGNER
(860) 594-3305

SAMUEL.BEAN@CT.GOV



Project Website

PLEASE VISIT
OUR WEBSITE AT
ROUTE9MIDDLETOWN.COM
FOR ADDITIONAL
INFORMATION AND UPDATES

THE PROJECT TEAM CAN BE CONTACTED AT
DOT.Rte9Middletown@ct.gov

LOCATION PLAN

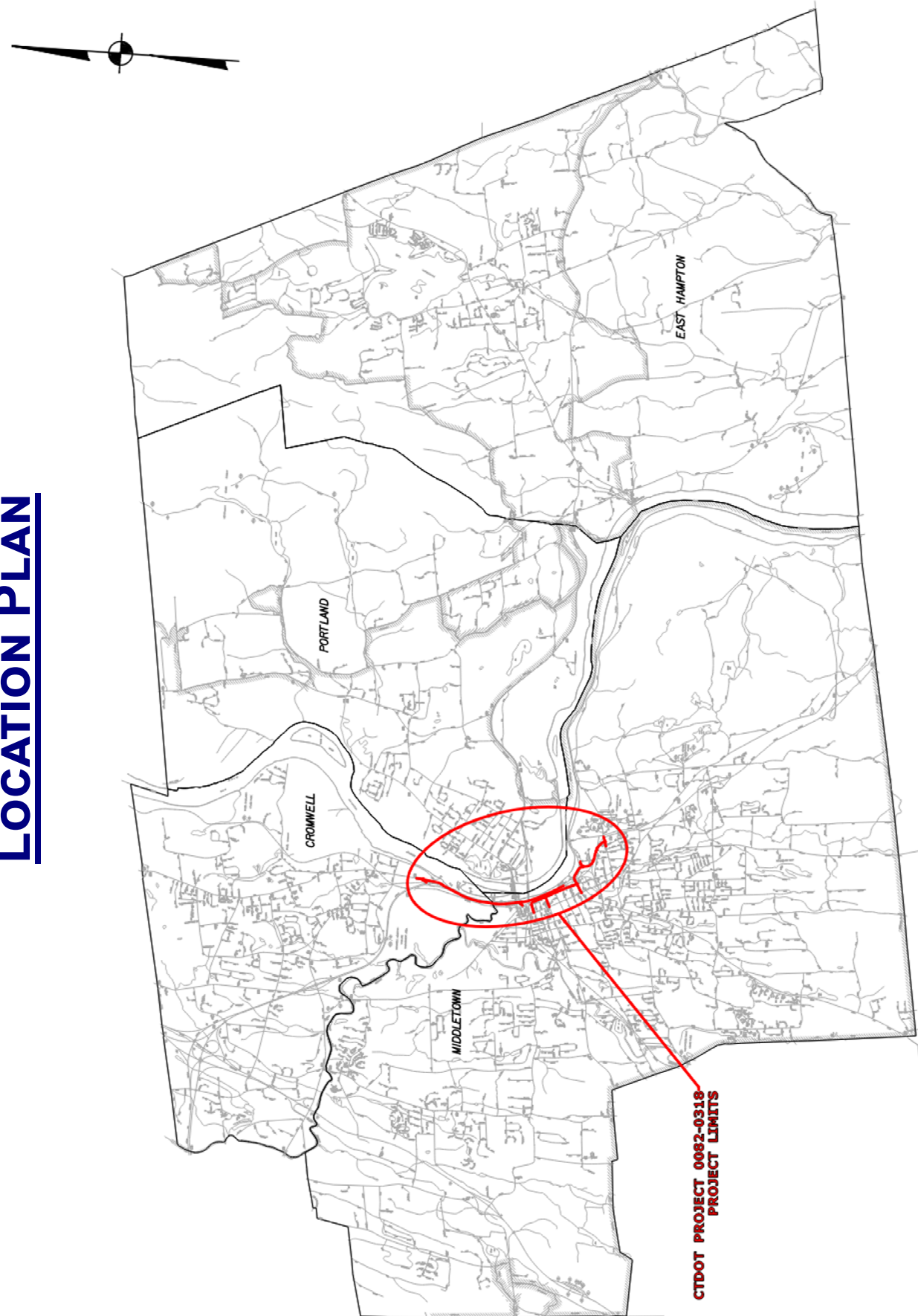


FIGURE 1 — LOCATION PLAN

ABOUT THE PROJECT

The Connecticut Department of Transportation (CTDOT) is currently developing plans to remove two traffic signals on Route 9 to improve safety and reduce congestion. The project is located on Route 9 from Exit 22 near Silver St. in Middletown to Exit 25 at Route 99 in Cromwell.

Connecticut Route 9 is a north/south running freeway except for a short section of non-freeway in the downtown Middletown area where it overlaps with Route 17. This section of Route 9 stretches for approximately 0.36 miles from Exit 23c at Washington Street to Exit 24 at Hartford Avenue and includes two at-grade signalized intersections. These signalized intersections contribute to significant crashes and delays. The three year crash history (January 1, 2021 through December 31, 2023) shows that there were 505 crashes resulting in 161 injuries within the project limits on Route 9 alone. This means that Route 9 currently experiences an average of **one crash every other day and an injury once per week**.

The intersection of Route 9 and Hartford Avenue at Exit 24 provides access between Route 9 and the Arrigoni Bridge, which connects Middletown and Portland over the Connecticut River. This signalized intersection provides full access to and from Route 9. This location has a high number of crashes, the majority being rear-end, that can be directly attributed to the signals.

At Exit 23c, Route 9 intersects with Washington Street and deKoven Drive at a large, signalized intersection over an at-grade railroad crossing. Washington Street leads to Route 66, providing connectivity to eastern and western portions of the state. This intersection provides full access from Route 9 and access to Route 9 south. Access to Route 9 northbound is not provided at this intersection.

The congestion caused by these two signals is not limited to Route 9, but rather causes significant delays in downtown Middletown, especially in the North End and across the Arrigoni Bridge.

PROJECT HISTORY

CTDOT has shown interest in removing the traffic signals on Route 9 in Middletown since the early 2000's. The public has been engaged multiple times and has historically shown support of the removal of the signals, yet haven't been in support of the design alternatives previously presented. After the 2018 public engagement, the traffic model was expanded and further analysis was performed. An origin-destination study was conducted to gain the knowledge of the network to accurately redistribute vehicles in the proposed design. Additional alternatives were investigated, leading to the proposed design which proposes providing access by means of a new off-ramp at River Road. This alternative was originally proposed by the City of Middletown as a method to remove the traffic signals by using the existing infrastructure. The existing bridge carrying Route 9 over Union Street provides the opportunity to convey traffic under Route 9 for northbound exiting vehicles.

CTDOT held two workshops in February of 2024 to discuss all of the alternatives and better refine the design. At these workshops, significant support was shown in favor of the proposed design, Alternative 11. Following the workshop, the elected officials of the surrounding cities and towns have provided their full support of the project. Today's public information and CEPA Scoping meeting is intended to inform the public of the design and provide an opportunity to comment. Please direct comments and questions by May 16, 2024 to DOT.Rte9Middletown@ct.gov or (860) 594-2020 and please reference DOT Project Number 0082-0318.

CONNECTICUT ENVIRONMENTAL POLICY ACT (CEPA)

This meeting also serves as a CEPA Scoping Meeting. The core purpose is to identify and assess potential environmental impacts, evaluate alternatives to avoid or minimize environmental impacts, and engage public involvement. A CEPA review is required for any state action that could have major impact on the environmental, social, and/or economic resources.

ROUTE 9 OFF-RAMP TO RIVER ROAD

A new off-ramp is proposed on Route 9 northbound at River Road to serve as the primary access for northbound exiting vehicles. A three leg roundabout will calm freeway traffic to downtown speeds and serve as a gateway feature to the riverfront. The proposed off-ramp requires the acquisition of a portion of a superfund site owned by RLO Properties as well as several minor acquisitions of City property.

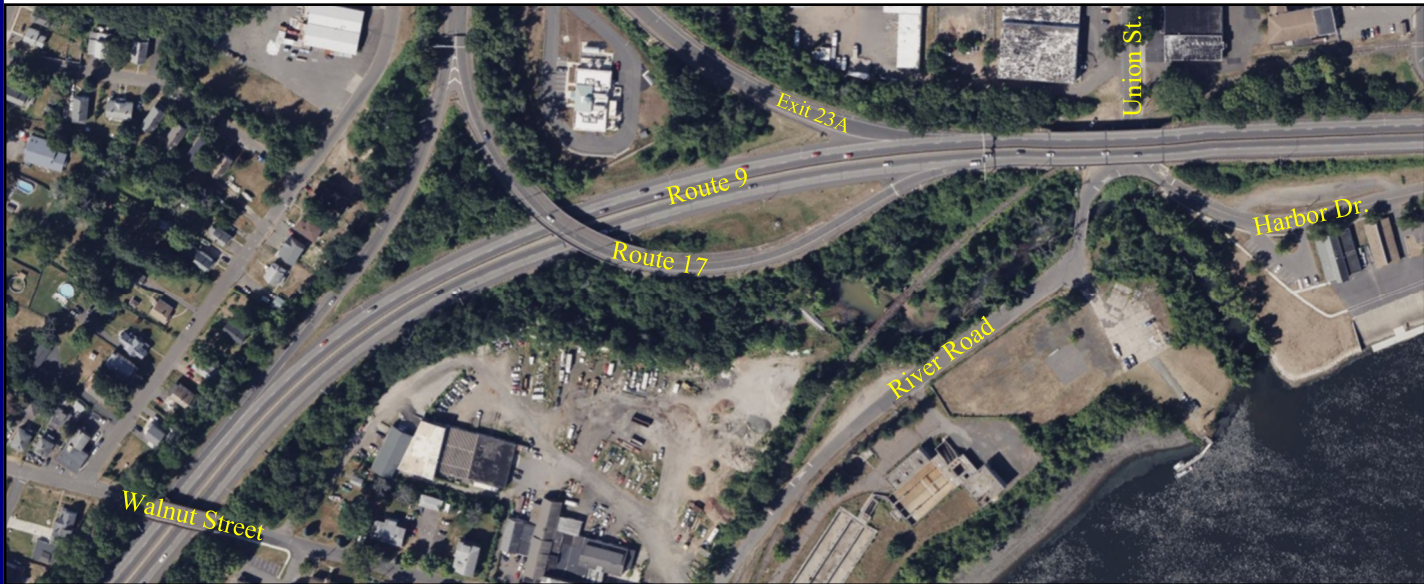


FIGURE 2 — ROUTE 9 AT RIVER ROAD — EXISTING CONDITIONS

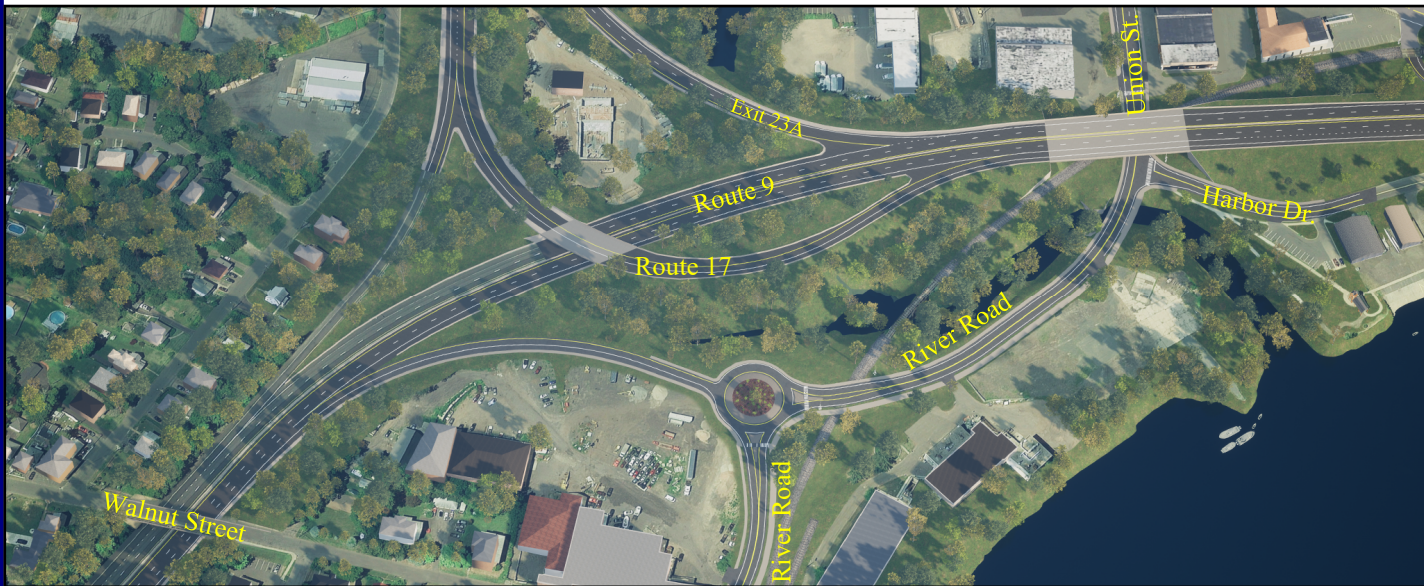


FIGURE 3 — ROUTE 9 AT RIVER ROAD — DESIGN CONDITIONS

The intersection of River Road and Harbor Drive will be reconfigured to prioritize River Road, accommodating the vehicles coming from Route 9 northbound. A right turn lane will be added to Union Street to help encourage vehicles to use deKoven Drive for connection to the Arrigoni Bridge and Route 66. This right turn lane will require a sliver acquisition of the Middletown Plate Glass property. An additional pedestrian crossing is being provided on Union Street at the railroad crossing to improve pedestrian connectivity to the Connecticut River and proposed developments. A multi-use trail on the east side of River Road will provide a riverfront walk and provide a multi-modal connection from downtown to proposed development areas.

ROUTE 9 AT WASHINGTON STREET (EXIT 23c)

Exit 23c is a large, complicated intersection comprised of two signals at the convergence of Route 9, Washington Street, and deKoven Drive that also includes an active at-grade railroad crossing. The layout of this intersection has led to numerous wrong way freeway entrances and a significant number of crashes and injuries. The ramp to Route 9 southbound will remain, while the access from both directions of Route 9 will be removed. This not only removes the dangerous traffic signal from Route 9 but also reduces the number of vehicles on Washington Street between Route 9 and Main Steet by approximately 40%. The removal of the traffic signal at Exit 23c will improve safety and essentially eliminate the possibility of wrong way entrances to Route 9.



FIGURE 4 — EXIT 23c — ROUTE 9 AT WASHINGTON STREET — EXISTING CONDITIONS

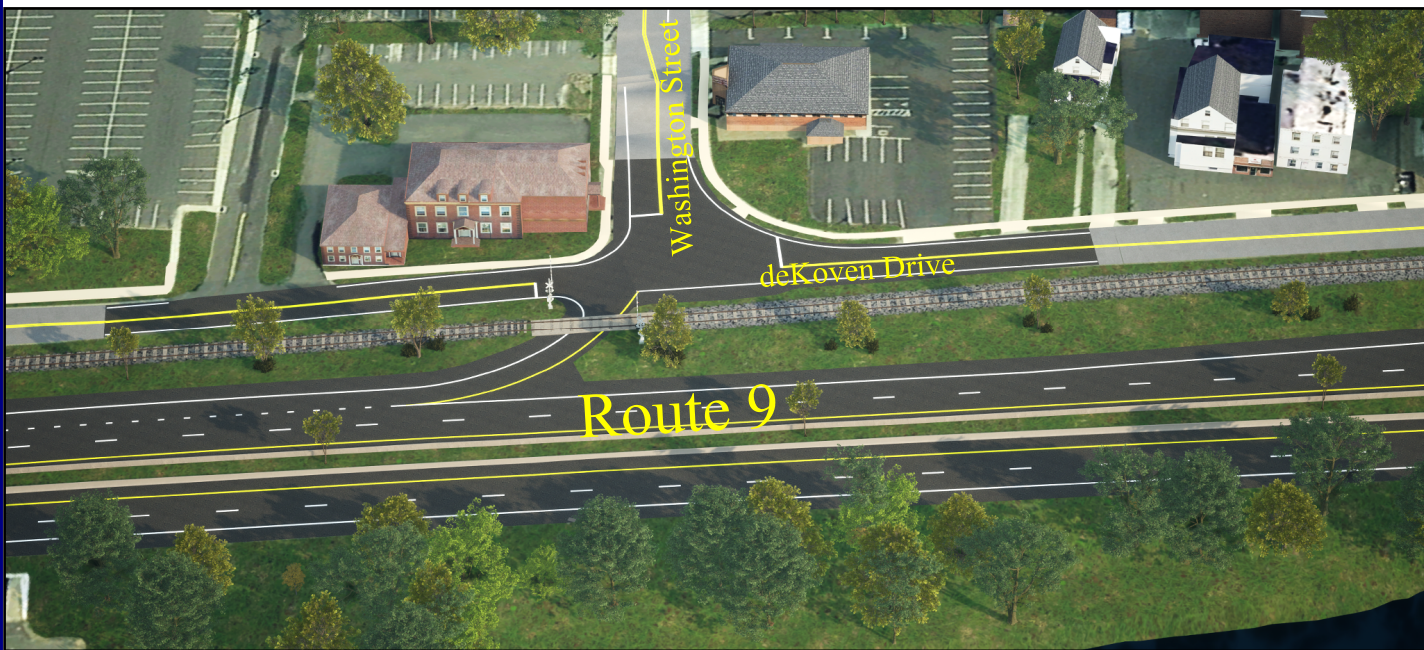


FIGURE 5 — EXIT 23c — ROUTE 9 AT WASHINGTON STREET — DESIGN CONDITIONS

ROUTE 9 AT HARTFORD AVENUE (EXIT 24)

The traffic signal at Exit 24 will be removed, and access to Route 9 northbound will be converted from an at-grade signalized intersection to a grade separated free flow interchange. The removal of this signal not only reduces the possibility of wrong way entrances and improves safety, but it causes the signal at Saint John's Square to work significantly more efficiently. With the signal removed, vehicles approaching Route 9 will flow freely onto northbound and southbound. This removes the queue from Hartford Avenue eastbound and in turn provides more green time to Main Street, effectively eliminating the queue on Route 66 westbound over the Arrigoni Bridge. In order to provide a safe interchange, access from Route 9 northbound to Hartford Ave must be removed.



FIGURE 6 — EXIT 24 — ROUTE 9 AT HARTFORD AVENUE — EXISTING CONDITIONS



FIGURE 7 — EXIT 24 — ROUTE 9 AT HARTFORD AVENUE — DESIGN CONDITIONS

RAPALLO AVENUE

The primary travel path from Route 9 Northbound to the Arrigoni Bridge will be deKoven Drive to Rapallo Avenue. As such, Rapallo Avenue will be converted to one-way towards Main Street in order to prioritize this movement. By converting Rapallo Avenue to one-way, we are able to accommodate this new movement while maintaining all 21 on street parking spaces and only requiring one foot of widening on the north side of the road. This configuration will also improve the pedestrian safety of the crossing along Main Street, and eliminate the current observed illegal left turns onto Rapallo Avenue from Main Street southbound.



**FIGURE 8 — RAPALLO AVE
EXISTING CONDITIONS**



**FIGURE 9 — RAPALLO AVE
DESIGN CONDITIONS**

TRAFFIC ANALYSIS

The traffic simulation created for this project was first compared to real world observed conditions to ensure its accuracy before it was forecast out to 2045 to incorporate regional growth and planned local development. Given the complex nature of the downtown Middletown roadway network and the proposed modification of access, this effort was necessary to ensure that the two traffic signals could be removed from Route 9 without a disproportionate negative impact to downtown Middletown and the local roadway network. To best compare the no-build and build scenarios, we compare the expected travel times along various common routes. Essentially, we are able to predict how long it will take during the morning and evening rush hour for the average vehicle to travel from point A to point B for both the no-build and build condition. The following figures show the expected travel times for various travel paths during the 2045 PM peak hour period (4:00 pm to 5:00 pm) for the no build condition as well as the build condition. The PM period has been chosen as it is generally more congested than the AM peak hour (7:00 am to 8:00 am). The no build travel times can be compared to the build condition travel times to quantify and compare the impacts of the proposed design to the “do nothing” alternative.

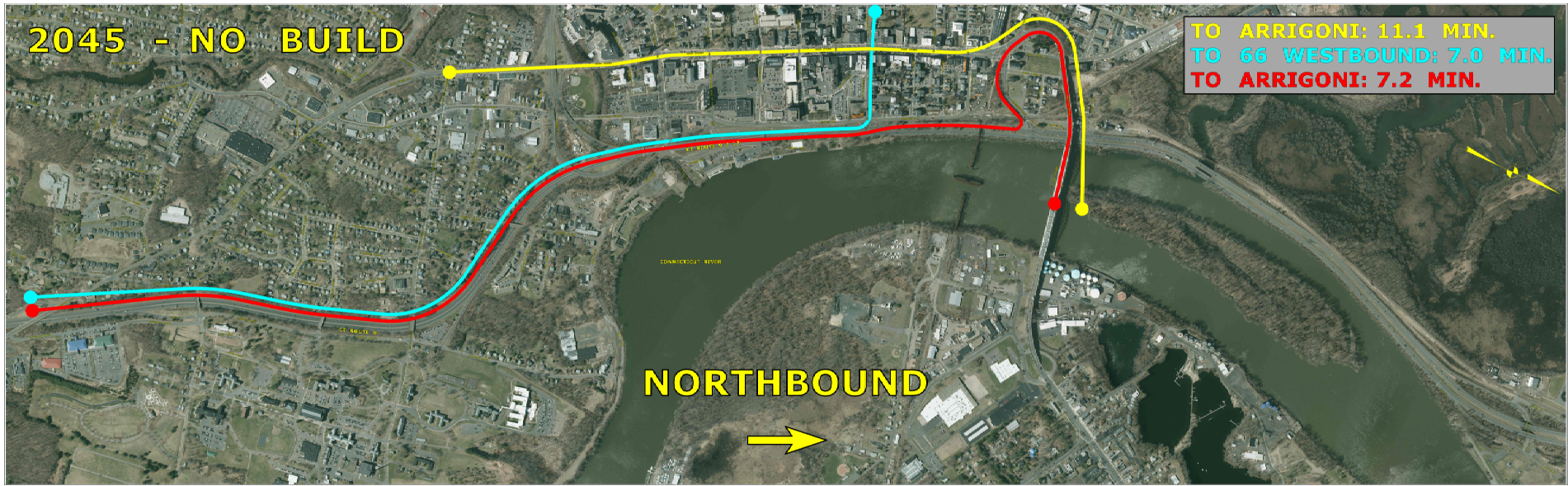


FIGURE 10 — NORTHBOUND TRAVEL TIMES — 2045 No BUILD

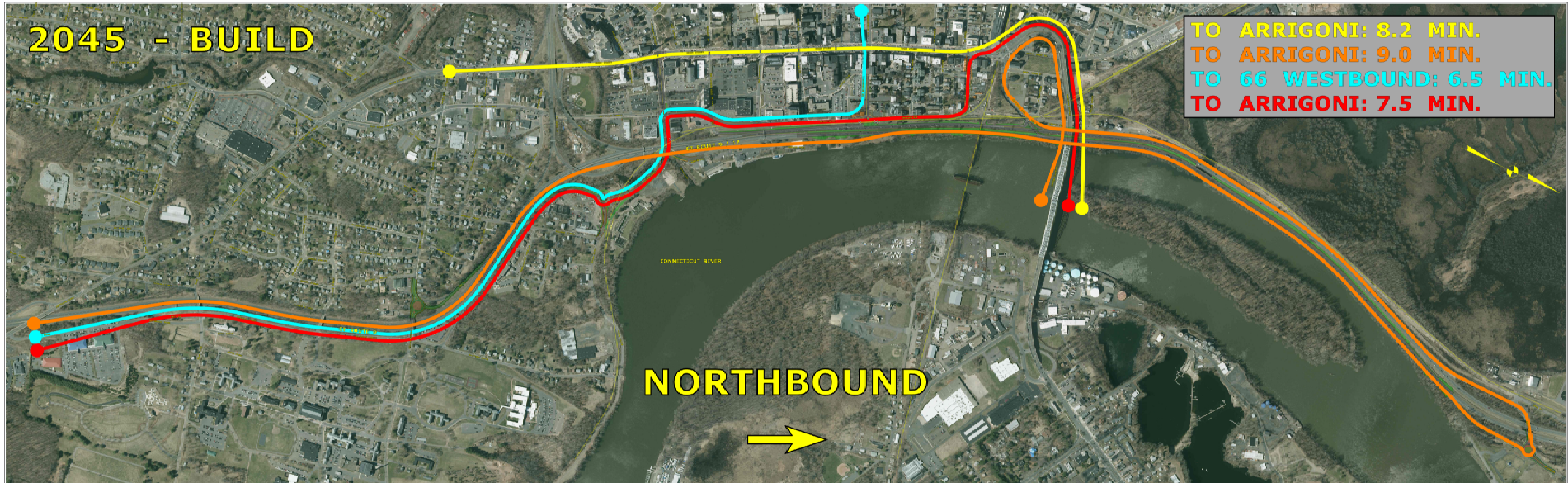


FIGURE 11 — NORTHBOUND TRAVEL TIMES — 2045 BUILD

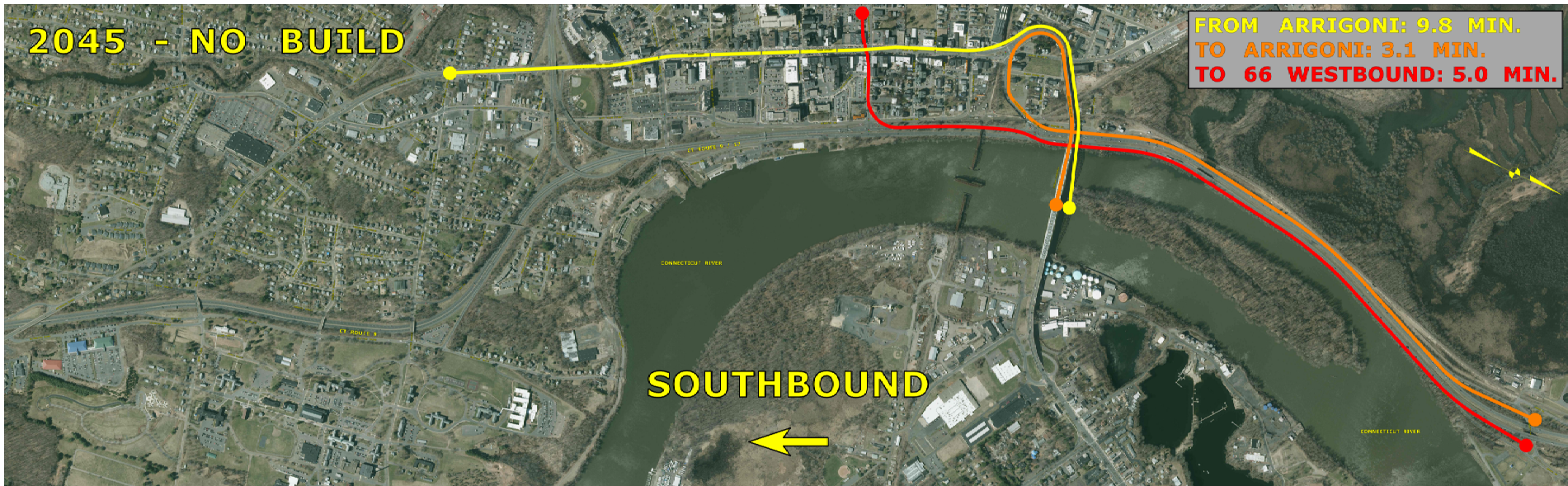


FIGURE 12 — SOUTHBOUND TRAVEL TIMES — 2045 No BUILD



FIGURE 13 — SOUTHBOUND TRAVEL TIMES — 2045 BUILD

CONGESTION

The traffic simulation can be viewed with color coded blocks representing vehicles at differing speeds to get a better visual representation of congestion. Red indicates vehicles traveling 10 miles per hour or less, highlighting the congestion. The no-build condition can be compared to the design condition in the following figures, both in the 2045 design year, to better visualize the anticipated congestion reduction.

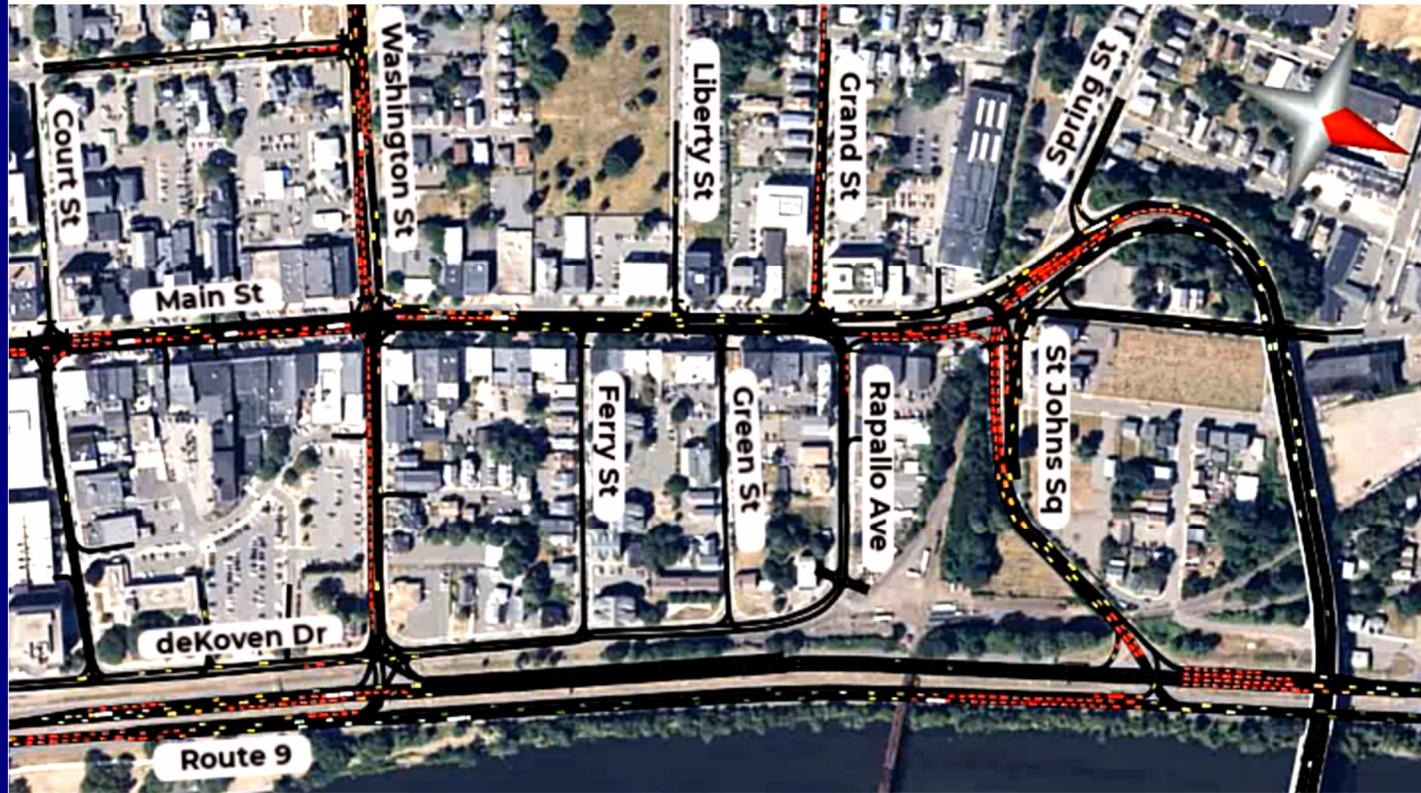


FIGURE 14 — TRAFFIC MODEL— 2045 NO BUILD SCENARIO



FIGURE 15 — TRAFFIC MODEL— 2045 BUILD SCENARIO

ADDITIONAL ROUNDABOUTS:

Roundabout at Exit 22—Silver Street Interchange:

A roundabout is proposed at Exit 22 to calm traffic and provide an acceptable queue length on the off ramp. The roundabout will encourage low speeds and improve the efficiency. Sliver acquisitions are anticipated to fit the roundabout at this location.



FIGURE 16 — ROUNDABOUT AT EXIT 22 —SILVER STREET INTERCHANGE — EXISTING CONDITIONS

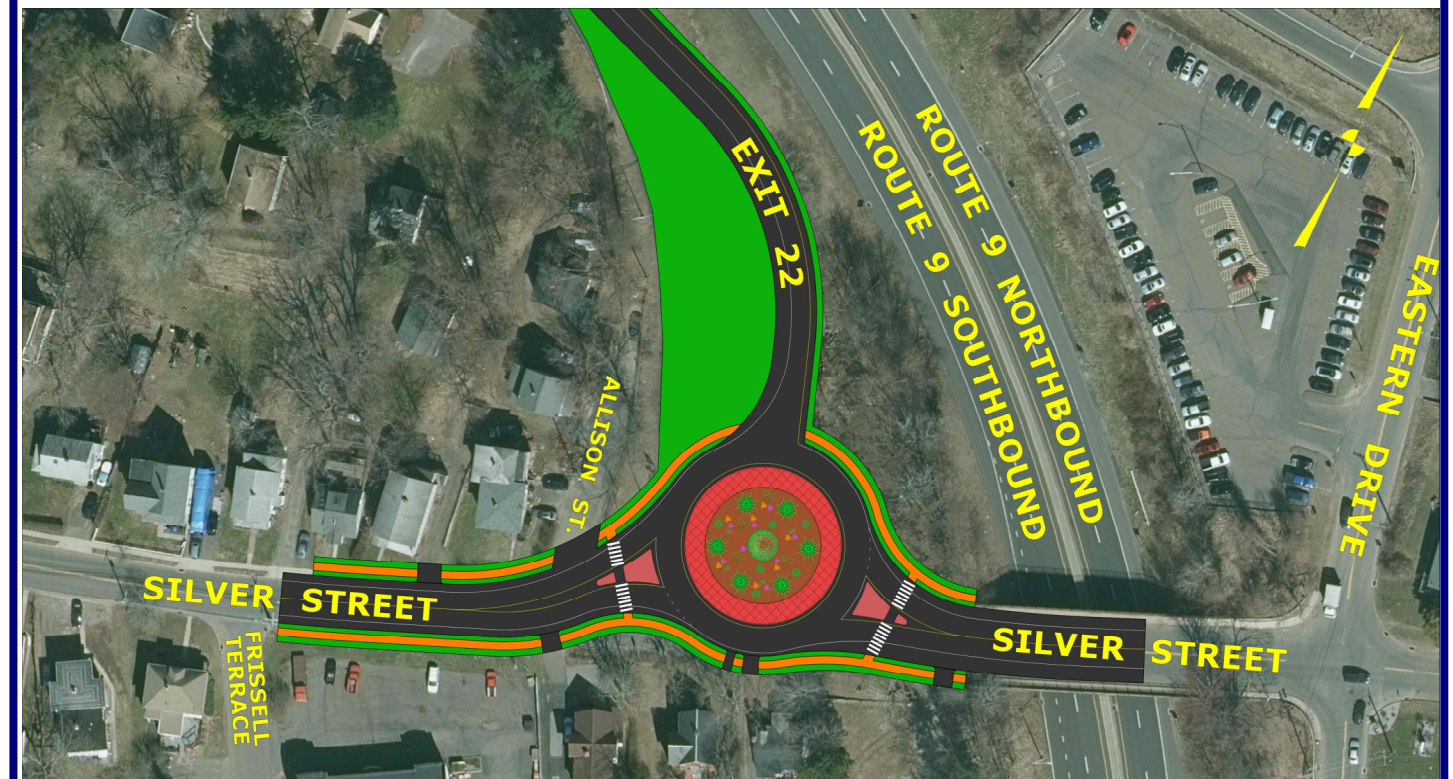


FIGURE 17 — ROUNDABOUT AT EXIT 22 — SILVER STREET INTERCHANGE — DESIGN CONDITIONS

Roundabout at Exit 25 — Route 99 Interchange:

Northbound trucks destined for the Arrigoni Bridge will be encouraged to use Exit 25 and reverse direction to use the Route 9 southbound access to Saint John's Square and the Arrigoni Bridge. A roundabout is proposed at the Route 99 interchange to improve the safety and viability of that movement.



FIGURE 18 — ROUNDABOUT AT EXIT 25 — ROUTE 99 INTERCHANGE — EXISTING CONDITIONS

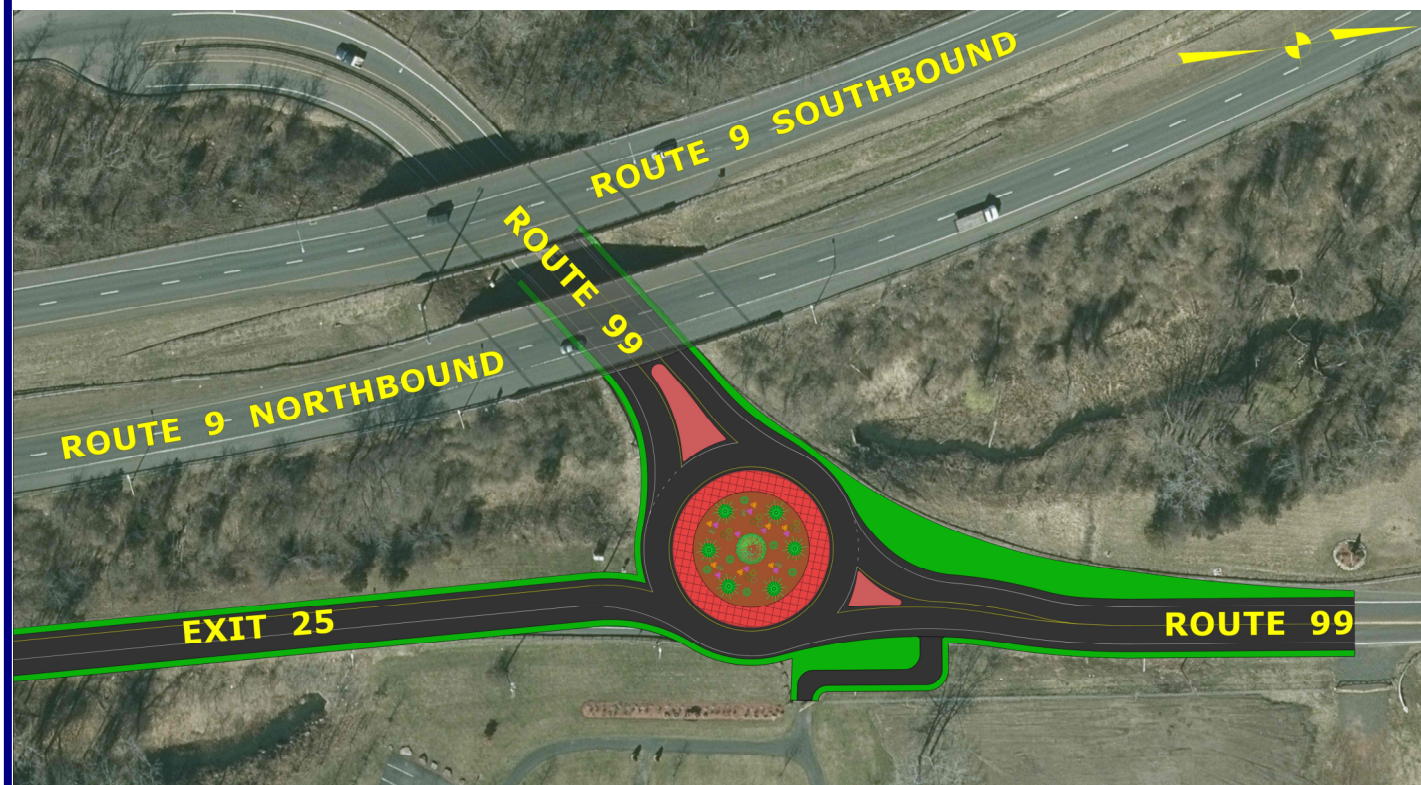


FIGURE 19 — ROUNDABOUT AT EXIT 25 — ROUTE 99 INTERCHANGE — DESIGN CONDITIONS

ROUNDABOUT BENEFITS:

As of 2023, CTDOT has converted 7 intersections to roundabouts and as a result, hundreds of crashes and injuries have been prevented. A crash reduction of 47% has been noted with a 76% reduction in severe crashes. Roundabouts make roads safer for all users. Speeds are lower in roundabouts, typically 20-25 miles per hour for a single-lane design, increasing overall intersection safety. Pedestrians only need to cross one direction of vehicle travel at a time and can find refuge in splitter islands / medians. Bicyclists can ride in the lane with traffic or dismount and cross as a pedestrian. There are a multitude of successful intersection reconfigurations across the country that converted a conventional intersection to a roundabout, at an offramp or near a railroad crossing, similar to the roundabouts proposed as a part of this project. Roundabouts are also better for the environment. Motorists no longer need to wait at a stop sign or traffic signal, resulting in reduction of fuel consumption. Less idling and less acceleration from a stopped position reduces the amount of harmful motor vehicle emissions released into the environment.

VARIABLE MESSAGE SIGN:

Variable message signs will be used to alert drivers to any roadway closures or incidents in the area. If needed, these signs can be used to reroute northbound vehicles headed to the Arrigoni Bridge up to Exit 25 in Cromwell where they can then take Route 9 southbound back to Exit 24 to go over the bridge. Not only is this route a good option for incident management, but it also provides an efficient route, especially for trucks, that is only two minutes longer to get to over the Arrigoni Bridge than if they had taken the new off-ramp to River Road. This route, while being a slightly longer duration, is anticipated to be the preferred route for trucks over navigating deKoven Drive and Rapallo Avenue to access the Arrigoni Bridge from Route 9 northbound.

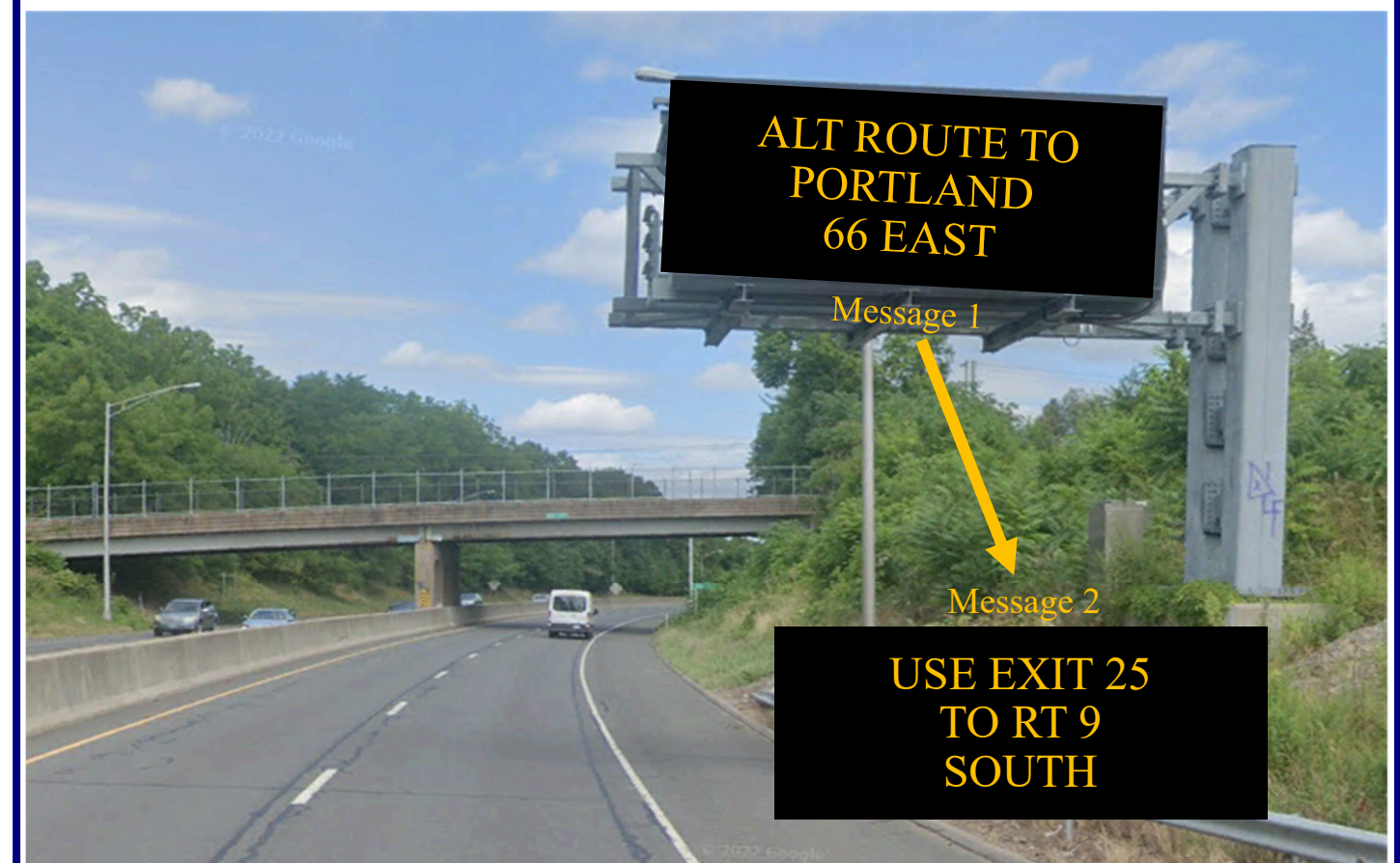


FIGURE 20 — NORTHBOUND VARIABLE MESSAGE SIGN

A separate project, CTDOT project number 0082-0327, has been initiated to design and construct a pedestrian bridge over Route 9 to provide better connectivity to the riverfront. This project is in its infancy but will be coordinated with the signal removal project as it progresses. The following image depicts a conceptual depiction of the bridge from the City of Middletown's architectural consultant, between Court Street and Dingwall Drive.



IN SUMMARY:

The Committee

The two traffic signals on Route 9 contribute to a crash every other day and an injury once per week on average. The signals also directly contribute to the congestion in the North End of Middletown, and subsequently to the high percentage of vehicles that use the North End residential streets to bypass the congestion westbound on Route 66. The proposed design shown here eliminates both traffic signals without a significant impact to the northbound Route 9 travel time to the Arrigoni Bridge. Additionally, travel times from the north, east, and west are shown to improve in this condition.

The construction of this project uses 80% Federal funding and 20% State funding. The total construction cost is estimated to be \$143 million. Construction is estimated to take four years and could begin as early as 2027 based on the acceptance of this plan.

COMMENTS AND REQUESTS FOR ADDITIONAL INFORMATION

All comments and recommendations made will receive careful consideration by the Connecticut Department of Transportation. As a result of the information gained at this meeting, some of you may wish to make additional statements. Please consider including any sketches you may wish to provide on any of the provided sheets. Additional written statements should be sent to:

MR. STEPHEN D. HALL, P.E.
TRANSPORTATION SUPERVISING ENGINEER
CONNECTICUT DEPARTMENT OF TRANSPORTATION
P.O. Box 317546
NEWINGTON, CONNECTICUT 06131-7546
OR AT EMAIL ADDRESS
DOT.RTE9MIDDLETOWN@CT.GOV

COMMENT FORM
STATE PROJECT 0082-0318
REMOVAL OF THE TRAFFIC SIGNALS ON ROUTE 9

NAME: _____

ADDRESS:

EMAIL: _____

TELEPHONE: _____ **CALL:** ☐ **PREFERRED TIME:** _____

[illegible]



Fold Along Dashed Line

PLACE
STAMP
HERE

MR. STEPHEN D. HALL, P.E.
TRANSPORTATION SUPERVISING ENGINEER
CONNECTICUT DEPARTMENT OF TRANSPORTATION
P.O. Box 317546
NEWINGTON, CT 06131-7546

STATE PROJECT 0082-0318
ATTN. WILLIAM NICOLLE AND SAMUEL BEAN

Fold Along Dashed Line

