



2023 RAISE Grant Application

# REVITALIZE 95

Rehabilitation of I-95  
from Milepost 604.0 (NE 4.0) to Milepost 608.8 (NE 8.8)

REVITALIZE



NEW YORK  
STATE OF  
OPPORTUNITY.

Thruway  
Authority

## Project Context

Built in the early 1950s, the New York State Thruway is one of the oldest components of the National Interstate Highway System and one of the longest toll roads in the nation. The 570-mile Thruway System plays a vital role in the national, regional, and state economies, and provides connections between New York's principal cities, rural areas, and tourist destinations. Approximately one-third of all vehicles using the system are from out of state, and it is a key part of the National Highway Freight Network (NHFN) and the New York State Freight Core Highway Network.



The New England Thruway (I-95), a 15-mile segment of the New York State Thruway System, stretches from New York City (Bronx) to the Connecticut state line. This segment of I-95 is classified as a Principal Urban Arterial Interstate and is part of the National Highway system (NHS). It is typically comprised of three 12-foot mainline lanes in each direction, with 10-foot right shoulders, a variable-width median, and a concrete median barrier running the full length. The estimated two-way Annual Average Daily Traffic (AADT) is approximately 121,000 vehicles, including 13% trucks.

## Statement of Work

The objective of this project is to rehabilitate a deteriorated 4.8-mile segment of the critical I-95 corridor, from Milepost 604.0 (NE 4.0) to Milepost 608.8 (NE 6.8), while also promoting better community connectivity and mobility across the corridor. The project aims to ensure the safe, efficient movement of people, goods, and services along this portion of the corridor. The project's environmentally sustainable and equitable approach will benefit state, region, and communities located close to I-95, including Historically Disadvantaged Communities. All design and construction work performed will meet or exceed State and Federal standards.

## Transportation Challenges and Solutions

Four primary transportation challenges and solutions have been identified for the project.

- Challenge #1: Pavement Condition.** The pavement in this 4.8-mile segment is experiencing accelerated deterioration due to its advanced age and heavy loading. The existing concrete pavement on this segment was reconstructed between 1984 and 1992, and last rehabilitated in 2014. That rehabilitation consisted of concrete pavement restoration and the replacement of concrete slabs. However, in recent years, nearly constant corrective repair work has been needed, along with preventative maintenance. The continuous repair work is costly, inefficient, and frequently creates delays for road users. Since the pavement has exceeded its design life expectancy, is in poor condition, and all options for repair have been exhausted, rehabilitative or replacement improvements are needed. The pavement conditions, if unaddressed, will pose a safety hazard to road users and vehicle occupants, increase congestion due to lower travel speeds, exacerbate air quality concerns related to emissions from slowed or idling vehicles, and negatively impact the movement of people and the delivery of goods and services. It has become apparent that the pavement's condition has deteriorated to a level where extensive rehabilitation or replacement measures are required. This pavement needs to be stabilized and protected to prevent further deterioration.

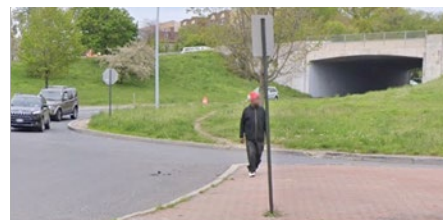


**Solution to Challenge #1.** The project will rehabilitate the existing deteriorated concrete pavement and place a thick protective asphalt overlay on it. With a 20-year design life, the pavement will be kept in



a state of good repair with routine preventative maintenance and preservation activities. This solution will be far more cost-effective and will have fewer negative impacts to traffic and safety than the current approach of continuous round-the-clock patching and repair work. In conjunction with pavement rehabilitation, this project will incorporate further safety enhancements, such as replacing guiderails and pavement markings. Refer to **Challenge #3: Safety** in this document, and the **A. Safety** section of the Merit Criteria document, for additional information about the pavement and safety improvements.

- **Challenge #2: Community Connections.** Like many other interstates of its era, the New England Thruway was routed through existing communities, creating a barrier to mobility in some of them. While numerous bridges and underpasses provide essential community connections for both motorized and non-motorized traffic crossing the corridor, there are opportunities to establish or improve safe connections, particularly for non-motorized users.



Of the nine overhead bridges providing community connections over this segment of I-95, four have been struck by vehicles in the past. One of these, the North Avenue bridge, is scheduled to be replaced in a separate Authority project in 2024, while the three remaining bridges have relatively low vertical clearances. To allow for the movement of large vehicles and decrease the chance of bridge strikes, the minimum vertical clearance standards for overhead structures on the National Highway System must be met or exceeded. Raising the pavement profile with an asphalt overlay, though, has the potential to further reduce vertical clearances that are already at or near the minimum.

**Bridges Providing Local Community Connections**

Feature Carried	Sidewalks	Community	Vertical Clearance	Notes
Centre Avenue	Both sides	New Rochelle	14.44'	Has been struck.
Division Street	Both sides	New Rochelle	16.42'	
Memorial Highway	Both sides	New Rochelle	20.25'	
New Rochelle Pedestrian/Utility Bridge	Pedestrian bridge	New Rochelle	16.88'	
North Avenue	Both sides	New Rochelle	14.33'	Has been struck. Will be replaced by a separate Thruway Authority project with anticipated completion in late 2024.
Potter Avenue	Both sides	New Rochelle	19.88'	
Chatsworth Avenue/Larchmont Station Plaza	Both Sides	Larchmont	14.75'	Metro North Larchmont Station Plaza (train station access and vehicle/ bicycle parking) located on bridge. Has been struck.
Weaver Street	Both sides	Larchmont	17.58'	
Rockland Avenue	No	Mamaroneck	14.87'	Has been struck. Flanked by low density single-family residential areas

In addition, there is a pressing demand for a new connection for non-motorized users to cross I-95 and the loop roads located near Interchange 16 in the City of New Rochelle. The city’s *2016 Comprehensive Plan* identified this need, which is reinforced by the presence of worn footpaths beside the interchange loop roads. There is clearly a gap in the pedestrian network at this location, which hinders the mobility and safety of those traveling between neighborhoods north of I-95 and the commercial area south of I-95. The commercial area includes the city’s downtown and the only supermarket within walking distance (½ mile) of the neighborhoods immediately north of I-95.

The city is advancing a project, known as “The LINC,” that is scheduled to start construction in 2025. “The LINC” will partially convert an adjacent 4-lane highway into a linear park. Additional pedestrian and

bicycle traffic will be generated by “The LINC,” underscoring the need to provide a safe, continuous active transportation network in this area. More detail on the need for connectivity is addressed in the ***D. Mobility and Community Connectivity*** section of the ***Merit Criteria*** document, and safety concerns associated with the existing informal footpaths and road crossings are detailed in the ***A. Safety*** section of the same document and ***Challenge #3*** of this document.

**Solution to Challenge #2.** The vertical clearance of all overhead bridges will be evaluated, and measures identified, as needed, to meet minimum clearance standards and decrease the chance of bridge hits. Bridge heights may be adjusted, or the profile of the pavement beneath them may be lowered, to allow for the added thickness of the asphalt overlay. Fully accessible pedestrian connections will be preserved or restored on any bridges where the heights are adjusted. Opportunities to enhance accessibility on affected bridges will also be identified.

A new, safe, and accessible active transportation connection will be established to cross I-95 and the associated loop roads at Interchange 16 in New Rochelle. Fully compliant with the Americans with Disabilities Act (ADA), new 10-foot-wide shared-use paths will feature two new access points to residential areas and will connect to the city’s proposed “LINC” project. One travel lane in an existing I-95 underpass will be reallocated for the shared-use path network. High visibility crosswalks with rectangular rapid flashing beacons (RRFBs) will provide safe crossings of the loop roads. Near these crossings, the existing two-lane road sections will be reduced to one lane to calm traffic and reduce pedestrian crossing distances. The existing and proposed conditions are shown below:



Finally, a new traffic signal and high visibility crosswalks will be developed, in cooperation with the New York State Department of Transportation under another contract, to provide a safe crossing of Garden Street. This will connect with the existing contiguous pedestrian and street network that serves the commercial and downtown areas south of I-95. The existing and proposed conditions are shown below:



- **Challenge #3: Safety for Motorized and Non-Motorized Users.** In addition to the safety concerns discussed above, related to the deteriorating pavement condition, risks for bridge strikes, and safety issues for non-motorized users in the vicinity of Interchange 16, other safety features need to be addressed. Some pavement markings in the segment are worn, with poor visibility or reflectivity, and guiderail needs to be upgraded to current Federal standards.

As a result of community engagement with emergency responders, an existing U-turn within the project limits was moved in 2022. In its former location, it was difficult for them to access, and the Authority redesigned it and relocated it further to the south to improve its safety and functionality for responders. Project area constraints required a non-conforming weave pattern, which is being monitored by the

Authority for its performance. A more detailed discussion of safety challenges is included in the *A. Safety* section of the *Merit Criteria* document submitted for this project.

**Solution to Challenge #3.** In addition to the enhancing safety with an improved road surface, adequate vertical bridge clearances, and the installation of new safe, accessible facilities for non-motorized users near Interchange 16, this project will replace worn pavement markings upgrade guiderail to meet the current Federal standards. The superelevation on curves will also be evaluated and corrected, if necessary, to meet current standards for urban interstates.

Additional improvements (e.g., signs) for the relocated U-turn will be included in this project if the Authority determines, from monitoring and analysis, that they will result in a safer condition. A detailed discussion of the project's safety improvements is provided in the *A. Safety* section of the *Merit Criteria* document submitted for this project.

- **Challenge #4: Traffic During Construction.** Moving people and vehicles safely and efficiently through this high-volume corridor during construction will present an additional challenge. There are no convenient alternative routes for vehicles going to and from New England and unintentionally diverting traffic to nearby state and local roads to “go around” the construction area would be undesirable. Community and non-motorized user connections must be maintained, with minimal disruption, including pedestrian connections near Interchange 16.

**Solution to Challenge #4.** The project will be constructed with an emphasis on minimizing disruption to traffic and prioritizing safety. Nighttime lane closures will be used to minimize impacts to traffic and avoid impacts that would otherwise be caused by lane reductions during peak daytime travel hours. Particular attention will be paid to community and pedestrian connections, to avoid or minimize any temporary impacts on these pathways. The informal and unsafe pedestrian conditions near Interchange 16 will be evaluated for improved accessibility and safety during construction. Refer to the *A. Safety* section of the *Merit Criteria* document for additional details.

## Project Status

---

In 2019, a detailed “Pavement Reconstruction Study” was conducted to evaluate options to address the pavement conditions on the entire New England Thruway (I-95). This project is part of a comprehensive plan, informed by the study, for the rehabilitation of the corridor. Now in the preliminary design phase, the project is on the Authority's five-year Capital Plan.

## Project Context with Other Transportation Infrastructure Investments

---

As part of the comprehensive, long-term plan to rehabilitate the New England Thruway (I-95) corridor, the New York State Thruway Authority (Authority) has recently advanced or completed several other projects nearby. A project to rehabilitate the pavement on the 4-mile segment of I-95 immediately to the south (Milepost 600.0 [NE 0.0] to Milepost 604.4 [NE 4.4]) is scheduled for completion of construction in 2023. Another project to rehabilitate the pavement from Milepost 608.8 (NE 8.8) to Milepost 610.8 (NE 10.8) and from Milepost 613.0 (NE 13.0) to Milepost 614.1 (NE 14.1) was recently completed. These projects, together, will link the northern and southern segments of I-95 in New York State and further enhance efforts to reduce congestion and reduce greenhouse gas emissions from slowed or idling vehicles along the New England Thruway and the entire Thruway System.

In 2021, the “Last Mile” of the New England Thruway, from Exit 22 (Port Chester-Rye) to the Connecticut border was fully reconstructed. The project included several ramp upgrades for connections to the Cross Westchester Expressway (I-287) and Midland Avenue in the City of Rye and Village of Port Chester in Westchester County. It also included the replacement of two bridges over the Thruway, and the resurfacing of several others.



The North Avenue Bridge, located in the City of New Rochelle within same segment of I-95 as this project, is scheduled to be replaced by a separate Thruway Authority contract. Completion of construction for the North Avenue Bridge is anticipated by the end of 2024. The new bridge will meet the the minimum vertical clearance requirement for a bridge over I-95. Sidewalks will be provided on both sides, along with Americans with Disabilities Act (ADA) accessibility improvements at nearby signalized intersections and a small public park.

In addition, the New Rochelle toll barrier, which was located within the project limits, was removed in 2018 as part of the New York State Thruway's system-wide conversion to All-Electronic Tolling. In addition to modernizing the system, the conversion significantly contributed to the Authority's efforts to reduce greenhouse gas emissions from slowed or idling vehicles. Total annual greenhouse gas emissions were reduced by over 44,000 short tons in 2021.

## Project Location

### Detailed Geographical Description

The project is located along the New England Thruway (I-95) in Westchester County, New York State. The project begins at Milepost 604.0 (NE 4.0), in the Village of Pelham Manor, Town of Pelham, runs north through the City of New Rochelle and Village of Larchmont, and ends at Milepost 608.8 (NE 8.8) in the Town of Mamaroneck.



### Connections to Existing Transportation Infrastructure

This segment of the Thruway lies within the I-95 corridor, which is a major north-south artery from Maine to Florida and a critical part of the national and Northeast regional transportation infrastructure. The New England Thruway portion of I-95, located immediately north of New York City, is 15 miles long, beginning 3.5 miles south of the Bronx/Westchester County line, near Orchard Beach (Pelham Bay Park), New York, and continuing north to the Connecticut state line, near Port Chester, New York.

The New England Thruway is one of the primary routes used to transport people and freight to and from the greater New York metropolitan area, Long Island, New England, and the mid-Atlantic states. It serves the Port of New York and New Jersey, the largest port on the East Coast, as well as John F. Kennedy International Airport and LaGuardia Airport, two of the busiest airports in the nation. For additional information on the role this segment plays in state, regional, and national freight connectivity, refer to *E. Economic Competitiveness and Opportunity* in the *Merit Criteria* document submitted for this project.

Along this segment, there are three interchanges, which primarily serve local connections to downtown business areas, commercial/manufacturing areas, and residential areas. The segment serves two intermodal transportation facilities: the Larchmont Plaza Train Station and New Rochelle Transit Center. Additional information about these local and intermodal connections is included in the *D. Mobility and Community Connectivity* section of the *Merit Criteria* document submitted for this project.

### Census Information

The project is located within Westchester County 2010 Census Tracts 55, 57.01, 61, 63, 65, 69, and 70. It is located entirely within the New York--Newark, NY--NJ--CT Urban Area.

Approximately 2.3 miles (48%) of the 4.8-mile-long project are located in Historically Disadvantaged Communities associated with Tracts 57, 63, and 65. Approximately 49% of the project costs will be expended in these areas. The project is not located within an Area of Persistent Poverty.

## Project Budget

### Budget Overview

The budget for the project was developed with preliminary design information, (approximately 30% design completion) and in consideration of the cost history of similar projects and work scopes in the same geographic area. As the grant requests funding solely for the construction project development phase, only funds that are ineligible -- such as preliminary/final design costs -- are expected to be incurred by the Authority prior to the anticipated Winter 2024 grant funding obligation. A contingency of 20% of project construction costs has been applied to conservatively budget for cost increases which may occur due to industry cost escalations or other unknowns.

No prior Federal funds have been previously authorized for this project.

The table below tabulates future project costs and shares which are eligible for RAISE Grant funding, along with funding sources and their shares by each major project development activity.

FUTURE PROJECT COSTS AND SHARES						
\$Million (Eligible for RAISE Funds)						
	I-95 Costs	Shared Use Path Costs	Non-Federal Funds <sup>1</sup>	I-95 RAISE Funds	Shared-Use Path RAISE Funds	Other Federal Funds
Construction	\$40.0	\$0.9	\$15.9	\$24.5	\$0.5	\$0
Mobilization (4%)	\$1.6	\$0.0	\$0.6	\$1.0	\$0.0	\$0
<b>Subtotal: Construction Cost</b>	<b>\$41.6</b>	<b>\$0.9</b>	<b>\$16.5 (38%)</b>	<b>\$25.5 (60%)</b>	<b>\$0.5 (1.2%)</b>	<b>\$0 (0%)</b>
Contingency	\$8.3	\$0.2	\$8.5	\$0.0	\$0	\$0
<b>Subtotal: Award/Construction Cost</b>	<b>\$49.9</b>	<b>\$1.1</b>	<b>\$25.0 (49%)</b>	<b>\$25.5 (50%)</b>	<b>\$0.51 (1%)</b>	<b>\$0.00</b>
Preliminary Design	\$2.0	\$0.05	\$2.05	\$0	\$0	\$0
Final Design	\$3.0	\$0.05	\$3.05	\$0	\$0	\$0
Quality Control/Admin of Final Design and Contract	\$1.0	\$0.10	\$1.10	\$0	\$0	\$0
Construction Inspection	\$4.0	\$0	\$4.05	\$0	\$0	\$0
Right of Way	\$0	\$0	\$0	\$0	\$0	\$0
<b>Subtotal: Engineering/ROW Cost</b>	<b>\$10.0</b>	<b>\$0.25</b>	<b>\$10.25</b>	<b>\$0 (0%)</b>	<b>\$0 (0%)</b>	<b>\$0 (0%)</b>
<b>Subtotal Future Project Cost</b>	<b>\$59.92</b>	<b>\$1.33</b>	<b>\$35.25</b>	<b>\$25.49</b>	<b>\$0.51</b>	<b>\$0 (0%)</b>
<b>Total Future Project Cost</b>	<b>\$61.25</b>		<b>\$36.25 (57.6%)</b>	<b>\$25.0 (42.4%)</b>		<b>\$0 (0%)</b>

1. Thruway Authority Capital Funds

All RAISE Grant funding will be applied towards construction activities for the project scope outlined in the application *Project Description* and *Merit Criteria* files. The Authority will retain funding responsibility for 100% of project development through the final design engineering phase, and for construction inspection. Thus, the RAISE Grant will fund 51.0% of Construction costs versus a lesser 42.4% of the Total Project Costs.

## Funding Commitments

The Authority has committed \$36.25 million in Thruway Authority Capital Funds for the subject project (Refer to letter from the Authority’s Chief Financial Officer within application *Funding Commitment Documentation*. Authority funding accounts for 57.6% of the project costs.

RAISE Grant funding will supplement the Authority’s funds and ensure that this project and the comprehensive plan to rehabilitate the New England Thruway (I-95) corridor, discussed in application *Project Description* and *Merit Criteria* files are completed as soon as possible. It will enable the Authority to provide a much-needed connection for pedestrians and bicycles through the Interchange 16 area, and to ensure this is completed in time to seamlessly connect to an adjacent pedestrian and bicycle project (“the LINC”) being advanced by the City of New Rochelle for planned construction in 2025. Without RAISE funding, deteriorating conditions of the pavement system will necessitate completion of some rehabilitative work within the 2024 construction year. However, an inability to advance the full project scope will lead to additional future expenses and construction-related traffic impacts that will be avoided with the more comprehensive scope of full pavement rehabilitation that will be made possible with RAISE funding.

## Funding by Census Tracts

This project traverses 7 census tracts. Project funding by census tract is provided in the table below. Additional census information is available within the *Merit critical* application file.

Project Funding by Census Tract \$Million (Eligible for RAISE Funds)	
Census Tract	Project Cost in Census Tract
55	\$5
57.01 <sup>1</sup>	\$3.25
61	\$10
63 <sup>1</sup>	\$8
65 <sup>1</sup>	\$19
69	\$2
70	\$14
<b>Total Future Project Cost</b>	<b>\$61.25</b>

1. Historically Disadvantage Community

## Use of Project Funds

RAISE Grant funds are requested for construction activities only, and therefore are not scheduled to be obligated until after Final Design has been completed, an activity fully under the control of the Authority. Authority funding will be applied to all other project costs. No other funding conditions or restrictions are applicable.

## Transportation Improvement Program (TIP) and Statewide Transportation Improvement Program (STIP)

As outlined in the following letter, The New York State Department of Transportation acknowledges that the requested \$25 million toward this \$61.25 million project will be incorporated into the Transportation Improvement Program (TIP) and Statewide Transportation Improvement Program (STIP) when federal funding is allocated for this purpose.





## Department of Transportation

KATHY HOCHUL  
Governor

MARIE THERESE DOMINGUEZ  
Commissioner

JANICE A. McLACHLAN  
Chief of Staff

February 24, 2023

Frank G. Hoare  
Interim Executive Director  
New York State Thruway Authority  
200 Southern Boulevard  
P.O. Box 189  
Albany, New York 12201-0189

Dear Interim Executive Director Hoare:

The New York State Department of Transportation affirms that the New York State Thruway Authority's request for the rehabilitation of Interstate 95, (between milepost 604.0 and milepost 608.8) in Westchester County meets the eligibility requirements under Title 23, of United State Code and that the project is scheduled to be obligated within the time period set forth under Transportation and Infrastructure request form.

The State acknowledges that the requested \$25 million toward this \$61.25 million project will be incorporated into the Transportation Improvement Program (TIP) and Statewide Transportation Improvement Program (STIP) when federal funding is allocated for this purpose. Furthermore, the New York State Thruway Authority acknowledged that it is solely responsible for demonstrating the availability of the remaining non-federal share to complete the project.

If you need additional assistance regarding this request, please contact Donald Mattimore at (518) 485-1382 or [Don.Mattimore@dot.ny.gov](mailto:Don.Mattimore@dot.ny.gov).

Sincerely,

Janice A. McLachlan  
Chief of Staff

50 Wolf Road, Albany, NY 12232 | [www.dot.ny.gov](http://www.dot.ny.gov)



## Department of Transportation

**KATHY HOCHUL**  
Governor

**MARIE THERESE DOMINGUEZ**  
Commissioner

**JANICE A. McLACHLAN**  
Chief of Staff

February 24, 2023

Frank G. Hoare  
Interim Executive Director  
New York State Thruway Authority  
200 Southern Boulevard  
P.O. Box 189  
Albany, New York 12201-0189

Dear Interim Executive Director Hoare:

The New York State Department of Transportation affirms that the New York State Thruway Authority's request for the rehabilitation of Interstate 95, (between milepost 604.0 and milepost 608.8) in Westchester County meets the eligibility requirements under Title 23, of United State Code and that the project is scheduled to be obligated within the time period set forth under Transportation and Infrastructure request form.

The State acknowledges that the requested \$25 million toward this \$61.25 million project will be incorporated into the Transportation Improvement Program (TIP) and Statewide Transportation Improvement Program (STIP) when federal funding is allocated for this purpose. Furthermore, the New York State Thruway Authority acknowledged that it is solely responsible for demonstrating the availability of the remaining non-federal share to complete the project.

If you need additional assistance regarding this request, please contact Donald Mattimore at (518) 485-1382 or [Don.Mattimore@dot.ny.gov](mailto:Don.Mattimore@dot.ny.gov).

Sincerely,

Janice A. McLachlan  
Chief of Staff

bcc: Joseph Morrissey, Director, Office of Communications  
Rob Gibbon, Assistant Commissioner Government & Community Relations  
Mark Casellini, Government Relations



## A. Safety

This project aims to enhance safety for both motorized and non-motorized users. The proposed solutions were developed using direct, data-driven processes and are consistent with the goal of “taking substantial, comprehensive action to significantly reduce serious and fatal injuries on the Nation’s roadways,” outlined in USDOT’s 2022 *National Roadway Safety Strategy* (NRSS). The proposed improvements are expected to result in a reduction of fatalities and serious injuries and to bring the crash rates below the statewide average. As reflected in the *Benefit Cost Analysis* submitted for this project, it is expected to result in a reduction of 323 damaged vehicles per year, a reduction of 94 injuries per year, and a reduction of 7 serious injuries per year.

### Safety for Motorized Users

**Safety Challenges for Motorized Users.** Accident record data evaluated for this segment of I-95 (Mileposts 604.0 [NE 4.0] to 608.8 [NE 8.8]) from 2018 through 2020 documented 806 crashes, with 229 injuries. The accident rate over this period was 137.48 accidents per million vehicle miles traveled. This accident rate is 32% higher than the comparative statewide Thruway System accident rate of 103.79 accidents per million vehicle miles traveled. Safety improvements are needed to reduce the quantity and severity of accidents to Statewide rates.

Analysis of accident data has determined that poor pavement condition and an aged pavement surface with reduced friction properties is a contributing factor to crashes within this project. From 2018 through 2020, unsafe lane changes were identified as the cause of 23% of crashes (188 crashes) on this segment of I-95. In addition, 38% of crashes (303 crashes) were rear-end collisions and 29% (232 crashes) were side-swipe collisions. A portion of these rear-end and side-swipe collisions may have involved sudden lane changes or braking by drivers who were apprehensive about going over potholes or spalls. An additional 6 crashes were attributed to hitting a hole or bump in the pavement and an additional 7 crashes were attributed to unsafe braking. Rough pavement conditions on this roadway contribute to flat tires, vehicle damage, and breakdowns, sometimes causing vehicles to be disabled. Tire failure was the primary cause of 8 crashes and 86 claims were filed for property damages sustained along this segment of highway between 2018 and 2021. Claims were submitted by both private and commercial vehicle owners, many for flattened tires or other vehicle damage requiring repairs. In addition to causing congestion, motorists with mechanical problems often resort to stopping on a shoulder. Vehicles entering the left or right shoulder caused 59 crashes.

Reduced pavement friction, i.e., wet, or slippery pavement, was determined to be a factor in many crashes along the study segment. For example, 26% of the crashes (211 crashes) occurred on wet pavement. Skidding vehicles were involved in 9% of crashes (73 crashes). Less than 3% of crashes (22 crashes) occurred when surfaces conditions were identified as snowy or icy; most occurred on wet or dry pavement. A change in wearing surface materials is needed to increase roadway friction, which will result in fewer friction-related incidents.

In 2022, as a result of ongoing community engagement, the Authority addressed a critical need to relocate an existing U-turn so it would better serve emergency responders. The existing U-turn, near Interchange 17, was moved approximately 550 feet south, to a location identified by the Town of Mamaroneck Fire Department. When responding to incidents on the northbound side of I-95, the location of original U-turn made it difficult for emergency responders to enter the southbound side of I-95 at Interchange 17 and safely cross three lanes of traffic in a short distance to enter the U-turn. If they “missed” the U-turn, they were forced to travel to the next interchange, get off I-95 and re-enter the interstate on the northbound side, adding 2.4 miles to their travel distance and up to 10 minutes to their response time. The new U-turn is not only better located for emergency responders to access it, but it’s wider to better accommodate the large turning radius of fire trucks. Due

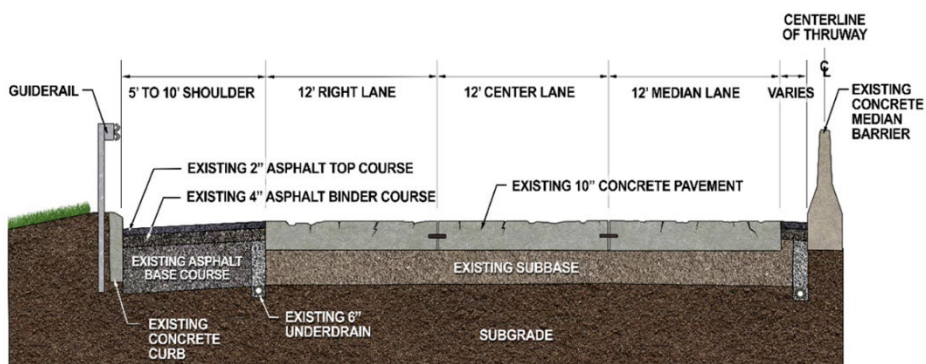


to project area constraints, a non-conforming weave pattern was required, and its performance is being monitored by the Authority for function and safety.

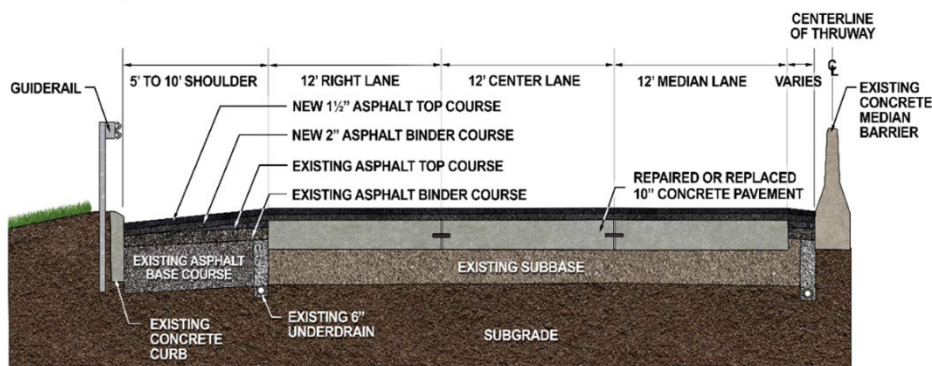
In addition to these safety issues, pavement markings along this segment are worn and damaged and guiderail needs to be brought up to current Federal standards. Three of the nine overhead bridges that provide motorized and non-motorized community connections over I-95 have relatively low vertical clearances and have been struck. This raises safety concerns for roadway users under the bridges as well as motorized and non-motorized users on the bridges.

**Safety Solutions for Motorized Users.** The 2017-2022 New York State *Strategic Highway Safety Plan* (SHSP) adopts a strategy of implementing engineering improvements to mitigate high-risk driver behaviors, including driver decision errors, such as unsafe lane changes and sudden braking. To help meet the goals of the SHSP, the following improvements will be included in this project:

- **Repair the existing pavement system** to reduce the frequency of unsafe lane changes, sudden braking, and other unexpected maneuvers to reduce crashes that are caused, in part, by poor pavement condition.



**Existing Condition**



**Proposed Condition**

- **Replace worn or damaged pavement markings** to improve marking visibility. The pavement marking system utilized by the Authority for mainline pavements, known as "Recess Triple Drop," substantively improves visibility of markings in all lighting and most weather conditions. Refer to *Section H. Innovation* for additional information on Recess Triple Drop pavement markings. Wide edge lines will be used and are identified by FHWA as a Proven Safety Countermeasure that can reduce crashes on all facility types in both urban and rural areas.<sup>1</sup> In addition, shoulder audible roadway



<sup>1</sup> FHWA. "Wider Edge Lines". <https://safety.fhwa.dot.gov/provencountermeasures/wider-edge-lines.cfm>. Accessed March 14, 2022.

delineators (shoulder rumble strips) will be installed along the full length of the project to notify motorists of unintended lane departures.

Other safety improvements that will be incorporated include:

- **Guardrail and other roadside design features will be improved to current State and Federal standards** in accordance with applicable design guidance. The existing concrete median barrier will be preserved to the extent practicable. If grade changes necessitate the removal of existing median barrier, it will be replaced. FHWA identifies median barriers as another Proven Safety Countermeasure, stating that, “Median barriers significantly reduce the number of cross-median crashes, which are attributed to the relatively high speeds that are typical on divided highways.”<sup>2</sup>
- **The superelevation on curves will be evaluated and corrected, if necessary,** to meet current standards for urban interstates.
- **Bridges carrying roads and pedestrian facilities over I-95 will be evaluated and measures taken to ensure that the minimum required vertical clearances are achieved.** Due to the addition of an overlay, the profile of I-95 below the bridges may be lowered or the bridges may be raised. This will reduce the risk of bridge strikes that may damage the bridges and/or cause injury to people using them. Ensuring that minimum vertical clearances are provided under the bridges will improve safety for vehicle operators and occupants traveling on and under the bridges, as well as pedestrians or cyclists using the bridges.
- The Authority will continue to monitor the performance of the new U-turn near Interchange 17 to ensure it not only minimizes emergency response times for incidents on I-95 but decreases the likelihood of an emergency response vehicle being directly involved in an accident. Cost effective improvements that may further enhance performance of this critical emergency feature (e.g., additional signage) will be considered and provided under this project, if needed.

## Safety for Non-motorized Users

This project will improve safety for vulnerable non-motorized users, consistent with the January 2022 USDOT NRSS. Under the principles of a “Safe System Approach,” the safety of all non-motorized users has been considered, including those who walk, bike, drive, ride transit, travel by other modes, and for highway workers, who are also often considered pedestrians.

**Safety Challenges for Non-motorized Users.** The systematic challenges outlined in the NRSS and SHSP are applicable to the dense urban conditions that exist near Interchange 16 of this project. This area, which is being actively used by non-motorized users without adequate accommodations, needs fundamental safety improvements.

The NRSS found that “disproportionate safety impacts are especially true in underserved communities, where people face heightened exposure to risk” and that “pedestrian fatalities are overrepresented for American Indians, Black, or African Americans.” As reported in the 2020 US Census, a population of 14,500 people live within 1 mile of the Interchange 16 area and a significant portion of this population is historically underserved, with approximately 74% of the population reporting as being of a race other than white<sup>3</sup> and 10 to 20% of people living in poverty.<sup>4</sup> Given the proximity of these populations to Interchange 16, it is probably that they



<sup>2</sup> FHWA. “Median Barriers”. [https://safety.fhwa.dot.gov/provencountermeasures/median\\_barrier.cfm](https://safety.fhwa.dot.gov/provencountermeasures/median_barrier.cfm). Accessed March 31, 2022.

<sup>3</sup> Council on Environmental Quality. Climate and Economic Justice Screening Tool. <https://screeningtool.geoplatform.gov/en/#14.4/40.91252/-73.78929>. Accessed February 18, 2023.

<sup>4</sup> FHWA. HEPGIS Map Server. <https://hepgis.fhwa.dot.gov/fhwagis>. Accessed February 20, 2023.



represent a significant portion of the pedestrians currently obligated to use informal footpaths and road crossings to navigate through the area.

The NRSS recommends that the design of roadway environments be implemented to mitigate human mistakes and account for injury tolerances, to encourage safer behaviors, and to facilitate safe travel by the most vulnerable users. The 2023 [USDOT Progress Report on the NRSS](#) documented that overall fatalities have increased between 2020 and 2022, that 16% of fatalities occurred on urban roads, and that 13% of fatalities - the highest total in decades - were among people walking. The SHSP documents that a majority of pedestrian and bicyclist fatalities and serious injuries occurred in conditions like those found in this project area. At intersections, they are 62% and 72%, respectively. In urban areas, they are 87% and 89%, respectively.

Roadway workers outside of equipment are also vulnerable non-motorists. The NYS Work Zone Intrusion Report, referenced in the SHSP, shows an increasing trend in fatalities and injuries for these workers. During 2021, there were 378 work zone intrusions on New York state roads maintained by the State Department of Transportation and Authority. More than 50 of those intrusions resulted injuries to either a highway worker or vehicle occupant.<sup>5</sup> Safer work zones are necessary to reduce safety risks for these workers.

Work Zone Fatalities and Injuries



**Safety Solutions for Non-motorized Users.** Consistent with the strategies and goals of the NRSS and SHSP, this project will take substantial and comprehensive actions to reduce the likelihood of serious and fatal incidents for non-motorized users:

- **Install new pedestrian and bicyclist accommodations at Interchange 16** to reconnect this part of the community and re-establish a contiguous non-motorized transportation system that hasn't existed at this location since construction of I-95 in the 1950s. Shared-use paths conforming to AASHTO, ADA, and NYSDOT *Highway Design Manual* standards will be constructed. These will replace the informal foot trails and unmarked road crossings that are currently being used by pedestrians with safe and fully accessible facilities and will introduce new access for cyclists.
- **Include safety countermeasures in the design of the shared-use paths and crossings**, including MUTCD-compliant Rectangular Rapid Flashing Beacons and high visibility crosswalk markings. Roadways will be reduced by one lane in each direction on Memorial Highway and Cedar Streets where shared-use paths cross. In addition to minimizing pedestrian crossing distances, this will enhance user safety by calming traffic and encouraging reduced vehicular speeds at the crossings. The crossing of Garden Street will consist of a new traffic signal, a marked crosswalk, and fully accessible pedestrian signals that are being advanced, in coordination with NYSDOT, under a separate project.
- **Install LED lighting for users of the shared-use paths** per criteria provided by the NYSDOT *Policy on Highway Lighting* and the AASHTO *Roadway Lighting Design Guide*. Lighting at intersections with motorized vehicles, at other pedestrian crossings, and in areas where there is significant dusk or nighttime pedestrian activity will improve safety and user comfort.
- **Implement a Construction Transportation Traffic Control Plan** in partnership with the Contractor, to provide a safe work area for all non-motorist users, including workers within the roadway on I-95 and for pedestrians and bicyclists at other project areas. This plan will facilitate the safe and orderly flow of all non-motorized users through the work zone.

<sup>5</sup> NY Work Zone Safety Awareness Program. <https://www.ny.gov/programs/work-zone-safety-awareness>. Accessed February 18, 2023.



## B. Environmental Sustainability

### Reduction of Transportation-Related Air Pollution and Greenhouse Gas Emissions

FHWA has found that reducing pavement-related rolling resistance reduces environmental impact due to less fuel use, particularly on high traffic volume routes.<sup>6</sup> The rehabilitation of I-95 will reduce fuel consumption by improving the smoothness of surface. Reduced congestion and traffic backups related to traffic incidents and frequent pavement repairs will further reduce fuel consumption and reduce greenhouse emissions from slowed or idling vehicles. Net reductions of greenhouse gases are estimated to be over 178,000 tons from the start of construction in 2024 through the end of the analysis period in 2046.<sup>7</sup> This will reduce impacts to the communities near the project, including the disproportionate impacts typically experienced by Historically Disadvantaged Communities located near highways. Historically Disadvantaged Communities are located immediately adjacent to I-95 along 48% of the project length.



The project will also improve access to regional hubs for low-carbon transit options. This segment of I-95 is utilized by transit buses for local and regional routes, as well as by tour and school buses, providing the necessary infrastructure for these higher-occupancy vehicles to operate effectively and minimize their own fuel consumption and emissions. Two major regional intermodal facilities, Larchmont Plaza Train Station and

<sup>6</sup> Federal Highway Administration. “*Vehicle Fuel Consumption and Pavement Characteristics.*” Accessed February 16, 2023.

<sup>7</sup> Greenhouse gas reductions were estimated for the Benefit-Cost Analysis and include Carbon dioxide (CO<sub>2</sub>), Nitric oxide (NO<sub>x</sub>), Particulate matter (PM<sub>2.5</sub>), and Sulfur dioxide (SO<sub>2</sub>).



New Rochelle Transit Center, are served by this segment of I-95, providing a connection for commuters and other travelers to opt for mixed-mode trips that include lower-carbon modes of travel such as trains and buses.

The new shared-use paths at Interchange 16 will greatly enhance pedestrian access and introduce new access for cyclists, improving the opportunity for people to choose active transportation modes, rather than using motor vehicles for local trips. The projected annual volume of users (pedestrian and bicycle) in 2025 is 211,000 pedestrians and 12,700 bicycles. A 2002 Rails-To-Trails Conservancy survey<sup>8</sup> of users on several urban trails in Seattle, Tampa, San Francisco, and Washington DC found that 35-45% of weekday trail users are making a trip to a destination such as a place of business, school, place of worship, etc. Assuming that a similar percentage (35%) of the 2025 trail users in urban New Rochelle (a total of 223,700 bicycles and pedestrians) are making trips to destinations, the new trail segment will account for approximately 78,300 annual trips that can be made without generating emissions or contributing to traffic congestion on local roads. The projections of pedestrians and bicycle trips in the *Benefit Cost Analysis* shows that the annual non-motorized trips on the proposed shared-use paths may reach to 460,000 in 2036 and 1,226,000 in 2046. It is anticipated that 41 million vehicle miles traveled (VMT) will be avoided due to mode switch (1-3 million per year) and 182,355 hours of automobile travel time will be avoided (between 4,500 and 14,000 per year). More than 1,233 short tons of emissions will be avoided, or roughly \$62,000 worth of greenhouse gases, over the analysis period.

Finally, the project will incorporate Warm Mix Asphalt (WMA), which allows the producers of asphalt pavement material to lower the temperatures at which the material is mixed and placed on the road. According to the Warm Mix Asphalt Technical Working Group, reductions of 50° to 100° Fahrenheit have been documented and have the benefits of cutting fuel consumption and decreasing the production of greenhouse gases.<sup>9</sup> It also makes night paving more feasible, which enhances the ability to minimize traffic impacts and emissions by completing paving work at off-peak hours when temperatures are typically cooler. Since the lower application temperature requires less cooling time, facilities can be reopened to traffic earlier. Reclaimed Asphalt Pavement (RAP) of up to 20% weight by volume is typically used in WMA on Authority projects. FHWA actively promotes asphalt pavement recycling as part of the *FHWA Recycled Materials Policy*. Use of RAP results in reduced emissions and fuel usage due to reduced extraction and transportation of virgin materials, reduced demands on non-renewable resources, and reduced landfill space for the disposal of used pavements.

## Resilience

FHWA defines resilience as “the ability to prepare for changing conditions and withstand, respond to, and recover rapidly from disruptions.”<sup>10</sup> Ensuring that I-95 is in good condition will help ensure that the region can cope with severe weather events caused by climate change. According to FHWA’s Screening Tool for Equity Analysis of Projects (STEAP)<sup>11</sup>, nearly 100,000 people live within one mile of this segment. This project will improve the likelihood that I-95 will withstand the effects of severe weather, remaining serviceable for successful evacuations for this population before or during severe weather events, and for emergency response during and after these events.

FHWA has identified potential climate impacts to pavement and measures to improve pavement resilience.<sup>12</sup> A number of these measures will be included in the project:

<sup>8</sup> Rails-To-Trails Conservancy (2002). “Trails & Greenways: Advancing the Smart Growth Agenda.” Page 16.

<sup>9</sup> Warm Mix Asphalt Technical Working Group. “Warm Mix Asphalt Takes Off”. <http://www.warmmixasphalt.org/Default.aspx>. Accessed March 20, 2022.

<sup>10</sup> Federal Highway Administration. “Transportation System Resilience to Extreme Weather and Climate Change – Executives”. <https://ops.fhwa.dot.gov/publications/fhwahop15024/index.htm>. Accessed February 10, 2023.

<sup>11</sup> Federal Highway Administration. “Screening Tool for Equity Analysis of Projects (STEAP)”. <https://hepgis.fhwa.dot.gov/fhwagis/buffertool/>. Accessed February 10, 2023.

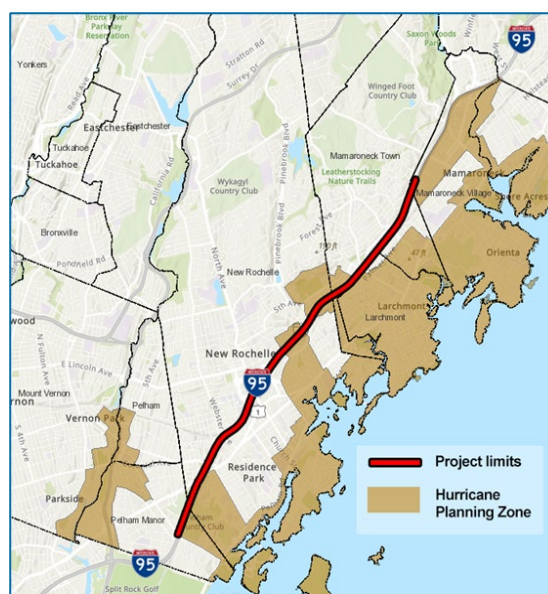
<sup>12</sup> Federal Highway Administration “Boosting Pavement Resilience”. *Public Roads Magazine*. Autumn 2018. Publication Number: FHWA-HRT-19-001



Climate Change Impact <sup>9</sup>	Effects on Pavement	Pavement Resilience Measures Incorporated into this Project
Higher Average or Extreme Temperatures	Increased potential for concrete temperature-related curling (and associated stresses) and moisture warping	Installing flexible pavement to protect underlying concrete from thermal expansion and resulting damage
	Increased potential for rutting and increased hardening of asphalt binder	Using geographic area-specific binder to ensure that durability is maximized, and age hardening is minimized
	Impacts to construction scheduling from extreme temperatures	Scheduling night work to avoid or minimize effects of high temperatures on personnel and materials
More Extreme Rainfall Events	Increased need for surface friction – more focus on surface texture and maintain skid resistance	Increasing roadway friction with pavement replacement
	Need to improve visibility and pavement marking demarcation	Using “Recess Triple Drop” pavement markings and wide edge lines for improved durability and improved visibility in most weather conditions; installing audible roadway delineators (shoulder rumble strips) that will warn motorists of lane departures in low-visibility weather conditions or where pavement markings are weathered or damaged

The project is within or adjacent to numerous areas identified by Westchester County as being susceptible to hurricanes (Hurricane Planning Zones). People living or working in these areas are advised to have an evacuation route to use if they need to leave the area quickly due to the approach of a hurricane or other severe weather. Because it is a high-capacity route within 1.5 miles of all the landward susceptible areas along its length, and also directly serves two major hubs for intermodal transportation (the New Rochelle Transit Center and Larchmont Plaza Train Station), this segment of I-95 is a vital component of evacuation and emergency response routes.

Evacuation and emergency response for non-hurricane related flooding along these coastal areas is also a concern. In its *Observed and Projected Climate Change in New York State: An Overview*, the New York State Department of Environmental Conservation observes that the “frequency, intensity, and duration of extreme precipitation events and coastal storms and flooding are increasing” and that “[a]ny increase in frequency or intensity of coastal storms could result in more frequent coastal flood events. However, even absent changes in storm frequency or intensity, sea level rise alone will result in an increase in coastal floods” in New York State.<sup>13</sup>



Source: Westchester County GIS

## C. Quality of Life

### Improving Active Transportation Usage and Access to Daily Destinations

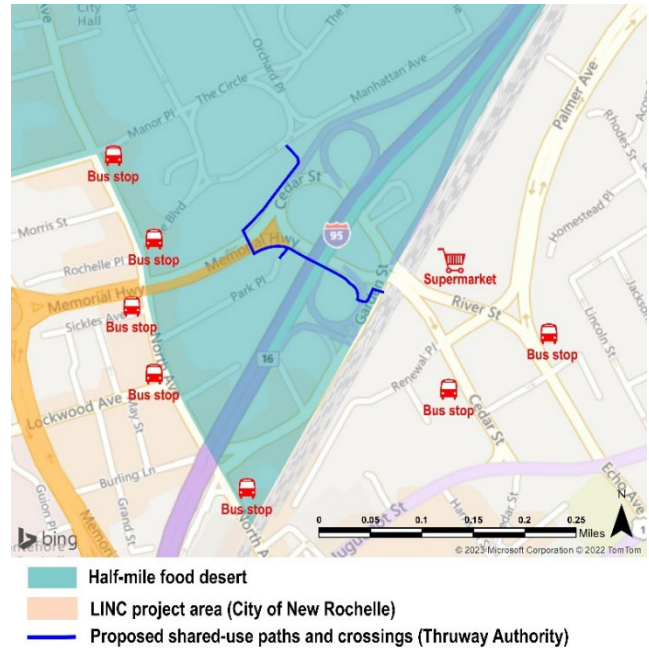
As discussed in *A. Safety* and *D. Mobility and Community Connectivity*, there is a known need for safe, accessible pedestrian facilities near Interchange 16 in New Rochelle. The existing informal footpaths that are used, indicating “desire lines” for pedestrian travel, are due in part to the presence of a large grocery store to the southeast of Interchange 16 and I-95, while the area immediately north of I-95 is identified by FHWA’s

<sup>13</sup> New York State Department of Environmental Conservation. “Coastal Storms”. *Observed and Projected Climate Change in New York State: An Overview*. August 2021. [https://www.dec.ny.gov/docs/administration\\_pdf/ccnys2021.pdf](https://www.dec.ny.gov/docs/administration_pdf/ccnys2021.pdf).

HEPGIS tool as a half-mile food desert. New Rochelle’s downtown is also south of I-95, which separates it from neighborhoods to the north.

Shared-use paths and associated safety improvements that will be a part of this project will provide a safe, direct active transportation connection that residents of the neighborhoods north of I-95 can use to reach destinations and services south of I-95. The projected annual non-motorized trips may reach to 460,000 in 2036 and 1,226,000 in 2046, representing a mix of both recreational users and users making trips to places of business, places of worship, healthcare providers, etc.

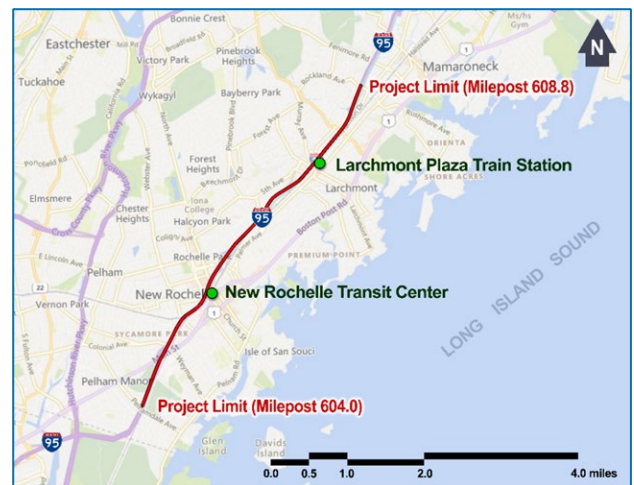
According to the 2020 US Census, a population of 14,500 people live within 1 mile of this new proposed connection. A significant portion of it is historically underserved. Approximately 74% of this population reported as being of a race other than white, or multiracial. New Rochelle’s 2016 *Comprehensive Plan* reports that 32-47% of owner-occupied households in the city are cost burdened<sup>14</sup> and 60% of renters are cost burdened. Of the 5,700 housing units within 1 mile of Interchange 16, 1,800 to 2,600 are likely cost burdened. Within ½ mile of Interchange 16, low income<sup>15</sup> households are in the 73<sup>rd</sup> percentile (Census Tract 63)<sup>16</sup> and 10 to 20% of people live in poverty.<sup>17</sup> In 2016, the Institute for Transportation & Development Policy found that lower income households paid a larger portion of their income on transportation expenses than households with higher incomes, i.e., the lowest earning 20% of the population spent an average of 29% of their income on transportation costs<sup>18</sup>. Improved access to cost-free active transportation, or the ability to walk to a bus stop to access low-cost public transit will help alleviate some of the transportation cost inequity that exists for lower income and cost burdened households.



**Supporting Transit**

In addition to improving access to active transportation, this project will support the use of public transit. The *Draft Westchester County Mobility & Transit Plan* (2022) reports that, in 2018, 22.6% of county residents used public transit to commute, and an additional 5% walked or biked.

This segment of I-95 serves two major regional intermodal facilities, the Larchmont Train Station and New Rochelle Transit Center. The Metropolitan Transit Authority (MTA) Metro-North Larchmont Train Station is integrated with the Chatsworth Avenue bridge over I-



<sup>14</sup> According to the U.S. Department of Housing and Urban Development, households paying more than 30% of their income for housing are considered cost burdened. Households that are cost burdened may have difficulty affording other necessities such as food, clothing, transportation or medical care.

<sup>15</sup> People in households where income is less than or equal to twice the federal poverty level, not including students enrolled in higher education.

<sup>16</sup> Council on Environmental Quality. Climate and Economic Justice Screening Tool. <https://screeningtool.geoplatform.gov/en/#14.4/40.91252/-73.78929>. Accessed February 18, 2023.

<sup>17</sup> FHWA. HEPGIS Map Server. <https://hepgis.fhwa.dot.gov/fhwagis>. Accessed February 20, 2023.

<sup>18</sup> Institute for Transportation & Development Policy. “The High Cost of Transportation in the United States.” May 2019. <https://www.itdp.org/2019/05/23/high-cost-transportation-united-states/>

95. Larchmont Plaza, served by I-95 and located directly above it, provides train station access, a bus stop, and parking for transit users. The parking lot, which accommodates both cars and bicycles, is also located directly above I-95. The New Rochelle Transit Center, an intermodal hub, accommodates local buses, taxis, and airport limousine service and is integrated with the New Rochelle Train Station, which serves both the MTA Metro-North railroad line and the regional Amtrak line, with connections to Boston, New York, and Washington, DC. In 2018, the New Rochelle Station ranked 5<sup>th</sup> of Metro-North's 109 stations with 6,145 weekday boardings. The Larchmont Station ranked 9<sup>th</sup>, with 4,104 weekday boardings.<sup>19</sup> Patrons using I-95 to access these intermodal facilities for mixed-mode trips will benefit from safety and reliability improvements to this segment.

One of Westchester County's Bee-Line bus system express routes, as well as tour bus and school bus routes, regularly use this segment of highway. Nearly 30,000 annual bus trips were recorded in E-ZPass electronic tolling data at the New Rochelle barrier location in 2021. The Bee-Line route alone accounts for an average weekday ridership of over 550. Improvements to the roadway will help to ensure safe, reliable travel for those using transit, including those who cannot afford to own and maintain a personal vehicle. With 6 Bee-line transit bus stops located within ¼ mile of the new proposed shared use paths, the network of active transportation facilities serving these stops will also be enhanced by removing a barrier to safe, convenient access that is currently created by I-95.

## D. Mobility and Community Connectivity

This project will address a gap in the existing active transportation network, consistent with a need identified in *The New Rochelle Comprehensive Plan* (2016): "Additional sidewalks and access points should be constructed to fill gaps in the pedestrian network around the Exit 16 Interchange. Safe pedestrian crossings should be provided by either redesign[ing] the intersections of the high-speed loop roads or by installing rectangular rapid flashing beacons (RRFB)." Footpaths that have been worn into the grass around Interchange 16 further support the case for safe, accessible pedestrian accommodations and road crossings in this area. There are currently no bicycle accommodations. According to 2020 US Census data, 16% of people (over 1,400 individuals) living within ½ mile of Interchange 16 are disabled. The portion of this population with certain mobility and vision disabilities currently has no viable safe option for active transportation through this area. The need for continuity of the active transportation network will be increased when the City of New Rochelle implements its adjacent "LINC" project, which will convert part of Memorial Highway, adjacent to Interchange 16, into a linear park.

As detailed in *A. Safety*, the Authority's Revitalize 95 project will provide ADA-compliant 10-foot-wide shared use paths, and safe, high-visibility road crossings with RRFBs, to fill the gap in the active transportation network. The new paths will help to reconnect the neighborhoods north of I-95 with the neighborhoods and New Rochelle's downtown, south of I-95. In addition to directly providing access to active travel modes, the shared-use paths will provide a safer, more direct walking or cycling route to two Bee-line bus stops, located within ¼ mile, improving access to public transit. They will also enhance the overall connectivity of the city's LINC project with neighborhoods near Interchange 16.

Construction of the LINC project is scheduled to begin in 2025 and to be completed in 2028. The Authority's Revitalize 95 project is scheduled to be complete in 2025, but the shared-use paths will have independent utility until the LINC project is fully tied into it. The New York State Department of Transportation (NYSDOT) is also advancing a 2023 project to resurface the loop roads around the Interchange. The Authority has coordinated with the City of New Rochelle and NYSDOT on their intersecting projects and will continue to coordinate throughout the course of the projects' design and construction. Additional information on these partnerships is provided in *G. Partnership and Collaboration*.

<sup>19</sup> Metro-North Operations Planning and Analysis Department. "2018 Weekday Boardings - Station Rankings". April 2019.



The project will also preserve or enhance 9 overhead bridges connections that provide community connectivity for motorized and non-motorized users over I-95. Additional information is provided in *A. Safety*.

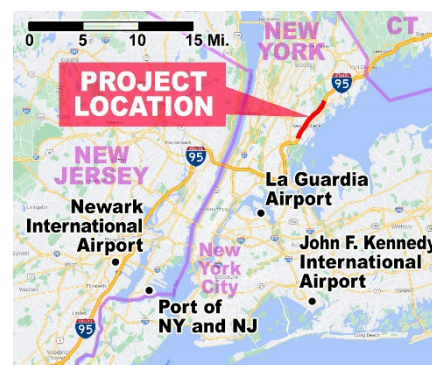
## E. Economic Competitiveness and Opportunity

The project will provide greater reliability, safety, and comfort in the movement of people, freight, and services, which will help to relieve supply chain issues and benefit businesses and industry on the local, regional, and national levels. It will be an asset for local and regional businesses, with benefits realized by their employees and patrons, as well as the commercial vehicles, e.g., freight and delivery trucks, necessary to support these businesses.

As shown in the *Benefit Cost Analysis*, truck operating cost savings are expected to amount to \$2.7 million over the 20-year analysis period and auto operating cost savings of \$7.6 million. Travel time savings are anticipated to amount to \$90.5 million, translating to 9.8 million hours. Anticipated safety benefits are detailed in *A. Safety*.

### Freight Mobility

This portion of I-95 belongs to the larger I-95 corridor, which runs more than 1,925 miles from Maine to Florida and is the major North-South landside freight corridor on the East Coast. The segment within the project area, through a multitude of connections to other arterial highways, serves a variety of populated areas and major economic markets in the New York City metropolitan area, New England, and the Mid-Atlantic States.



This segment is located 25 miles from the Port of New York and New Jersey, which is the busiest East Coast port, handling more than 7.5 million Twenty Foot Equivalent Units (TEUs) in 2020, ranking 3<sup>rd</sup> in North America.<sup>20</sup> The segment connects this high cargo volume port with the Northeast and Canada along I-95. Similarly, the segment serves as a critical link to and from John F. Kennedy International airport, which was ranked 12<sup>th</sup> in the nation for landed cargo weight in 2020.<sup>21</sup>

The 2019 *New York State Freight Transportation Plan* states that trucking moves 84% of freight tonnage in the state and is the only mode that can directly serve all statewide origins and destinations. The New England Thruway (I-95) is part of the National Highway Freight Network (NHFN) and is included in the State Freight Transportation Plan as a Freight Core Highway Network, but this segment has also been identified by FHWA as freight bottleneck. For the year 2021, the FHWA Freight Mobility Tool ([https://ops.fhwa.dot.gov/freight/freight\\_analysis/mobility\\_trends/index.htm](https://ops.fhwa.dot.gov/freight/freight_analysis/mobility_trends/index.htm)) indicates that congestion adds 4.0 minutes, based on a 20-minute truck trip, with a delay per mile of 13,481 truck hours. Freight mobility will significantly improved by this project. As reflected in the *Benefit Costs Analysis*, 1,190,952 hours of truck travel time savings are expected over the 20-year analysis period.

### Global Competitiveness

One of the pillars of global competitiveness is an appropriate infrastructure that contributes to an environment that enables domestic businesses and industries to compete internationally. As discussed above, I-95, including

<sup>20</sup> Container News. "Top 10: The busiest container ports in the United States". <https://container-news.com/top-10-the-busiest-container-ports-in-the-united-states/>. Accessed March 23, 2022.

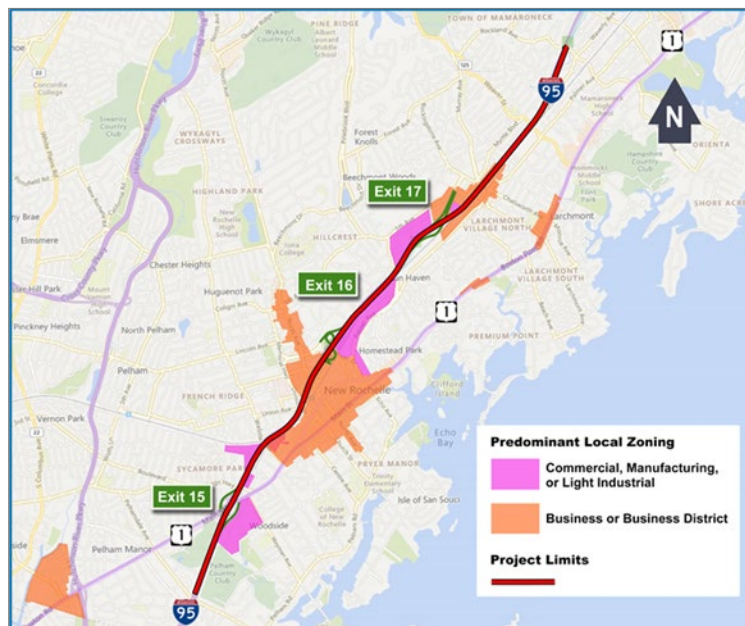
<sup>21</sup> Federal Aviation Administration. "CY 20 all-Cargo Landed Weight Percent Change from CY 2019". [https://www.faa.gov/airports/planning\\_capacity/passenger\\_allcargo\\_stats/passenger/media/cy20-cargo-airports.pdf](https://www.faa.gov/airports/planning_capacity/passenger_allcargo_stats/passenger/media/cy20-cargo-airports.pdf).

this segment, provides crucial connectivity to major international shipping and travel hubs. Improving this segment will help to support global competitiveness by contributing to the efficient, uninterrupted, and affordable movement of goods and people along I-95 and to and from these hubs.

## Local and Regional Economic Competitiveness and Opportunity

Transportation infrastructure is a fundamental building block required to attract investment and create jobs. Businesses and industries seek locations based, in part, on the convenience and quality of transportation available for employees, business patrons, business partners, and providers of goods and services to the business.

The improved segment of I-95 will be an attractive asset to businesses and employers near the project, encouraging existing businesses to stay, and new businesses to open. A 2021 study prepared for the American Road and Transportation Builders Association found that, for highways and bridges, the average direct spending of additional IJA funding on infrastructure will produce economic output (sales) with an overall multiplier of 3.4 nationally.<sup>22</sup> While this multiplier is subject to variation based on work scope, geography, and other contextual factors, it is a strong indicator that there will be tangible economic benefits at a regional and local level from improvements to I-95. Much of the area adjacent to this segment of I-95, and directly served by the three interchanges in the project segment, has been locally zoned for business, commercial, manufacturing, or light industrial uses. Improvements to the segment will support local comprehensive and zoning plans that have designated these areas for this type of economic activity and development.



## Inclusivity, Labor and Employment

In addition to the economic and employment benefits described above, the delivery of the project itself will directly create high-quality employment opportunities. It is anticipated that residents of the Historically Disadvantaged Communities near the project segment will benefit from the employment opportunities created by the project. Secondary benefits are likely to be realized by local business providing goods and services to the construction workforce.

It is the policy of the Authority to ensure equal opportunity and to prevent and eliminate discrimination in all its activities, including the areas of construction, consultants, commodities, and professional services. The Authority ensures its compliance responsibility in meeting the requirements for federal Civil Rights law on its Federal Aid-funded transportation projects, including requirements for the participation of Disadvantaged Business Enterprises (DBEs). The Authority is also fully committed to actively promoting Minority and Women-Owned Business Enterprises (MWBE) and Service-Disabled Veteran-Owned Business (SDVOB) opportunities. Participation goals will be set, results reported, and contracts monitored for this project. Further,

<sup>22</sup> IHS Markit. "Economic Impacts of Transportation Infrastructure - Macroeconomic, Industry and State-level Impact Analysis of the Additional Highway, Bridge, and Public Transit Spending in the Infrastructure Investment and Jobs Act." September 2021.

the Authority incorporates targeted training provisions within its contracts to provide a mechanism which allows for underrepresented groups to become skilled in the various construction trades.

Every Authority-awarded construction contract is subject to the strong and well-established provisions of New York State Labor Law. On contracts financed with Federal Aid, any provisions of the state Labor Law that conflict with mandatory Federal-Aid construction contract compliance requirements, as contained in 23 CFR 635.11, are superseded. To the benefit of workers, state Labor Law provisions that are more restrictive than the Federal-Aid construction contract compliance requirements, or the Davis-Bacon Act, and are not in conflict with them, continue to apply.

Prevailing Wage Schedules, defined for each project based upon County of work, are issued by the New York State Department of Labor for all general construction public works projects. These wage rates are monitored for conformance during construction and strictly enforced.

Workers' rights notices are posted in accordance with State and Federal Law. Before commencing any work on the site, the contractor must post, in a location accessible to all workers, a copy of the New York State Department of Labor schedules of prevailing wages and supplements for the specific contract, a copy of all redeterminations of such schedules for the contract, the Workers' Compensation Law notice, required safety notices, and all other notices required by law. The notices must be maintained in clear, legible condition until all work on the site is complete.

Project Labor Agreements (PLAs) are utilized by the Authority on select projects. Before advancing a project under the PLA process, an independent analysis is undertaken to determine whether the use of a PLA will best serve the Authority's interest in obtaining the best work at the lowest possible price, preventing favoritism, fraud, and corruption, and to what extent other considerations such as the impact of delay, the possibility of cost saving advantages, and any local history of labor unrest may have upon the project.

## **F. State of Good Repair**

---

### **Existing State of Good Repair Challenges**

Maintaining a state of good repair for the project section of I-95 interstate pavement has become extremely difficult. The existing pavement has exceeded its original design life and has entered an accelerated deterioration curve cycle. Maintenance forces continuously patch the pavement, but the overall condition continues to deteriorate at an exponentially faster rate. Data-driven analysis, including a comprehensive 2019 "Pavement Reconstruction Study" that evaluated options to address the pavement conditions on the entire New England Thruway (I-95), has determined that continued maintenance repair strategies cannot provide a suitable long-term pavement condition solution. Additionally, the frequency of maintenance pavement work, which requires work zone traffic control and lane reductions, creates an avoidable safety risk to vulnerable non-motorized workers performing maintenance and repairs. The increasing rate of maintenance work is also contributing to further system congestion, which increases the risk of crashes for motorized users.

### **Future State of Good Repair Workplan**

Maintenance of the interstate improvements performed under this project will be performed by locally based Authority maintenance forces, who will monitor the need for corrective maintenance along with the Authority's Office of Asset Management (OAM). OAM uses life cycle and mathematical models that consider factors such as traffic volume trends, location, construction history, and design, along with extensive data on current conditions, to accurately predict and plan maintenance. This analysis will inform the long-range capital and maintenance plan for the project segment, ensuring that future repairs and improvements are performed in a timely fashion, keeping it in a continuous state of good repair. This approach will break the inefficient, costly, less safe, and disruptive cycle of "patchwork" repairs that are currently performed.



To maximize the service life of the project, the Authority will utilize proven State and Federal standards for design and constructions, as well as best-practice methods, to restore I-95's pavement and roadside safety infrastructure to an "Excellent" condition, and to construct the shared-use paths at Interchange 16.

The Authority will continue to coordinate with the City of New Rochelle and NYSDOT to determine the final maintenance jurisdiction and ensure that the planned shared-use paths and appurtenances (RRFBs, signs, pavement markings, etc.) are maintained in a state of good repair. Please refer to **G. Partnership and Collaboration**, below, for a discussion of the ongoing coordination with these entities.

## **G. Partnership and Collaboration**

---

The Authority routinely coordinates with local municipalities and other stakeholders, including disadvantaged and underrepresented communities, as part of the project development process. This project will be undertaken in accordance with the Authority's normal public outreach and coordination guidance, including the New York State Department of Transportation's (NYSDOT) *Public Involvement Manual*.

In addition, the Authority will partner with NYSDOT and the New York Metropolitan Transportation Council (the local Metropolitan Planning Organization) on the development and implementation of the project. Coordination with Metropolitan Transit Authority (MTA), Amtrak, and transit operators will be conducted, as necessary, for any temporary impacts to the access to their facilities.

The Authority has contacted a wide range of stakeholders about this transportation investment. These entities and individuals include municipalities that may be affected by the project, community organizations, elected officials, business associations, and construction and trucking industry representatives. Documentation of these stakeholders' support for the project is included in the *Letters of Support* file submitted for this project.

The Authority has also worked with the City of New Rochelle and NYSDOT to coordinate this project with projects they are advancing adjacent to this location. Two meetings have been held with the City of New Rochelle to coordinate the scopes, schedules, and continuity of the proposed shared-use paths near Interchange 16 with their "LINC" project. A meeting was also held with NYSDOT to coordinate the work with a 2023 pavement resurfacing project they are advancing for the loop roads around Interchange 16, as well as the installation of a new traffic signal on Garden Street where a new pedestrian crossing will be installed. Coordination with both entities will be continuous throughout the design and construction of the projects.

As discussed in **A. Safety**, the Authority also worked with the Town of Mamaroneck Fire Department to fulfill their request to relocate a U-turn near Interchange 17 to provide better and safer access for emergency services responding to incidents on the northbound side of I-95.

## **H. Innovation**

---

### **Innovative technologies**

#### **Use of Unmanned Aerial Systems (UAS) for Data Collection and Mapping**

The Authority has cultivated a partnership with the Northeast UAS Airspace Integration Research Alliance, Inc. (NUAIR) to introduce new applications for commercial UAS technology into the transportation industry. These applications include data collection for mapping and asset management, and they seek to improve efficiency, safety, and accuracy.

NUAIR is a New York-based nonprofit with a mission to safely integrate UAS into the national airspace to enable scalable, economically viable, commercial drone operations. NUAIR manages operations of the FAA-designated New York UAS Test Site at Griffiss International Airport, Rome, NY and is responsible for UAS testing advancements within its 50-mile UAS test corridor between Rome and Syracuse, NY. Under this

partnership, NUAIR is providing guidance to ensure the Authority's UAS program strictly complies with all applicable FAA and other federal, state, and local regulations, and that the program prioritizes public safety and risk aversion.

This project has been selected as an ideal test location for a first night-time flight over active roadways. It presents challenges for both traditional survey collection and the utilization of UAS equipment to perform data collection. Due to the existing traffic volumes, the ability to safely collect a complete data set to represent the existing conditions of the site would require several days of traditional field surveying, with multiple lane and shoulder closures, causing congestion and traffic delays, as well as placing personnel in harm's way to reach necessary points on the pavement. UAS data collection methods would traditionally have been disallowed by FAA in this corridor.

To overcome restrictions on the use of UAS, specialized drones will be outfitted with LiDAR sensors that will allow all the data to be collected from the safety of a remote location, at night, without placing pilots or other air crew staff on the pavement. An aviation team comprised of several licensed remote pilots and drone professionals (Authority and NUAIR staff) will be assembled, with expertise in mapping, georeferencing with ground control stations, and data processing and integration. This team will collect all survey data for the project, including data for the shared-use paths at Interchange 16.

In support of this innovative survey data collection approach, the Authority will develop and submit a project-specific safety plan to the FAA for the application of an airframe specifically designed to mitigate risks in flights over moving traffic under operation by Certified Nighttime Operations pilots. To maximize safety of the traveling public, the Authority is tentatively planning to conduct flights between the hours of 2 am and 4 am, when traffic in this area decreases by more than 90%. Since LiDAR uses laser technology for measurement, performing this type of operation in low or no lighting is not only possible, but preferred. The resulting models for this project are anticipated to yield data for design that will be more complete than traditional methods, while requiring less effort to process. Additionally, the data will be useful to the Authority's Asset Management office. The Authority intends to document this process and will share its technological processes and findings with other transportation agencies.

### **Warm Mix Asphalt and Reclaimed Asphalt Pavement**

As discussed in **B. Environmental Sustainability**, the Authority will utilize Warm Mix Asphalt (WMA) and reclaimed Asphalt Pavement (RAP) on this project, both of which are low-carbon materials. WMA results in production of fewer greenhouse gasses than conventional hot mix asphalts, while RAP reduces use of non-renewable resources, and reduced landfill space for the disposal of used pavements.

### **Recess Triple Drop Pavement Marking System**

The mainline pavement marking system that is used by the Authority, and will be used on this project, is known as "Recess Triple Drop". It utilizes advanced materials and a product installation process that provides more visible markings in all lighting and weather conditions, making the highway safer throughout the year. Recess Triple Drop uses specialized colored ceramic elements, mixed with various sized glass beads. The glass beads supply nighttime reflectivity that is more than twice as bright as standard highway striping. The ceramic element provides wet and fog reflectivity at levels that traditional pavement marking systems cannot.

By installing the ceramic elements and glass beads into the paint in a one-tenth inch (0.10 in.) deep recess in the pavement, the stripe is protected from snowplow damage during winter months, extending its service life and preserving its reflective properties. This technique provides pavement striping which is much more durable than traditional methods. The Authority invented and patented Recess Triple Drop and was the first superhighway in the country to incorporate use of this new technology systemwide. These pavement markings



meet all applicable Federal standards, including those in Part 3 of the 2009 *Manual of Uniform Traffic Control Devices*.

The service life of these pavement markings is approximately 3 times that of traditional markings, reducing the need to routinely restripe the project to replace worn markings. As a result, there is a reduced need for the frequency of marking replacement activities that can cause traffic delays, congestion, and increased vehicle emissions, contributing to air quality concerns.

## Innovative Project Delivery

The Authority may use a Best Value bidding procedure for this project. The Best Value process has been used successfully for several Thruway projects in the past, including one on another segment of the same I-95 corridor, near the Connecticut border.

Traditional bidding procedures award the contract to the lowest responsible bidder. The Best Value bidding procedure is an innovative process that considers quality and efficiency in addition to cost. While price is still a major factor, a bidder with the lowest overall price may not necessarily be awarded the project: it will be awarded to the bidder who demonstrates the best complete understanding and ability to deliver the best project.

Competitive bids are solicited through a two-part process:

- **Part One** consists of traditional construction plans, proposal, bid items and quantities.
- **Part Two** consists of a description of technical evaluation factors specific to the project, their relative weights, the weighting of price vs. technical evaluation factors, and instructions to the bidders.

Bidders submit a price proposal and a separate technical submission. The technical submissions are not publicly opened or read. Instead, they are reviewed and scored, based on defined project-specific criteria related to quality, schedule, experience, capability, traffic impacts, and the bidder's overall understanding of the project. The technical evaluation scores are then combined with the price proposals to determine the Best Value Bidder. All Best Value Submissions are reviewed and scored by an Evaluation Committee, under the direction of the Authority's Office of Capital and Contracts Management.

This innovative procurement process reduces risk to the Authority. A contractor is selected based, in part, on their complete and written understanding of all critical aspects of the project rather than just price alone. This increases the potential for selecting and awarding to the contractor with the ability to deliver the best overall project. Contractors can propose the use of innovative approaches or techniques that will offer significant benefits in terms of:

- lower costs
- shorter timeframes to complete work
- less disruption to neighboring communities
- less disruption to the movement of people, goods, and services
- improved work quality
- improved safety

Best Value bidding is particularly important for a project like this one, located in a densely populated urban area, on a high traffic volume freight corridor, where minimizing delays and disruption is critical. Two recent Authority projects that used Best Value bidding, both over \$50 million, benefitted from construction time savings of up to 37% and price savings of up to 20%.



## Project Readiness

### Detailed Project Schedule

Major project milestones and their anticipated completion dates are identified in Exhibit 27. All necessary activities will be completed to allow RAISE grant funds to be obligated sufficiently in advance of the statutory deadline of June 30, 2026, and expended significantly earlier than the statutory deadline or September 30, 2032.

All work will be completed within the existing right-of-way. No real property or right-of-way acquisitions are needed. No railroad agreements are needed to complete work under this project. Design is progressing to determine the need for utility relocations. The Authority has extensive coordination history with local utilities and will execute utility relocations, should utility agreements become necessary.

Public involvement has begun with outreach to stakeholders and will be conducted for the duration of the project, through construction. Refer to the *Merit Criteria* application file for additional information.

Project Milestone	Date
Start of NEPA and SEQR (State) Environmental Review Processes / Public Engagement Process	September 2020
Project Scoping Completed	January 2023
Incorporated into Statewide Transportation Improvement Program	September 2023
Completion of Preliminary Design	September 2023
Completion of Final Design Plans, Specifications, and Estimates	June 2024
Completion of NEPA and SEQR (State) Environmental Review Processes	September 2023
Environmental Permitting Complete	January 2024
Completion of Utility Agreements (No Railroad Agreements Needed)	January 2024
Real Property / Right-Of-Way Acquisitions Completed (None Required)	N/A
RAISE Grant Funds Obligated <sup>(1)</sup>	February 2024
Project Letting	May 2024
Project Award	June 2024
Start of Construction	June 2024
Completion of Construction / Public Engagement <sup>(2)</sup>	June 2026
<b>Notes:</b> All necessary activities will be complete to allow RAISE grant funds to be obligated substantially in advance of the programmatic administrative deadline (June 30, 2027).  RAISE funds will be spent expeditiously once construction starts, with all funds expended significantly earlier than the programmatic September 30, 2032 deadline.	

## Required Approvals

### Environmental Permits and Reviews

**National Environmental Policy Act:** It is anticipated that this project will be classified as a Class II Action under the National Environmental Policy Act (NEPA) as implemented in 23 CFR 771. The Federal Highway Administration (FHWA) would be the NEPA lead agency. The project will be submitted for approval as a NEPA Programmatic Categorical Exclusion on the basis that it is not an action that will individually or cumulatively have a significant environmental effect. It meets the description in 23 CFR 771.117(c)(22) of “[a project] that would take place entirely within the existing operational right-of-way.” The project will result in no significant changes or expansions to the existing infrastructure.

The NEPA analysis is currently underway. The project NEPA determination is anticipated to occur in September of 2023.

**New York State Environmental Quality Review Act.** The project is expected to meet all criteria to be classified as a Type II project under the New York State Environmental Quality Review Act (SEQRA) in accordance with 6 NYCRR Part 617. The Authority plans to declare itself as the lead agency for SEQRA. Since the project is anticipated to qualify as a SEQRA Type II action, a State Consistency Review by the Authority is not anticipated to be required, and no further environmental review is required under SEQR.

Topics that have been examined for this project include, but are not limited to:

- **Cultural Resources.** The Advisory Council on Historic Preservation (ACHP) adopted the Section 106 Exemption Regarding Effects to the Interstate Highway System on March 10, 2005. As per the ACHP Section 106 Exemption, Section 106 consultation is not applicable.
- **Protected Coastal Areas.** The project falls partially within New York State Coastal Areas, which are identified by the New York Department of State's (NYS DOS) Coastal Management Program to protect vulnerable natural coastal assets. A portion of the project is located within a New York State Landward Coastal Boundary, and within the boundary of the Long Island Sound Coastal Management Program. It is located within the Town of Mamaroneck and the Village of Larchmont Local Waterfront Revitalization Program (LWRP) boundary and the Village of Mamaroneck LWRP boundary.

The project will require a Coastal Consistency Review by the NYSDOS to ensure that it is consistent with State coastal policies and the local waterfront revitalization programs. Since the project will maintain the existing infrastructure, it is anticipated that the Coastal Consistency Review will be accomplished in a timely manner.

- **Stormwater Pollution Prevention.** Depending on the level of disturbance, the project may require coverage under the New York State Department of Environmental Conservation (NYSDEC) State Pollutant Discharge Elimination Systems General Permit GP-0-20-001 for Construction Activities. Due to the nature of the project, no additional impervious area is anticipated. A Stormwater Pollution Prevention Plan (SWPPP) will be developed in accordance with the New York State Department of Environmental Conservation's *Stormwater Design Manual*.
- **Wetlands.** The project will have no impacts to Federal- or State-regulated wetlands or waterbodies.
- **Endangered, Threatened, and Protected Species.** A preliminary screening with US Fish and Wildlife Service's Information for Planning and Consultation (IPaC) tool indicates that there are no critical habitat areas in or adjacent to the project area. The Monarch Butterfly, a candidate for listing as a Federal Endangered Species, may be present, but there is no suitable habitat for the species within the project area. It is not anticipated that the species, if present, will be affected by the project activities.
- **Public Involvement.** A description of public engagement that has occurred, as well as plans for continuing public involvement, is available within the *Merit Criteria* file submitted with this application.

### State and Local Approvals

As mentioned above, the project may require coverage under the New York State Department of Environmental Conservation (NYSDEC) State Pollutant Discharge Elimination Systems General Permit GP-0-20-001 for Construction Activities, in addition to coordination with the New York State Department of State for Coastal Consistency Review.

### Federal Transportation Requirements Affecting State and Local Planning

The project will be added to the New York Metropolitan Transportation Council's Transportation Improvement Program, the Statewide Transportation Improvement Program, and the New York State Freight Transportation Plan.

### Assessment of Project Risks and Mitigation Strategies

A systematic approach to risk management will be used to help minimize costs and avoid potential contract complications or disputes. The project team and project stakeholders will undertake an identification process of all risks that may affect successful implementation of the project, regardless of when such risks may occur. Once risks

are identified, their occurrence probability and relative project impact will be rated and used to determine an overall risk rating. Strategies to mitigate the potential impacts of the risks will be defined. Priority will be given to the high-risk factors, with appropriate attention also devoted to moderate and low risks.

The results of the risk analysis process will be used in preparing contract provisions and any agreements with stakeholders or other third parties. The analysis will be used to identify the type and extent of engineering for different components of the project to avoid and mitigate high and moderate risk factors.

A preliminary assessment of risks that are known at this time has been developed and is shown in the table below. As the project is advanced and additional input is received from stakeholders, the assessment will be revised as necessary.

Identified Risk	Occurrence Probability Rating <sup>1</sup>	Project Impact Rating <sup>2</sup>	Overall Project Risk Rating <sup>3</sup>	Mitigation Strategy
<b>Environmental Permits</b> Delay in securing necessary environmental approvals or permits to proceed with letting, award and construction	1	2	2	Identify and perform all necessary consultation with regulatory agencies as early in the project development process as possible to ensure that any issues can be addressed in a timely manner.
<b>Utility Delays</b> Design or construction delays caused by slow utility owner response to requests for information or activities	1	2	2	Identify any utilities that will potentially be affected and engage utility owners as early in the process as possible to maximize time available for responses; maintain positive, proactive contact with utility owners during design and construction.
<b>Completion Time</b> Unseasonable weather, severe weather, or other uncontrollable circumstances have the potential to slow the progress of construction and delay completion of the project	2	3	6	The project schedule includes an allowance of time for weather variations: only limited types of work are planned during winter, when harsh weather is most likely to affect construction activities.
<b>Design Approvals by External Agencies</b> Approval will be required if bridges under other agencies' jurisdiction need to be raised to achieve minimum clearances. Delayed approvals have the potential to delay the completion of design.	1	2	2	Engage other agencies as soon as any bridges that may be affected are identified; coordinate throughout the design process to identify and address their concerns well before the final design is developed.
<b>Community Concerns</b> Community perception of negative environmental impacts has the potential to delay completion of the environmental review process	2	3	6	Continue to communicate openly with stakeholders about impacts and benefits of the project; actively incorporate community feedback into the design and construction processes.

**NOTES:**

1. Rated on a scale of 1 to 3, with 3 representing the highest probability.
2. Rated on a scale of 1 to 3, with 3 representing the highest impact.
3. Overall risk rating ≤3 is low  
>3 or <6 is moderate  
≥ 6 is high



## Technical Capacity

The New York state Thruway Authority can deliver the project in a manner that fully satisfies Federal requirements. Over several decades, the Authority has, on multiple occasions, been a recipient of Federal transportation funds and has successfully delivered each of the projects, including a \$1.6 Billion loan grant for the Governor Mario M. Cuomo Bridge (Tappan Zee Bridge Replacement) under the Transportation Infrastructure Finance and Innovation Act (TIFIA).

As an owner of an Interstate facility, the Authority is particularly familiar with Federal standards and procedural requirements for developing and delivering a Federally funded project. The Authority adheres to the FHWA-approved design guidance and standards contained in the New York State Department of Transportation's (NYSDOT) Project Development Manual and Highway Design Manual. Other FHWA and State-approved design guidance manuals, such as the Manual of Uniform Traffic Control Devices, will be applied, as appropriate, to this project. Construction will also be administered in accordance with FHWA approved guidance documents, including the NYSDOT Contract Administration Manual and Construction Inspection Manual.

This project will comply with applicable Federal requirements including but not limited to Buy America provisions, ADA regulations, Civil Rights requirements, Federal Motor Vehicle Safety Standards (FMVSS), and/or the Federal Motor Carrier Safety Regulations (FMCSR).

## Civil Rights and Labor Law Requirements

It is the policy of the Authority to ensure equal opportunity and to prevent and eliminate discrimination in all its activities, including the areas of construction, consultants, commodities, and professional services. The Authority ensures its compliance responsibility in meeting the requirements for federal Civil Rights law on its Federal Aid-funded transportation projects, including requirements for the participation of Disadvantaged Business Enterprises (DBEs). The Authority is also fully committed to actively promoting Minority and Women-Owned Business Enterprises (MWBE) and Service-Disabled Veteran-Owned Business (SDVOB) opportunities. Participation goals will be properly set, results reported, and civil rights implementation contracts monitored for this project. Further, the Authority incorporates targeted training provisions within its contracts to provide a mechanism which allows for underrepresented groups to become skilled in the various construction trades.

Every Authority-awarded construction contract is subject to the strong and well-established provisions of New York State Labor Law. On contracts financed with Federal Aid, any provisions of the state Labor Law that conflict with mandatory Federal-Aid construction contract compliance requirements, as contained in 23 CFR 635.11, are superseded. To the benefit of workers, state Labor Law provisions that are more restrictive than the Federal-Aid construction contract compliance requirements, or the Davis-Bacon Act, and are not in conflict with them, continue to apply.

Prevailing Wage Schedules, defined for each project based upon County of work, are issued by the New York State Department of Labor for all general construction public works projects. These wage rates are monitored for conformance during construction and strictly enforced. Workers' rights notices are posted in accordance with State and Federal Law. Before commencing any work on the site, the contractor must post, in a location accessible to all workers, a copy of the New York State Department of Labor schedules of prevailing wages and supplements for the specific contract, a copy of all redeterminations of such schedules for the contract, the Workers' Compensation Law notice, required safety notices, and all other notices required by law. The notices must be maintained in clear, legible condition until all work on the site is complete.

## Previous Experience with DOT Discretionary Grant Awards

The Authority has been a past recipient of the discretionary Federal Funding, including the successful implementation of a \$1.6 Billion loan grant for the Governor Mario M. Cuomo Bridge (Tappan Zee Bridge Replacement) under the Transportation Infrastructure Finance and Innovation Act (TIFIA).

The Authority is fully resourced to implement a RAISE Grant. Following selection, the Authority will expedite negotiations to quickly sign a grant agreement with USDOT. The Authority will then work with FHWA to implement the award in accordance with technical guidance. The Authority will provide all required monitoring documentation and deliver all finalized technical and financial reports to close out the project.

## Financial Completeness

### Project Funding Sources

The Authority has committed \$35.25 million in Thruway Authority Capital Funds for the subject project. Authority funding accounts for 57.6% of the total future project costs. Refer to the application *Funding Commitment Documentation* file for documentation of this commitment.

RAISE Grant funding will supplement the Authority's funds and ensure that the time-sensitive needed improvements are completed as soon as possible. Without RAISE funding, deteriorating conditions of the pavement system will either delay the project, potentially eliminating any scope of work except reconstruction, or necessitate completion of a much lesser extent of rehabilitative work within the 2024 construction year. This reduced scope of work approach will result in substantial long-term additional costs to the Authority for maintenance of the roadway and for highway passenger and freight users who will experience compounding construction-related traffic and pavement condition related financial and safety impacts. Additionally, the ability to reconnect pedestrians and bicyclists at Interchange 16 will not occur.

### Documented Support

Letters of support from the Authority Executive Director and key public and private stakeholders are provided within the *Letters of Support* file for this application.

### Cost Overrun Plan

The Authority is funding 100% of preliminary design activities and shall be responsible for any construction cost overruns. The cost estimate, included in the application *Project Budget* file, is based on itemized unit cost estimates of preliminary design information which consider the cost history of similar projects and work scopes in the same geographic area. The project includes a 20% contingency, which is appropriate for this level of design.

**Benefit-Cost Analysis Narrative**

RAISE Program

**REVITALIZE 95:  
Rehabilitation of I-95  
from MP 604.0 to 608.8**

*New York State Thruway Authority (NYSTA)*

**February 28, 2023**





# Table of Contents

<b>BENEFIT-COST ANALYSIS NARRATIVE</b> .....	<b>3</b>
1. EXECUTIVE SUMMARY .....	3
2. INTRODUCTION .....	6
3. METHODOLOGICAL FRAMEWORK.....	6
4. PROJECT OVERVIEW.....	7
4.1 <i>Base Case and Alternatives</i> .....	7
4.2 <i>Types of Impacts</i> .....	7
4.3 <i>Project Cost and Schedule</i> .....	8
5. GENERAL ASSUMPTIONS.....	9
6. DEMAND PROJECTIONS .....	9
6.1 <i>Methodology and Assumptions</i> .....	9
6.2 <i>Demand Projections</i> .....	9
7. ESTIMATION OF ECONOMIC BENEFITS .....	10
7.1 <i>Travel Time Savings</i> .....	10
7.2 <i>Accident Cost Savings</i> .....	11
7.3 <i>Emissions Cost Savings</i> .....	12
7.4 <i>Pavement Maintenance Savings</i> .....	13
7.5 <i>Bridge Strike Maintenance Cost Savings</i> .....	14
7.6 <i>Vehicle Operating Cost Savings</i> .....	14
7.7 <i>Pedestrian and Cyclist Benefits</i> .....	15
8. SUMMARY OF FINDINGS AND BCA OUTCOMES .....	16
9. BCA SENSITIVITY ANALYSIS .....	17
10. SUMMARY OF BENEFITS AND COSTS .....	19

# Benefit-Cost Analysis Narrative

## 1. Executive Summary

The cost effectiveness and net benefits of the REVITALIZE 95: Rehabilitation of I-95 from MP 604.0 to 608.8 Project were estimated through a complete Benefit-Cost Analysis (BCA) as per U.S. Department of Transportation (USDOT)'s *Benefit-Cost Analysis Guidance for Discretionary Grant Programs* (January 2023). The BCA quantifies and monetizes, as thoroughly as possible, the benefits generated under the criteria defined by the RAISE program and compares them against the project's costs. The analysis shows that the project generates benefits that exceed its costs, and therefore results in a quantified net benefit to society.

The REVITALIZE 95 project is anticipated to have substantial impacts, which include the following:

- Provide travel time savings by maintaining the pavement in a minimum of fair or better condition and avoiding emergency work zone related lane closures and delays.
- Decrease the number of crashes and crash related costs by decreasing the number of roadway quality related incidents.
- Reduce emissions for pollutants, such as nitrogen oxides (NO<sub>x</sub>), fine particulate matter (PM<sub>2.5</sub>), sulfur dioxide (SO<sub>2</sub>), and carbon dioxide (CO<sub>2</sub>), due to reduction in delays along the thruway.
- Provide pavement management benefits by avoiding incurring the cost of emergency pavement maintenance projects across the analysis period.
- Decrease the frequency of bridge strikes by conducting vertical adjustments to frequently struck bridges.
- Decrease vehicle operating cost along the thruway by decreasing the relative fuel costs related to the pavement condition.
- Enhance pedestrian and bicyclist safety, mobility, and connectivity at Exit 16 with the addition of a shared-use path and three signalized crossings.

Table ES-1 summarizes the changes expected from the project and the associated benefits.



**Table ES-1: Merit Criteria and Cost-Effectiveness - Summary of Infrastructure Improvements and Associated Benefits, Millions of 2021 Dollars**

Current Status or Baseline & Problems to be Addressed	Changes to Baseline/Alternatives	Types of Impacts	Benefits	Summary of Results (Discounted)	Page #
MP 604.0 to 608.8 of the NY I-95 Thruway are in need of resurfacing. Pavement condition is rated "poor" or "very poor" along the segment, according to the FHWA IRA categories of pavement roughness	The project will resurface this segment of the NY I-95 Thruway, and will conduct vertical adjustments to frequently struck bridges along the segment. Pavement conditions will return to "very good" status upon project completion	Improved travel times along the Thruway from avoiding future emergency work zones	Reduced Travel Time Costs	\$90,563,437	10
		Improved safety and crash avoidance by reducing the number of pavement condition related incidents	Improved Safety and Avoided Accident Costs	\$19,487,528	11
		Reduction in Greenhouse Gas (GHG) Emissions, CO2, due to reduced travel time	Reduction in Emissions Costs	\$8,579,913	12
		Decrease pavement management costs by avoiding the need for emergency pavement repairs	Reduction in Pavement Maintenance Costs	\$5,704,447	13
		Decrease the frequency of bridge strikes by conducting vertical adjustments to frequently struck bridges	Reduction in Bridge Strike Repair Costs	\$130,960	14
		Decrease vehicle operating costs by improving pavement condition	Reductions in Vehicle Operating Cost	\$3,427,057	14
Limited Connectivity and Pedestrian access issues on the surface roads adjacent to Exit 16 reduce connectivity for non-motorized users	Signalization of three intersections and construction of 0.2 miles of shared use path	Bicyclist and Pedestrian connectivity and safety improvements	Bicyclist and Pedestrian Quality Benefits	\$8,207,236	15
<b>Total Discounted Benefits</b>				<b>\$136,100,579</b>	

The 24-year period of analysis used in the estimation of the project’s benefits and costs includes 4 years of project development and construction (2023-2026) and 20 years of benefits.<sup>1</sup> The

<sup>1</sup> Note that benefits are estimated for a period of 20-years with additional costs included for top-course replacement after years 8 and 15 to remain in “good” or “fair” condition. These top-course replacements





total project capital costs of \$61.2 million in 2023 dollars equates to \$57.5 million in undiscounted 2021 dollars. The breakdown of project costs is presented in Table ES-2.

**Table ES-2: Summary of Project Costs, Undiscounted 2021 Dollars**

Cost Category	Constant
Preliminary Design	\$1,880,000
Final Design	\$2,820,000
QC/Admin	\$940,000
Construction Inspection	\$3,760,000
Construction	\$47,000,000
Shared Use Path	\$1,175,000
<b>Total</b>	<b>\$57,575,000</b>

**Table ES-3: Summary of Project Benefits, 2021 Dollars**

Benefits	Constant 2021 \$	Discounted 2021 \$
Reduced Travel Time Costs	\$307.57	\$90.56
Improved Safety and Avoided Accident Costs	\$53.85	\$19.49
Reduction in Emissions Costs	\$18.16	\$8.58
Reduction in Pavement Maintenance Costs	\$16.85	\$5.70
Reduction in Bridge Strike Repair Costs	\$0.30	\$0.13
Reductions in Vehicle Operating Cost	\$5.90	\$3.43
Cyclist and Pedestrian Benefits	\$25.15	\$8.21
<b>Total Benefits</b>	<b>\$427.79</b>	<b>\$136.10</b>

Benefits are expected to begin accruing when resurfacing is complete in 2027. A summary of the relevant data and calculations used to derive the benefits and costs of the project are shown in the BCA model (in 2021 dollars per USDOT Guidance) and summarized in Table ES-3. Based on the analysis presented in the rest of this document, the project is expected to generate \$136.1 million in discounted benefits and \$46.9 million in discounted costs using a 7% real discount rate for most benefit categories and a 3% real discount rate for CO<sub>2</sub> emissions. Therefore, the project is expected to generate a Net Present Value of \$89.2 million and a Benefit-Cost Ratio of 2.9. In other words, for each dollar spent in project costs, approximately \$2.90 worth of benefits will be generated by the improvements. The largest category of benefits is associated with travel time and safety improvements due to the improved condition and avoided emergency repairs and associated lane closures and work zones.

A summary table of annual monetized benefits and costs is provided in Section 10.

---

are expected to cost approximately \$5.6 million each time and are not included in the initial capital cost request.

## 2. Introduction

This document provides detailed technical information on the economic analyses conducted in support of the grant application for the REVITALIZE 95 project:

- Section 3, Methodological Framework, introduces the conceptual framework used in the Benefit-Cost Analysis.
- Section 4, Project Overview provides an overview of the project, including a brief description of existing conditions; a summary of cost estimates and schedule; and a description of the types of effects that the project is expected to generate.
- Section 5, General Assumptions, discusses the general assumptions used in the estimation of project costs and benefits, while estimates of travel demand and traffic growth can be found in Section 6.
- Specific data elements and assumptions pertaining to the long-term outcome selection criteria are presented in Section 7, Estimation of Economic Benefits, along with associated benefit estimates.
- Estimates of the project's Net Present Value (NPV), its Benefit-Cost Ratio (BCR) and other project evaluation metrics are introduced in Section 8, Summary of Findings and BCA Outcomes.
- Next, Section 9, BCA Sensitivity Analysis, provides the outcomes of the sensitivity analysis. Additional data tables are provided within the BCA model including annual estimates of benefits and costs to assist the U.S. Department of Transportation (USDOT) in its review of the application.<sup>2</sup>
- Section 10, Summary of Benefits and Costs, provides results for project costs and benefits for each analysis year.

## 3. Methodological Framework

A benefit-cost analysis (BCA) is a conceptual framework that can be used to evaluate the cost-effectiveness of transportation infrastructure projects. A BCA attempts to describe, quantify, and monetize the societal benefits and costs generated by a particular project. A project's societal return-on-investment is estimated by comparing the monetized benefits against the project's total costs.

The benefits of the project are based on the expected impacts on both users and non-users of the facility. In addition, a BCA evaluates the benefits and costs over the entire life cycle of the project. Therefore, all benefits and costs that occur in future years need to be discounted to present values in order to be compared equitably. A real discount rate based on U.S. Department of Transportation (USDOT) BCA guidance has been identified for this purpose.

The BCA produces several important measures to assess the cost-effectiveness of a proposed project. The benefit-cost ratio (BCR), calculated by dividing the project's discounted societal benefits by its discounted costs, measures the societal return on each dollar spent in project costs. In other words, a BCR greater than 1.0 indicates that for every dollar spent in project costs, more

---

<sup>2</sup> The BCA model is provided separately as part of the application.

than one dollar will be generated in benefits. The net present value (NPV), calculated by subtracting the discounted project costs from the project's discounted societal benefits, measures the total benefit that society enjoys as a result of the project improvements.

The specific methodology for REVITALIZE 95 project was developed using the BCA guidance published by USDOT in January 2023.<sup>3</sup> In particular, the methodology involves:

- Establishing existing and future conditions under the build and no-build scenarios.
- Measuring benefits in dollar terms, whenever possible, and expressing benefits and costs in a common unit of measurement.
- Using USDOT guidance for the valuation of travel time savings, safety benefits and reductions in air emissions, while relying on industry best practice for the valuation of other effects.
- Discounting future benefits and costs with the real discount rate of 7 percent for most categories and using the real discount rate of 3 percent for CO<sub>2</sub> emissions, as recommended by USDOT.
- Conducting a sensitivity analysis to assess the impacts of changes in key estimating assumptions.

## 4. Project Overview

### 4.1 Base Case and Alternatives

**Base Case** – The No Build condition assumes that resurfacing does not occur, and emergency repairs are conducted to keep the pavement in the current “very poor” condition.

**Build Case** – Includes pavement resurfacing and bridge vertical adjustments. The pavement is in “very good” condition after project completion and deteriorates over the analysis period with no emergency repairs necessary for the first 8 years. To maintain the pavement in “good” or “fair” condition, top-course replacement is required at years 8 and 15, at a cost of \$5.6 million per occurrence. With these additional improvements, the project is expected to generate 20-years of useful life.

### 4.2 Types of Impacts

The proposed REVITALIZE 95 project is expected to significantly improve pavement condition, which will reduce the number and frequency of delays for motorists, the severity and number of crashes and bridge strikes, harmful environmental emissions, and vehicle operating costs. These impacts are described in more detail below:

- **Travel Time Savings:** The project will reduce the need to conduct emergency repairs, which cause lane closures and delays.
- **Improved Safety and Avoided Accident Costs:** Improving the pavement condition to “very good” condition will reduce the number of pavement condition related incidents.
- **Reduction in Emissions:** The project will reduce the number of excess emissions produced by vehicles by reducing delays related to emergency work zones. As vehicles

---

<sup>3</sup> U.S. DOT. *Benefit-Cost Analysis Guidance for Discretionary Grant Programs*. January 2023. Available at: [Benefit-Cost Analysis Guidance for Discretionary Grant Programs | US Department of Transportation](#)





are delayed passing through the emergency work zones, they emit several pollutants such as carbon dioxide (CO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), particulate matter (PM<sub>2.5</sub>), and sulfur dioxide (SO<sub>2</sub>), volatile organic compounds (VOC) and carbon monoxide (CO)<sup>4</sup>. By reducing the amount of time that vehicles spend in work zones along the project segment, the Build alternative will result in fewer emissions relative to the No Build scenario (even after accounting for the initial scheduled work zones for construction in the Build scenario).

- **Reduced Pavement Maintenance Costs:** The project will reduce the need to conduct costly emergency repairs.
- **Reduced Bridge Strike Repair Costs:** The project will conduct vertical adjustments to bridges along the segment, which will reduce the number of bridge strikes.
- **Reduced Vehicle Operating Cost:** The project will decrease vehicle operating cost along the thruway by decreasing the relative fuel costs related to the pavement condition.
- **Bike and Pedestrian Benefits:** The project includes a shared-use path for cyclists and pedestrians, with three signaled crossings to improve connectivity in the area of Exit 16. This will improve pedestrian and bike safety and quality of life, including enhancing connectivity to the adjacent City of New Rochelle LINC project.

#### 4.3 Project Cost and Schedule<sup>5</sup>

The construction of the REVITALIZE 95 project is expected to occur in years 2025 and 2026 with completion in late 2026 and full operations available in 2027. The costs associated with design, construction, and inspection are expected to be incurred between 2023 and 2026. The breakdown of project costs is presented in Table 1. The capital expenditures of the project will add up to \$57.5 million (undiscounted).<sup>6</sup> Additional expenditures of \$5.64 million are expected in 2034 and 2051, resulting in a total discounted project cost of \$46.9 million.

Table 1: Project Cost Summary, 2021 Dollars

Calendar Year	Capital Expenditures (2021 \$)	Discounted Capital Expenditures (2021 \$)
2023	\$2,585,000	\$2,257,839
2024	\$2,820,000	\$2,301,960
2025	\$26,052,100	\$19,875,022
2026	\$26,052,100	\$18,574,787
<b>Total</b>	<b>\$57,509,200</b>	<b>\$43,009,609</b>

<sup>4</sup> Note that VOC and CO are quantified but not monetized.

<sup>5</sup> All cost estimates are in millions of 2021 dollars, discounted to 2021 using a 7% real discount rate.

<sup>6</sup> Based on USDOT’s BCA guidance, increases in Operating and Maintenance costs are treated as a disbenefit in the numerator of the calculation rather than as a cost, in the denominator.



## 5. General Assumptions

The BCA measures benefits against costs throughout a period of analysis beginning at the preliminary design and the start of construction and including 2 years of additional construction costs and a 20-year analysis period.

The monetized benefits and costs are estimated in 2021 dollars with future dollars discounted in compliance with USDOT BCA requirements using a 7 percent real rate for most categories and a 3 percent rate for CO<sub>2</sub> emissions. The benefits and costs have been discounted to year 2021.

The methodology makes several important assumptions and seeks to avoid overestimation of benefits and underestimation of costs. Specifically:

- Input prices are expressed in 2021 dollars.
- The base period of analysis begins in 2023 and ends in 2046. It includes project development and construction years (2023 - 2026) and 20 years of operations (2027 – 2046).
- A constant 7 percent real discount rate is assumed throughout the period of analysis for most categories; a constant 3 percent real discount rate is assumed for CO<sub>2</sub> emissions.

## 6. Demand Projections

The projected future traffic demand is a key component in calculating travel time savings and emissions for the No Build and Build scenarios. The volumes and delays for vehicles on the corridor are based on the hourly traffic data.

### 6.1 Methodology and Assumptions

NYSTA provides hourly and daily traffic data in volumes and VMTs. These figures include projections for 2026 and 2036. The model uses this implied growth rate to calculate traffic demand along the thruway for the forecast period. The project does not increase capacity, and thus traffic volumes are consistent between the No Build and Build scenarios. The primary difference is due to changes in delays associated with emergency repairs and lane closures due to vehicular incidents.

### 6.2 Demand Projections

The resulting projections for daily VMT are presented in Table 2.

Table 1: NYSTA Daily Traffic Forecasts (2026-2036)

Segment	Description	Daily VMT, 2026	Daily VMT, 2036
NE14 - NE15	New Rochelle - Boston Post Rd - US 1	87,154	104,430
NE15 - NE16	New Rochelle - North Ave. - Cedar St.	180,282	216,019
NE16 - NE17	Larchmont - Chatsworth Ave.	143,382	171,805
NE17 - NE18A	Mamaroneck - Fenimore Rd.	179,878	215,535



## 7. Estimation of Economic Benefits

This section describes the measurement approach used for each benefit or impact category identified in the Executive Summary and provides an overview of the associated methodology, assumptions, and estimates.

Table 3 outlines general assumptions used in the BCA.

**Table 2: General Assumptions Used in the Benefit-Cost Analysis**

Variable Name	Unit	Value	Source
Construction Start Year	years	2025	NYSTA Project Schedule
Construction Duration	years	2	
Project Open Year	year	2027	
Benefits Period	years	20	Duration based on anticipated pavement condition life before next significant repairs will be required. The model accommodates the analysis of up to 30 years.
Extended Benefits Period	years	0	Utilize this to extend the benefits beyond the initial useful life
Year Emergency Repairs (Build) Start	years	2031	
General Discount Rate	percent	0.07	USDOT Benefit-Cost Analysis Guidance for Discretionary Grant Programs - 2023
Environmental Discount Rate (CO2)	percent	0.03	
Annualization Factor (Weekdays)	days/year	260	Used to annualize; value of 260 = weekdays only
Annualization Factor (Full Week)	days/year	365.25	Known
Commercial Vehicle Percentage	percent	0.12	Calculated based on NYSTA observed data for commercial vehicles

### 7.1 Travel Time Savings

Travel time savings are estimated using the VMT projections and USDOT travel time recommended values.

#### METHODOLOGY

Estimation of travel time savings are based on VMT information from NYSTA forecasts outlined in the Demand Projections section. The VMT information is applied to the projected work zone activity along the project corridor, and the relative average vehicle speeds during the different work zone periods. In the no build scenario, an estimated 50 emergency work zones occur during daytime hours each year, resulting in an average vehicle speed of 35 mph. In the build scenario, an estimated 188 scheduled work zones occur during the construction period. One-lane closure and two-lane closures produces average vehicle speeds of 45 and 42 mph, respectively. The average free flow speed without work zones along the segment is 55 mph. All emergency work zones are estimated to last 4 hours per occurrence. Scheduled maintenance for the build scenario occurs as dictated by NYSTA lane closure allowances for the corridor. It is assumed that without the project, additional repairs will be necessary each year as the overall





roadway condition continues to deteriorate. Based on NYSTA maintenance logs, a multiplier of 1.02 has been included to account for the deteriorating condition and additional frequency of repairs.

**ASSUMPTIONS**

The assumptions used in the estimation of travel time savings are summarized in Table 4.

**Table 3: Assumptions Used in the Estimation of Travel Time Savings**

Variable Name	Unit	Value	Source
Value of Time (All Purpose) - auto	2021 \$/person	18.8	USDOT Benefit-Cost Analysis Guidance for Discretionary Grant Programs - 2023
Average Vehicle Occupancy	persons	1.67	USDOT Benefit-Cost Analysis Guidance for Discretionary Grant Programs - 2023
Value of Time (All Purposes)	2021 \$/vehicle	31.396	Calculation
Value of Time (Trucks)	2021 \$/vehicle	32.40	USDOT Benefit-Cost Analysis Guidance for Discretionary Grant Programs - 2023
Commercial Vehicle Percentage	percent	1.22	Calculated based on NYSTA observed data for commercial vehicles
Project Length	miles	4.8	NYSTA
Duration of Emergency Repairs	hours	4	HDR assumption based on NYSTA maintenance logs
Duration of Scheduled Repairs	hours	11.4	Average allowable duration of overnight lane closures of at least one lane
Frequency of Emergency Repairs	number	50	HDR assumption based on NYSTA maintenance logs
Emergency Repair Scaling Factor	Multiplier	1.02	Assumption based on NYSTA maintenance logs
Frequency of Scheduled Repairs	number	188	Estimated allowable construction days per year
Frequency of Extended Emergency Repairs (Build)	number	25	Estimated allowable construction days per year

**BENEFIT ESTIMATES**

Table 5 outlines the benefits of travel time over the project lifecycle. They account for \$90.6 million in benefits over the life cycle, discounted at 7 percent.

**Table 4: Estimates of Travel Time Savings, Millions of 2021 Dollars**

Benefit Type	Constant 2021 \$	Discounted 2021 \$
Travel Time Savings	\$307.6	\$90.6

**7.2 Accident Cost Savings**

The proposed project would result in significant accident cost savings to society by reducing the number of pavement condition related accidents.

**METHODOLOGY**



NYSTA provided existing crash data which was used to forecast the number of crashes for the no build scenario. FHWA Crash Modification Factors #9288 and #9299, which are related to pavement condition, were utilized to estimate predicted crashes in the build scenario. The data is provided in three crash severity categories: crashes resulting in property damage, injury, and severe injury. The reduction in crashes from the no build to build scenarios are applied to USDOT recommended monetization values.

### ASSUMPTIONS

The assumptions used in the estimation of vehicle operating costs are summarized in Table 6.

Table 5: Assumptions Used in the Estimation of Safety Benefits

Variable Name	Unit	Value	Source
Cost of Damaged Vehicle (PDO)	2021 \$/vehicle	\$4,800	USDOT Benefit-Cost Analysis Guidance for Discretionary Grant Programs - 2023
Cost of Damaged Vehicle	2021 \$/vehicle	\$4,800	
Cost of Injury Crash	2021 \$/injury	\$153,700	
Cost of Serious Injury Crash	2021 \$/injury	\$564,300	

### BENEFIT ESTIMATES

Table 7 outlines the safety benefits due to the pavement improvements over the project lifecycle. Safety Benefits will total \$19.5 million in benefits over the 20-year operation period, discounted at 7 percent.

Table 6: Estimates of Safety Benefits, Millions of 2021 Dollars

Benefit Type	Constant 2021 \$	Discounted 2021 \$
Crash Avoidance Benefits	\$53.8	\$19.5

## 7.3 Emissions Cost Savings

The BCA estimates the reduction in tons of emissions by pollutant type and monetizes the cost of emission using values provided in the USDOT's BCA Guidance.

### METHODOLOGY

The project has two opposite impacts on emissions:

- Decreased emissions due to a reduction in delays and lower speeds caused by emergency repairs lowers emissions from vehicles that no longer experience travel delays due to emergency closures.
- Increased emissions due to delays caused by work zones for scheduled construction.

The BCA estimates and monetizes the additions and reductions of emissions from both of these effects. The reduction in tons of emissions by pollutant type was estimated based on the reduction in hours of vehicle delay from the No Build to Build alternatives and vice versa. Using per-mile emission rates for carbon dioxide ( $CO_2$ ), nitrogen oxides ( $NO_x$ ), particulate matter ( $PM_{2.5}$ ), and sulfur dioxide ( $SO_2$ ) from the Environmental Protection Agency (EPA)'s Motor



Vehicle Emission Simulator (MOVES), hourly emission rates for passenger vehicles and trucks were calculated based on speeds of 35, 40, 45, and 55 miles per hour.

The emissions cost savings were then monetized according to the damage cost values provided USDOT’s Guidance. The difference between reduction in emissions (due to emergency repair avoidance) and increases in emissions (due to project construction) was then estimated.

**ASSUMPTIONS**

The assumptions used in the estimation of emissions cost savings are provided in the BCA model. See *Emissions Cost Lookup* worksheet.

**BENEFIT ESTIMATES**

The emissions reductions from avoiding emergency repairs are higher than emissions increase from the construction period.

Table 8 outlines the emission cost savings for this project with Criteria Air Contaminant emissions (Nitrogen Oxides (NO<sub>x</sub>), Fine Particulate Matter (PM<sub>2.5</sub>), and Sulfur Dioxide (SO<sub>2</sub>)) discounted at 7 percent and Greenhouse Gas emissions (CO<sub>2</sub>) discounted at 3 percent. The emissions cost savings will total \$8.6 million (discounted).

**Table 7: Estimates of Emissions Cost Savings, Millions of 2021 Dollars**

Emissions Type	Constant 2021 \$	Discounted 2021 \$
Carbon Dioxide (CO <sub>2</sub> )	\$12.3	\$7.0
Nitrogen Oxides (NO <sub>x</sub> )	\$1.7	\$0.5
Particulate Matter (PM <sub>2.5</sub> )	\$4.1	\$1.1
Sulfur Dioxide (SO <sub>2</sub> )	\$0.09	\$0.03
<b>Total</b>	<b>\$18.2</b>	<b>\$8.6</b>

**7.4 Pavement Maintenance Savings**

The BCA estimates savings related to pavement maintenance by calculating the benefit of improving the pavement to a “very good” condition, thus avoiding future emergency repairs.

**METHODOLOGY**

The project will resurface the stretch of pavement on I-95 between MP 604.0 and 608.8. According to the International Roughness Index (IRI) and FHWA Categories of Roughness, the current pavement condition is “poor” to “very poor”. Consistent with the experience of NYSTA maintenance staff, the BCA assumes that regular emergency repairs are required to maintain the stretch of I-95 at a functioning level. The project will boost the pavement condition to “very good” and will avoid the necessity to conduct emergency repairs over the analysis period.

**ASSUMPTIONS**

The assumptions used in the estimation of pavement maintenance cost savings are provided in the Table 9.



**Table 8: Assumptions Used in the Estimation of Pavement Maintenance Benefits**

Variable Name	Unit	Value	Source
Starting Year for Emergency Repairs (No Build)	years	2025	NYSTA; project assumptions
Frequency of Emergency repairs per Year	number	50	HDR assumption

**BENEFIT ESTIMATES**

Table 10 outlines the pavement maintenance cost savings for this project. The pavement maintenance cost savings will total \$5.7 million (discounted).

**Table 9: Estimates of Pavement Maintenance Cost Savings, Millions of 2021 Dollars**

Benefit Type	Constant 2021 \$	Discounted 2021 \$
Pavement Maintenance Cost Savings	\$16.9	\$5.7

**7.5 Bridge Strike Maintenance Cost Savings**

The project will conduct vertical adjustment to bridges between NY I-95 MP 604.0 and 608.8. These bridges have been struck by over-height vehicles causing damage and requiring emergency repair.

**METHODOLOGY**

The reduction in emergency bridge repair costs along the project segment from conducting vertical adjustment was monetized with the assumption that the vertical adjustments will eliminate the necessity to make future emergency repairs.

**ASSUMPTIONS**

The BCA assumes that the vertical adjustments will eliminate future bridge strike occurrences, and that each emergency bridge repair costs \$10,000 in constant 2021\$.

**BENEFIT ESTIMATES**

The aggregated bridge strike maintenance cost savings are presented in Table 11 discounted at 7 percent. The project would total approximately \$300,000 in avoided bridge strike costs over the analysis period.

**Table 10: Estimates of Bridge Strike Maintenance Cost Savings, Millions of 2021 Dollars**

Benefit Type	Constant 2021 \$	Discounted 2021 \$
Bridge Strike Maintenance Cost Savings	\$0.3	\$0.13

**7.6 Vehicle Operating Cost Savings**

The project will improve pavement condition and decrease vehicle operating costs. The model calculates the change in fuel consumption based on the pavement condition and applies this figure to calculate the marginal cost of fuel per VMT.





**METHODOLOGY**

Vehicle operating cost savings are calculated based on the improvement in roadway pavement quality. First, the annual average daily traffic (AADT) is applied to the length of the corridor pavement improvements and an Annualization factor to estimate the annual vehicle miles traveled (VMT) in the no build case. VMT in the no build case is monetized using average dollar-per-mile fuel cost estimates.

In the build scenario, a percent reduction in fuel costs is applied to the no build case cost estimates. This percent reduction is due to the improved pavement quality.

Fuel cost savings are assumed to decline over time based on the useful life of a roadway.

**ASSUMPTIONS**

The assumptions used in the estimation of travel time savings and vehicle operating cost savings are summarized in Table 12.

**Table 12: Assumptions Used in the Estimation Vehicle Operating Cost Savings**

Variable Name	Unit	Value	Source
Cost of Fuel - auto	2021 \$/mile	0.16	USDOT Benefit-Cost Analysis Guidance for Discretionary Grant Programs - 2023
Cost of Fuel - truck	2021 \$/mile	0.41	USDOT Benefit-Cost Analysis Guidance for Discretionary Grant Programs - 2023
Adjustment factor on fuel cost (savings)	percent	-6	HDR Calculation

**BENEFIT ESTIMATES**

Table 13 summarizes the vehicle operating cost savings. The project is expected to generate approximately \$3.4 million in vehicle operating cost savings at a 7 percent discount rate.

**Table 13: Estimates of Vehicle Operating Cost Savings, Millions of 2021 Dollars**

Benefit Type	Constant 2021 \$	Discounted 2021 \$
Vehicle Operating Cost Savings	\$5.9	\$3.4

**7.7 Pedestrian and Cyclist Benefits**

The project also includes interchange improvements at Exit 16 with the construction of a 0.2 mile shared-use path for pedestrians and cyclists and will construct three signaled crossings. This will improve safety, connectivity, and quality of life for pedestrians and cyclists.

**METHODOLOGY**

Replica data provides daily volume data for projected pedestrian and cyclist usage of the path. The BCA model annualizes the data and applies the recommended monetization values from the USDOT BCA Guidance for Benefit-Cost Analysis. The model monetizes the three signaled intersections, the path width, and the path itself.



### ASSUMPTIONS

The assumptions used in the estimation of cyclist and pedestrian benefits are summarized in Table 14.

**Table 14: Assumptions Used in the Estimation Cyclist and Pedestrian Benefits**

Variable Name	Unit	Value	Source
Number of Pedestrian Crossings	number	3	NYSTA; project Assumptions
Ped/Bike Path Length	miles	0.21	NYSTA; project Assumptions
Path width	feet	10	NYSTA; project Assumptions
Expand Sidewalk benefit	2021 \$/foot	\$0.11	USDOT Benefit-Cost Analysis Guidance for Discretionary Grant Programs - 2023
Install Signal for Pedestrian Crossing on Roadway with Volumes $\geq$ 13,000 Vehicles per Day	2021 \$/use	\$0.48	USDOT Benefit-Cost Analysis Guidance for Discretionary Grant Programs - 2023
Cycling Path with At-Grade Crossings	2021 \$/cycled mile	\$1.49	USDOT Benefit-Cost Analysis Guidance for Discretionary Grant Programs - 2023

### BENEFIT ESTIMATES

Table 15 summarizes the cyclist and pedestrian benefits. The project is expected to generate approximately \$25.2 million in vehicle operating cost savings at a 7 percent discount rate.

**Table 15: Estimates of Cyclist and Pedestrian Benefits, Millions of 2021 Dollars**

Benefit Type	Constant 2021 \$	Discounted 2021 \$
Cyclist and Pedestrian Benefits	\$25.2	\$8.2

## 8. Summary of Findings and BCA Outcomes

Table 16 and Table 17 summarize the BCA findings. Annual costs and benefits are computed over the lifecycle of the project.

**Table 16: Estimates of Economic Benefits, Millions of 2021 Dollars**

Benefits	Constant 2021 \$	Discounted 2021 \$
Reduced Travel Time Costs	\$307.57	\$90.56
Improved Safety and Avoided Accident Costs	\$53.85	\$19.49
Reduction in Emissions Costs	\$18.16	\$8.58
Reduction in Pavement Maintenance Costs	\$16.85	\$5.70
Reduction in Bridge Strike Repair Costs	\$0.30	\$0.13
Reductions in Vehicle Operating Cost	\$5.90	\$3.43
Cyclist and Pedestrian Benefits	\$25.15	\$8.21
<b>Total Benefits</b>	<b>\$427.79</b>	<b>\$136.10</b>



**Table 117: Overall Results of the Benefit-Cost Analysis, Millions of 2021 Dollars**

Project Evaluation Metric	Constant 2021 \$	Discounted 2021 \$
Total Benefits	\$427.8	\$136.1
Total Costs	\$68.9	\$46.9
Net Present Value	\$89.2	
Benefit-Cost Ratio	2.9	

With a 7 percent general discount rate and 3 percent discount rate for CO<sub>2</sub>, the \$46.9 million investment would result in \$136.1 million in total benefits and a benefit-cost ratio of approximately 2.90.

## 9. BCA Sensitivity Analysis

The BCA outcomes presented in the previous sections rely on a large number of assumptions and long-term projections, both of which are subject to considerable uncertainty.

The primary purpose of the sensitivity analysis is to help identify the variables and model parameters whose variations have the greatest impact on the BCA outcomes: the “critical variables.”

The sensitivity analysis can also be used to:

- Evaluate the impact of changes in individual critical variables – how much the final results would vary with reasonable departures from the “preferred” or most likely value for the variable.
- Assess the robustness of the BCA and evaluate, in particular, whether the conclusions reached under the “preferred” set of input values are significantly altered by reasonable departures from those values.

In the sensitivity analysis, only one assumption from the baseline model is changed to see the effect of that assumption on initial results. The cases presented in the sensitivity analysis are the following:

- Discount Rate: reducing the general discount rate to 3 percent.
- Value of Time: increasing the value of time by 25% for passenger vehicles and trucks
- Project Costs: increasing and decreasing the total project cost of the project by 30%.

The sensitivity results are presented in Table 18.



**Table 18: Quantitative Assessment of Sensitivity, Summary**

Parameters	Change in Parameter Value	Current NPV	New NPV	New B/C Ratio
Discount Rate	Reducing the general discount rate to 3 percent	\$89.24	\$198.32	4.44
Value of Time	25% Increase in Value of Time for Passenger Vehicles and Trucks		\$111.89	3.39
Project Cost	Increasing the total project cost by 30%		\$75.19	2.23
	Decreasing the total project cost by 30%		\$103.30	4.15





## 10. Summary of Benefits and Costs

Table 19 presents the benefits and costs of the project in 2021 dollars discounted.

Table 19: Summary of Benefits and Costs, Discounted (7% Except Carbon Emissions at 3%)

CY	Pavement Management Benefits	Total Annual Safety Benefits	Total Travel Time Savings	Emission Benefits	Bridge Strike Savings	Vehicle Operating Cost Savings	Cyclist & Pedestrian Benefits	Total Benefits	Total Capital Costs	Net Present Value
2023	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,257,839	-\$2,257,839
2024	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,301,960	-\$2,301,960
2025	\$0	\$0	-\$15,398,106	-\$1,268,363	\$0	\$0	\$0	-\$16,666,469	\$19,900,122	-\$36,566,591
2026	\$0	\$0	-\$14,737,580	-\$1,225,077	\$0	\$0	\$0	-\$15,962,656	\$18,598,244	-\$34,560,901
2027	\$333,171	\$1,467,908	\$7,387,608	\$510,199	\$17,760	\$973,346	\$342,159	\$11,032,151	\$0	\$11,032,151
2028	\$323,954	\$1,403,969	\$7,181,832	\$500,058	\$15,513	\$758,617	\$368,553	\$10,552,498	\$0	\$10,552,498
2029	\$320,927	\$1,342,114	\$7,113,317	\$499,844	\$13,549	\$579,193	\$390,030	\$10,258,974	\$0	\$10,258,974
2030	\$317,475	\$1,282,343	\$7,035,423	\$504,243	\$11,835	\$429,922	\$407,120	\$9,988,361	\$0	\$9,988,361
2031	\$313,645	\$1,224,649	\$6,949,181	\$515,481	\$10,337	\$306,357	\$420,304	\$9,739,953	\$0	\$9,739,953
2032	\$309,479	\$1,169,015	\$6,855,545	\$526,637	\$9,029	\$204,661	\$430,021	\$9,504,388	\$0	\$9,504,388
2033	\$305,018	\$1,115,419	\$6,734,865	\$536,095	\$7,886	\$121,163	\$436,668	\$9,257,113	\$0	\$9,257,113
2034	\$300,298	\$1,063,833	\$6,609,196	\$545,442	\$6,888	\$53,798	\$440,604	\$9,020,058	\$2,340,399	\$6,679,659
2035	\$295,353	\$1,014,222	\$6,479,336	\$554,691	\$6,016	\$0	\$442,157	\$8,791,775	\$0	\$8,791,775
2036	\$290,215	\$966,549	\$6,346,013	\$569,931	\$5,255	\$0	\$441,621	\$8,619,584	\$0	\$8,619,584
2037	\$284,912	\$920,773	\$6,209,905	\$579,118	\$4,590	\$0	\$439,262	\$8,438,560	\$0	\$8,438,560
2038	\$279,471	\$876,850	\$5,971,871	\$578,571	\$4,009	\$0	\$435,322	\$8,146,094	\$0	\$8,146,094
2039	\$273,916	\$834,733	\$5,738,404	\$577,825	\$3,501	\$0	\$430,018	\$7,858,398	\$0	\$7,858,398
2040	\$268,270	\$794,374	\$5,509,926	\$576,894	\$3,058	\$0	\$423,544	\$7,576,066	\$0	\$7,576,066
2041	\$262,553	\$755,723	\$5,286,783	\$583,146	\$2,671	\$0	\$416,077	\$7,306,954	\$1,457,483	\$5,849,471
2042	\$256,785	\$718,729	\$5,069,254	\$583,016	\$2,333	\$0	\$407,775	\$7,037,892	\$0	\$7,037,892
2043	\$250,983	\$683,342	\$4,857,560	\$582,649	\$2,038	\$0	\$398,778	\$6,775,349	\$0	\$6,775,349
2044	\$245,163	\$649,508	\$4,651,869	\$582,058	\$1,780	\$0	\$389,213	\$6,519,590	\$0	\$6,519,590
2045	\$239,338	\$617,177	\$4,452,301	\$581,253	\$1,555	\$0	\$379,192	\$6,270,816	\$0	\$6,270,816
2046	\$233,522	\$586,296	\$4,258,936	\$586,203	\$1,358	\$0	\$368,817	\$6,035,132	\$0	\$6,035,132
<b>Total</b>	<b>\$5,704,447</b>	<b>\$19,487,528</b>	<b>\$90,563,437</b>	<b>\$8,579,913</b>	<b>\$130,960</b>	<b>\$3,427,057</b>	<b>\$8,207,236</b>	<b>\$136,100,579</b>	<b>\$46,856,048</b>	<b>\$89,244,531</b>

## Letters of Support

---

Stakeholder
New York State Senator Andrea Stewart-Cousins (Majority Leader)
New York State Senator Timothy Kennedy (Chairman Transportation Committee)
New York State Senator Shelly Mayer
New York State Assemblymen William B. Magnarelli (Chair Transportation Committee)
New York State Assemblymen Steven Otis
George Latimer Westchester County Executive
City of New Rochelle Mayor Noam Bramson
Town of Mamaroneck Supervisor Jaine Elkind Eney
Village of Pelham Manor Manager Lindsey M. Luft
Kendra Hems, President, Trucking Association of New York
Robert Brisman, President, Bus Association of New York
Michael JI. Elmendorf II, President & CEO, Associated General Contractors of New York State
John Evers, PhD, President/CEO, American Council of Engineering Companies of New York
Marc Herbst, President, New York Roadway and Infrastructure Coalition
John A. Corlett, Legislative Committee Chairman, AAA New York State
Jackeline Agudelo, Executive Director, United Community Center of Westchester, Inc

ANDREA STEWART-COUSINS  
35TH SENATE DISTRICT  
TEMPORARY PRESIDENT OF THE SENATE  
MAJORITY LEADER



THE SENATE  
STATE OF NEW YORK

ROOM 907 LEGISLATIVE OFFICE BUILDING  
ALBANY, NEW YORK 12247  
(518) 455-2585  
FAX (518) 426-6811

ROOM 332 STATE CAPITOL  
ALBANY, NEW YORK 12247  
(518) 455-2715  
FAX (518) 426-6844

DISTRICT  
28 WELLS AVENUE, BUILDING 3  
YONKERS, NEW YORK 10701  
(914) 423-4031  
FAX (914) 423-0979

E-MAIL  
SCOUSINS@NYSENATE.GOV

February 24, 2023

The Honorable Pete Buttigieg, Secretary  
U.S. Department of Transportation  
1200 New Jersey Ave, SE  
Washington, DC 20590

Dear Secretary Buttigieg:

I write in support of the New York State Thruway Authority's \$25 million U.S. Department of Transportation Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant application. The RAISE Grant will supplement the cost of a project to rehabilitate a section of the New England Thruway (I-95), a 15-mile segment that connects New York City (the Bronx) to the Connecticut state line and many communities in between including Westchester County. The RAISE Grant will supplement funding to upgrade and improve this portion of I-95 that is used by more than 41 million travelers each year, accounting for approximately 14 percent of all Thruway traffic statewide.

This grant will help provide for the safe, efficient, and sustainable movement of people, goods, and services, while ensuring that surrounding communities benefit from the project, including approximately 60 percent which are historically disadvantaged. Specifically, a new shared-use path segment will provide a safe, accessible connection from the residential neighborhoods near I-95 and Interchange 16 to commercial areas on the other side.

Rehabilitating this section of the New England Thruway will provide a long-term improvement to this corridor, maintaining community connections across I-95, enhancing the overall safety for motorists and improving quality of life for residents in this area. It will mitigate air quality concerns, upgrade mobility and community connectivity and decrease the need for repeated maintenance which increase traffic disruptions.

Thank you for considering the New York State Thruway Authority's grant application. If you need more information, please feel free to contact my office at (914) 423-4031 or [scousins@nysenate.gov](mailto:scousins@nysenate.gov).

Sincerely,

A handwritten signature in cursive script that reads "Andrea Stewart-Cousins".

Andrea Stewart-Cousins  
New York State Senator, 35<sup>th</sup> District  
President Pro Tem, Majority Leader

THE SENATE  
STATE OF NEW YORK



**TIMOTHY M. KENNEDY**  
SENATOR, 63<sup>RD</sup> DISTRICT

CHAIRMAN  
TRANSPORTATION  
SELECT COMMITTEE ON  
STATE-NATIVE AMERICAN RELATIONS  
COMMITTEES  
BANKS  
CITIES 2  
ENERGY AND TELECOMMUNICATIONS  
FINANCE  
INSURANCE  
RULES

□ ALBANY OFFICE:  
ROOM 708  
LEGISLATIVE OFFICE BUILDING  
ALBANY, NEW YORK 12247  
(518) 455-2426 OFFICE  
(518) 426-6851 FAX  
□ DISTRICT OFFICE:  
37 FRANKLIN ST., SUITE 550  
BUFFALO, NEW YORK 14202  
(716) 826-2683 OFFICE  
(716) 826-2793 FAX  
E-MAIL ADDRESS:  
KENNEDY@NYSenate.GOV

February 23, 2023

The Honorable Peter Buttigieg, Secretary  
U.S. Department of Transportation  
1200 New Jersey Ave, SE  
Washington, DC 20590

Dear Secretary Buttigieg:

As the Chair of the NYS Senate Transportation Committee, I strongly support the New York State Thruway Authority's \$25 million U.S. Department of Transportation Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant application. This RAISE Grant will supplement the cost of a project to rehabilitate a section of the New England Thruway (I-95) in Westchester County.

As you may know the New England Thruway is a 15-mile segment that connects New York City, specifically the Bronx, to the Connecticut state line and countless communities in between. The RAISE Grant will supplement funding to upgrade and improve this portion of I-95 that is used by more than 41 million travelers each year, accounting for approximately 14 percent of all Thruway traffic statewide.

This grant will help provide for the safe, efficient, and sustainable movement of people, goods, and services, while ensuring that surrounding communities, including approximately 60 percent which are Historically Disadvantaged Communities, benefit from the project. Specifically, a new shared-use path segment will provide a safe, accessible connection from the residential neighborhoods near I-95 and Interchange 16 to commercial areas on the other side.

Rehabilitating this section of the New England Thruway will provide a long-term improvement to this corridor, maintaining community connections across I-95, enhancing the overall safety for motorists and improving quality of life for residents in this area. It will mitigate air quality concerns, upgrade mobility and community connectivity and decrease the need for repeated maintenance which can increase traffic disruptions.

For these reasons, I strongly support the New York State Thruway Authority's \$25 million U.S. Department of Transportation Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant application. Thank you for your attention to this important matter. Should you have any questions, I welcome your call.

Sincerely,

A handwritten signature in black ink that reads "Timothy M. Kennedy". The signature is fluid and cursive, with the first name being the most prominent.

Timothy M. Kennedy  
New York State Senator, 63rd District



**CHAIR**  
Education

**COMMITTEES**  
Cities 2  
Corporations, Authorities  
and Commissions  
Elections  
Judiciary  
Labor  
Rules

**THE SENATE  
STATE OF NEW YORK**



**SHELLEY B. MAYER**  
**SENATOR, 37<sup>TH</sup> DISTRICT**  
**DEPUTY MAJORITY LEADER FOR  
STATE/FEDERAL RELATIONS**

☐ **Albany Office:**  
Room 509  
Legislative Office Building  
Albany, New York 12247  
(518) 455-2031 Office  
(518) 426-6860 Fax

☐ **District Office:**  
222 Grace Church St., Suite 300  
Port Chester, NY 10573  
(914) 934-5250 Office  
(914) 934-5256 Fax  
smayer@nysenate.gov

February 24, 2023

The Honorable Pete Buttigieg, Secretary  
U.S. Department of Transportation  
1200 New Jersey Ave, SE  
Washington, DC 20590

Dear Secretary Buttigieg:

As the New York State Senator representing many communities through which The New England Thruway passes, I write in support of the New York State Thruway Authority's \$25 million U.S. Department of Transportation Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant application.

The RAISE Grant will supplement the cost of a project to rehabilitate a section of the New England Thruway (I-95) in Westchester County.

The New England Thruway is a 15-mile segment that connects New York City (the Bronx) to the Connecticut state line and countless communities in between. The RAISE Grant will supplement funding to upgrade and improve this portion of I-95 that is used by more than 41 million travelers each year, accounting for approximately 14 percent of all Thruway traffic statewide.

This grant will help provide for the safe, efficient, and sustainable movement of people, goods, and services, while ensuring that surrounding communities, including approximately 60 percent which are Historically Disadvantaged Communities, benefit from the project.

Specifically, a new shared-use path segment will provide a safe, accessible connection from the residential neighborhoods near I-95 and Interchange 16 to commercial areas on the other side.

Rehabilitating this section of the New England Thruway will provide a long-term improvement to this corridor, maintaining community connections across I-95, enhancing the overall safety for motorists and improving quality of life for residents in this area. It will mitigate air quality concerns, upgrade mobility and community connectivity and decrease the need for repeated maintenance which increase traffic disruptions.

Thank you for your consideration.

Sincerely,

A handwritten signature in cursive script that reads "Shelley B. Mayer".

Shelley B. Mayer



WILLIAM B. MAGNARELLI  
 Assemblyman 129<sup>th</sup> District

THE ASSEMBLY  
 STATE OF NEW YORK  
 ALBANY

CHAIR  
 Committee on Transportation

COMMITTEES  
 Economic Development, Job Creation,  
 Commerce and Industry  
 Education  
 Rules  
 Oversight, Analysis and Investigation  
 Steering  
 Ways and Means

February 22, 2023

Hon. Pete Buttigieg  
 Secretary  
 U.S. Department of Transportation  
 1200 New Jersey Ave, SE  
 Washington, DC 20590

Dear Secretary Buttigieg:

As Chair of the New York State Assembly’s Committee on Transportation, I am writing in support of the New York State Thruway Authority’s (“Thruway Authority”) application for a Rebuilding American Infrastructure with Sustainability and Equity (“RAISE”) Grant to rehabilitate a section of the New England Thruway (I-95) in Westchester County. The Thruway Authority is seeking \$25 million for this project that is critically important to both the State and the local community.

The proposed project along I-95 runs through the towns of Pelham and Mamaroneck. The segment is classified as a “Principal Urban Arterial” of the National Highway System. Despite a 2014 paving project, the highway has continued to deteriorate due to the large volume of traffic it receives. Approximately, 121,000 motorists travel this stretch daily, with 13 percent being large trucks. The project would rectify this by rehabilitating the section with a thick protective asphalt overlay, replacing guiderail and by adding new pavement markings. It will also relocate an emergency U-Turn used by emergency responders to better accommodate vehicle access, improving safety and response times.

Approximately, 2.9 miles of this project is located in “Historically Disadvantaged Communities”. The project will provide long-term improvements in this area by reducing the likelihood of accidents and traffic delays due to maintenance. A key component of this project is environmental sustainability to reduce traffic congestion and improve air quality in the surrounding area. Specifically, a new shared-use path segment will provide a safe, accessible connection from the residential neighborhoods near I-95 and Interchange 16 to commercial areas on the other side.

Rehabilitating this important section of Interstate in New York will provide long-term improvement to this corridor, enhance safety and improve the quality of life for residents. Therefore, I respectfully request that you give the Thruway Authority’s RAISE application a full and fair consideration. Please feel free to contact me if I can be of any further assistance on this matter.

Very truly yours,

William B. Magnarelli  
 Member, NYS Assembly  
 129<sup>th</sup> District

WBM/cms



STEVEN OTIS  
Assemblyman 91<sup>st</sup> District  
Westchester County

THE ASSEMBLY  
STATE OF NEW YORK  
ALBANY

CHAIR  
Committee on  
Science and Technology  
COMMITTEES  
Corporations, Authorities and  
Commissions  
Education  
Environmental Conservation  
Local Governments  
MEMBER  
Puerto Rican/Hispanic Task Force

February 23, 2023

The Honorable Pete Buttigieg, Secretary  
U.S. Department of Transportation  
1200 New Jersey Avenue, SE  
Washington, DC 20590

**Re: New York State Thruway Authority  
Rebuilding American Infrastructure with Sustainability and Equity (RAISE)**

Dear Secretary Buttigieg,

I am writing to convey my strong support for the NYS Thruway Authority's request for a \$25 million U.S. Department of Transportation RAISE grant that will be used to rehabilitate a deteriorated 4.8-mile segment of the New England Thruway (I-95) in Westchester County and provide a bicycle and pedestrian connection across Interchange 16 into the City of New Rochelle.

This is a vitally important grant to address issues in the increasingly busy I-95 corridor. The New England Thruway is a 15-mile segment that connects New York City from the Bronx to the Connecticut state border. In Westchester County, our section of I-95 has seen steady increases in car and truck traffic in the last two decades, now totally 41 million vehicles a year, representing 14 percent of all Thruway traffic stateside.

These volumes have translated into accelerated decline of road surface quality and increases in noise and air pollution in Westchester. The segment identified in this project primarily covers economic justice neighborhoods where we now have established national and state priorities to address environmental issues that have not been corrected previously. In 2014, a pavement rehabilitation project repaired and replaced concrete slabs for this section of I-95. However, under the weight of large trucks and commercial vehicles and the significant volume of vehicles of approximately 121,000 a day, the 4.8-mile segment has experienced accelerated deterioration.

In addition, approximately 2.9 miles, which represents 60% of this 4.8-mile-long project, is in historically disadvantaged neighborhoods including in the City of New Rochelle. These are economically, ethnically and culturally diverse areas near I-95, which have experienced a growing population and density in recent years. Pedestrians are currently using a worn dirt path and making unsafe road crossings to traverse Interchange 16 into the downtown areas of New Rochelle. Currently, there are also no bicycle accommodations.

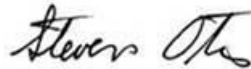
The RAISE grant will fund a new shared-use path segment that will provide a safe, and accessible connection from the residential neighborhoods near I-95 to commercial areas on the other side of Interchange 16. The RAISE grant will also complement the City of New Rochelle's adjacent "LINC" project which will partially convert Memorial Highway to a linear park with greatly improved bicycle and pedestrian facilities, embracing the environmental sustainability goals that New York State and local communities have adopted.

The rehabilitation of this segment of the New England Thruway incorporates many community benefits. The project will upgrade the mobility and community access to services that will benefit local businesses and residents. It will greatly enhance public safety for motorists, first responders and pedestrians; it will mitigate air quality concerns that have disproportionately impacted disadvantaged communities near congested highway corridors for much too long and improve the quality of life in this densely populated area.

Since the 1980's I have followed issues and projects along the I-95 corridor in Westchester closely. This is one of the most highly traveled corridors in the United States. The NYS Thruway Authority has an excellent track record of improving, maintaining and enhancing this corridor and the entire Thruway system. The roadway and neighborhood issues addressed by this project are vitally important to motorists and the communities along the Sound Shore in Westchester County.

I strongly urge your favorable consideration of the NYS Thruway Authority's \$25 million application for a U.S. Department of Transportation RAISE Grant.

Warm regards,

A handwritten signature in black ink that reads "Steven Otis". The signature is written in a cursive, flowing style.

Steven Otis  
State Assemblyman



George Latimer  
County Executive

February 23, 2023

The Honorable Pete Buttigieg, Secretary  
U.S. Department of Transportation  
1200 New Jersey Ave, SE  
Washington, DC 20590

Dear Secretary Buttigieg:

I write in support of the New York State Thruway Authority's \$25 million U.S. Department of Transportation Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant application.

The RAISE Grant will supplement the cost of a project to rehabilitate a section of the New England Thruway (I-95) in Westchester County.

The New England Thruway is a 15-mile segment that connects New York City (the Bronx) to the Connecticut state line and countless communities in between. The RAISE Grant will supplement funding to upgrade and improve this portion of I-95 that is used by more than 41 million travelers each year, accounting for approximately 14 percent of all Thruway traffic statewide.

This grant will help provide for the safe, efficient, and sustainable movement of people, goods, and services, while ensuring that surrounding communities, including approximately 60 percent which are Historically Disadvantaged Communities, benefit from the project.

Specifically, a new shared-use path segment will provide a safe, accessible connection from the residential neighborhoods near I-95 and Interchange 16 to commercial areas on the other side.

Rehabilitating this section of the New England Thruway will provide a long-term improvement to this corridor, maintaining community connections across I-95, enhancing the overall safety for motorists and improving quality of life for residents in this area. It will mitigate air quality concerns, upgrade mobility and community connectivity and decrease the need for repeated maintenance which increase traffic disruptions.

Sincerely,



George Latimer  
Westchester County Executive

Noam Bramson  
**Mayor**  
**Office of the Mayor**  
[nbramson@newrochelleny.com](mailto:nbramson@newrochelleny.com)  
[www.newrochelleny.com](http://www.newrochelleny.com)



City Hall  
515 North Avenue  
New Rochelle, NY 10801  
Tel: 914.654.2150  
Fax: 914.654.2357

February 21, 2023

The Honorable Pete Buttigieg, Secretary  
U.S. Department of Transportation  
1200 New Jersey Ave, SE  
Washington, DC 20590

Dear Secretary Buttigieg:

I write in support of the New York State Thruway Authority's \$25 million U.S. Department of Transportation Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant application.

The RAISE Grant will supplement the cost of a project to rehabilitate a section of the New England Thruway (I-95) in Westchester County.

The New England Thruway is a 15-mile segment that connects New York City (the Bronx) to the Connecticut state line and countless communities in between. The RAISE Grant will supplement funding to upgrade and improve this portion of I-95 that is used by more than 41 million travelers each year, accounting for approximately 14 percent of all Thruway traffic statewide.

This grant will help provide for the safe, efficient, and sustainable movement of people, goods, and services, while ensuring that surrounding communities, including approximately 60 percent which are Historically Disadvantaged Communities, benefit from the project.

Specifically, a new shared-use path segment will provide a safe, accessible connection from the residential neighborhoods near I-95 and Interchange 16 to commercial areas on the other side.

Rehabilitating this section of the New England Thruway will provide a long-term improvement to this corridor, maintaining community connections across I-95, enhancing the overall safety for motorists and improving quality of life for residents in this area. It will mitigate air quality concerns, upgrade mobility and community connectivity and decrease the need for repeated maintenance which increase traffic disruptions.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Noam Bramson', is written over a white background.

Noam Bramson  
Mayor



## Town of Mamaroneck

Office of the Supervisor

Town Center

740 West Boston Post Road, Mamaroneck, NY 10543-3353

TEL: 914.381.7805

FAX: 914.381.7809

[supervisor@townofmamaroneckny.org](mailto:supervisor@townofmamaroneckny.org)

JAINE ELKIND ENEY

February 21, 2023

The Honorable Pete Buttigieg, Secretary  
U.S. Department of Transportation  
1200 New Jersey Ave, SE  
Washington, DC 20590

Dear Secretary Buttigieg:

I write in support of the New York State Thruway Authority's \$25 million U.S. Department of Transportation Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant application.

The RAISE Grant will supplement the cost of a project to rehabilitate a section of the New England Thruway (I-95) in Westchester County.

The New England Thruway is a 15-mile segment that connects New York City (the Bronx) to the Connecticut state line and countless communities in between. The RAISE Grant will supplement funding to upgrade and improve this portion of I-95 that is used by more than 41 million travelers each year, accounting for approximately 14 percent of all Thruway traffic statewide.

This grant will help provide for the safe, efficient, and sustainable movement of people, goods, and services, while ensuring that surrounding communities, including approximately 60 percent which are Historically Disadvantaged Communities, benefit from the project.

Specifically, a new shared-use path segment will provide a safe, accessible connection from the residential neighborhoods near I-95 and Interchange 16 to commercial areas on the other side.

Rehabilitating this section of the New England Thruway will provide a long-term improvement to this corridor, maintaining community connections across I-95, enhancing the overall safety for motorists and improving quality of life for residents in this area. It will mitigate air quality concerns, upgrade mobility and community connectivity and decrease the need for repeated maintenance which increase traffic disruptions.

Sincerely,

Jaine Elkind Eney



VILLAGE OF PELHAM MANOR  
WESTCHESTER COUNTY, NEW YORK

4 PENFIELD PLACE  
PELHAM MANOR, NY 10803-3298

VILLAGE ADMINISTRATION 914-738-8820

February 24, 2023

The Honorable Pete Buttigieg, Secretary  
U.S. Department of Transportation  
1200 New Jersey Ave, SE  
Washington, DC 20590

Dear Secretary Buttigieg:

I write in support of the New York State Thruway Authority's \$25 million U.S. Department of Transportation Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant application.

The RAISE Grant will supplement the cost of a project to rehabilitate a section of the New England Thruway (I-95) in Westchester County.

The New England Thruway is a 15-mile segment that connects New York City (the Bronx) to the Connecticut state line and countless communities in between. The RAISE Grant will supplement funding to upgrade and improve this portion of I-95 that is used by more than 41 million travelers each year, accounting for approximately 14 percent of all Thruway traffic statewide.

This grant will help provide for the safe, efficient, and sustainable movement of people, goods, and services, while ensuring that surrounding communities benefit from the project. While the Village of Pelham Manor is supportive of this capital improvement, we kindly request New York State Thruway Authority extends the sound barrier from its northern terminus to U.S. Route 1 in New Rochelle as part of the project.

Rehabilitating this section of the New England Thruway will provide a long-term improvement to this corridor, maintaining community connections across I-95, enhancing the overall safety for motorists and improving quality of life for residents in this area. It will mitigate air quality concerns, upgrade mobility and community connectivity and decrease the need for repeated maintenance which increase traffic disruptions.

Sincerely,

Lindsey M. Luft  
Village Manager



**Kendra Hems**  
President

3 Corporate Drive, Suite 101  
Clifton Park, NY 12065  
P 518.458.9696  
nytrucks.org

February 23, 2023

The Honorable Pete Buttigieg, Secretary  
U.S. Department of Transportation  
1200 New Jersey Ave, SE  
Washington, DC 20590

Dear Secretary Buttigieg:

On behalf of the Trucking Association of New York, I write in support of the New York State Thruway Authority's \$25 million U.S. Department of Transportation Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant application.

The RAISE Grant will supplement the cost of a project to rehabilitate a section of the New England Thruway (I-95) in Westchester County.

The New England Thruway is a 15-mile segment that connects New York City (the Bronx) to the Connecticut state line and countless communities in between. The RAISE Grant will supplement funding to upgrade and improve this portion of I-95 that is used by more than 41 million travelers each year, accounting for approximately 14 percent of all Thruway traffic statewide.

This grant will help provide for the safe, efficient, and sustainable movement of people, goods, and services, while ensuring that surrounding communities, including approximately 60 percent which are Historically Disadvantaged Communities, benefit from the project.

Specifically, a new shared-use path segment will provide a safe, accessible connection from the residential neighborhoods near I-95 and Interchange 16 to commercial areas on the other side.

Rehabilitating this section of the New England Thruway will provide a long-term improvement to this corridor, maintaining community connections across I-95, enhancing the overall safety for motorists and improving quality of life for residents in this area. It will mitigate air quality concerns, upgrade mobility and community connectivity and decrease the need for repeated maintenance which increase traffic disruptions.

Sincerely,

A handwritten signature in black ink that reads "Kendra Hems". The signature is fluid and cursive, with a horizontal line extending from the end of the name.





2/22/2023

The Honorable Pete Buttigieg, Secretary  
U.S. Department of Transportation  
1200 New Jersey Ave, SE  
Washington, DC 20590

Dear Secretary Buttigieg:

I write in support of the New York State Thruway Authority's \$25 million U.S. Department of Transportation Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant application.

The RAISE Grant will supplement the cost of a project to rehabilitate a section of the New England Thruway (I-95) in Westchester County.

The New England Thruway is a 15-mile segment that connects New York City (the Bronx) to the Connecticut state line and countless communities in between. The RAISE Grant will supplement funding to upgrade and improve this portion of I-95 that is used by more than 41 million travelers each year, accounting for approximately 14 percent of all Thruway traffic statewide.

This grant will help provide for the safe, efficient, and sustainable movement of people, goods, and services, while ensuring that surrounding communities, including approximately 60 percent which are Historically Disadvantaged Communities, benefit from the project.

Specifically, a new shared-use path segment will provide a safe, accessible connection from the residential neighborhoods near I-95 and Interchange 16 to commercial areas on the other side.

Rehabilitating this section of the New England Thruway will provide a long-term improvement to this corridor, maintaining community connections across I-95, enhancing the overall safety for motorists and improving quality of life for residents in this area. It will mitigate air quality concerns, upgrade mobility and community connectivity and decrease the need for repeated maintenance which increase traffic disruptions.

Sincerely,

Robert Brisman  
President, Bus Association of New York  
West Point Tours, Inc.



**ASSOCIATED GENERAL CONTRACTORS  
OF NEW YORK STATE**

10 AIRLINE DRIVE, SUITE 203  
ALBANY, NY 12205-1025  
518-456-1134 P 518-456-1198 F  
www.agcnys.org

---

**MICHAEL J. ELMENDORF II**  
**PRESIDENT & CEO**

February 20, 2023

The Honorable Pete Buttigieg, Secretary  
U.S. Department of Transportation  
1200 New Jersey Ave, S.E.  
Washington, D.C. 20590

**RE: (RAISE) Grant application -- New England Thruway (I-95) in Westchester County**

Dear Secretary Buttigieg:

The Associated General Contractors of New York State (AGC NYS), New York's leading statewide construction industry association and the New York State Chapter of the Associated General Contractors of America, is pleased to write in support of the New York State Thruway Authority's application for a \$25 million U.S. Department of Transportation Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant application to supplement the cost of a project to rehabilitate a section of the New England Thruway (I-95) in Westchester County.

The New York State Thruway is the critical transportation artery in the State of New York, connecting communities and moving people, goods and commerce from one end of the state to the other. Among New York's transportation systems, the Thruway is unique in that it was constructed all at the same time more than 60 years ago and is seeing much of its infrastructure aging out or developing significant needs at the same time. It has seen significant declines in its pavement conditions system-wide—85 percent of its roadway base dates to the original construction of the system—and 75 percent of the Thruway's bridges are more than 60 years old.

The New England Thruway is a 15-mile segment that connects New York City (the Bronx) to the Connecticut state line and countless communities in between. The RAISE Grant will supplement funding to upgrade and improve this portion of I-95 that is used by more than 41 million travelers each year, accounting for approximately 14 percent of all Thruway traffic statewide.

This grant will help provide for the safe, efficient, and sustainable movement of people, goods, and services, while ensuring that surrounding communities, including approximately 60 percent which are Historically Disadvantaged Communities, benefit from the project. Specifically, a new shared-use path segment will provide a safe, accessible connection from the residential neighborhoods near I-95 and Interchange 16 to commercial areas on the other side.

The Honorable Pete Buttigieg  
February 20, 2023  
Page Two

Rehabilitating this section of the New England Thruway will provide a long-term improvement to this corridor, maintaining community connections across I-95, enhancing the overall safety for motorists and improving quality of life for residents in this area. It will also serve to mitigate air quality concerns, upgrade mobility and community connectivity and decrease the need for repeated maintenance which increase traffic disruptions.

It will also help create and sustain good paying, prevailing wage construction jobs and support the broader economy in the region and beyond.

We urge the Department's favorable consideration of the Thruway Authority's RAISE Grant application for this important project.

Very truly yours,

A handwritten signature in blue ink, appearing to read "M. J. Elmendorf II", followed by a long horizontal flourish extending to the right.

Michael J. Elmendorf II  
President & CEO, AGC NYS

# ACEC New York

*American Council of Engineering Companies of New York*

February 22, 2023

The Honorable Pete Buttigieg, Secretary  
U.S. Department of Transportation  
1200 New Jersey Ave, SE  
Washington, DC 20590

Dear Secretary Buttigieg:

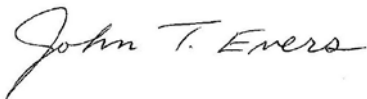
I write on behalf of the American Council of Engineering Companies of New York (ACEC New York) in support of the New York State Thruway Authority's \$25 million U.S. Department of Transportation Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant application to rehabilitate a section of the New England Thruway (I-95) in Westchester County.

ACEC New York is a proactive coalition representing nearly 300 member firms who engage in every discipline of engineering related to the built environment including civil, structural, mechanical, electrical, environmental, and geotechnical. We are a diverse group of consulting engineering firms from across New York State that collectively employ over 30,000 New Yorkers.

The New England Thruway is a 15-mile segment that connects New York City (the Bronx) to the Connecticut state line and countless communities in between. The RAISE Grant will supplement funding to upgrade and improve this portion of I-95 that is used by more than 41 million travelers each year, accounting for approximately 14 percent of all Thruway traffic statewide. This grant will help provide for the safe, efficient, and sustainable movement of people, goods, and services, while ensuring that surrounding communities, including approximately 60 percent which are Historically Disadvantaged Communities, benefit from the project.

Specifically, a new shared-use path segment will provide a safe, accessible connection from the residential neighborhoods near I-95 and Interchange 16 to commercial areas on the other side. Rehabilitating this section of the New England Thruway will provide a long-term improvement to this corridor, maintaining community connections across I-95, enhancing the overall safety for motorists and improving quality of life for residents. It will mitigate air quality concerns, upgrade mobility and community connectivity and decrease the need for repeated maintenance which increase traffic disruptions.

Sincerely,



John Evers, PhD,  
President/CEO  
ACEC New York

CC: Frank Hoare, Interim Executive Director, NYS Thruway Authority  
Dan Duprey, PE, Chair, ACEC New York  
Todd Gadd, PE, Chair, ACEC NY Thruway Committee



Executive Committee

**John T. Cooney, Jr.**  
Construction Industry  
Council of Westchester  
& Hudson Valley, Inc.

**Michael J. Elmendorf**  
Associated General  
Contractors of NYS

**John T. Evers, PhD.**  
ACEC New York  
American Council of  
Engineering Companies

**Daniel J. McGraw**  
International Union of  
Operating Engineers

**Patrick Purcell**  
LECET - NYS Laborers

**Robert G. Wessels**  
General Contractors  
Association of New York

**New York Roadway and Infrastructure Coalition**

111 Washington Avenue, Suite 501  
Albany, New York 12210  
(518) 436-0786  
office@wearenyric.org  
[www.wearenyric.org](http://www.wearenyric.org)

**Marc Herbst**  
*President*  
*Long Island Contractors Association - LICA*

**Ross Pepe**  
*President-emeritus*

**John Cooney, Jr.**  
*Treasurer*

**Stephen Morgan**  
*Secretary*  
Featherstonhaugh,  
Wiley & Clyne

February 24, 2023

The Honorable Pete Buttigieg, Secretary  
U.S. Department of Transportation  
1200 New Jersey Ave, SE  
Washington, DC 20590

Dear Secretary Buttigieg:

I write in support of the New York State Thruway Authority's \$25 million U.S. Department of Transportation Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant application.

The RAISE Grant will supplement the cost of a project to rehabilitate a section of the New England Thruway (I-95) in Westchester County.

The New England Thruway is a 15-mile segment that connects New York City (the Bronx) to the Connecticut state line and countless communities in between. The RAISE Grant will supplement funding to upgrade and improve this portion of I-95 that is used by more than 41 million travelers each year, accounting for approximately 14 percent of all Thruway traffic statewide.

This grant will help provide for the safe, efficient, and sustainable movement of people, goods, and services, while ensuring that surrounding communities, including



approximately 60 percent which are Historically Disadvantaged Communities, benefit from the project.

Specifically, a new shared-use path segment will provide a safe, accessible connection from the residential neighborhoods near I-95 and Interchange 16 to commercial areas on the other side.

Rehabilitating this section of the New England Thruway will provide a long-term improvement to this corridor, maintaining community connections across I-95, enhancing the overall safety for motorists and improving quality of life for residents in this area. It will mitigate air quality concerns, upgrade mobility and community connectivity and decrease the need for repeated maintenance which increase traffic disruptions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Marc Herbst', written in a cursive style.

Marc Herbst  
President, NYRIC



**Mailing Address**  
1415 Kellum Place  
Garden City, NY 11530  
(516) 873-2259

February 22, 2023

The Honorable Pete Buttigieg, Secretary  
U.S. Department of Transportation  
1200 New Jersey Ave, SE  
Washington, DC 20590

Dear Secretary Buttigieg:

I write in support of the New York State Thruway Authority's \$25 million U.S. Department of Transportation Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant application.

The RAISE Grant will supplement the cost of a project to rehabilitate a section of the New England Thruway (I-95) in Westchester County.

The New England Thruway is a 15-mile segment that connects New York City (the Bronx) to the Connecticut state line and countless communities in between. The RAISE Grant will supplement funding to upgrade and improve this portion of I-95 that is used by more than 41 million travelers each year, accounting for approximately 14 percent of all Thruway traffic statewide.

This grant will help provide for the safe, efficient, and sustainable movement of people, goods, and services, while ensuring that surrounding communities, including approximately 60 percent which are Historically Disadvantaged Communities, benefit from the project.

Specifically, a new shared-use path segment will provide a safe, accessible connection from the residential neighborhoods near I-95 and Interchange 16 to commercial areas on the other side.

Rehabilitating this section of the New England Thruway will provide a long-term improvement to this corridor, maintaining community connections across I-95, enhancing the overall safety for motorists and improving quality of life for residents in this area. It will mitigate air quality concerns, upgrade mobility and community connectivity and decrease the need for repeated maintenance which increase traffic disruptions.

Sincerely,

A handwritten signature in black ink that reads 'John Corlett'.

John A. Corlett  
Legislative Committee Chairman

JAC:dc  
(Pete ButtigiegRaise Grant-2/22/23NYS)



**United Community Center of Westchester, Inc.**

360 North Ave New Rochelle, N.Y. 10801

■ Phone: (914)-813-2896 ■ Fax: (914)-813-3058

WWW.UCCENTER.ORG

02/20/2023

The Honorable Pete Buttigieg, Secretary  
U.S. Department of Transportation  
1200 New Jersey Ave, SE  
Washington, DC 20590

Dear Secretary, Buttigieg:

I write in support of the New York State Thruway Authority's \$25 million U.S. Department of Transportation Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant application. The RAISE Grant will supplement the cost of a project to rehabilitate a section of the New England Thruway (1-95) in Westchester County. The New England Thruway is a 15-mile segment that connects New York City (the Bronx) to the Connecticut state line and countless communities in between. The RAISE Grant will supplement funding to upgrade and improve this portion of 1-95 that is used by more than 41 million travelers each year, accounting for approximately 14 percent of all Thruway traffic statewide.

This grant will help provide for the safe, efficient, and sustainable movement of people, goods, and services, while ensuring that surrounding communities, including approximately 60 percent which are Historically Disadvantaged Communities, benefit from the project.

Specifically, a new shared-use path segment will provide a safe, accessible connection from the residential neighborhoods near 1-95 and Interchange 16 to commercial areas on the other side.

Rehabilitating this section of the New England Thruway will provide a long-term improvement to this corridor, maintaining community connections across 1-95, enhancing the overall safety for motorists, and improving quality of life for residents in this area. It will mitigate air quality concerns, upgrade mobility and community connectivity and decrease the need for repeated maintenance which increases traffic disruptions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jacqueline Agudelo', is written over the word 'Sincerely,'.

Jackeline Agudelo  
Executive Director