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NEW YORK TRANSPORTATION BY THE NUMBERS:

PROVIDING A MODERN, SUSTAINABLE TRANSPORTATION SYSTEM IN THE EMPIRE STATE

JANUARY 2026

Founded in 1971, TRIP ® of Washington, DC, is a nonprofit organization that researches, evaluates and distributes economic and technical data on surface transportation issues. TRIP is sponsored by insurance companies, equipment manufacturers, distributors and suppliers; businesses involved in highway and transit engineering and construction; labor unions; and organizations concerned with efficient and safe surface transportation.

EXECUTIVE SUMMARY

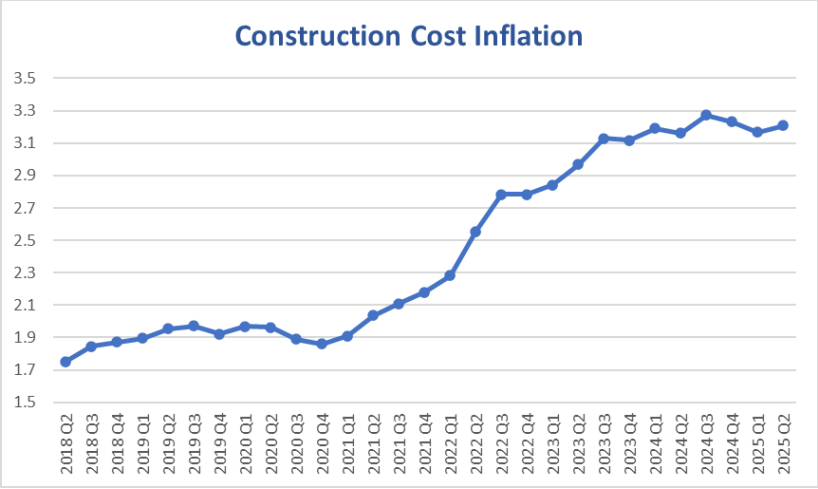
NEW YORK TRANSPORTATION FUNDING

New York's roads, highways and bridges are funded by investments from local, state and federal governments. Increasing inflation in the cost of highway construction and declining capital threaten the state's ability to deliver needed improvements road and bridge conditions, safety and reliability.

From 2023 to 2024, NYSDOT's capital investment in pavement and bridge conditions, mobility and safety dropped by nearly $262 million, declining from $3.36 billion to $3.1 billion – a decrease of eight percent. Capital spending declined in six of NYSDOT's 11 regions, with reductions of up to 70 percent in some regions. Meanwhile, the need for repairs is growing: 270 miles of state-maintained roadway required reconstruction in 2023, up from 142 miles in 2022. Overall, 73 percent of state-maintained pavements need some level of treatment, at an estimated cost of $7.76 billion. Needed improvements to county- and locally owned bridges - just over half of the state's bridge inventory - total nearly $29 billion.

Rising vehicle fuel efficiency, increasing adoption of electric and hybrid vehicles and inflation in highway construction costs will make it difficult for revenue from state and federal motor fuel taxes and other transportation funding sources to keep pace with New York's future transportation needs.

Increasing inflation has also hampered New York's ability to complete needed projects and improvements, as the available funding now covers significantly less work. Based on the Consumer Price Index, it is estimated that inflation has eroded $3.8 billion of New York's core construction funding over the last five years (SFY 2021-22 – SFY 2025-26). The Federal Highway Administration's national highway construction cost index, which measures labor and materials cost, increased by 47 percent from the beginning of 2022 through the first half of 2025.



THE HIDDEN COSTS OF DEFICIENT ROADS

Driving on New York roads that are deteriorated, congested and that lack some desirable safety features costs New York drivers a total of $40.3 billion each year. TRIP has calculated the cost to the average motorist in the state's largest urban areas in the form of additional vehicle operating costs (VOC) as a result of driving on rough roads, the cost of lost time and wasted fuel due to congestion, and the financial cost of traffic crashes. The statewide cost to drivers has increased 44 percent since 2022, when it totaled $28 billion. The chart below details the cost of deficient roads statewide and for the average driver in the state's largest urban areas.

Location	VOC	Safety	Congestion	TOTAL
Albany-Schenectady-Troy	$575	$583	$940	$2,098
Binghamton	$558	$618	$594	$1,770
Buffalo-Niagara Falls	$498	$512	$1,193	$2,203
New York-Newark-Jersey City	$728	$365	$2,662	$3,755
Poughkeepsie-Newburgh-Middletown	$612	$726	$818	$2,156
Rochester	$438	$641	$1,119	$2,198
Syracuse	$537	$619	$535	$1,691
Utica	$413	$697	$515	$1,625
New York Statewide	**$8.8 Billion**	**$11.5 Billion**	**$20 Billion**	**$40.3 Billion**

NEW YORK ROADS PROVIDE A ROUGH RIDE

Due to a lack of funding, 45 percent of major state and locally-owned roads in New York are in poor or mediocre condition. Driving on rough roads costs the average New York driver $718 annually in additional vehicle operating costs – a total of $8.8 million statewide. The chart below details pavement conditions on major roads in the state's largest urban areas and statewide.

Location	Poor	Mediocre	Fair	Good
Albany-Schenectady-Troy	17%	25%	23%	34%
Binghamton	18%	21%	24%	37%
Buffalo-Niagara Falls	14%	23%	24%	40%
New York-Newark-Jersey City	31%	16%	18%	35%
Poughkeepsie-Newburgh-Middletown	19%	27%	19%	34%
Rochester	12%	19%	22%	47%
Syracuse	19%	18%	15%	47%
Utica	12%	16%	21%	51%
New York Statewide	**25%**	**20%**	**16%**	**39%**

NEW YORK BRIDGE CONDITIONS

Ten percent (1,741 of 17,666) of New York's bridges are rated in poor/structurally deficient condition, the tenth highest share in the nation. Bridges that are rated poor/structurally deficient have significant deterioration of the bridge deck, supports or other major components. Fifty-eight percent of the state's bridges are rated in fair condition and the remaining 32 percent are in good condition. The chart below details bridge conditions statewide and in the state's largest urban areas.

Location	POOR/STRUCTURALLY DEFICIENT		FAIR		GOOD		TOTAL BRIDGES
	Number	Share	Number	Share	Number	Share	
Albany-Schenectady-Troy	82	10%	487	58%	270	32%	839
Binghamton	28	4%	465	67%	197	29%	690
Buffalo - Niagara Falls	104	9%	752	64%	318	27%	1,174
New York -Newark-Jersey City	435	7%	4,562	68%	1,679	25%	6,676
Poughkeepsie-Newburgh-Middletown	129	16%	486	60%	191	24%	806
Rochester	156	12%	691	55%	405	32%	1,252
Syracuse	95	11%	515	58%	275	31%	885
Utica	58	12%	215	43%	223	45%	496
NEW YORK STATEWIDE	**1,741**	**10%**	**10,227**	**58%**	**5,698**	**32%**	**17,666**

As a result of decreased investment, from 2018 to 2023, the number of state-owned bridges in fair/poor condition has increased from 4,117 to 4,402, and bridge conditions have declined in each of the 11 NYSDOT regions.

NEW YORK ROADS ARE CONGESTED

Due to the Covid-19 pandemic, vehicle travel in New York dropped by as much as 45 percent in April 2020 (as compared to vehicle travel during the same month the previous year). By 2024, vehicle miles of travel (VMT) in New York had rebounded to two percent below pre-pandemic levels in 2019. NYSDOT estimates that vehicle travel in New York will increase by 23 percent by 2040.

Congested roads choke commuting and commerce and cost New York drivers $20 billion each year in the form of lost time and wasted fuel. The chart below details the annual number of hours and gallons of fuel lost to traffic congestion by the average motorist in each urban area, as well as the annual cost to each average driver in lost time and wasted fuel.

Location	Hours Lost to Congestion	Annual Cost Per Driver	Gallons of Fuel Wasted Per Driver
Albany-Schenectady-Troy	43	$940	18
Binghamton	33	$594	7
Buffalo-Niagara Falls	45	$1,193	16
New York-Newark-Jersey City	99	$2,662	31
Poughkeepsie-Newburgh-Middletown	35	$818	15
Rochester	41	$1,119	16
Syracuse	29	$535	7
Utica	29	$515	6

NEW YORK TRAFFIC SAFETY AND FATALITIES

From 2019 to 2024, 6,529 people were killed in traffic crashes in New York, an average of 1,088 fatalities each year. New York traffic fatalities began to increase dramatically in 2020 even as vehicle travel rates plummeted due to the COVID-19 pandemic. The number of fatalities continued to increase in 2021 and 2022 before falling in 2023 and 2024. While the state's traffic fatality rate decreased 15 percent from 2021 to 2024, New York's traffic fatality rate in 2024 was still 15 percent higher than a decade ago.

NEW YORK TRAFFIC FATALITY DATA									
	2014	2019	2020	2021	2022	2023	2024	2014-2024 Change	2021-2024 Change
Traffic Fatalities	1,039	934	1,045	1,156	1,175	1,114	1,105	6%	-4%
Fatalities per 100M VMT	0.80	0.75	1.02	1.08	1.02	0.94	0.92	15%	-15%

TRIP estimates that roadway features, while not the primary factor, were likely a contributing factor in approximately one-third of all fatal traffic crashes, resulting in $11.5 million in economic costs in New York in 2024. The economic costs of traffic crashes include work and household productivity losses, property damage, medical costs, rehabilitation costs, legal and court costs, congestion costs and emergency services. The chart below shows the number of people killed in traffic crashes in the state's largest urban areas between 2019 and 2023, and the cost of traffic cashes per driver.

Location	Average Fatalities 2019-2023	Safety Costs per Driver
Albany-Schenectady-Troy	46	$583
Binghamton	19	$618
Buffalo - Niagara Falls	73	$512
New York -Newark-Jersey City	650	$365
Poughkeepsie-Newburgh-Middletown	55	$726
Rochester	83	$641
Syracuse	49	$619
Utica	20	$697

TRANSPORTATION AND ECONOMIC DEVELOPMENT

In 2024 New York's freight system moved 732 million tons of freight, valued at $1.3 trillion. From 2024 to 2050, freight moved annually in New York by trucks is expected to increase 62 percent by weight and 98 percent by value (inflation-adjusted dollars). This anticipated growth in freight transport in New York, and the rest of the U.S., is a result of further economic growth, changing business and retail models, increasing international trade, and rapidly changing consumer expectations that place an emphasis on faster deliveries, often of smaller packages or payloads.

According to a report by the American Road & Transportation Builders Association, the design, construction and maintenance of transportation infrastructure in New York supports approximately 318,600 full-time jobs across all sectors of the state economy. These workers earn $9.8 billion annually. Approximately 3.5 million full-time jobs in New York in key industries like tourism, retail sales, agriculture and manufacturing are completely dependent on the state's transportation network.

Sources of information for this report include the American Association of State Highway and Transportation Officials (AASHTO), the American Road & Transportation Builders Association (ARTBA), the Bureau of Transportation Statistics (BTS), the Federal Highway Administration (FHWA), the National Highway Traffic Safety Administration (NHTSA), the New York State Department of Transportation (NYSDOT), the Texas Transportation Institute (TTI), and the U.S. Census Bureau. Coverage page photo credit: Flickr.com.

INTRODUCTION

New York's roads, highways and bridges form vital transportation links for the state's residents, visitors and businesses, providing daily access to homes, jobs, shopping, natural resources and recreation. Modernizing New York's transportation system is critical to quality of life and economic competitiveness in the Empire State. Inadequate transportation investment, which will result in deteriorated transportation facilities and diminished access, will negatively affect New York's economic competitiveness and quality of life.

To accommodate population and economic growth, maintain its level of economic competitiveness and achieve further economic growth, New York will need to maintain and modernize its roads, highways and bridges by improving the physical condition of its transportation network and enhancing the system's ability to provide efficient, reliable and safe mobility for residents, visitors and businesses. Making needed improvements to New York's roads, highways, bridges and transit systems could also provide a significant boost to the state's economy by creating jobs in the short term and stimulating long-term economic growth as a result of enhanced mobility and access.

This report examines the condition, use, safety and funding of New York's roads, highways and bridges, and the state's future mobility needs. Sources of information for this report include the American Association of State Highway and Transportation Officials (AASHTO), the American Road & Transportation Builders Association (ARTBA), the Bureau of Transportation Statistics (BTS), the Federal Highway Administration (FHWA), the National Highway Traffic Safety Administration (NHTSA), the New York State Department of Transportation (NYSDOT), the Texas Transportation Institute (TTI), and the U.S. Census Bureau.

In addition to statewide data, the TRIP report includes regional data for the Albany-Schenectady-Troy, Binghamton, Buffalo-Niagara Falls, New York-Newark-Jersey City, Poughkeepsie-Newburgh-Middletown, Rochester, Syracuse and Utica urban areas. An urban area is defined as a region's municipalities and surrounding suburbs for pavement condition and congestion data; bridge and traffic fatality data include a region's major counties.[1]

POPULATION, TRAVEL AND ECONOMIC TRENDS IN NEW YORK

New York motorists and businesses require a high level of personal and commercial mobility. To foster quality of life and spur continued economic growth, it is critical that the state provide a safe and modern transportation system that can accommodate future growth in population, tourism, business, recreation and vehicle travel.

New York's population grew to approximately 19.9 million residents in 2024.[2] New York had approximately 12.3 million licensed drivers in 2023.[3] From 2000 to 2024, New York's gross domestic product (GDP), a measure of the state's economic output, increased by 51 percent, when adjusted for inflation.[4] U.S. GDP increased 66 percent during the same period.[5]

Due to the Covid-19 pandemic, vehicle travel in New York dropped by as much as 45 percent in April 2020 (as compared to vehicle travel during the same month the previous year), but rebounded to two percent below 2019's pre-Covid levels in 2024.[6] The New York State Department of Transportation estimates that vehicle travel in New York will increase by 23 percent by 2040.[7]

CONDITION OF NEW YORK ROADS

The life cycle of New York's roads is greatly affected by the state and local governments' ability to perform timely maintenance and upgrades to ensure that road and highway surfaces last as long as possible.

The pavement data in this report, which is for all arterial and collector roads and highways, is provided by the Federal Highway Administration (FHWA), based on data submitted annually by the New York State Department of Transportation on the condition of major state and locally maintained roads and highways. Pavement data for Interstate highways and other principal arterials is collected for all system mileage, whereas pavement data for minor arterial and all collector roads and highways is based on sampling portions of roadways as prescribed by FHWA to ensure the data collected is adequate to provide an accurate assessment of pavement conditions on these roads and highways.

Statewide, 25 percent of New York's major locally and state-maintained roads are in poor condition and 20 percent are in mediocre condition.[8] Sixteen percent of New York's major roads are in fair condition, and the remaining 39 percent are in good condition.[9]

Thirty-nine percent of New York's major locally and state-maintained **urban** roads and highways have pavements rated in poor condition and 24 percent are in mediocre condition.[10] Fifteen percent are in fair condition and the remaining 23 percent New York's major urban roads are rated in good condition.[11]

Six percent of New York's major locally and state-maintained **rural** roads and highways have pavements rated in poor condition and 16 percent are in mediocre condition.[12] Eighteen percent are in fair condition, and the remaining 60 percent of New York's rural roads are rated in good condition.[13]

The chart below details pavement conditions on major locally and state-maintained roads in New York's largest urban areas and statewide.

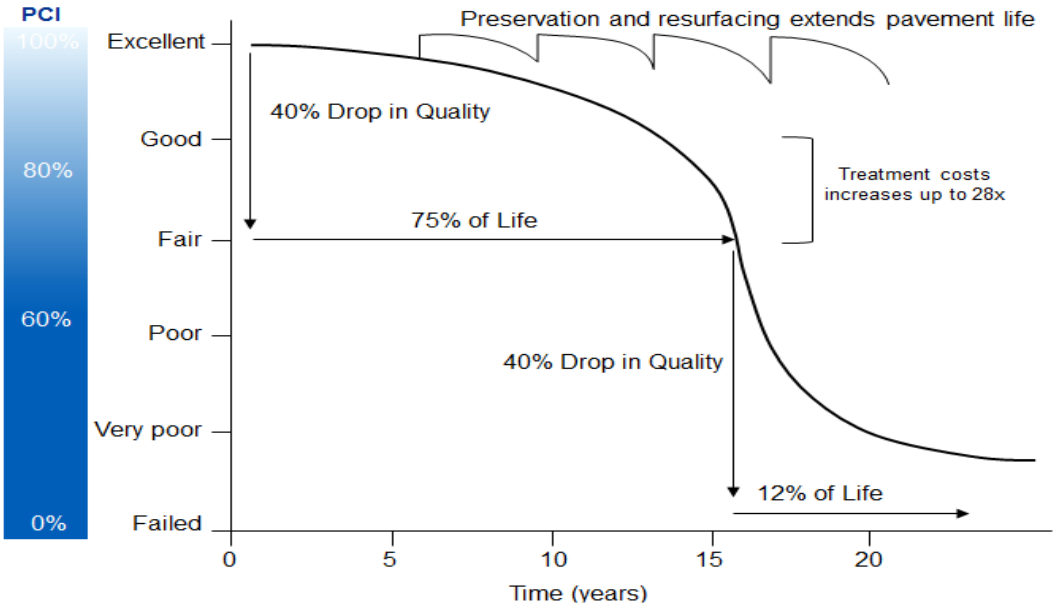
Chart 1. Pavement conditions on major roads in New York's largest urban areas and statewide.

Location	Poor	Mediocre	Fair	Good
Albany-Schenectady-Troy	17%	25%	23%	34%
Binghamton	18%	21%	24%	37%
Buffalo-Niagara Falls	14%	23%	24%	40%
New York-Newark-Jersey City	31%	16%	18%	35%
Poughkeepsie-Newburgh-Middletown	19%	27%	19%	34%
Rochester	12%	19%	22%	47%
Syracuse	19%	18%	15%	47%
Utica	12%	16%	21%	51%
New York Statewide	**25%**	**20%**	**16%**	**39%**

Source: TRIP analysis of Federal Highway Administration data.

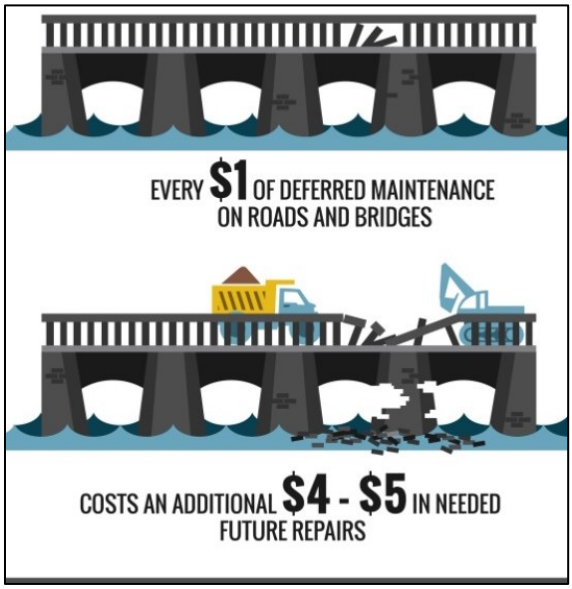
Pavement failure is caused by a combination of traffic, moisture and climate. Moisture often works its way into road surfaces and the materials that form the road's foundation. Road surfaces at intersections are more prone to deterioration because the slow-moving or standing loads occurring at these sites subject the pavement to higher levels of stress. It is critical that roads are fixed before they require major repairs because reconstructing roads costs approximately four times more than resurfacing them.[14] As roads and highways continue to age, they will reach a point of deterioration where routine paving and maintenance will not be adequate to keep pavement surfaces in good condition and costly reconstruction of the roadway and its underlying surfaces will become necessary.

Chart 2. Pavement Condition Cycle Time with Treatment and Cost.



Source: North Carolina Department of Transportation (2016). 2016 Maintenance Operations and Performance Analysis Report

Long-term repair costs increase significantly when road and bridge maintenance is deferred, as road and bridge deterioration accelerates later in the service life of a transportation facility and requires more costly repairs. A report on maintaining pavements found that every $1 of deferred maintenance on roads and bridges costs an additional $4 to $5 in needed future repairs.[15]



THE COST TO MOTORISTS OF ROADS IN INADEQUATE CONDITION

TRIP has calculated the additional cost to motorists of driving on roads in poor, mediocre or fair condition. When roads are in poor, mediocre or fair condition – which may include potholes, rutting or rough surfaces – the cost to operate and maintain a vehicle increases. These additional vehicle operating costs (VOC) include accelerated vehicle depreciation, additional vehicle repair costs, increased fuel consumption and increased tire wear. TRIP estimates that additional VOC borne by New York motorists as a result of deteriorated road conditions is $8.8 billion annually, an average of $718 per driver statewide.[16] The chart below details additional VOC per motorist in the state's largest urban areas.

Chart 3. Vehicle operating costs per motorist as a result of driving on deteriorated roads.

Location	Additonal Vehicle Operating Cost
Albany-Schenectady-Troy	$575
Binghamton	$558
Buffalo - Niagara Falls	$498
New York -Newark-Jersey City	$728
Poughkeepsie-Newburgh-Middletown	$612
Rochester	$438
Syracuse	$537
Utica	$413
New York Statewide	**$718**

Source: TRIP estimates.

Additional vehicle operating costs have been calculated in the Highway Development and Management Model (HDM), which is recognized by the U.S. Department of Transportation and more than 100 other countries as the definitive analysis of the impact of road conditions on vehicle operating costs. The HDM report is based on numerous studies that have measured the impact of various factors, including road conditions, on vehicle operating costs.[17] The HDM study found that road deterioration increases ownership, repair, fuel and tire costs. The report found that deteriorated roads accelerate the pace of depreciation of vehicles and the need for repairs because the stress on the vehicle increases in proportion to the level of roughness of the pavement surface. Similarly, tire wear and fuel consumption increase as roads deteriorate since there is less efficient transfer of power to the drive train and additional friction between the road and the tires.

TRIP's additional VOC estimate is based on taking the average number of miles driven annually by a motorist, calculating current VOC based on AAA's driving cost estimates and then using the HDM model to estimate the additional VOC paid by drivers as a result of substandard roads.[18] Additional research on the impact of road conditions on fuel consumption by the Texas Transportation Institute (TTI) is also factored into TRIP's vehicle operating cost methodology.

BRIDGE CONDITIONS IN NEW YORK

New York's bridges form key links in the state's highway system, providing communities and individuals access to employment, schools, shopping and medical facilities, and facilitating commerce and access for emergency vehicles.

Ten percent (1,741 of 17,666) of New York's locally and state-owned bridges are rated in poor/structurally deficient condition, the tenth highest share in the U.S.[19] This includes all bridges 20 feet or longer. A bridge is deemed poor/structurally deficient if there is significant deterioration of the bridge deck, supports or other major components.

Bridges that are poor/structurally deficient may be posted for lower weight limits or closed if their condition warrants such action. Deteriorated bridges can have a significant impact on daily life. Restrictions on vehicle weight may cause many vehicles – especially emergency vehicles, commercial trucks, school buses and farm equipment – to use alternate routes to avoid posted bridges. Redirected trips also lengthen travel time, waste fuel and reduce the efficiency of the local economy.

Fifty-eight percent of New York's locally and state-owned bridges have been rated in fair condition.[20] A fair rating indicates that a bridge's structural elements are sound but minor deterioration has occurred to the bridge's deck, substructure or superstructure. The remaining 32 percent of the state's bridges are rated in good condition.[21]

A report released in 2024 by the office of the New York State Comptroller estimated that the cost for needed work on bridges owned by counties and local governments in the state - which make up just over half of the state's bridges – was approximately $29 billion.[22]

The chart below shows the condition of bridges statewide and in New York's largest urban areas.

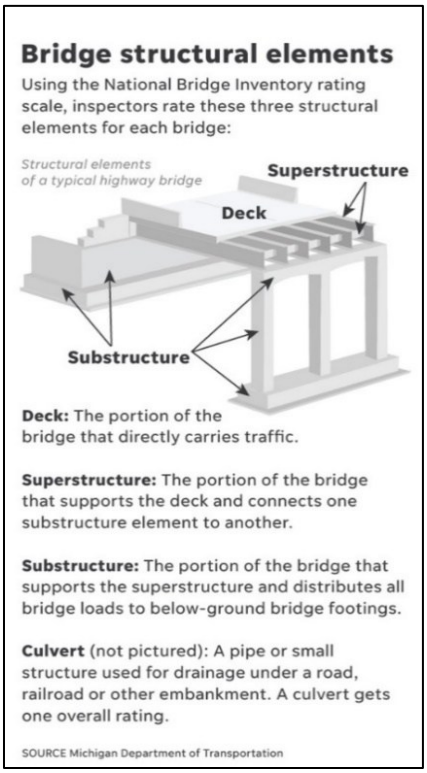


Chart 4. Bridge conditions statewide and in New York's largest urban areas.

Location	POOR/STRUCTURALLY DEFICIENT		FAIR		GOOD		TOTAL BRIDGES
	Number	Share	Number	Share	Number	Share	
Albany-Schenectady-Troy	82	10%	487	58%	270	32%	839
Binghamton	28	4%	465	67%	197	29%	690
Buffalo - Niagara Falls	104	9%	752	64%	318	27%	1,174
New York -Newark-Jersey City	435	7%	4,562	68%	1,679	25%	6,676
Poughkeepsie-Newburgh-Middletown	129	16%	486	60%	191	24%	806
Rochester	156	12%	691	55%	405	32%	1,252
Syracuse	95	11%	515	58%	275	31%	885
Utica	58	12%	215	43%	223	45%	496
NEW YORK STATEWIDE	**1,741**	**10%**	**10,227**	**58%**	**5,698**	**32%**	**17,666**

Source: TRIP analysis of Federal Highway Administration National Bridge Inventory (2025).

Most bridges are designed to last 50 years before major overhaul or replacement, although many newer bridges are being designed to last 75 years or longer. In New York, 49 percent of the state's bridges were built in 1969 or earlier, the 11th highest share in the nation.[23]

The service life of bridges can be extended by performing routine maintenance such as resurfacing decks, painting surfaces, ensuring that a facility has good drainage and replacing deteriorating components. But most bridges will eventually require more costly reconstruction or major rehabilitation to remain operable.

TRAFFIC CONGESTION IN NEW YORK

While traffic congestion is largely constrained to the state's urban areas, increasing congestion on New York's major highways and roads hampers the state's ability to support economic development and quality of life by reducing the reliability and efficiency of personal and commercial travel, including the transport of goods and services. Traffic congestion robs commuters of time and money and imposes increased costs on businesses, shippers and manufacturers, which are often passed along to consumers. Increased levels of congestion can also reduce the attractiveness of a location when a company is considering expansion or deciding where to locate a new facility.

Based on the Texas Transportation Institute's 2025 Urban Mobility Report, which analyzes urban traffic congestion levels and provides estimates on the amount of time and the value of lost time and wasted fuel as a result of traffic congestion, the chart below includes the average annual per-driver number of hours and gallons of fuel lost and the cost of lost time and wasted fuel due to congestion in each of New York's largest urban areas.

Chart 5. Annual hours and gallons of fuel lost to congestion and congestion costs per driver.

ANNUAL CONGESTION IMPACT PER DRIVER			
Location	**Hours Lost**	**Cost of Lost Time & Fuel**	**Gallons of Fuel Wasted**
Albany-Schenectady-Troy	43	$940	18
Binghamton	33	$594	7
Buffalo-Niagara Falls	45	$1,193	16
New York-Newark-Jersey City	99	$2,662	31
Poughkeepsie-Newburgh-Middletown	35	$818	15
Rochester	41	$1,119	16
Syracuse	29	$535	7
Utica	29	$515	6

Source: 2025 Texas Transportation Institute (TTI) Urban Mobility Report

Based on the TTI report, TRIP estimates that the total cost of traffic congestion in New York in the form of lost time and wasted fuel is $20 billion annually.[24] Increasing congestion on New York's major highways and roads hampers the state's ability to support economic development and quality of life by reducing the reliability and efficiency of personal and commercial travel, including the transport of goods and services

TRAFFIC SAFETY IN NEW YORK

A total of 6,529 people were killed in New York traffic crashes from 2019 to 2024, an average of 1,088 fatalities per year.[25] New York had 0.92 traffic fatalities for every 100 million miles traveled in 2024, lower than the national average of 1.2.[26] The fatality rate per 100 million miles of travel on New York's rural, non-Interstate roads in 2023 was significantly higher than all other roads in the state (1.43 vs. 0.83).[27] From 2019 to 2023, 30 percent of those killed in New York traffic crashes were pedestrians or bicyclists.[28]

Nationwide and in New York, traffic fatalities began to increase dramatically in 2020 even as vehicle travel rates plummeted due to the COVID-19 pandemic. The number of fatalities in New York increased sharply in 2021 and 2022 before falling in 2023 and 2024. While the state's traffic fatality rate decreased 15 percent from 2021 to 2024, New York's traffic fatality rate in 2024 was still 15 percent higher than a decade ago.[29]

Chart 6. Traffic fatalities and fatality rates in New York 2019 – 2023.

NEW YORK TRAFFIC FATALITY DATA									
	2014	2019	2020	2021	2022	2023	2024	2014-2024 Change	2021-2024 Change
Traffic Fatalities	1,039	934	1,045	1,156	1,175	1,114	1,105	6%	-4%
Fatalities per 100M VMT	0.80	0.75	1.02	1.08	1.02	0.94	0.92	15%	-15%

Source: TRIP analysis of Federal Highway Administration and National Highway Traffic Safety Administration data.

Three major factors are associated with fatal vehicle crashes: driver behavior, vehicle characteristics and roadway features. Roadway features that impact safety include the number of lanes, lane widths, lighting, lane markings, rumble strips, shoulders, guard rails, other shielding devices, median barriers and intersection design.

Traffic crashes in New York imposed a total of $34.4 billion in economic costs in 2024.[30] TRIP estimates that roadway features, while not the primary factor, were likely a contributing factor in approximately one-third of all fatal traffic crashes, resulting in $11.5 million in economic costs in New York in 2024.[31]

According to a 2023 National Highway Traffic Safety Administration (NHTSA) report, the tangible economic costs of traffic crashes include medical care, lost productivity, legal and court costs, insurance administrative costs, workplace costs, congestion impacts (travel delay, excess fuel consumption and pollution), emergency services, and property damage. NHTSA has also estimated the annual value of the lost quality-of-life cost of traffic crashes causing serious injury or death. The lost quality-of-life costs include the loss of remaining lifespan, extended or lifelong physical impairment, or physical pain.

The chart below shows the average number of people killed in traffic crashes in the state's largest urban areas between 2019 and 2023 and the cost of traffic crashes per driver.[32]

Chart 7. Average fatalities between 2019 and 2023 and the annual cost of crashes per driver.

Location	Average Fatalities 2019-2023	Safety Costs per Driver
Albany-Schenectady-Troy	46	$583
Binghamton	19	$618
Buffalo - Niagara Falls	73	$512
New York -Newark-Jersey City	650	$365
Poughkeepsie-Newburgh-Middletown	55	$726
Rochester	83	$641
Syracuse	49	$619
Utica	20	$697

Source: TRIP analysis of NHTSA data.

The significant increase in traffic fatalities since the onset of the pandemic appears largely related to increased risks being taken by drivers. In an October 2021 report, the National Highway Traffic Safety Administration found that "after the declaration of the public health emergency in March 2020, driving patterns and behaviors in the United States changed significantly. Of the drivers who drove on the roads, some engaged in riskier behavior, including speeding, failure to wear seat belts, and driving under the influence of alcohol or drugs."[33]The AAA Foundation for Traffic Safety (AAAFTS) drew similar conclusions about the role of increased risks being taken by drivers during the pandemic.

A survey taken of drivers in October and November 2020 by the AAAFTS asked whether their level of driving had decreased, remained the same or increased since the beginning of COVID-19 related restrictions, and whether the motorist had engaged in a variety of risky driving behaviors in the previous 30 days.[34] In a February 2022 brief about the survey, the AAAFTS noted that drivers who maintained or increased their pre-COVID travel levels indicated that they were more likely to engage in risky driving behavior, including speeding, not wearing a seat belt, being impaired and driving aggressively. "It is possible that many of the individuals who were willing to travel—and even increase their travel—despite the health risks associated with the pandemic were already more willing than average to take other risks," the AAAFTS report found.[35]

In early 2022 the U.S. Department of Transportation adopted a comprehensive National Roadway Safety Strategy, a roadmap for addressing the nation's roadway safety crisis based on a Safe System approach that acknowledges the following: humans make mistakes and are physically vulnerable; traffic deaths and serious injuries are unacceptable; traffic deaths and serious injuries need to be reduced by the provision of a redundant transportation system that reduces or minimizes crashes and ensures that, if crashes do occur, they do not result in serious injury or death.[36]

Chart 8. The Safe System Approach

Source: US Department of Transportation.

The Safe System approach, which is also being adopted by state and local transportation agencies has five objectives:

- Safer People: Encourage safe, responsible behavior by people who use our roads, and create conditions that prioritize their ability to reach their destination unharmed.
- Safer Roads: Design roadway environments to mitigate human mistakes and account for injury tolerances, to encourage safer behaviors, and to facilitate safe travel by the most vulnerable users.
- Safer Vehicles: Expand the availability of vehicle systems and features that help to prevent crashes and minimize the impact of crashes on both occupants and non-occupants.
- Safer Speeds: Promote safer speeds in all roadway environments through a combination of thoughtful, context-appropriate roadway design, targeted education and outreach campaigns, and enforcement.

- Post-Crash Care: Enhance the survivability of crashes through expedient access to emergency medical care, while creating a safe working environment for vital first responders and preventing secondary crashes through robust traffic incident management practices.

Improving safety on the nation's roadways will require that additional steps are taken to make further progress in achieving the Safe System's objectives. NHTSA, which provides states with roadway safety grants, requires states to submit annually a state highway safety plan. The state plans outline numerous steps states are taking to improve traffic safety. Elements of these state roadway safety plans aimed at addressing the Safe System objectives include:

- Safer People: education on speeding, impaired or disadvantaged driving; education on safe pedestrian and bicycling behavior; education on driving safely around large commercial vehicles; enforcement of commercial driver license and vehicle weight requirements; extension of safety belt laws and their enforcement to include all passenger vehicle occupants; enhancing enforcement action of speeding, impaired, aggressive and distracted driving, particularly at high-risk locations; increase penalties, particularly for repeat offender drivers; and increased enforcement at work zones.
- Safer Roads: converting intersections to roundabouts; removing or shielding roadside objects; the addition of left-turn lanes at intersections; improved signalization and lighting at intersections; adding or improving median barriers; improved roadway lighting; adding centerline or shoulder rumble strips; improving pedestrian and bicycle facilities, including sidewalks and bike lanes and providing pedestrian crossing islands; improved work zone safety measures; wider lanes and paved shoulders; upgrading roads from two lanes to four lanes; providing or improving lane markings; updating rail crossings; eliminating vertical pavement drop-offs; and providing large truck parking spaces.
- Safer Vehicles: Support the development, testing and deployment of connected and autonomous vehicle technology such as collision avoidance, lane departure avoidance systems and turning detection systems.
- Safer Speeds: Where appropriate, provide roadway features to encourage safer speeds, including traffic roundabouts and curb extensions; improved signage and dynamic speed signing at high-risk locations; education on the consequences of speeding; and increased speeding enforcement, particularly at high-risk locations.
- Post-Crash Care: Reduce crash response time including the use of emergency vehicle preemption technology; improve emergency response to multi-vehicle or hazardous material crashes; and increase access to level one or two trauma centers for seriously-injured crash victims.

The U.S. has a $146 billion backlog in needed roadway safety improvements, according to a 2017 report from the AAA Foundation for Traffic Safety. The report found implementing these cost-effective and needed roadway safety improvements on U.S. roadways would save approximately 63,700 lives and reduce the number of serious injuries as a result of traffic crashes by approximately 350,000 over 20 years.

TRANSPORTATION FUNDING IN NEW YORK

Investment in New York's roads, highways and bridges is funded by local, state and federal governments. A lack of sufficient funding at all levels, coupled with the impact of rising inflation, will make it difficult to adequately maintain and improve the state's existing transportation system.

From 2023 to 2024, NYSDOT's capital investment in pavement and bridge conditions, mobility and safety fell by nearly $262 million, declining from $3.36 billion to $3.1 billion – a drop of eight percent.[37] Capital spending declined in six of NYSDOT's 11 regions, with reductions of up to 70 percent in some regions.

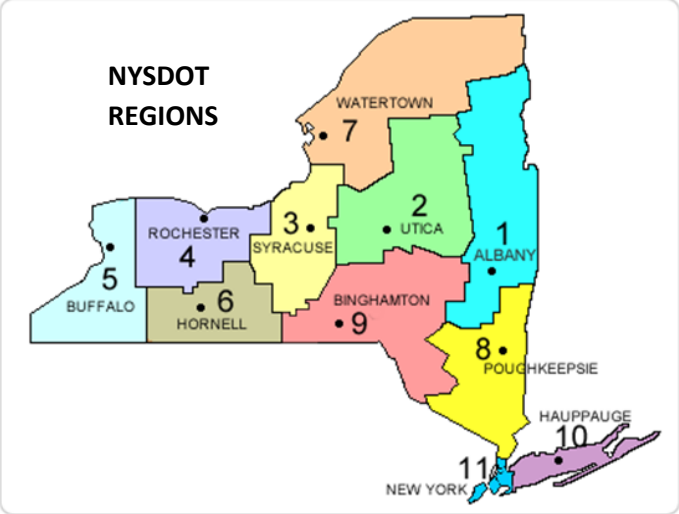


Chart 9. Bridge, pavement, safety and mobility spending in NYSDOT regions by millions, 2023-2024.

NYSDOT Region	NYSDOT TOTAL CAPITAL SPENDING (MILLIONS)			
	2023	2024	$ Difference	% Difference
1	$ 701.57	$ 211.21	$ (490.36)	-70%
2	$ 50.03	$ 94.37	$ 44.34	89%
3	$ 402.64	$ 684.08	$ 281.44	70%
4	$ 129.24	$ 171.42	$ 42.18	33%
5	$ 231.47	$ 274.98	$ 43.51	19%
6	$ 62.73	$ 56.17	$ (6.57)	-10%
7	$ 105.33	$ 69.10	$ (36.23)	-34%
8	$ 298.26	$ 636.83	$ 338.57	114%
9	$ 150.43	$ 133.88	$ (16.55)	-11%
10	$ 285.61	$ 255.29	$ (30.31)	-11%
11	$ 940.87	$ 509.20	$ (431.67)	-46%
TOTALS	**$3.358 BILLION**	**$3.097 BILLION**	**$261.7 MILLION**	**-8%**

Source: TRIP analysis of NYSDOT Data.

In 2023, 270 miles of roadway maintained by NYSDOT required reconstruction – more than double the 142 miles of roadway that required reconstruction in 2022.[38] According to NYSDOT, a total of 73 percent of state-maintained pavements need treatment ranging from reconstruction, rehabilitation, corrective or preventative maintenance or crack sealing.[39] NYSDOT estimates that addressing all treatment needs on state-maintained pavements will cost $7.76 billion.[40] A report released in 2024 by the office of the New York State Comptroller estimated that the cost for needed work on bridges owned by counties and local governments in the state - which make up just over half of the state's bridges – was nearly $29 billion.[41]

In addition to state transportation funding, the Infrastructure Investment and Jobs Act (IIJA), signed into law on November 2021, will provide $13.5 billion in federal funds to the state for highway and bridge investments in New York over five years, representing a 52 percent increase in annual federal funding for roads and bridges in the state over the previous federal surface transportation program.[42]

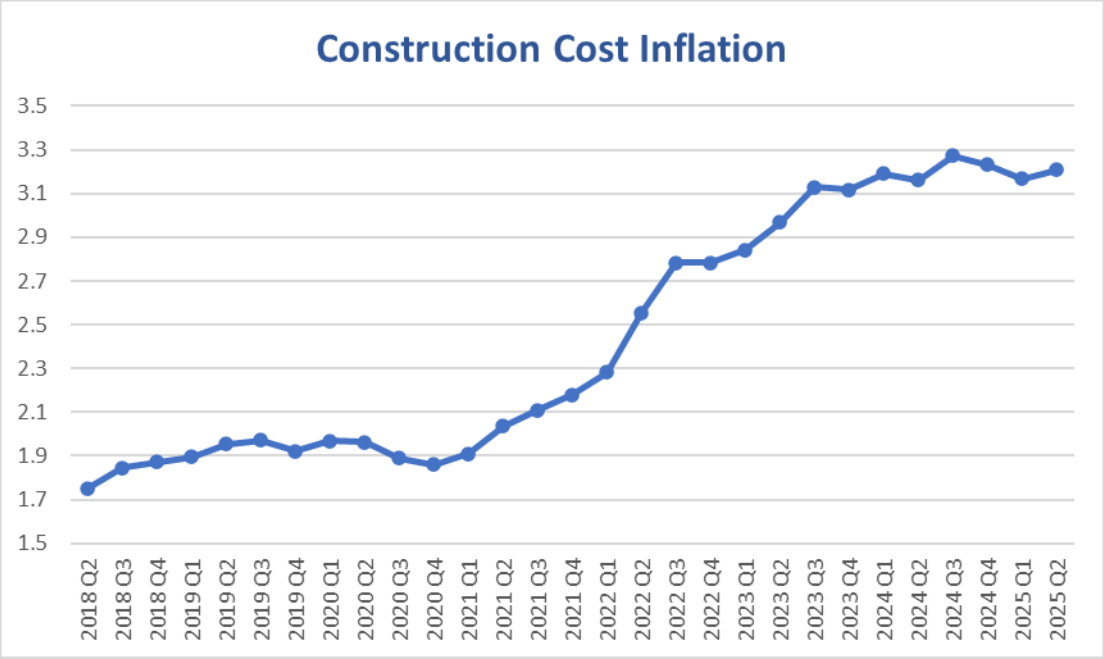
Most federal funds for highway and transit improvements in New York are provided by federal highway user fees, largely an 18.4 cents-per-gallon tax on gasoline and a 24.4 cents-per-gallon tax on diesel fuel (additional revenue is generated by fees on the sale of large trucks, a highway use tax levied on vehicles in excess of 55,000 pounds and a tax on the sale of large truck tires).

Increasing vehicle fuel efficiency, wider adoption of electric and hybrid vehicles and inflation in highway construction costs will hamper the ability of revenue from state and federal motor fuel taxes and other sources of state and federal transportation funding to keep pace with the state's transportation needs.

In the first quarter of 2025, hybrid vehicles, plug-in hybrid electric vehicles, and battery electric vehicles made up approximately 22 percent of total new light-duty vehicle sales in the U.S.[43] The average fuel efficiency of U.S. passenger vehicles increased from 20 miles per gallon in 2010 to 24.5 miles per gallon in 2020. Average fuel efficiency is expected to increase another 31 percent by 2030, to 32 miles per gallon, and increase 51 percent by 2040, to 37 miles per gallon.[44]

Increasing inflation has also hampered New York's ability to complete needed projects and improvements, as the available funding now covers significantly less work. Based on the Consumer Price Index, it is estimated that inflation has eroded $3.8 billion of New York's core construction funding over the last five years (SFY 2021-22 – SFY 2025-26).[45] The Federal Highway Administration's national highway construction cost index, which measures labor and materials cost, increased by 47 percent from the beginning of 2022 through the first half of 2025. [46]

Chart 10. FHWA's national highway construction cost index.



Source: Federal Highway Administration.

Highway and bridge spending multiplies through the economy by stimulating additional output. A 2021 macroeconomic analysis by IHS Markit found that that every dollar spent on highway and bridge improvements results in $3.4 dollars in combined direct, indirect and induced output from industries throughout the economy, resulting in a multiplier for highway and bridge investment of 3.4.[47]

TRANSPORTATION AND ECONOMIC GROWTH

Today's business culture demands that an area has well-maintained and efficient roads, highways and bridges if it is to remain economically competitive. Global communications and the impact of free trade in North America and elsewhere have resulted in a significant increase in freight movement, making the quality of a region's transportation system a key component in a business's ability to compete locally, nationally and internationally.

Businesses have responded to improved communications and the need to cut costs with a variety of innovations including just-in-time delivery, increased small package delivery, demand-side inventory management and e-commerce. The result of these changes has been a significant improvement in logistics efficiency as firms move from a push-style distribution system, which relies on large-scale warehousing of materials, to a pull-style distribution system, which relies on smaller, more strategic movement of goods. These improvements have made mobile inventories the norm, resulting in the nation's trucks literally becoming rolling warehouses.

Highways are vitally important to continued economic development in New York. As the economy expands, creating more jobs and increasing consumer confidence, the demand for consumer and business products grows. In turn, manufacturers ship greater quantities of goods to market to meet this demand, a process that adds to truck traffic on the state's highways and major arterial roads.

The amount of freight transported in New York and the rest of the U.S. is expected to increase significantly as a result of economic growth, changing business and retail models, increasing international trade, and rapidly changing consumer expectations that place an emphasis on faster deliveries, often of smaller packages or payloads.

In 2024 New York's freight system moved 732 million tons of freight, valued at $1.3 trillion.[48] From 2024 to 2050, freight moved annually in New York by trucks is expected to increase 62 percent by weight and 98 percent by value (inflation-adjusted dollars).[49]

The ability of the nation's freight transportation system to efficiently and safely accommodate the growing demand for freight movement could be hampered by inadequate transportation capacity, a lack of adequate safety features on some transportation facilities, institutional barriers to enhancing the nation's freight facilities, a lack of adequate funding for needed improvements to the freight network and a shortage of drivers.

The need to improve the U.S. freight network is occurring at a time when the nation's freight delivery system is being transformed by advances in vehicle autonomy, manufacturing, warehousing and supply chain automation, increasing e-commerce, and the growing logistic networks being developed by Amazon and other retail organizations in response to the demand for a faster and more responsive delivery and logistics cycle.

Investments in transportation improvements in New York play a critical role in the state's economy. A report by the American Road & Transportation Builders Association found that the design, construction and maintenance of transportation infrastructure supports the equivalent of approximately 318,600 full-time jobs across all sectors of the state economy, earning these workers approximately $9.8 billion annually.[50] These jobs include approximately 159,000 full-time jobs directly involved in transportation infrastructure construction and related activities. Spending by employees and companies in the transportation design and construction industry supports an additional 160,000 full-time jobs in New York.[51] Transportation construction in New York contributes an estimated $1.8 billion annually in state and local income, corporate and unemployment insurance taxes and the federal payroll tax.[52]

Approximately 3.5 million full-time jobs in New York in key industries like tourism, retail sales, agriculture and manufacturing are dependent on the quality, safety and reliability of the state's transportation infrastructure network. These workers earn $145 billion in wages and contribute an

estimated $26.4 billion in state and local income, corporate and unemployment insurance taxes, and the federal payroll tax.[53]

Local, regional and state economic performance is improved when a region's surface transportation system is expanded or repaired. This improvement comes as a result of the initial job creation and increased employment created over the long-term because of improved access, reduced transport costs and improved safety.

Increasingly, companies are looking at the quality of a region's transportation system when deciding where to re-locate or expand. Regions with congested or poorly maintained roads may see businesses relocate to areas with a smoother, more efficient and more modern transportation system. Highway access has a significant impact on the competitiveness of a region's economy.

IMPROVING TRANSPORTATION SAFETY, RESILIENCY AND EFFICIENCY

Recognizing that extreme weather, sea level change, and changes in environmental conditions may threaten the condition and longevity of the nation's transportation infrastructure, transportation agencies have begun to assess vulnerabilities and consider the resilience of their transportation assets during the transportation planning process. Transportation agencies across the country have begun to incorporate resilience in asset management plans, addressing resilience in project development and design and optimizing operations and maintenance practices.[54]

Based on the importance of maximizing the level and safety of mobility provided by its transportation system, transportation agencies are adopting Transportation Systems Management and Operations (TSMO) practices and incorporating improved resiliency into their transportation network. While a TSMO program does not eliminate the need for capacity expansions along some routes, it helps enhance the mobility of an existing corridor as much as possible.

A TSMO program adopts an integrated set of strategies to improve traffic flow and safety on a portion of a roadway, including work zone management, traffic incident management, freight management, traveler information, traffic signal coordination, ramp management, transit management and improved bicycle and pedestrian crossings.[55] The benefits of TSMO can include reduced traffic congestion, reduced fuel consumption and reduced emissions.

CONCLUSION

As New York works to enhance its thriving, growing and dynamic state, it will be critical that it is able to address the most significant transportation issues by providing a 21st century network of roads, highways, bridges and transit that can accommodate the mobility demands of a modern society and allow for economic recovery and growth. But declining investments and the impact of inflation will hamper the state's ability to complete needed projects and provide a transportation network that is smooth, safe and efficient.

New York will need to modernize its surface transportation system by improving the physical condition of its transportation network and enhancing the system's ability to provide efficient, safe and reliable mobility for residents, visitors and businesses. Making needed improvements to the state's roads, highways, bridges and transit systems would provide a significant boost to the economy by creating jobs in the short term and stimulating long-term economic growth as a result of enhanced mobility and access.

Numerous projects to improve the condition of New York's roads, highways, bridges and transit systems will not be able to proceed without a boost in local, state or federal transportation funding. If New York is unable to complete needed transportation projects, it will hamper the state's ability to improve the condition and efficiency of its transportation system or enhance economic development opportunities and quality of life.

# # #

ENDNOTES

[1] Bridge condition data and safety data for each urban area includes the counties noted: Albany-Schenectady-Troy: Albany, Rensselaer and Saratoga Counties; Binghamton: Broome and Tioga Counties; Buffalo: Erie and Niagara Counties; New York Metro: Bronx, Kings, New York, Richmond, Rockland, Westchester, Queens, Fairfield (CT), New Haven (CT), Bergen (NJ), Hudson (NJ), Middlesex (NJ), Ocean (NJ), and Passaic (NJ) Counties; Poughkeepsie-Newburg: Dutchess and Orange Counties; Rochester: Livingston, Monroe, Ontario, Orleans, Wayne and Yates Counties; Syracuse: Madison, Onondaga and Oswego Counties; Utica: Oneida County.
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[26] National Highway Traffic Safety Administration and Federal Highway Administration data (2024 Preliminary).
[27] TRIP analysis of National Highway Traffic Safety Administration and Federal Highway Administration data (2023).
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