# **Keeping Long Island Mobile:**

Accomplishments and Challenges in Improving Accessibility on Long Island to Support Quality of Life and a Strong Economy



#### **SEPTEMBER 2020**



Transportation

Founded in 1971, TRIP <sup>®</sup> 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**

Accessibility is a critical factor in a region's quality of life and economic competitiveness. The ability of residents, visitors and businesses to use multiple transportation modes to access employment, customers, commerce, recreation, education and healthcare in a timely fashion is essential for the continued growth of a region and a state. Long Island's quality of life and economic development is being hampered by high levels of traffic congestion and reduced accessibility. Long Island stands to benefit from programs and projects aimed at improving accessibility and could realize significant benefits from a proposal for an even more robust program.

The necessity of a reliable transportation system has been reinforced on Long Island during the coronavirus pandemic, which placed increased importance on the ability of a region's transportation network to support a reliable supply chain.

TRIP's "Keeping Long Island Mobile" report examines the mobility and efficiency of the region's transportation system and improvements needed to enhance access in the region. Sources of information for this report include the Counties of Nassau and Suffolk, the New York Metropolitan Transportation Council, the Texas Transportation Institute and the U.S. Census Bureau. All data used in the report are the most recent available.

For the purpose of this report, TRIP's definition of Long Island includes Nassau and Suffolk counties.

#### **POPULATION AND TRAVEL TRENDS ON LONG ISLAND**

Anticipated population growth will result in additional traffic on Long Island's heavily traveled roads and highways. Commuters in the region primarily rely on private vehicles for commuting, and most trips that originate in Nassau or Suffolk county terminate at destinations on Long Island.

- Long Island's current population of 2.8 million is expected to increase 14 percent by 2045, to 3.2 million.
- Daily vehicle travel during rush hour (6:00-10:00 a.m. and 4:00-8:00 p.m. weekdays) on Long Island is anticipated to increase by approximately 13 percent by 2045, from approximately 70 million vehicle miles of travel (VMT) to approximately 79 million VMT.
- The following chart shows Means of Transportation to Work, Nassau and Suffolk Counties from 2012 to 2016.

Mode	Share
Drove Alone	74%
Carpool	8%
Transit	11%
Walk	2%
Bike	1%
Work at Home	4%

• Approximately three-quarters (73 percent) of two-way, New York metro trips that originate in Nassau or Suffolk counties remain within the county from which it originated. Approximately another quarter (24 percent) of the trips are to other locations on Long Island (including Queens and Brooklyn).



• The following chart shows the share of daily New York metro two-way trips originating in Nassau and Suffolk Counties by destination.

Destination	Share by Destination of Two-Way Trips Starting in Nassau and Suffolk Counties by Destination		
Same County	73%		
Other LI Counties	24%		
Manhattan	1%		
Other New York Metro	1%		

#### TRAFFIC CONGESTION ON LONG ISLAND

High levels of traffic congestion on Long Island's major urban roads and highways reduce the reliability and efficiency of travel, impose significant delays on commuters, and hamper the region's ability to support economic development and quality of life. Traffic congestion on Long Island is anticipated to increase significantly over the next 25 years unless steps are taken to improve mobility and reduce traffic delays.

- Estimates of regional traffic congestion delays and costs are based on analysis from the <u>Texas</u> <u>Transportation Institute</u> (TTI). TTI, based at Texas A&M University, is one of the nation's leading transportation research organizations and regularly prepares an <u>urban mobility report</u> that quantifies the level and impact of traffic congestion.
- Traffic congestion on Long Island resulted in 93 million person hours of delay annually to occupants of private vehicles and large commercial trucks.
- Based on TTI's delay calculations, TRIP estimates that the annual cost of traffic congestion on Long Island is \$1.9 billion. This includes the value of motorists' lost time and the 41.5 million gallons of additional fuel wasted as a result of traffic congestion.
- TRIP estimates the average Long Island commuter spends an additional 81 hours annually stuck in traffic due to congestion. The average annual cost of traffic congestion to a Long Island commuter is \$1,684 in the value of wasted time and fuel.
- Because many of the region's major routes already experience significant traffic congestion during peak periods, it is expected that traffic delays on Long Island will increase at a rate faster than the growth of peak hour travel.
- Daily vehicle hours of delay during Long Island rush hour are expected to increase by 57 percent by 2045, from approximately 650,000 hours to approximately 1 million hours.



#### LONG ISLAND'S MOST CONGESTED ROADWAYS

In its 2017 congestion <u>report</u>, the New York Metropolitan Transportation Council (NYMTC) provided information on traffic congestion levels on individual corridors in the region. Based on an analysis of the NYMTC report, TRIP has ranked the 10 most congested sections of Long Island roadways. Traffic congestion on these routes significantly reduces the reliability of travel times in these corridors.

Rank	County	Corridor	From	То	Length (Miles)	Daily Rush Hour Traffic
1	Nassau. Suffolk	Long Island Expressway	Queens County Line	William Floyd Parkway	45	118,289
2	Nassau. Suffolk	Southern State Parkway	Queens County Line	5th Avenue	26	210,889
3	Nassau. Suffolk	Sunrise Highway	Queens County Line	William Floyd Parkway	31	97,890
4	Nassau. Suffolk	assau. Suffolk Northern State Parkway Queens County Line Sunken Me		Sunken Meadow State Parkway	26	122,364
5	Suffolk	Jericho Turnpike	Northern State Parkway	Echo Ave.	6.5	60,834
6	Nassau	Northern Boulevard	Queens County Line	Shelter Rock Road	2.7	44,404
7	Suffolk	Main Street	Hauppauge Road	St. Johnland Rd.	4	64,414
8	Nassau	Meadowbrook State Parkway	NY 25	Zeckendorf Boulevard	1.6	143,155
9	Suffolk	Sagtikos/Sunken Meadow State Parkways	NY 27	Jericho Turnpike	5.4	117,177
10	Nassau	Hempstead Turnpike	Queens County Line	Wantagh State Parkway	10	48,641

• The following chart shows the 10 most congested portions of Long Island roadways.

#### FREIGHT TRANSPORTATION ON LONG ISLAND

The reliable movement of freight on Long Island is critical to the health and efficiency of the region's economy. Traffic congestion erodes the productivity of Long Island's economy, which reduces the reliability of goods movement to and from destinations within the region and outside of Long Island.

- Based on TTI analysis, TRIP estimates that in 2018, traffic congestion on Long Island resulted in 3 million hours of delay to large commercial trucks. (This figure is a subset of the overall 93 million hours of annual delay as a result of traffic congestion on Long Island.)
- The annual economic cost of commercial truck delays on Long Island caused by traffic congestion is \$162 million, which includes the cost of delayed deliveries and wasted fuel. (This total is a subset of the overall \$1.9 billion annual cost of traffic congestion on Long Island.)
- Evolving business and retail models that rely on leaner supply chains, advances in warehouse and supply chain automation, the significant growth in e-commerce, increasing international trade, and the growing logistic networks being developed by Amazon and other large retailers, require timely and reliable freight shipments.
- Highway accessibility was ranked the number one site selection factor behind the availability of skilled labor and labor costs in a 2020 <u>survey</u> of corporate executives by Area Development Magazine.



#### **IMPROVEMENTS NEEDED TO RELIEVE TRAFFIC CONGESTION ON LONG ISLAND**

Reducing and managing traffic congestion on Long Island will require that the region proceed with projects, improvements or programs to increase the capacity or efficiency of the region's transportation system, or reduce peak-hour demand on the system. These projects, improvements or programs include:

#### Expanded capacity

- ✓ Additional general purpose or high-occupancy lanes along existing roadways or highways
- ✓ Additional lanes within an existing highway width
- ✓ Improved intersections and interchanges, either through the addition of turn lanes, grade-separation or other design improvements
- ✓ Additional or improved bicycle and pedestrian facilities
- ✓ Expanded or more frequent transit service
- $\checkmark$  The addition of park and ride spaces at transit stations

#### Improved efficiency

- ✓ Improved incident management
- ✓ Improved traffic signalization
- ✓ Ramp metering at highway entrances
- ✓ Improved traveler information
- ✓ Electronic or universal transit fares
- ✓ Improved work zone and special event management

#### Demand management

- ✓ Increased ridesharing
- ✓ Increased telecommuting

## The following list includes information on the most needed projects, improvements or programs to improve mobility on Long Island and are from a TRIP survey of Nassau and Suffolk counties.

These needed mobility projects include improvements to critical interchanges and intersections
including Seaford Oyster Bay Expressway and Old Country Road, Wantagh Parkway and Old Country
Road and Stewart Avenue and Clinton Road; the extension of the region's trail system; and, expanded
rail and bus rapid transit facilities. Details for each of the needed projects can be found on the
following page.



#### Keeping Long Island Mobile

County	Facility/Route	Mode	From	То	Current Traffic (AADT/ Ridership)	Cost (\$1,000)	Project Description	Reason project is needed/how project would help relieve traffic congestion and provide increased mobility and reliability
Nassau	Seaford Oyster Bay Expwy / Old Country Road	Road	Margaret Drive	Kalda Lane	126,000	20,000	Study and design for reconstruction of Old Country Road overpass on Seaford Oyster Bay Expwy. Existing 5 lane configuration inadequate for traffic demand.	Eliminate existing capacity, air quality & safety issues by smoothing traffic flow along Old Country Road and Seaford Oyster Bay Expwy ramps.
Suffolk	Long Island Rail Road - East Farmingdale Station Reopening	Train	Route 110	) and Conklin Street	N/A	5000	Feasibility study for reopening train station at Route 110 on LIRR Main Line, to serve as a primary hub for Route 110.	Restore rail access on LIRR Main Line to Route 110 and connect to proposed Route 110 BRT to ease congestion and safety on one of LI's deadliest roads.
Nassau	Wantagh Parkway / Old Country Road Interchange	Road	Carmen Avenue	Duffy Avenue	126,000	20,000	Study and design reconstruction of Old country Rd overpass on Wantagh Prkwy. Existing 5 lane configuration inadequate for traffic demand, unconventional geometry create significant congestion.	Reduce accidents and improve traffic flow along Wantagh Prkwy, Old Country Rd and Duffy Avenue by eliminating non standard ramps, reconstructing intersection of Old Country Road and NB Parkway ramps, reconfiguring intersection of Duffy Ave and Wantagh Pkwy ramps to streamline traffic flow.
Nassau	Nassau Hub Transit Project	Bus Rapid Transit	Nass	au Hub region	3,100 - 5,200 daily boardings projected	150000	Implement Full Initial Operating Segment of Nassau Hub Transit Locally Preferred Alternative - Bus Rapid Transit (BRT).	Enhance development and relieve congestion through new premium bus rapid transit service connecting the Nassau Hub to LIRR stations in the Village of Hempstead and along the LIRR Main Line. Provide a transportation option to proposed Hub Innovation District, while better connecting existing downtowns to economic opportunity at the Hub.
Nassau	Marcus Ave/New Hyde Park Rd/Union Turnpike Intersection	Road	Tyson Court	New Hyde Park Road	54,000	5,000	Study and design of intersection improvements to coordinate traffic movements to improve intersection efficiency and reduce accident potential.	Reconstruct existing intersection configuration traffic signals to improve traffic flow while improving air quality and reducing accidents at critical intersection.
Nassau/ Suffolk	LI Greenway/Empire State Trail Extension Phase I	Hike/ Bike	Eisenhower Park	Edgewood Preserve/Brentwood State Park	N/A	17000	First phase of new Long Island Greenway to connect parks and communities across LI and serve as easternmost extension to the Empire State Trail.	25-mile segment connecting 9 communities through 13 parks, will provide a much-needed safe alternative for hikers, joggers, cyclists, and other non-motorized users
Nassau	Stewart Avenue at Clinton Road Intersection	Road	Stewart Road/C	Stewart Avenue at Clinton Road/Osbourne Avenue		5,000	Study and design of intersection improvements to coordinate traffic movements to improve intersection efficiency and safety.	Reconstruct existing intersection to improve traffic flow and realign intersection to provide protected left turn lanes to reduce congestion, improve air quality and improve safety.
Suffolk	Relocation of Yaphank LIRR station	Train	Yaphank				Relocate current Yaphank LIRR station several miles east.	Provide improved rail transportation access in rapidly growing area and meet transportation demands of existing and future commercial and residential economic development projects.
Suffolk	Oakdale Merge	Road	Oakdale				Reconstruction of 'Oakdale Merge,' where highway service roads and and all traffic is limited to 6 lanes of Sunrise Hwy.	Provide congestion relief and improve traffic safety.
Suffolk	NYS Route 110	Bus Rapid Transit	Amityville LIRR	Huntington LIRR	3000	30000	BRT Service on Route 110 between Amityville LIRR and Huntington LIRR, to include a minimum of 6.5 miles of shoulder running bus-lane, Transit Signal Priority and Queue Jumps at select intersections	Provide high-speed, high-frequency service on Suffolk County Transit's highest-ridership line. Project is currently under 30% Design Phase
Suffolk	Green NYS Route 347 Corridor	Multi- use	Hauppauge	Port Jefferson			Series of projects to improve safety and reduce travel delays by transforming NY Route 347 into a modified boulevard and suburban greenway for 15 miles through Brookhaven, Islip and Smithtown.	Current features of NY Route 347 are inadequate for significant traffic volumes. Increased crashes, congestion, lack of continuous sidewalks, limited turning lanes present safety and traffic flow concerns.
Suffolk	Nicolls Road	Bus Rapid Transit	Pachogue LIRR	Stony Brook LIRR/Ronkonkoma LIRR	N/A	42000 (Phase I)	Roughly 13 miles of BRT Service primarily on Nicolls Rd between Downtown Patchogue and Stony Brook LIRR Station, serving Suffolk County Community College, the Ronkonkoma Hub, and Stony Brook University.	Part of ConnectLI's 'iZone' corridor linking major downtowns, transportation hubs, academic institutions with high-quality north- south mass transit.
Suffolk	Electrification of Port Jeff LIRR Line	Train	Huntington	Port Jefferson		18,000/ mile	Electification of the Port Jefferson Branch of the LIRR	Improve reliability and service on the Port Jefferson Line and provide a one-seat ride for commuters into New York City.
Suffolk	Suffolk County Hike and Bike Master Plan	Hike/Bi ke	C	ounty-wide	N/A		1 ne Suttolk County Hike Bike Master Plan proposes over 1,200 of hike and bike facilities for development across the County.	Provide sate on- and ott-road hike and bike facilities to encourage alternatives to single-occupancy vehicle use.

#### Introduction

Long Island's transportation system provides a vital link for the region's residents, visitors and businesses, providing daily access to homes, jobs, shopping, natural resources and recreation. An important measure of the adequacy of a region's transportation system is the level of access provided to residents, visitors and businesses. Accessibility is the ease of reaching valued destinations or being reachable from valued destinations. For the public, these destinations include jobs, housing, shopping, recreation and social outings, whereas for businesses these locations include customers, suppliers and employees.

Supporting quality of life and a robust economy on Long Island requires that the region provide an efficient transportation system that provides a high level of accessibility. But, the high level of traffic congestion on Long Island threatens the region's economic competitiveness and is impacting quality of life in the region. Improving mobility on the Island would enhance economic development opportunities, improve business productivity, and make it easier and more reliable for the public to get to and from valued destinations.

For the purpose of this report, TRIP defines Long Island as Nassau and Suffolk counties, unless otherwise noted.

#### **Traffic Congestion**

Traffic congestion occurs when a roadway experiences demand that exceeds the capacities of the facility. The result of traffic congestion is reduced throughput (the amount of materials or items passing through a system), reduced travel speeds, increased travel time and increased crashes. Significant levels of traffic congestion, as experienced on Long Island, reduce the productivity of a region's economy, harm the quality of life of a region's residents and reduces the efficiency of local businesses and employers.

Traffic congestion levels can be impacted by the amount of traffic in relation to the capacity of a roadway or highway, the effectiveness of traffic operations along a corridor, including signalization, as well as non-recurring events such as crashes, vehicle breakdowns, work zones, special events and weather.<sup>1</sup>

#### Long Island Population and Commuting Trends

Long Island residents and businesses require a high level of personal and commercial mobility. Commuters in the region primarily rely on private vehicles for commuting. Most trips that originate in Nassau or Suffolk County are to destinations on Long Island.

Long Island's population of 2.8 million is expected to increase 14 percent by 2045, to 3.2 million.<sup>2</sup>

The majority of commuting on Long Island is in private vehicles, either driving alone or as part of a carpool. From 2012 to 2016, 74 percent of trips to work on Long Island were by driving alone, eight percent were by carpool, 11 percent were by transit, two percent were by walking, one percent bicycling and four percent of jobs were at home.<sup>3</sup>

Mode	Share
Drove Alone	74%
Carpool	8%
Transit	11%
Walk	2%
Bike	1%
Work at Home	4%

#### Chart 1. Means of Transportation to Work, Nassau and Suffolk Counties, 2012-2016

#### Source: U.S. Census Bureau, American Community Survey

Approximately three-quarters (73 percent) of two-way, New York metro trips that originate in Nassau or Suffolk counties remain within the county from which they originated, and the vast majority of the remaining trips (another 24 percent) are to other locations on Long Island (including Queens and Brooklyn).<sup>4</sup> Only two percent of New York Metro trips originating in Nassau or Suffolk counties were to destinations outside of Long Island.<sup>5</sup>

Chart 2. Share of Daily, New York Metro Two-Way Trips Originating in Nassau and Suffolk Counties by Destination

Destination	Share by Destination of Two-Way Trips Starting in Nassau and Suffolk Counties by Destination		
Same County	73%		
Other LI Counties	24%		
Manhattan	1%		
Other New York Metro	1%		

Source: TRIP analysis of NYMTC data.



The region currently experiences a significant level of traffic congestion, which is anticipated to increase significantly over the next 25 years unless steps are taken to improve mobility and reduce traffic delays on Long Island.

Daily vehicle travel during rush hour (6:00-10:00 a.m. and 4:00-8:00 p.m. on weekdays) on Long Island is anticipated to increase by approximately 13 percent by 2045, from approximately 70 million vehicle miles of travel (VMT) to approximately 79 million VMT.<sup>6</sup> But, because many of the region's major routes already experience significant traffic congestion during peak periods, it is expected that daily rush hour vehicle hours of delay on Long Island will increase by 57 percent by 2045 from nearly 650,000 (649,321) hours to just over 1 million hours (1,021,350).<sup>7</sup>

#### **Cost of Congestion on Long Island**

Significant levels of traffic congestion on Long Island's major urban highways and roads hamper the region'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.

The <u>Texas Transportation Institute</u> (TTI), based at Texas A&M University, is one of the nation's leading transportation research organizations and regularly prepares an <u>urban mobility report</u> that quantifies the level and impact of traffic congestion in the nation's largest urban areas. By evaluating regional traffic levels, roadway capacity and peak-hour travel speeds, TTI provides estimates of the amount of delays for private and commercial vehicles.

TTI found that in 2018, traffic congestion on Long Island resulted in 93 million person hours of delay to occupants of private vehicles and large commercial trucks.<sup>8</sup> Based on TTI's delay calculations, TRIP estimates that the annual cost of traffic congestion on Long Island is \$1.9 billion in the value of motorists' lost time and the 41.5 million gallons of additional fuel wasted as a result of traffic congestion.<sup>9</sup> TRIP estimates that the average Long Island commuter spends an additional 81 hours annually stuck in traffic due to congestion. The average annual cost of traffic congestion to a Long Island commuter is \$1,684 in the value of wasted time and fuel.



#### Long Island's Most Congested Roadways

In its 2017 congestion <u>report</u>, the New York Metropolitan Transportation Council (NYMTC) provided information on the status of traffic congestion in the New York metropolitan area, traffic congestion level on individual corridors and information on possible solutions to address the region's high level of traffic congestion. Based on an analysis of the NYMTC report, TRIP has ranked the 10 most congested sections of Long island roadways. Traffic congestion on these routes significantly reduces the reliability of travel times in these corridors.

The following chart shows the 10 most congested portions of Long Island roadways.

Chart 3. Most Congested	l Sections of Long	Island Roadways
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Rank	County	Corridor	From	То	Length (Miles)	Daily Rush Hour Traffic
1	Nassau. Suffolk	Long Island Expressway	Queens County Line	William Floyd Parkway	45	118,289
2	Nassau. Suffolk	Southern State Parkway	Queens County Line	5th Avenue	26	210,889
3	Nassau. Suffolk	Sunrise Highway	Queens County Line	William Floyd Parkway	31	97,890
4	Nassau. Suffolk	Northern State Parkway	Queens County Line	Sunken Meadow State Parkway	26	122,364
5	Suffolk	Jericho Turnpike	Northern State Parkway	Echo Ave.	6.5	60,834
6	Nassau	Northern Boulevard	Queens County Line	Shelter Rock Road	2.7	44,404
7	Suffolk	Main Street	Hauppauge Road	St. Johnland Rd.	4	64,414
8	Nassau	Meadowbrook State Parkway	NY 25	Zeckendorf Boulevard	1.6	143,155
9	Suffolk	Sagtikos/Sunken Meadow State Parkways	NY 27	Jericho Turnpike	5.4	117,177
10	Nassau	Hempstead Turnpike	Queens County Line	Wantagh State Parkway	10	48,641

Source: TRIP analysis of NYMTC data.

#### Freight Transportation on Long Island

Traffic congestion erodes the productivity of Long Island's economy by slowing the movement of goods. TTI found that, in 2018, traffic congestion on Long Island resulted in 3 million hours of delay to large commercial trucks (this figure is a subset of the overall 93 million hours of annual delay as a result of traffic congestion on Long Island).<sup>10</sup> The annual economic cost of commercial truck delays on Long Island caused by traffic congestion is \$162 million, which includes the cost of delayed deliveries and wasted fuel. (This total is a subset of the overall \$1.9 billion annual cost of traffic congestion on Long Island.)<sup>11</sup>

Highways are vitally important to continued economic development on Long Island, particularly to the region's manufacturing, distribution and tourism industries. As the region's 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 Long Island's highways and major arterial roads.



ransportation esearch onprofit 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 accessibility was ranked the number one site selection factor behind the availability of skilled labor and labor costs in a 2020 <u>survey</u> of corporate executives by Area Development Magazine.<sup>12</sup>

Evolving business and retail models that rely on leaner supply chains, advances in warehouse and supply chain automation, the significant growth in e-commerce, increasing international trade, and the growing logistic networks being developed by Amazon and other large retailers, require timely and reliable freight shipments. Digitization is resulting in significant improvements in supply chain management, allowing freight brokers, carriers, shippers and receivers to exchange real-time data to more efficiently utilize freight capacity.

### Improvements Needed to Relieve Traffic Congestion and Enhance Accessibility on Long Island

Addressing Long Island's significant traffic congestion challenges will require investment in projects, improvements or programs that can provide additional capacity along some of the state's most heavily traveled transportation corridors and further investment in projects that improve the efficiency of the region's transportation system and manage the level of transportation demand. These improvements will benefit the region by improving access, reducing delays, accommodating growth, improving economic development and the environment, and improving quality of life in the region.

The New York Metropolitan Transportation Council in its <u>2017 Status Report Congestion Management</u> <u>Process</u> provides a menu of options as part of a toolkit for relieving traffic congestion. These options include projects, improvements or programs to increase the capacity or efficiency of the region's transportation system or reduce peak-hour demand on the system. These projects, improvements or programs include:

#### Expanded capacity

- ✓ Additional general purpose or high-occupancy lanes along existing roadways or highways
- ✓ Additional lanes within an existing highway width
- Improved intersections and interchanges either through the addition of turn lanes of grade-separation or other design improvements
- ✓ Additional or improved bicycle and pedestrian facilities
- ✓ Expanded or more frequent transit service
- ✓ The addition of park and ride spaces.



#### Improved efficiency

- ✓ Improved incident management
- ✓ Improved traffic signalization
- ✓ Ramp metering at highway entrances
- ✓ Improved traveler information
- ✓ Electronic or universal transit fares
- ✓ Improved work zone and special event management

#### Demand management

- ✓ Increased ridesharing
- ✓ Increased telecommuting

To determine which projects, improvements or programs are the most needed to help relieve traffic congestion on Long Island, TRIP surveyed Nassau and Suffolk counties. The following list represents the most needed projects, improvements or programs needed to improve mobility on Long Island. These needed mobility projects include improvements to critical interchanges and intersections including Seaford Oyster Bay Expressway and Old Country Road, Wantagh Parkway and Old Country Road and Stewart Avenue and Clinton Road; the extension of the region's trail system; and, expanded rail and bus rapid transit facilities.



#### Keeping Long Island Mobile

County	Facility/Route	Mode	From	То	Current Traffic (AADT/	Cost	Project Description	Reason project is needed/how project would help relieve traffic congestion and provide increased mobility and reliability
					Ridership)	(\$1,000)		
Nassau	Seaford Oyster Bay Expwy / Old Country Road	Road	Margaret Drive	Kalda Lane	126,000	20,000	Study and design for reconstruction of Old Country Road overpass on Seaford Oyster Bay Expwy. Existing 5 lane configuration inadequate for traffic demand.	Eliminate existing capacity, air quality & safety issues by smoothing traffic flow along Old Country Road and Seaford Oyster Bay Expwy ramps.
Suffolk	Long Island Rail Road - East Farmingdale Station Reopening	Train	Route 110	) and Conklin Street	N/A	5000	Feasibility study for reopening train station at Route 110 on LIRR Main Line, to serve as a primary hub for Route 110.	Restore rail access on LIRR Main Line to Route 110 and connect to proposed Route 110 BRT to ease congestion and safety on one of LI's deadliest roads.
Nassau	Wantagh Parkway / Old Country Road Interchange	Road	Carmen Avenue	Duffy Avenue	126,000	20,000	Study and design reconstruction of Old country Rd overpass on Wantagh Prkwy. Existing 5 lane configuration inadequate for traffic demand, unconventional geometry create significant congestion.	Reduce accidents and improve traffic flow along Wantagh Prkwy, Old Country Rd and Duffy Avenue by eliminating non standard ramps, reconstructing intersection of Old Country Road and NB Parkway ramps, reconfiguring intersection of Duffy Ave and Wantagh Pkwy ramps to streamline traffic flow.
Nassau	Nassau Hub Transit Project	Bus Rapid Transit	Nass	;au Hub region	3,100 - 5,200 daily boardings projected	150000	Implement Full Initial Operating Segment of Nassau Hub Transit Locally Preferred Alternative - Bus Rapid Transit (BRT).	Enhance development and relieve congestion through new premium bus rapid transit service connecting the Nassau Hub to LIRR stations in the Village of Hempstead and along the LIRR Main Line. Provide a transportation option to proposed Hub Innovation District, while better connecting existing downtowns to economic opportunity at the Hub.
Nassau	Marcus Ave/New Hyde Park Rd/Union Turnpike Intersection	Road	Tyson Court	New Hyde Park Road	54,000	5,000	Study and design of intersection improvements to coordinate traffic movements to improve intersection efficiency and reduce accident potential.	Reconstruct existing intersection configuration traffic signals to improve traffic flow while improving air quality and reducing accidents at critical intersection.
Nassau/ Suffolk	LI Greenway/Empire State Trail Extension Phase I	Hike/ Bike	Eisenhower Park	Edgewood Preserve/Brentwood State Park	N/A	17000	First phase of new Long Island Greenway to connect parks and communities across LI and serve as easternmost extension to the Empire State Trail.	25-mile segment connecting 9 communities through 13 parks, will provide a much-needed safe alternative for hikers, joggers, cyclists, and other non-motorized users
Nassau	Stewart Avenue at Clinton Road Intersection	Road	Stewart Road/C	Avenue at Clinton Osbourne Avenue	56,000	5,000	Study and design of intersection improvements to coordinate traffic movements to improve intersection efficiency and safety.	Reconstruct existing intersection to improve traffic flow and realign intersection to provide protected left turn lanes to reduce congestion, improve air quality and improve safety.
Suffolk	Relocation of Yaphank LIRR station	Train	Yaphank				Relocate current Yaphank LIRR station several miles east.	Provide improved rail transportation access in rapidly growing area and meet transportation demands of existing and future commercial and residential economic development projects.
Suffolk	Oakdale Merge	Road	Oakdale				Reconstruction of 'Oakdale Merge,' where highway service roads and and all traffic is limited to 6 lanes of Sunrise Hwy.	Provide congestion relief and improve traffic safety.
Suffolk	NYS Route 110	Bus Rapid Transit	Amityville LIRR	Huntington LIRR	3000	30000	BRT Service on Route 110 between Amityville LIRR and Huntington LIRR, to include a minimum of 6.5 miles of shoulder running bus-lane, Transit Signal Priority and Queue Jumps at select intersections	Provide high-speed, high-frequency service on Suffolk County Transit's highest-ridership line. Project is currently under 30% Design Phase
Suffolk	Green NYS Route 347 Corridor	Multi-use	Hauppauge	Port Jefferson			Series of projects to improve safety and reduce travel delays by transforming NY Route 347 into a modified boulevard and suburban greenway for 15 miles through Brookhaven, Islip and Smithtown.	Current features of NY Route 347 are inadequate for significant traffic volumes. Increased crashes, congestion, lack of continuous sidewalks, limited turning lanes present safety and traffic flow concerns.
Suffolk	Nicolls Road	Bus Rapid Transit	Pachogue LIRR	Stony Brook LIRR/Ronkonkoma LIRR	N/A	42000 (Phase I)	Roughly 13 miles of BRT Service primarily on Nicolls Rd between Downtown Patchogue and Stony Brook LIRR Station, serving Suffolk County Community College, the Ronkonkoma Hub, and Stony Brook University.	Part of ConnectLI's 'iZone' corridor linking major downtowns, transportation hubs, academic institutions with high-quality north- south mass transit.
Suffolk	Electrification of Port Jeff LIRR Line	Train	Huntington	Port Jefferson		18,000/ mile	Elecrification of the Port Jefferson Branch of the LIRR	Improve reliability and service on the Port Jefferson Line and provide a one-seat ride for commuters into New York City.
Suffolk	Suffolk County Hike and Bike Master Plan	Hike/ Bike	с	ounty-wide	N/A		The Suffolk County Hike Bike Master Plan proposes over 1,200 of hike and bike facilities for development across the County.	Provide safe on- and off-road hike and bike facilities to encourage alternatives to single-occupancy vehicle use.

#### Conclusion

As Long Island strives to enhance its economy and quality of life, it will be critical that the region is able to provide a well-maintained, safe and efficient 21<sup>st</sup> century network of roads, highways, bridges, bicycle and pedestrian facilities that can accommodate the mobility demands of a modern society. The importance of a reliable transportation system has been reinforced on Long Island during the coronavirus pandemic, which placed increased importance on the ability of a region's transportation network to support a reliable supply chain.

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#### **ENDNOTES**

<sup>1</sup> New York Metropolitan Transportation Council (2017). 2017 Status Report Congestion Management Process. P. 2-2. <sup>2</sup> New York Metropolitan Transportation Council (2017). 2017 Status Report Congestion Management Process. P. 6-25, 6-55.

https://www.nymtc.org/Portals/0/Pdf/CMP%20Status%20Report/2017%20CMP/Final%202017%20CMP%20Status%20 Report%20 6.29.pdf

<sup>3</sup> U.S. Census Bureau (2017). American Community Survey. Analysis provided by the Suffolk County Planning Department.

<sup>4</sup> New York Metropolitan Transportation Council (2017). 2017 Status Report Congestion Management Process. P. 6-25, 6-55.

https://www.nymtc.org/Portals/0/Pdf/CMP%20Status%20Report/2017%20CMP/Final%202017%20CMP%20Status%20 Report%20\_6.29.pdf

<sup>5</sup> Ibid.

<sup>6</sup> New York Metropolitan Transportation Council (2017). 2017 Status Report Congestion Management Process. P. 6-25, 6-55.

https://www.nymtc.org/Portals/0/Pdf/CMP%20Status%20Report/2017%20CMP/Final%202017%20CMP%20Status%20 Report%20\_6.29.pdf

<sup>7</sup> <u>Ibid</u>.

<sup>8</sup> Texas Transportation Institute (2020). Estimated provided at the request of TRIP.

<sup>9</sup> TRIP (2020). Estimate is based on Texas Transportation Institute congestion data for Nassau and Suffolk counties <sup>10</sup> Texas Transportation Institute (2020). Estimated provided at the request of TRIP.

<sup>11</sup> TRIP (2020). Estimate is based on Texas Transportation Institute congestion data for Nassau and Suffolk counties.
 <sup>12</sup> Area Development Magazine (2019). 33nd Annual Survey of Corporate Executives: Availability of Skilled Labor New Top Priority. <u>http://www.areadevelopment.com/Corporate-Consultants-Survey-Results/Q1-2019/33nd-annual-corporate-survey-15th-annual-consultants-survey.shtml</u>

