

# New York State Thruway Authority 2022 BUDGET



Thruway  
Authority



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# BOARD MEMBERS





## New York State Thruway Authority Board of Directors

Joanne M. Mahoney, Chair, Board of Directors

J. Donald Rice Jr., Member

José Holguín-Veras, Ph.D., P.E., Member

Robert L. Megna, Vice-Chair

Stephen M. Saland, Member

Heather C. Briccetti, Esq., Member

# LETTER FROM EXECUTIVE DIRECTOR AND CERTIFICATION





December 2021

Honorable Liz Krueger  
Chair  
NYS Senate Finance Committee  
State Capitol Building, Room 416  
Albany, NY 12247

Honorable Thomas O'Mara  
Ranking Member  
NYS Senate Finance Committee  
Legislative Office Building , Room 711B  
Albany, NY 12247

Honorable Helene E. Weinstein  
Chairwoman  
NYS Assembly Ways & Means Com.  
923 Legislative Office Building  
Albany, NY 12248

Honorable Edward P. Ra  
Ranking Minority Member  
NYS Assembly Ways & Means Com.  
444 State Capitol  
Albany, NY 12248

Ms. Ann Maloney  
Acting Director  
NYS Authorities Budget Office  
P.O. Box 2076  
Albany, NY 12220-0076

To the Addressees:

In compliance with the provisions of the Public Authorities Law and on behalf of the Board of the New York State Thruway Authority (Authority), I am submitting a summary of the Authority's Budget for the fiscal year beginning January 1, 2022. The overall 2022 Budget represents a total financial commitment of approximately \$1.1 billion. The 2022 Budget is one that is balanced; provides the necessary resources to maintain the current levels of maintenance, safety and service; and maximizes funding for critical infrastructure rehabilitation projects in the Authority's multi-year Capital Plan.

The COVID-19 pandemic that began in March 2020 has resulted in significant impacts to the Authority's financial condition. Most significantly, the Thruway observed substantial declines in Thruway passenger and commercial traffic and toll revenues that it has steadily recovered from. While these declines were most severe during the height of the outbreak, continued impacts persist and are projected to continue through the remainder of 2021 with projected declines in comparison to pre-COVID-19 levels throughout the multi-year projection period.

We are continuing our efforts to respond to these challenges in the coming year. Furthermore, the focus of improving our operations will continue into 2022, reflecting our long-term commitment to keep the

Thruway Authority on a sound fiscal footing. The 2022 budget that has been prepared, continues our efforts to provide a balanced financial plan.

The 2022 Budget invests a total of \$397 million to support the capital program of the Thruway Authority. In addition, the 2022 Budget provides a 2022-2026 Capital Program that would provide \$1.9 billion for Thruway Authority capital projects. This includes \$244.9 million for New NY Bridge project and \$1.65 billion for system-wide projects on the Thruway.

Thanks to the hard work and dedication of our employees, we continue to operate and maintain a safe, reliable, statewide superhighway in a fiscally responsible manner. The Thruway Authority provides quality services for our customers while supporting economic growth and job creation across New York State. Under Governor Hochul's leadership, we have instituted major initiatives and cost controls that have substantially reduced operating costs, improved services, and fostered strategic investments in our infrastructure.

Finally, none of these accomplishments would have been possible without strong support, guidance and leadership from our Chair, Joanne M. Mahoney and the dedicated members of the Thruway Authority Board of Directors. Thank you for your interest in the Thruway Authority.

Sincerely,

A handwritten signature in black ink, appearing to read "Matthew Driscoll". The signature is fluid and cursive, with the first name "Matthew" and last name "Driscoll" clearly distinguishable.

Matthew J. Driscoll  
Executive Director



Certification of Assumptions and Method of Estimation for Budget and  
Financial Plan 2022-2025 in accordance with the Comptroller's  
Regulation Section 203.9 Certification

Date: December 2021

To: Board of Directors, New York State Thruway Authority

In accordance with Office of State Comptroller (OSC regulations), I certify that to the best of my knowledge and belief after reasonable inquiry, the Authority 2022 Budget is based on reasonable assumptions and methods of estimation; and the requirements of the OSC regulations have been satisfied.

A handwritten signature in blue ink that reads "Matthew Howard".

---

Matthew A. Howard  
Chief Financial Officer



# THRUWAY ORGANIZATION AND BACKGROUND



## The New York State Thruway



## Mission

We offer a user-fee supported highway that delivers high levels of safety and service.

## History and Background

The New York State Thruway Authority, a body corporate and politic constituting a public corporation, created in 1950 by the New York State Thruway Authority Act, as amended, Title 9 of Article 2 of the Public Authorities Law, Chapter 43-A of the Consolidated Laws of the State of New York (the “Act”), is empowered, among other things, to finance, construct, operate and maintain as a toll facility, and to improve and reconstruct the New York State Thruway (the “Thruway”), subject to certain statutory limitations on the Authority’s right to impose tolls on certain parts of the Thruway, including the Cross-Westchester Expressway. The Act also authorizes the Authority to issue, from time to time, negotiable bonds and notes for any corporate purpose secured by tolls, revenues, rates, fees, charges, rents and other earned income of the Authority.

Title to the real property utilized by the Authority is vested in the State, but the Authority has the right, so long as its corporate existence shall continue, to possess, use and dispose of all real property and rights therein. The Authority has the power to acquire, hold and dispose of personal property for its corporate purposes. The Authority has no taxing power.

The Act provides that the Authority consists of a Board of seven members appointed by the Governor of the State, with the advice and consent of the State Senate. Board members serve for terms of nine years each. Vacancies in the Authority occurring other than by expiration of term are filled for the remainder of the unexpired term in the manner previously stated. Pursuant to the New York State Public Officers Law, members of the Authority whose terms have expired continue to serve until a successor is appointed and qualified. The members of the Authority receive no salary but are reimbursed for their necessary expenses incurred in connection with their duties. The Chair serves in that capacity for the full term of his/her appointment as a member of the Authority. The members of the Authority may appoint other officers. The present members of the Board and the expiration dates of their terms of office are as follows:

<u>Name</u>	<u>Expiration of Term</u>
Joanne M. Mahoney.....	January 1, 2020
Robert L. Megna .....	January 1, 2017
José Holguín-Veras .....	December 12, 2018
J. Donald Rice, Jr. ....	June 13, 2018
Stephen M. Saland .....	January 1, 2023
Heather C. Briccetti .....	September 14, 2026
(Vacant) .....	June 23, 2026

## Thruway Facilities and Operations

The Thruway is one of the largest tolled highway systems in the United States and is a critical component in the national interstate network. The original Thruway roadway system was constructed between 1949 and 1960 and is one of the oldest components of the national interstate highway system. In 1991, State legislation made the Authority additionally responsible for the operation and maintenance of 11 miles of I-287 Cross-Westchester Expressway. (The New York State Department of Transportation (NYSDOT) remains responsible for capital improvements to this roadway.) The Thruway System is now more than 570 miles in total length and includes 134 interchanges.

The Thruway serves travelers with a variety of needs and purposes, including commuters, business travelers, recreational travelers, and commercial vehicle traffic and provides the major route of access for visitors to the State’s tourist destinations including Niagara Falls, the State Canal system, the Finger Lakes, the Adirondacks, the Catskills and New York City. The Thruway has provided a dependable roadway for these travelers, sustaining and encouraging economic growth, fostering job creation and generating tax revenues to the State and its local governments. Underscoring its importance to the state, region and nation, in 2020 Thruway customers traveled approximately 6.2 billion vehicle-miles on the highway, averaging more than 17.0 million vehicle-miles per day. Due to the extent of its maintenance activities, good infrastructure conditions and the dedication of a specialized troop of the New York State Police to patrol the Thruway System, it has remained one of the safest roadway networks in the nation.

The Thruway System is comprised of 2,840 lane miles of roadway. In addition, the Authority has maintenance responsibility for 816 bridges and also owns 27 service areas and three welcome centers located at intervals along the Thruway System, operated by two food service and two fuel concessionaires that are open 24-hours daily, 7 days a week. Routine maintenance activities are performed by Authority staff from 21 maintenance locations grouped into four divisions.

The Thruway connects the principal cities of the State from New York City to Albany, and on to Utica, Syracuse and Rochester through to Buffalo and the Pennsylvania state line. Because the Thruway corridor serves 37 of the State's 62 counties and the majority of the State's population, it is the principal artery of travel and commerce within the State. It also is an important interstate connector, joining with the Massachusetts Turnpike (I-90), Connecticut Turnpike (I-95), New Jersey's Garden State Parkway, as well as several other Interstate routes such as I-287 from New Jersey; I-90 in Pennsylvania; I-290 around the north side of Buffalo; I-390 and I-490 serving Rochester; I-81, I-481 and I-690 at Syracuse; I-790 in Utica; I-87 (the Northway), I-88, I-90, I-787, and I-890 at Albany; and I-84 at Newburgh. As a result, the Thruway is a vital link to long distance interstate travel and a high proportion of its patrons are from out-of-state.

The Thruway is comprised of two types of toll systems – a controlled (ticket) system and a barrier system. The controlled system (approximately 481 miles) makes up the largest portion of the Thruway, running from Woodbury (in the southeast corner of the State) north along I-87 to Albany, then west on I-90 to Buffalo and south of Lake Erie to the Pennsylvania border. In addition to this main stretch of the controlled system, there is a small tolled branch south and east of Albany, known as the Berkshire Spur.

On the controlled system, tolls are charged based on the actual distance traveled by the customer. Meanwhile, barrier toll plazas have a fixed toll rate for each vehicle class and payment type (*e.g.*, Tolls by Mail, E-ZPass, as well as Commuter and other E-ZPass Discounts). The barrier systems are comprised of the Governor Mario M. Cuomo Bridge (formerly the Tappan Zee Bridge), Yonkers Barrier, New Rochelle Barrier, Spring Valley Barrier, Harriman Barrier and the Grand Island Bridges. Under the existing policy, toll rates across the system are based on vehicle classifications, related to the number of axles per vehicle and the height of the vehicle over the first two axles.

The Authority converted the barrier at The Governor Mario M. Cuomo Bridge to cashless tolling in April 2016. The Authority's conversion to cashless tolling of its remaining barriers (Grand Island Bridges, and the Harriman, New Rochelle, Yonkers and Spring Valley Barriers) occurred during 2018. The Authority completed system-wide cashless tolling with conversion of the entire controlled system to cashless tolling in November 2020.

Approximately 216.7 million toll transactions occurred on the Thruway in 2020, generating more than \$615.3 million in toll revenues.

## Organization

To administer its responsibilities for the Thruway and other authority projects, the Authority is organized into nine operating departments and currently supports approximately 1,946 permanent employees.

The departments are Board and Executive, Engineering, Maintenance and Operations, Administrative Services, Finance and Accounts, Legal, Media Relations & Communications, Audit and Management Services and Information Technology.

The Department of Engineering includes Asset and Innovation Management, Capital Program and Contracts Management, Program Delivery, and Transportation Planning and Environmental Services. The Department oversees the development and implementation of the Authority's long range capital programs. It has the professional capacity to design and inspect some capital projects in-house and accordingly does not have to rely solely on outside consultants.

The Department of Maintenance and Operations manages and maintains the highway, bridge and facilities infrastructure and equipment in a cost-effective manner in order to offer Thruway users high levels of safety and service. It is responsible for all toll collection activities, traffic management and travelers' services including concessions. The Department helps develop the Multi-Year Capital Program designed to preserve the condition, serviceability and safety of the roadway, bridges and facilities. The Department also continues to explore and implement innovative designs and technologies to enhance the safety and efficiency of the Thruway System. Direct field management of the maintenance and operations functions is handled through the four division offices (New York, Albany, Syracuse and Buffalo) under the auspices of the four Division Directors who report to the Chief of Staff.

The Department of Maintenance and Operations also acts as liaison with New York State Police Troop T, whose 320 members patrol the Thruway. In April 2016, the Authority resumed financial responsibility for State Police Troop T enforcement on the Thruway.

## Roadway

The original 2,800 lane mile Thruway roadway system was constructed between 1949 and 1960 and is one of the oldest components of the national Interstate Highway System. In 1991, State legislation made the Authority additionally responsible for the operation and maintenance of 11 miles of I-287 Cross-Westchester Expressway. The New York State Department of Transportation (NYSDOT) remains responsible for capital improvements to this roadway. The Thruway system is now more than 570 total miles in length and includes 134 interchanges. The various sections of roadway currently maintained by the Authority are listed in the table below.

THRUWAY BY SECTION AND MILES	
SECTION	MILES
THE MAINLINE (New York - Buffalo)	426 miles
ERIE SECTION (Buffalo - Pennsylvania Line)	70 miles
NIAGARA SECTION I-190 (Buffalo - Niagara Falls)	21 miles
BERKSHIRE SECTION (Selkirk - Massachusetts Line)	24 miles
NEW ENGLAND SECTION (I-95) (Bronx - Connecticut Line)	15 miles
GARDEN STATE PARKWAY CONNECTION (Spring Valley - New Jersey)	3 miles
CROSS WESTCHESTER EXPRESSWAY (I-287) (Mainline I-87 in Tarrytown - I-95 in Rye)	11 miles
<b>Total</b>	<b>570 miles</b>

## Bridges

The Authority has maintenance responsibility for 816 bridges that carry local roads and state highways over the Thruway System. The structural characteristics of these bridges vary: about 15 percent are concrete structures, either pre-stressed girder, arch, rigid frame or box culverts. The remaining 85 percent of the bridges are steel structures with asphalt overlays, reinforced concrete decks. As with the roadway, an overwhelming majority of the structures date back to the original opening of the Thruway System in the 1950s and require continual and significant repair, rehabilitation and reconstruction investments to prevent deteriorating conditions.

By far, the largest bridge on the Thruway System is the Governor Mario M. Cuomo Bridge over the Hudson River, located approximately 20 miles north of New York City. Due to its size and importance, a permanent Authority maintenance team is assigned to the Bridge.

Besides the Governor Mario M. Cuomo Bridge, the Thruway maintains and operates seven other major bridge structures. These include the Castleton-on-Hudson Bridge across the Hudson River on the Berkshire Section; the four Grand Island Bridges spanning branches of the Niagara River north of Buffalo; the mile long Niagara Viaduct, and the Byram River Bridge on the New England Section.

## Thruway Service Areas

The Thruway's 27 Service Areas and three welcome centers offer a variety of restaurants and other services designed to serve Thruway visitors, as well as competitive fuel prices. In addition, Automated Teller Machines (ATMs) are available, as are tourist information centers and kiosks, gift shops, Wireless Fidelity (Wi-Fi), travel safety information, and up-to-date weather and traffic conditions. All of the Service Areas offer family-assist restrooms, allowing people with special needs to get help from a traveling companion in total privacy. Travel Plazas are now fully accessible to travelers with special needs. Also, parents will find diaper changing areas in both men's and women's restrooms.

In July 2021, the Thruway commenced a \$450 million service area project under a private investment plan by Empire State Thruway Partners to redevelop the 27 service areas. The service areas were originally built in the 1950s, with the last significant redevelopment taking place in the 1990s. Most buildings at the new service areas will be configured to provide entrances from both the parking lot and fuel station facilities. New amenities and services at select service areas will also include exterior seating with access to Taste NY farm markets, picnic areas, play areas, pet walking areas with comfort stations, EV charging stations, and commercial driver services including increased truck parking, showers, laundry facilities and fitness centers. New food concepts will be available to customers as part of the redevelopment project. Customers will have diverse food options at all 27 service areas, offering a range of healthy products and meals from nationally recognized restaurants.

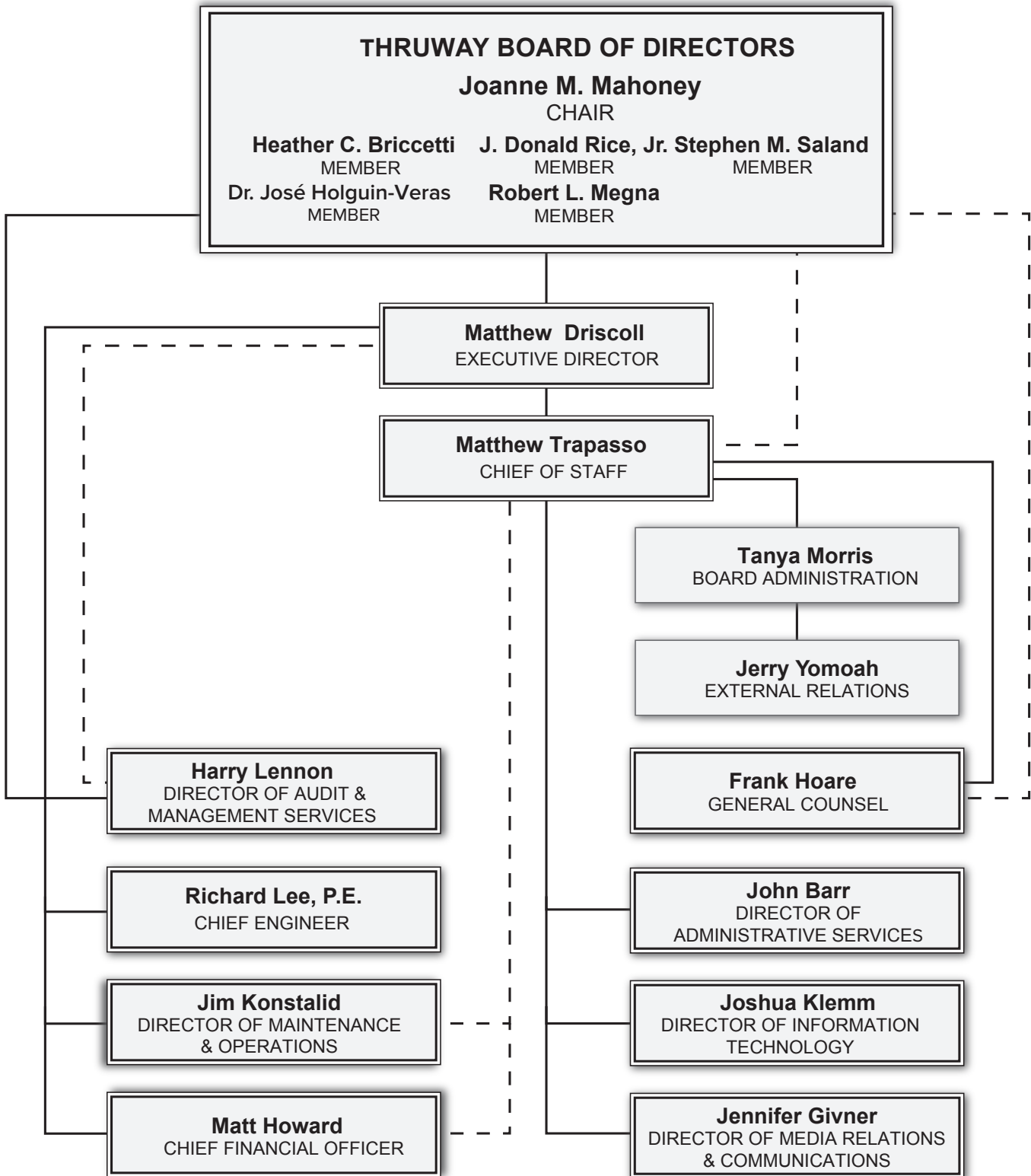
Service Areas are strategically located about every 30 to 40 miles along the Thruway. All gasoline stations at Thruway Service Areas have self-service islands. Upon request, people with disabilities and other travelers who so desire may receive full-service assistance at self-service pumps at self-serve prices.

## Rest Areas/Park and Ride Lots

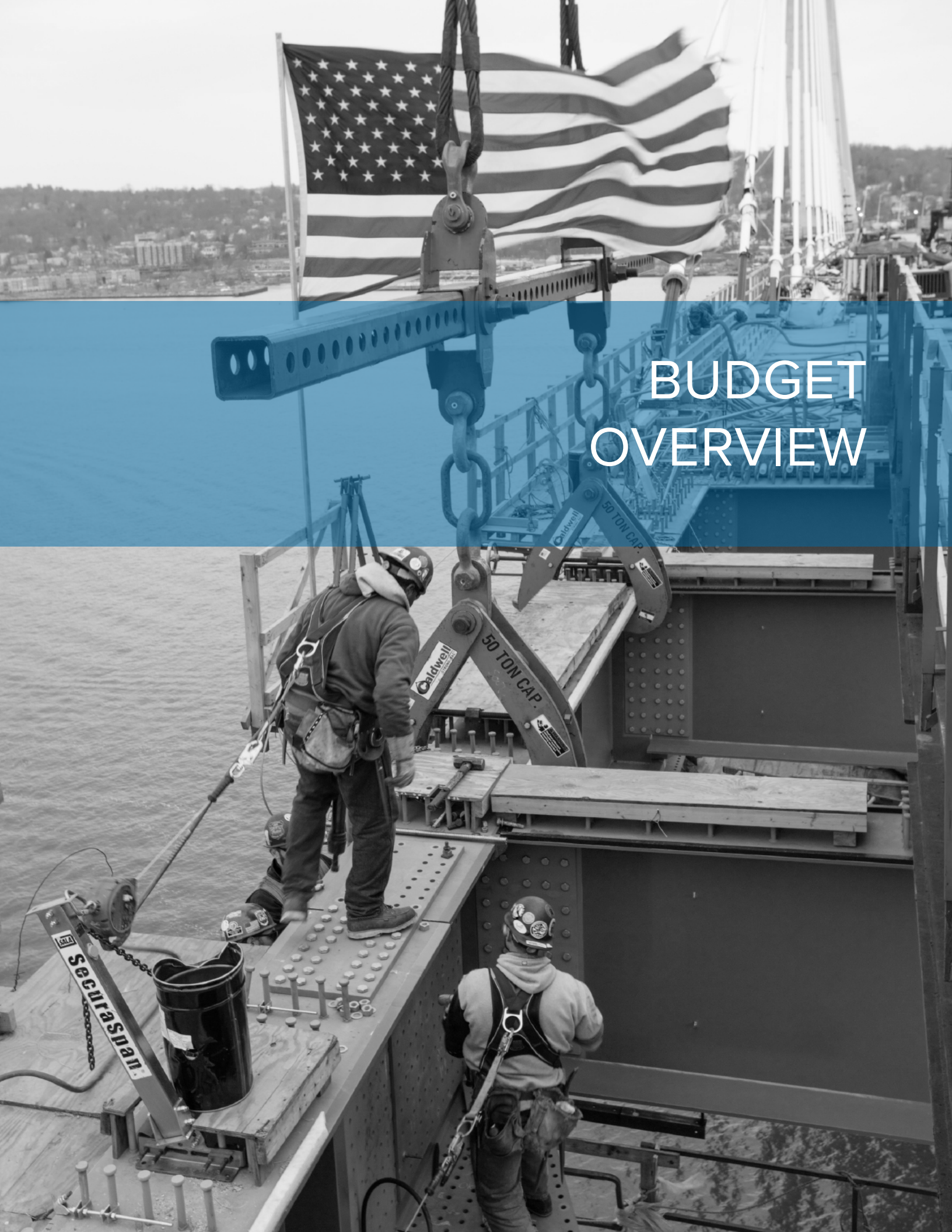
There are conveniently located parking areas along the Thruway system where travelers are invited to stop and rest during their trips. There are emergency call boxes at these rest areas that connect directly to the Thruway Statewide Operations Center, located in the Thruway Headquarters Building.

The Thruway Authority does offer several commuter Park and Ride lots across the System. Parking at these commuter lots is posted for a maximum stay of 16 hours, and are not designated for multiple day stays. There are no overnight or long-term parking facilities on the System.

# All Department Organization Chart







# BUDGET OVERVIEW

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50 TON CAP.

Securaman



## THRUWAY AUTHORITY 2022 BUDGET AT A GLANCE

- **2022 Overall Budget:** The 2022 Overall budget for the Thruway totals \$1.1 billion. This includes \$375.8 million for the operating expenses of the Thruway Authority, \$307.5 million for debt service, \$64.5 million for reimbursement of costs associated with New York State Police Troop T patrolling the system and \$397.3 million for capital projects across the Thruway system in 2022.
- **Traffic and Toll Revenues:** The 2022 Budget forecasts total traffic of 377 million transactions, reflecting growth of 14 million transactions or 3.9 percent above 2021 levels. This projection represents a full restoration to pre-covid traffic levels. This corresponds to a toll revenue forecast of \$805.6 million, reflecting an increase of \$54 million or 7 percent above 2021 levels. This forecast is supported by improved traffic projections and by toll adjustments approved in 2020 and reflects a \$65.7 million or 8% increase in toll revenues from the pre-covid levels of 2019.
- **2022 Operating Budget:** The 2022 Thruway Authority operating budget totals \$375.8 million (with operating reserves), which is \$10.6 million or 2.9 percent above revised 2021 levels.
- **2022-2026 Capital Program:** The 2022-2026 Capital Program that would provide \$1.9 billion for Thruway Authority capital projects. This includes \$244.9 million for the remaining costs of the New NY Bridge project that will result in the completion of the Governor Mario M. Cuomo Bridge and \$1.65 billion for system-wide projects on the Thruway.
- **2022 State Police Troop T Reimbursement:** The 2022 Thruway Authority budget provides \$64.5 million for reimbursement to the State of New York for costs associated with New York State Police Troop T patrolling the system reflecting a \$495,588 or 0.8 percent above revised 2021 levels.

## 2021 REVISED BUDGET SUMMARY

The revised 2021 budget forecasts total Thruway revenues of \$812.56 million in 2021. This reflects an increase of \$26.4 million or 3.4% from the original budget that was approved in December 2020. These figures incorporate the toll revenue impacts from better than anticipated traffic growth, but also adjustments to all other Thruway revenue sources as well (interest earnings, concession rental payments, E-ZPass and Tolls by Mail Violations and Fees and various other Sundry Revenues).

<b>Thruway Authority Revenues (in \$ millions)</b>					
	<b>2020</b>	<b>2021</b>	<b>2021</b>	<b>\$</b>	<b>%</b>
	<b>Actual</b>	<b>Original</b>	<b>Revised</b>	<b>Change</b>	<b>Change</b>
Tolls	615.29	708.63	750.81	42.18	6.0%
Concessions	6.76	5.08	5.38	0.30	5.9%
Interest	1.46	6.65	0.50	(6.15)	-92.5%
E-Zpass Violations and Fees	18.02	13.20	11.40	(1.80)	-13.6%
TBM Violations and Fees	15.40	44.30	34.20	(10.10)	-22.8%
Sundry	11.54	8.32	10.27	1.95	23.5%
<b>Total</b>	<b>668.47</b>	<b>786.17</b>	<b>812.56</b>	<b>26.39</b>	<b>3.4%</b>

## 2021 REVISED BUDGET SUMMARY

<b>2021 Revised Budget Summary (in \$ millions)</b>					
	<b>Actual</b>	<b>Original</b>	<b>Revised</b>	<b>\$</b>	<b>%</b>
	<b>2020</b>	<b>2021</b>	<b>2021</b>	<b>Change</b>	<b>Change</b>
Operating Expenses (including Thruway and State Police)	377.64	423.88	429.12	5.24	1.2%
Debt Service	191.01	338.68	338.36	(0.32)	-0.1%
Capital Program	538.01	374.29	317.18	(57.11)	-15.3%
<b>Total Uses</b>	<b>1,106.66</b>	<b>1,136.85</b>	<b>1,084.66</b>	<b>(52.19)</b>	<b>-4.6%</b>
New NY Bridge Project	88.93	52.89	30.10	(22.79)	-43%
<b>Total Uses- Net of the New NY Bridge Project</b>	<b>1,017.72</b>	<b>1,083.97</b>	<b>1,054.56</b>	<b>(29.40)</b>	<b>-2.7%</b>

- The revised 2021 Budget totals \$1.08 billion, reflecting a \$52.19 million or 4.6% reduction from the level approved by the board in December 2020. Net of New NY Bridge Project expenses, the 2021 Revised Budget totals \$1.054 billion reflecting a \$29.40 million or 2.7% reduction from the level approved by the board in December 2020.
- The revised 2021 Budget provides a total of \$365.15 million for operating expenses of the Thruway Authority (including provisions). This represents an increase of \$4.75 million or 1.3 percent above the originally approved 2021 budget levels. The 2021 Budget also provides \$63.97 million for reimbursement to the State Police for the cost of the Troop T patrolling of the system an increase of \$493,170 or 0.78 percent from the original 2021 budget.

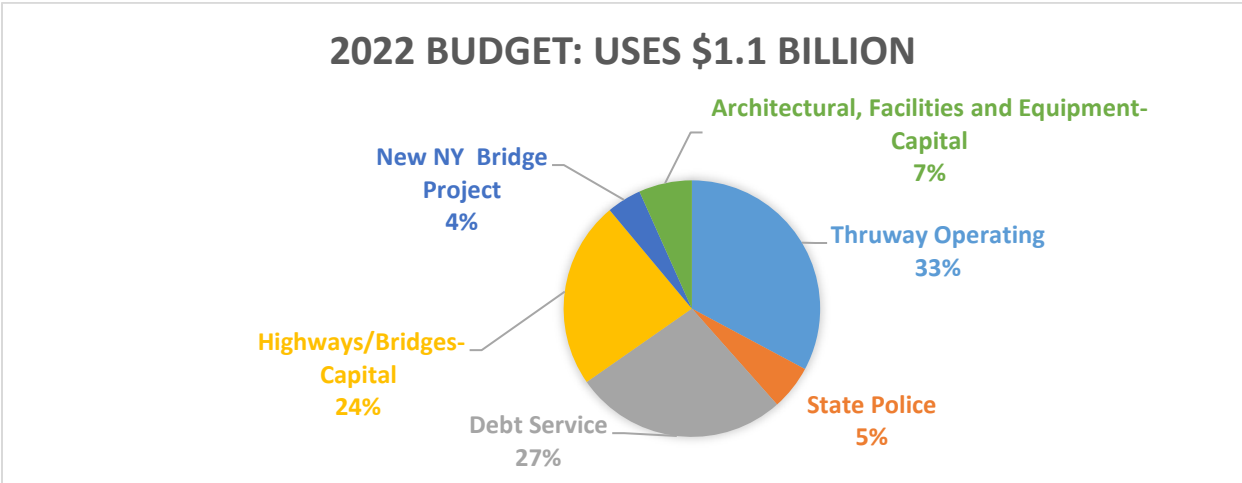
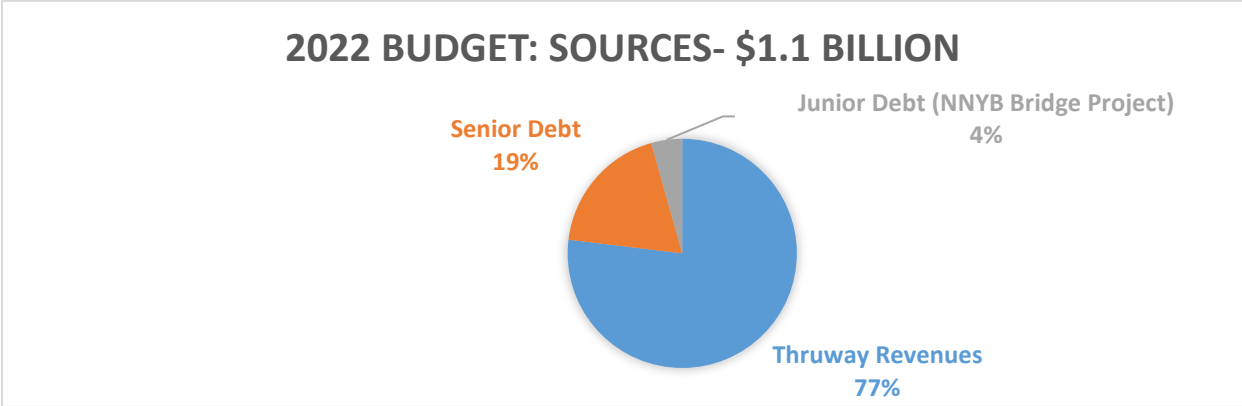
<b>2021 Revised Budget Operating Budget Revisions</b>	
<b>Description</b>	<b>Budget Revision</b>
Increased Personal Service Salary and Benefits costs due to reduced Allocations	3,980,875
Increase Environment Remediation Provision	3,000,000
Increased Personal Services Costs (retroactive 2% salary increases)	2,431,823
Increased New York State Police Troop T Reimbursement Costs	493,170
Increased Maintenance and Repair Costs	238,624
Increased Operating Supplies Expense	198,163
Increased Equipment and Projects not capitalized	107,606
Lower Benefit costs-HI, Unemployment, Employee Benefit Fund	(1,288,000)
Reduced TBM/EZP Administration Costs	(3,923,000)
<b>TOTAL- 2021 Operating Budget Revisions</b>	<b>5,239,261</b>

- The revised 2021 Budget provides a total of \$317.2 million to support the capital program of the Thruway Authority. This represents a net decrease of \$57.1 million or 15 percent below the originally approved 2021 levels.
- The revised 2021 Budget provides \$30.0 million for the New NY Bridge project, a decrease of \$22.8 million or 43.2 percent from the original 2021 budget. This decrease is associated with timing differences that resulted from lower actual project spending in 2021, which shifts these project expenses into the revised 2022 budget.
- The revised 2021 Budget provides \$287.2 million for System-wide Thruway capital project spending, a reduction of \$34.3 million or 10.7 percent from the original 2021 budget. This reduction is comprised of \$79.9 million in Bridge and Highway project bid savings and lower project closeout costs and \$2 million in savings in Architectural bid savings and lower project closeout costs. These savings are offset by an increase of \$47.6 million in capital expenses associated with timing differences associated with the system-wide cashless tolling project. In this instance, project spending in 2020 was lower than expected, thus increasing the 2021 expenses required to support the project.

# 2022 THRUWAY AUTHORITY BUDGET

## 2022 BUDGET SUMMARY

<b>2022 Budget Summary (in \$ millions)</b>					
	Actual 2020	Revised 2021	Budget 2022	\$ Change	% Change
Operating Expenses (including Thruway and State Police)	377.64	429.12	440.23	11.11	2.6%
Retained for Working Capital	-	-	-	-	-
Debt Service	191.01	338.36	307.51	(30.85)	-9.1%
Capital Program	538.01	317.18	397.34	80.16	25.3%
<b>Total</b>	<b>1,106.66</b>	<b>1,084.66</b>	<b>1,145.07</b>	<b>60.41</b>	<b>5.6%</b>



- The 2022 Budget provides for total uses of \$1.1 billion, representing a \$60.4 million increase or 5.6 percent increase from revised 2021 levels.
- The 2022 Budget forecasts total traffic of 377 million transactions, reflecting growth of 14 million transactions or 3.9 percent above 2021 levels. This projection represents a full restoration to pre-covid traffic levels. This corresponds to a toll revenue forecast of \$805.6 million, reflecting an increase of \$54 million or 7 percent above 2021 levels. This forecast is supported by improved traffic projections and by toll adjustments approved in 2020 and reflects a \$65.7 million or 8% increase in toll revenues from the pre-covid levels of 2019.
- The 2022 Budget provides a total of \$375.7 million for operating expenses of the Thruway Authority (including provisions). This represents an increase of \$10.6 million or 2.9 percent above revised 2021 levels. The 2022 Budget also provides \$64.4 million for reimbursement to the State Police for the cost of the Troop T patrolling of the system.
- The 2022 Budget provides a total of \$397.3 million to support the capital program of the Thruway Authority. This represents an increase of \$80.2 million or 25.3 percent above revised 2021 levels.
- The 2022 Budget provides a 2022-2026 Capital Program that would provide \$1.9 billion for Thruway Authority capital projects. This includes \$244.9 million for New NY Bridge project that will result in the completion of the Governor Mario M. Cuomo Bridge and \$1.65 billion for system-wide projects on the Thruway.

## THRUWAY AUTHORITY 2022 REVENUE SUMMARY

Thruway Authority Revenues (in \$ millions)					
	2020	2021	2022	\$	%
	Actual	Revised	Budget	Change	Change
Tolls	615.29	750.81	805.58	54.77	7.3%
Concessions	6.76	5.38	5.29	(0.08)	-1.5%
Interest	1.46	0.50	1.00	0.50	100.0%
E-Zpass Violations and Fees	18.02	11.40	10.00	(1.40)	-12.3%
TBM Violations and Fees	15.40	34.20	50.10	15.90	46.5%
Sundry	11.54	10.27	8.62	(1.65)	-16.1%
<b>Total</b>	<b>668.47</b>	<b>812.56</b>	<b>880.59</b>	<b>68.03</b>	<b>8.4%</b>

- The 2022 Budget forecasts total Thruway Authority revenues of \$880.6 million, an increase of \$68.03 million or 8.4 percent above revised 2021 levels. This corresponds to a toll revenue forecast of \$805.6 million reflecting an increase of \$54.7 million or 7.3 percent above revised 2021

levels; concessions revenues of \$5.29 million, E-ZPass and Tolls By Mail Violations and fees of \$60.1 million; sundry revenues of \$8.62 million; and, interest income of \$1 million.

## 2022 Thruway Authority Operating Budget Summary

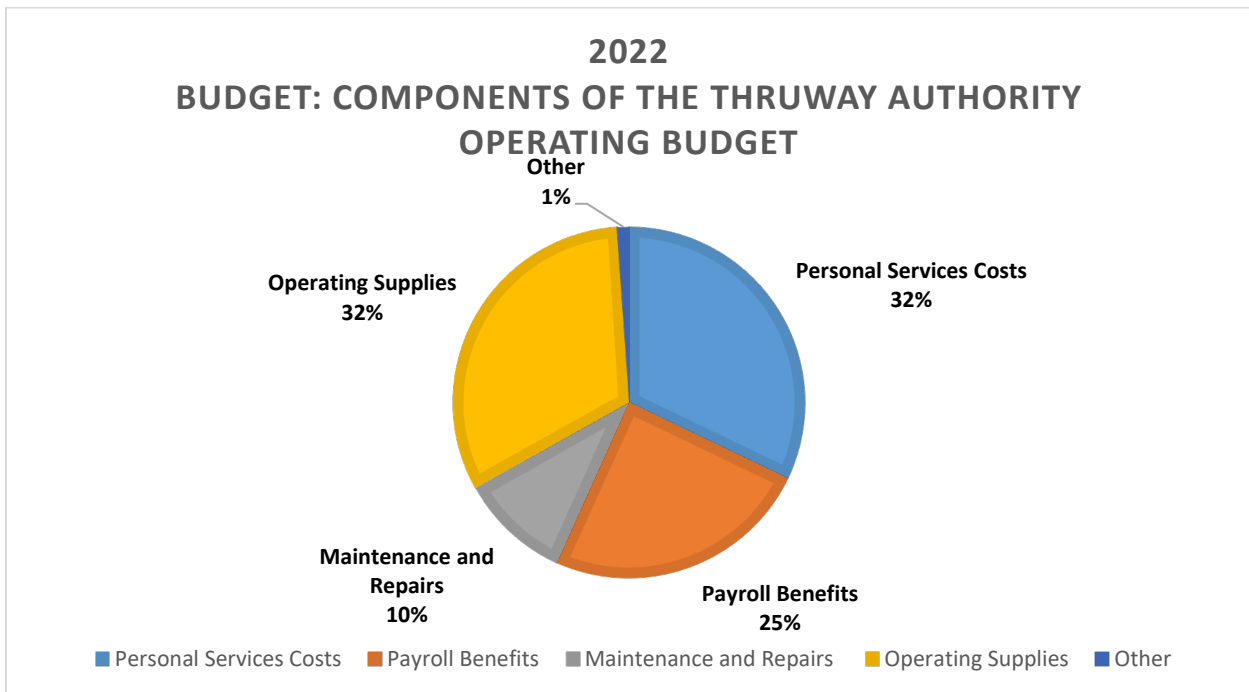
<b>2022 Thruway Authority Operating Budget Summary</b>					
<b>(in \$ millions)</b>					
	<b>Actual</b>	<b>Revised</b>	<b>2022</b>		
	<b>2020</b>	<b>Budget</b>	<b>Budget</b>	<b>\$ Change</b>	<b>% Change</b>
		<b>2021</b>			
Departmental					
Operating Expenses	215.27	259.99	272.94	12.95	5.0%
General Charges	101.30	101.17	101.83	0.66	0.7%
Operating Reserves (Environmental and Legal)	2.00	4.00	1.00	(3.00)	-75.0%
<b>Total</b>	<b>318.57</b>	<b>365.15</b>	<b>375.76</b>	<b>10.61</b>	<b>2.9%</b>

- The 2022 Budget provides a total of \$375.7 million (with provisions for legal claims and environmental remediation) to support the operating expenses of the Thruway Authority. This represents an increase of \$10.6 million or 2.9 percent above revised 2021 levels. This includes \$272.9 million for departmental operations (a \$12.9 million or 5 percent increase from revised 2021 levels), \$101.8 million for general charges, an increase of \$0.66 million or 0.7 percent from revised 2021 levels, and \$1 million for operating reserves which reflects a \$3 million reduction from the provisions made in the revised 2021 budget.

## Thruway Authority 2022 Operating Budget Major Components of Annual Change

Amount (\$ millions)

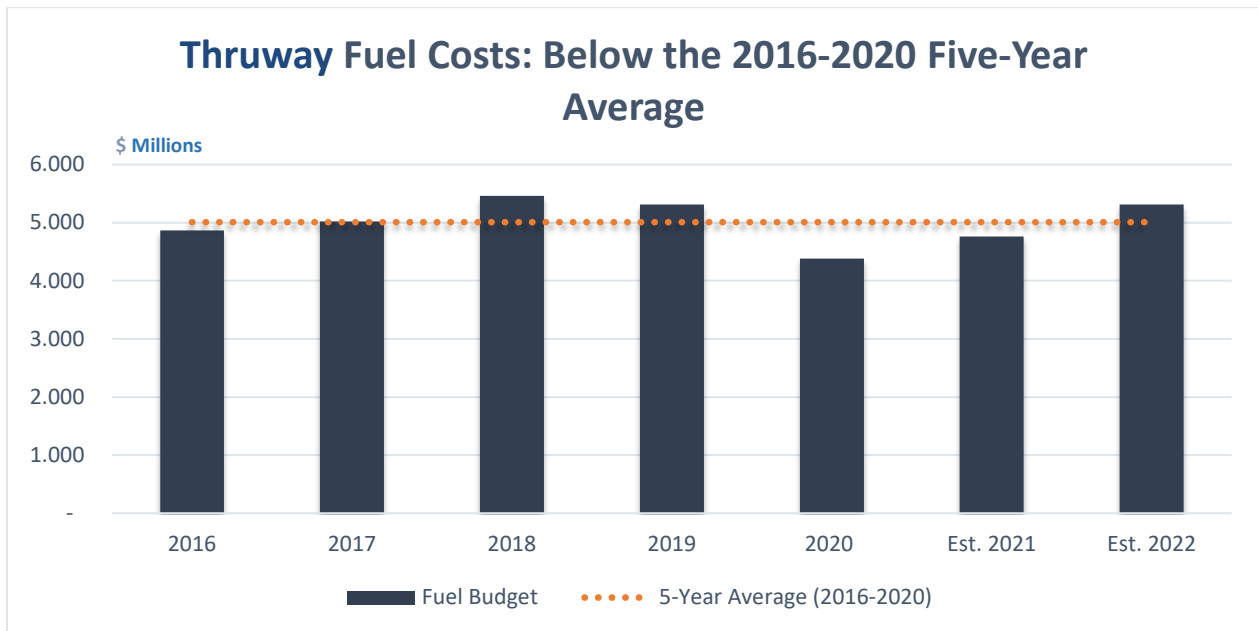
<b>Revised 2021 Operating Budget (excluding State Police)</b>	<b>365.15</b>
Operating Supplies (TBM and EZP Administration)	10.62
Payroll Benefits (HI, Pensions, Unemployment and Social Security)	(0.23)
Personal Services	4.64
Studies and equipment projects not capitalized	0.75
Maintenance and Repairs (snow and ice, fuel, bridge & highway)	0.63
Allocations to Other Funds	(2.80)
Provisions for Environmental Remediation and Legal Claims	(3.00)
 <b>2022 Operating Budget (excluding State Police)</b>	<b>375.76</b>
Year to Year Change	10.61
% Change	2.9%



- Major components of the \$10.6 million annual change in the Thruway Authority Operating Budget include the following:
  - An increase in Personal Services costs of \$4.64 million or 3.5 percent from 2021 levels. This reflects additional costs associated with hiring activity, salary increments, step advances and longevity payments.

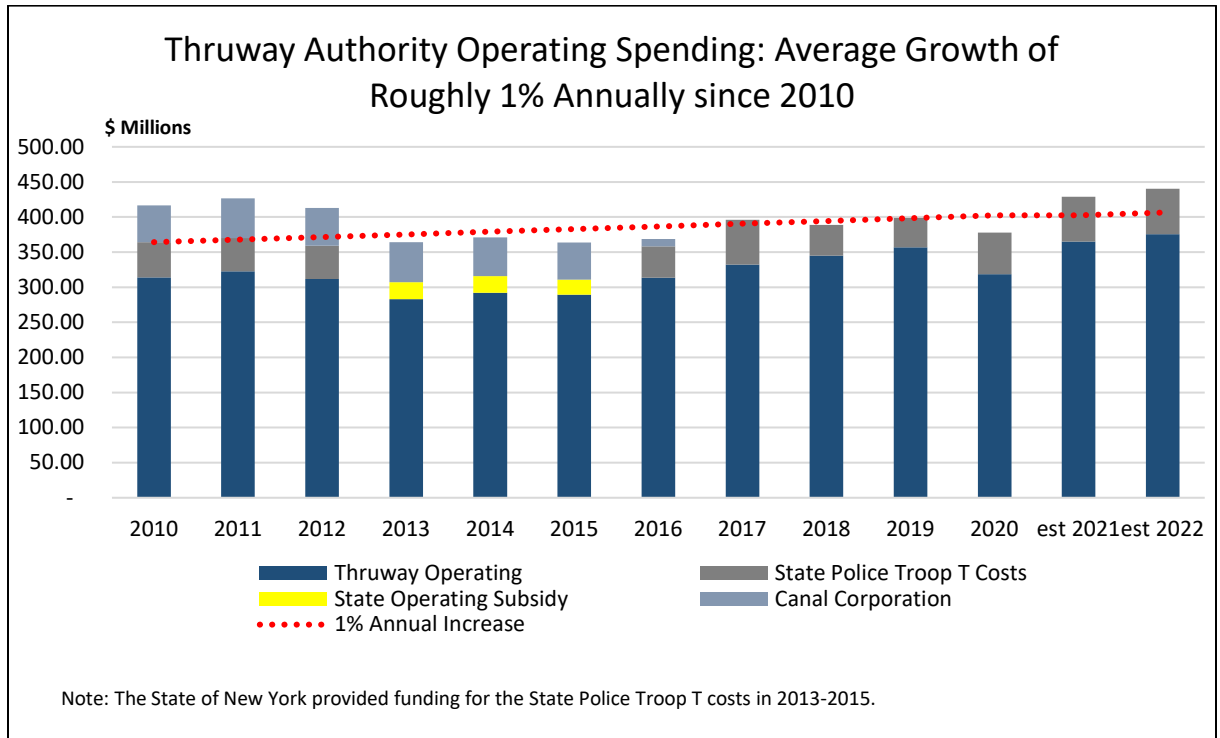


- A net reduction of \$230,000 for employee benefits or 0.2 percent from 2021 levels. This includes an increase of \$3.1 million for health insurance costs; a reduction of \$4.46 million in pension costs associated with employer contribution rate requirements recently announced by the New York State and Local Retirement System; a \$415,000 increase in Social Security expenses; a \$200,000 increase in contribution costs for the Employee Benefit Fund and no change in Workers' Compensation Insurance costs based on recent projections for determining premium costs.
- An increase of \$10.62 million in operating supplies. This includes an additional \$8.98 million associated with E-ZPass account management and Tolls by Mail administrative costs associated with the conversion to cashless tolling system-wide.
- A \$628,865 or 1.7 percent increase in maintenance and repair costs. Maintenance and repair expenses include \$4.2 million to support fuel expenses which are budgeted at a level slightly less than the five-year average (the graph below includes the combined Thruway and State Police fuel expenses included in the 2022 Budget).



- The 2022 Budget also includes \$2.83 million for non-capitalized project/equipment costs, reflecting an increase of \$753,626 million from revised 2021 levels. This reflects increased computer equipment expenses resulting in a return to the pre-covid levels of replacement.
- Savings of \$2.8 million resulting from increased allocations to capital and other funds based on the level of work included in the 2022 capital plan and is consistent with levels set for such allocations in prior years.

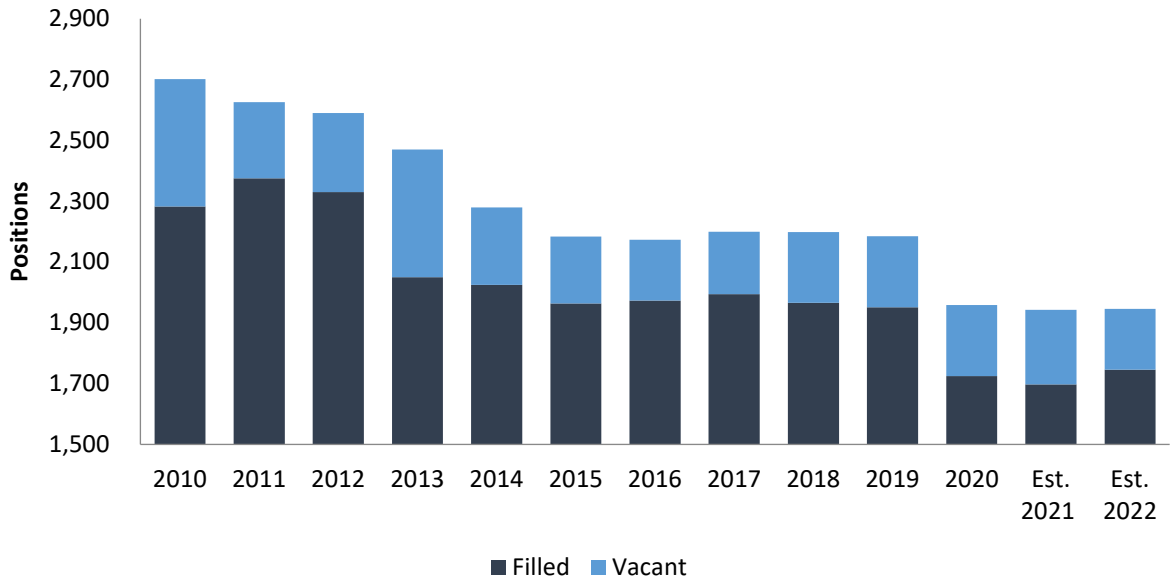
- The 2022 Budget provides \$1 million for provisions for Environmental Remediation and Legal Claims reflecting a \$3 million reduction from the levels provided in the revised 2021 budget.
- Since 2010, the Thruway Authority has operated at reduced levels and limited operating spending growth. In fact, for the period 2010-2021 annual growth of Thruway Authority operating expenses averaged roughly one percent annually (see figure below).



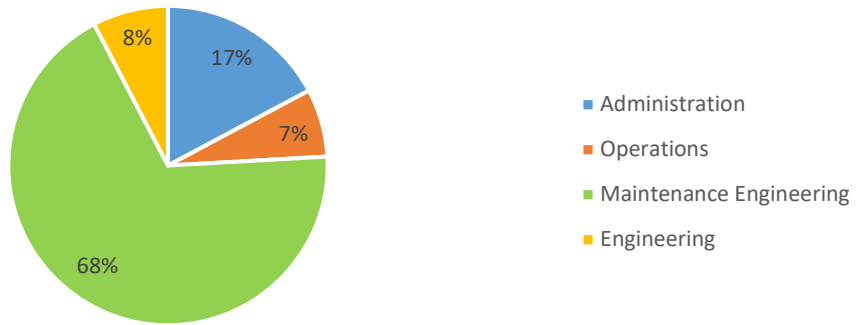
- The 2022 budget provides for 1,946 budgeted positions. This level is roughly 755 positions or 28 percent lower than the budgeted positions in 2010.

### Thruway Authority Budgeted Positions 2010-2022

755 budgeted positions or 28 percent below 2010 levels



### 2022 Thruway Authority- Percentage of Budgeted Staffing by Function



## 2022 CAPITAL PROGRAM

2022 Budget Capital Program Funding Uses (in \$ millions)						
	2020 Actual	2021 Original	2021 Revised	2022 Budget	\$ Change	% Change
Highway & Bridge	166.22	170.94	90.98	270.59	179.61	197.4%
Architectural (Facilities)	6.18	9.82	7.86	13.52	5.65	71.9%
Equipment & Systems and ITS	276.76	140.70	188.31	63.21	(125.11)	-66.4%
NYSP Equipment and Facilities	0.00	0.03	0.03	0.03	-	0.0%
<b>Sub Total - Thruway</b>	<b>449.15</b>	<b>321.49</b>	<b>287.18</b>	<b>347.34</b>	<b>60.16</b>	<b>20.9%</b>
<b>New NY Bridge Project</b>	<b>88.86</b>	<b>52.80</b>	<b>30.00</b>	<b>50.00</b>	<b>20.00</b>	<b>66.7%</b>
<b>TOTAL</b>	<b>538.01</b>	<b>374.29</b>	<b>317.18</b>	<b>397.34</b>	<b>80.16</b>	<b>25.3%</b>

- The 2022 Budget provides a total of \$397.3 million to support the capital program of the Thruway Authority. This represents an increase of \$80.16 million or 25.3 percent above Revised 2021 levels.
- The 2022 Budget provides a total of \$347.3 million to support the system-wide capital projects. This represents an increase of \$60.1 million or 20.9 percent above Revised 2021 levels.
- The 2022 Budget incorporates \$50.0 million in capital program funding for the NNYB project in 2022, an increase of \$20.0 million or 66.7 percent above Revised 2021 levels.
- The 2022 Budget provides a 2022-2026 Capital Program that would provide \$1.9 billion for Thruway Authority capital projects. This includes \$244.9 million for New NY Bridge project that will result in the completion of the Governor Mario M. Cuomo Bridge and \$1.65 billion for system-wide projects on the Thruway.

## 2022 Debt Service

2022 Budget					
Debt Service Expenses (in \$ millions)					
	2020	2021	2022	\$	%
	Actual	Revised	Budget	Change	Change
Senior Debt Service	166.79	240.51	243.63	3.12	1.3%
Junior Debt Service	23.13	46.36	63.29	16.93	36.5%
Subordinate Debt - Line of Credit	1.09	51.49	0.58	(50.90)	-98.9%
<b>TOTAL</b>	<b>191.01</b>	<b>338.36</b>	<b>307.51</b>	<b>(30.85)</b>	<b>-9.1%</b>

- The 2022 Budget provides a total of \$307.51 million to support debt service expenses of the Thruway Authority. This represents a decrease of \$30.85 million or 9.1 percent below the revised 2021 levels. This reduction is largely due to the payment of \$51.49 million in line of credit costs that were paid in full and non-recurring in 2022.



2021 REVISED  
FINANCIAL  
PLAN

## Actual 2020 vs. Revised 2021 Budget

	Actual 2020	Revised 2021	Amount of Change
<b><u>SOURCES:</u></b>			
Thruway Revenues	665,986,343	812,559,985	146,573,642
Prior Year Reserve Balances	(93,657,797)	103,440,831	197,098,628
Senior Debt	404,320,349	160,521,204	(243,799,145)
Junior Debt	68,878,387	6,559,169	(62,319,218)
Federal Funds	0	0	0
Other Funds	(825,191)	1,578,933	2,404,124
Thruway Stabilization Program Funds	61,954,743	0	(61,954,743)
<b>Total Sources</b>	<b>1,106,656,834</b>	<b>1,084,660,122</b>	<b>(21,996,712)</b>
<b>Total Sources - New NY Bridge Project</b>	<b>88,932,764</b>	<b>30,095,529</b>	<b>(58,837,235)</b>
<b>Total Sources - Net of New NY Bridge Project</b>	<b>1,017,724,070</b>	<b>1,054,564,593</b>	<b>36,840,523</b>
<b><u>USES:</u></b>			
<b>Operating Expenses:</b>			
Thruway Operating	316,576,904	361,152,313	44,575,409
State Police Operating	59,058,620	63,969,041	4,910,421
Sub Total	375,635,524	425,121,354	49,485,830
Provisions for Claims, Env Remediation & Cashless Tolling Transition	1,999,765	4,000,000	2,000,235
Total	377,635,289	429,121,354	51,486,065
<b>Retained for Working Capital</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Debt Service:</b>			
Senior Debt	166,790,345	240,509,012	73,718,667
Junior Debt	23,130,960	46,362,550	23,231,590
Subordinate Debt - Line of Credit	1,086,458	51,487,153	50,400,695
Total	191,007,763	338,358,715	147,350,952
<b>Capital Program:</b>			
Thruway Capital - Highways and Bridges	166,220,635	90,977,198	(75,243,437)
Thruway Capital - New NY Bridge	88,861,173	30,000,000	(58,861,173)
Thruway Capital - Architectural & Facilities	6,176,279	7,861,424	1,685,145
Thruway Capital - Equipment & Systems/ITS	276,755,695	188,311,431	(88,444,264)
Thruway Capital - SP Equipment/Facilities	0	30,000	30,000
Total	538,013,782	317,180,053	(220,833,729)
<b>Total Uses</b>	<b>1,106,656,834</b>	<b>1,084,660,122</b>	<b>(21,996,712)</b>
<b>Total Uses - New NY Bridge Project</b>	<b>88,932,764</b>	<b>30,095,529</b>	<b>(58,837,235)</b>
<b>Total Uses - Net of New NY Bridge Project</b>	<b>1,017,724,070</b>	<b>1,054,564,593</b>	<b>36,840,523</b>

**2021 Revised Financial Plan  
New York State Thruway Authority  
(in millions)**

<b>2021 Budget - Revenues</b>	786.2
<b>Revised Financial Plan Adjustments:</b>	
Toll Revenue	42.2 Increase in passenger and commercial toll revenue due to increased traffic.
Concession Revenue	0.3 Increased restaurant sales
Interest Earnings	(6.2) Decrease in cash balances and low interest rates
E-Zpass/Tolls By Mail Violations & Fees	(11.9) Decrease due to delay in violation bill processing
Sundry Revenues	2.0 Increase in fiber network fees
<b>2021 Revised Budget - Revenues</b>	<u>812.6</u>
<b>2021 Budget - Thruway Operating Expenses</b>	359.4
<b>Revised Financial Plan Adjustments:</b>	
Allocations (Salaries and Benefits)	4.0 Decrease in personal service and fringe benefit allocations due to fewer capital and technology projects
Personal Services	2.4 Increase due to retroactively awarded raises/steps
Pensions	1.1 Increase in salary base
Professional Services	0.5 Increase related to RFP for strategic planning/policy advice
Unemployment Insurance	(1.0) Unemployment costs covered by CARES act for 2021.
Health Insurance	(1.3) Based on actual premiums and enrollment
E-ZPass and Tolls By Mail Administration	(3.9) Mainly lower tolls by mail administration fees than originally estimated
Miscellaneous	(0.1) Miscellaneous adjustments to various accounts
<b>2021 Revised Thruway Operating Budget</b>	<u>361.2</u>



**2021 Revised Financial Plan  
New York State Thruway Authority  
(in millions)**

<b>2021 Budget - Capital Program</b>	<b>374.3</b>
<b>Revised Financial Plan Adjustments:</b>	
New NY Bridge Project	(22.8)
Thruway Capital	(34.3)
<b>2021 Revised Budget - Capital Program</b>	<u><u><b>317.2</b></u></u>

<b>2021 Budget - Capital Program Explanations</b>	<b>374.3</b>
<b>Revised Financial Plan Adjustments:</b>	

**New NY Bridge Project**

Timing Differences (22.8) Based on updated spending and project schedule

**Thruway Capital**

Highway and Bridge Bid savings and projects closed out lower than contract value, as well as (79.9) shifts in project schedules and timing differences.

Architectural Bid savings and projects closed out lower than contract value, as well as (2.0) shifts in project schedules and timing differences.

Equipment and Systems/ITS Mainly timing differences associated with Cashless Tolling; Contractors 47.6 spent less in 2020 than expected, thus increasing the 2021 cash flow.

<b>2021 Revised Capital Program Budget</b>	<u><u><b>317.2</b></u></u>
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**2021 Revised Budget - Consolidated Budget Schedule**

Use of Funds		Source of Funds							
Category	Amount	2021 Thruway Revenues	Prior Year Reserve Balances	Senior Debt	Junior Debt	Federal Funds	Thruway Stabilization Program Funds (1)	Other Funds	Total
<b>Thruway and Canal</b>									
Thruway Operating	361,152,313	361,152,313	0	0	0	0	0	0	361,152,313
Provision for Claims	500,000	500,000	0	0	0	0	0	0	500,000
Provision for Environ. Rem.	3,500,000	3,500,000	0	0	0	0	0	0	3,500,000
Senior Debt Service	240,509,012	240,509,012	0	0	0	0	0	0	240,509,012
Junior Debt Service	46,362,550	46,362,550	0	0	0	0	0	0	46,362,550
<b>Capital Program</b>	<b>317,180,053</b>	<b>125,079,916</b>	<b>23,440,831</b>	<b>160,521,204</b>	<b>6,559,169</b>	<b>0</b>	<b>0</b>	<b>1,578,933</b>	<b>317,180,053</b>
Highways/Bridges	90,977,198	0	0	90,923,037	0	0	0	54,161	90,977,198
Architectural (Facilities)	7,861,424	0	0	6,336,652	0	0	0	1,524,772	7,861,424
Equipment & Systems/ITS	188,311,431	125,049,916	0	63,261,515	0	0	0	0	188,311,431
State Police Equipment/Facilities	30,000	30,000	0	0	0	0	0	0	30,000
New NY Bridge	30,000,000	0	23,440,831	0	6,559,169	0	0	0	30,000,000
<b>State Police - Troop T</b>	<b>63,969,041</b>	<b>35,456,194</b>	<b>28,512,847</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>63,969,041</b>
Subordinate Debt - Line of Credit	51,487,153	0	51,487,153	0	0	0	0	0	51,487,153
<b>Grand Total</b>	<b>1,084,660,122</b>	<b>812,559,985</b>	<b>103,440,831</b>	<b>160,521,204</b>	<b>6,559,169</b>	<b>0</b>	<b>0</b>	<b>1,578,933</b>	<b>1,084,660,122</b>

(1) Represents a portion of the \$1.285 billion included in the enacted 2015-16 New York State Budget, as well as a portion of the \$700 million included in the enacted 2016-17 New York State Budget.

EXIT 4

Smith St  
Fillmore Ave



2022  
BUDGET

EXIT  
4



## Revised 2021 Budget vs. 2022 Budget

	2021 Revised	2022 Budget	Change from Revised
<b><u>SOURCES:</u></b>			
Thruway Revenues	812,559,985	880,589,478	68,029,493
Prior Year Reserve Balances	103,440,831	0	(103,440,831)
Senior Debt	160,521,204	214,468,488	53,947,284
Junior Debt	6,559,169	50,000,000	43,440,831
Federal Funds	0	0	0
Other Funds	1,578,933	13,366	(1,565,567)
Thruway Stabilization Program Funds	0	0	0
<b>Total Sources</b>	<b>1,084,660,122</b>	<b>1,145,071,332</b>	<b>60,411,210</b>
<b>Total Sources - New NY Bridge Project</b>	<b>30,095,529</b>	<b>50,123,900</b>	<b>20,028,371</b>
<b>Total Sources - Net of New NY Bridge Project</b>	<b>1,054,564,593</b>	<b>1,094,947,432</b>	<b>40,382,839</b>
<b><u>USES:</u></b>			
<b>Operating Expenses:</b>			
Thruway Operating	361,152,313	374,763,202	13,610,889
State Police Operating	63,969,041	64,464,629	495,588
Sub Total	425,121,354	439,227,831	14,106,477
Provisions for Claims, Env. Remediation & Cashless Tolling Transition	4,000,000	1,000,000	(3,000,000)
Total	429,121,354	440,227,831	11,106,477
<b>Retained for Working Capital</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Debt Service:</b>			
Senior Debt	240,509,012	243,628,442	3,119,430
Junior Debt	46,362,550	63,293,499	16,930,949
Subordinate Debt - Line of Credit	51,487,153	583,333	(50,903,820)
JIAN Interest	0	0	0
Total	338,358,715	307,505,274	(30,853,441)
<b>Capital Program:</b>			
Thruway Capital - Highways and Bridges	90,977,198	270,585,736	179,608,538
Thruway Capital - New NY Bridge	30,000,000	50,000,000	20,000,000
Thruway Capital - Architectural & Facilities	7,861,424	13,516,185	5,654,761
Thruway Capital - Equipment & Systems/ITS	188,311,431	63,206,306	(125,105,125)
Thruway Capital - SP Equipment/Facilities	30,000	30,000	0
Total	317,180,053	397,338,227	80,158,174
<b>Total Uses</b>	<b>1,084,660,122</b>	<b>1,145,071,332</b>	<b>60,411,210</b>
<b>Total Uses - New NY Bridge Project</b>	<b>30,095,529</b>	<b>50,123,900</b>	<b>20,028,371</b>
<b>Total Uses - Net of New NY Bridge Project</b>	<b>1,054,564,593</b>	<b>1,094,947,432</b>	<b>40,382,839</b>

## Toll, Concession & Sundry Revenues

	2020 Actual	2021 Revised	2022 Budget	Change from Revised
<b>Toll Revenue</b>				
Passenger	317,676,453	400,172,528	442,741,677	42,569,149
Commercial	297,616,694	350,639,495	362,835,801	12,196,306
Sub Total	<u>615,293,147</u>	<u>750,812,023</u>	<u>805,577,478</u>	<u>54,765,455</u>
<b>Concession Revenue</b>				
Gas Stations	2,044,222	2,200,000	2,200,000	-
Restaurants	4,715,932	3,175,000	3,092,000	(83,000)
Sub Total	<u>6,760,154</u>	<u>5,375,000</u>	<u>5,292,000</u>	<u>(83,000)</u>
<b>Interest Revenue</b>				
Interest	1,456,686	500,000	1,000,000	500,000
Sub Total	<u>1,456,686</u>	<u>500,000</u>	<u>1,000,000</u>	<u>500,000</u>
<b>E-ZPass Violations and Fees</b>				
E-ZPass Violations	8,270,392	2,500,000	1,800,000	(700,000)
E-ZPass Airport Fees	150,136	200,000	300,000	100,000
E-ZPass Admin Fees	2,775,026	2,000,000	1,200,000	(800,000)
Tag Lease Fees	6,824,098	6,700,000	6,700,000	-
Sub Total	<u>18,019,652</u>	<u>11,400,000</u>	<u>10,000,000</u>	<u>(1,400,000)</u>
<b>Tolls By Mail Fees</b>				
AET Violations and Fees	15,402,123	34,200,000	50,100,000	15,900,000
Sub Total	<u>15,402,123</u>	<u>34,200,000</u>	<u>50,100,000</u>	<u>15,900,000</u>
<b>Sundry Revenue</b>				
Special Hauling Permits	2,294,741	2,200,000	2,200,000	-
Permits & Other				
Rental Income	4,470,699	3,300,000	3,300,000	-
Logo Signs	132,831	120,000	120,000	-
Scrap Material Sales	112,702	310,000	200,000	(110,000)
Unpaid Tolls	567,181	92,962	-	(92,962)
Emerg.Service Permits	107,515	100,000	100,000	-
Canadian Exch.	(61,785)	-	-	-
Real Property	200,492	-	-	-
Fiber Network Fees	3,309,655	3,750,000	2,300,000	(1,450,000)
Miscellaneous Revenue	407,434	400,000	400,000	-
Total Permits & Other	<u>9,246,724</u>	<u>8,072,962</u>	<u>6,420,000</u>	<u>(1,652,962)</u>
Sub Total	<u>11,541,465</u>	<u>10,272,962</u>	<u>8,620,000</u>	<u>(1,652,962)</u>
<b>Grand Total</b>	<u><u>668,473,227</u></u>	<u><u>812,559,985</u></u>	<u><u>880,589,478</u></u>	<u><u>68,029,493</u></u>

## Departmental Operating Expenses

	2020 Actual	2021 Revised	2022 Budget	Change from Revised
<b>Operating Expenses</b>				
Board & Executive	862,862	3,318,872	3,478,056	159,184
Media and Government Relations	491,115	542,466	531,426	(11,040)
Legal	2,190,284	2,498,874	2,694,385	195,511
Audit and Management Services	821,104	800,632	817,162	16,530
Administrative Services	4,767,688	5,385,685	6,033,449	647,764
Information Technology	11,221,039	21,971,586	21,358,688	(612,898)
Engineering	6,527,954	6,229,267	6,621,863	392,596
Maintenance and Engineering				
Thruway Maintenance	82,243,021	93,733,896	93,881,106	147,210
Equipment & Inventory Management	25,475,114	30,568,466	32,474,024	1,905,558
Finance and Accounts	8,219,918	6,267,118	6,592,957	325,839
Operations				
Traffic Services	8,982,273	9,955,772	10,642,182	686,410
Toll Collection	63,470,500	78,714,587	87,811,073	9,096,486
Sub Total	<u>215,272,872</u>	<u>259,987,221</u>	<u>272,936,371</u>	<u>12,949,150</u>
General Charges	101,304,032	101,165,092	101,826,831	661,739
Sub Total	<u>316,576,904</u>	<u>361,152,313</u>	<u>374,763,202</u>	<u>13,610,889</u>
<b>Operating Reserves</b>				
Reserve for Claims & Indemnities	0	500,000	500,000	0
Reserve for Environmental Remediation	1,999,765	3,500,000	500,000	(3,000,000)
Sub Total	<u>1,999,765</u>	<u>4,000,000</u>	<u>1,000,000</u>	<u>(3,000,000)</u>
<b>Total Thruway</b>	<u><u>318,576,669</u></u>	<u><u>365,152,313</u></u>	<u><u>375,763,202</u></u>	<u><u>10,610,889</u></u>
<b><u>Other Authority Projects</u></b>				
<b>State Police</b>				
Operations	56,938,339	62,969,041	62,784,629	(184,412)
Equipment	2,115,000	1,000,000	1,680,000	680,000
Sub Total	<u>59,053,339</u>	<u>63,969,041</u>	<u>64,464,629</u>	<u>495,588</u>
<b>Total Other Authority Projects</b>	<u><u>59,053,339</u></u>	<u><u>63,969,041</u></u>	<u><u>64,464,629</u></u>	<u><u>495,588</u></u>
<b>Total Thruway and OAP</b>	<u><u>377,630,008</u></u>	<u><u>429,121,354</u></u>	<u><u>440,227,831</u></u>	<u><u>11,106,477</u></u>

## General Charges

	2020 Actual	2021 Revised Budget	2022 Budget	Change from Revised
<b>Payroll Benefits</b>				
Health Insurance	58,193,340	58,815,000	61,975,000	3,160,000
Pension Contributions	21,340,637	22,502,000	18,000,000	(4,502,000)
Social Security Contributions	11,045,904	10,026,000	10,441,000	415,000
Employee Benefits Fund	5,858,650	5,700,000	5,900,000	200,000
Workers' Compensation Insurance	8,899,174	7,200,000	7,200,000	0
Unemployment Insurance	1,468,771	0	500,000	500,000
Survivor's Benefits	135,000	150,000	150,000	0
Metropolitan Commuter Transportation Mobility Tax	98,678	100,000	97,000	(3,000)
Anticipated Salary Savings	0	0		0
Sub Total	<u>107,040,154</u>	<u>104,493,000</u>	<u>104,263,000</u>	<u>(230,000)</u>
<b>Other</b>				
Non Labor Non Federal Reimbursement	(4,757,500)	0	0	0
Insurance Premiums and Surety Bonds	3,584,047	3,858,500	4,500,000	641,500
Professional Services	1,243,354	1,124,500	2,381,000	1,256,500
Rentals	974,400	985,126	1,050,000	64,874
Special Events	330,852	50,000	25,000	(25,000)
Environmental Expense	374,481	450,000	450,000	0
Reimbursement to Civil Service	450,549	482,300	485,000	2,700
Provision for Doubtful Accounts	360,001	0	0	0
Employee Vacation Leave Expense	591,000	100,000	100,000	0
Tuition Assistance Program	114,905	68,000	60,000	(8,000)
Cash Discount Earned	(89,327)	(90,000)	(100,000)	(10,000)
Employee Safety Equipment	125,757	150,000	155,000	5,000
Inventory Obsolescence Expense	322,907	200,000	200,000	0
All Others	64,801	47,000	45,500	(1,500)
Sub Total	<u>3,690,227</u>	<u>7,425,426</u>	<u>9,351,500</u>	<u>1,926,074</u>
<b>Allocations</b>				
Allocations to Other Funds	(9,426,349)	(10,753,334)	(11,787,669)	(1,034,335)
<b>Equipment and Projects Not Capitalized</b>				
Transportation Studies	0	0	0	0
<b>Total General Charges</b>	<u><u>101,304,032</u></u>	<u><u>101,165,092</u></u>	<u><u>101,826,831</u></u>	<u><u>661,739</u></u>

## Debt Service

	Year of Issuance	2020 Actual	2021 Revised Budget	2022 Budget
<b>Debt Service</b>				
<b>Senior Debt</b>				
Series I Bonds	2012	29,541,928	32,174,231	0
Series J Bonds	2014	30,043,350	44,753,950	44,741,700
Series K Bonds	2014	44,323,594	61,869,788	61,876,138
Series L (Refunding)	2018	50,734,806	56,526,763	79,147,063
Series M (Refunding)	2019	13,133,118	26,266,236	26,266,236
Series N Bonds	2020	0	18,585,000	18,585,000
Series O Bonds	2021	0	1,033,044	13,817,306
Subtotal Proposed Senior Debt Service		167,776,796	241,209,012	244,433,443
Less: Interest Earnings		986,451	700,000	805,001
Net Senior Debt Service - Twy Bonds		166,790,345	240,509,012	243,628,442
Interest Earnings				
<b>Junior Debt</b>				
Series 2013A Bonds	2013	0	0	0
Series 2016A Bonds	2016	20,724,875	41,192,250	41,182,250
Series 2019B Bonds	2019	2,820,150	5,541,300	22,408,249
Subtotal Junior Debt		23,545,025	46,733,550	63,590,499
Less: Interest Earnings		414,065	371,000	297,000
Net Junior Debt Service		23,130,960	46,362,550	63,293,499
<b>Subordinated Indebtedness</b>				
Interest - LoC		708,333	559,028	0
Commitment Fee		211,458	167,708	0
Principal		0	50,000,000	0
		919,791	50,726,736	0
Interest - Drawdown Notes		0	0	0
Commitment Fee		166,667	760,417	583,333
Principal		0	0	0
		166,667	760,417	583,333



**Flow of Funds**  
**General Revenue Bond Resolution**

	2020 Actual	2021 Revised	2022 Budget	Change from Revised
<b>Revenues</b>				
Tolls	615,293,147	750,812,023	805,577,478	54,765,455
Concessions	6,760,154	5,375,000	5,292,000	(83,000)
Interest	1,456,686	500,000	1,000,000	500,000
E-ZPass Violations and Fees	18,019,652	11,400,000	10,000,000	(1,400,000)
Tolls By Mail Fees	15,402,123	34,200,000	50,100,000	15,900,000
Sundry	11,541,465	10,272,962	8,620,000	(1,652,962)
Sub Total	<u>668,473,227</u>	<u>812,559,985</u>	<u>880,589,478</u>	<u>68,029,493</u>
<b>Operating Expenses</b>				
Departmental Operating Expenses	215,272,872	259,987,221	272,936,371	12,949,150
Undistributed Charges	101,304,032	101,165,092	101,826,831	661,739
Reserve for Claims & Indemnities	0	500,000	500,000	0
Reserve for Environmental Remediation	1,999,765	3,500,000	500,000	(3,000,000)
Reserve for Cashless Tolling Transition	0	0	0	0
Sub Total	<u>318,576,669</u>	<u>365,152,313</u>	<u>375,763,202</u>	<u>10,610,889</u>
<b>Net Revenues (A)</b>	<u>349,896,558</u>	<u>447,407,672</u>	<u>504,826,276</u>	<u>57,418,604</u>
<b>Senior Debt Service (B)</b>				
Senior Debt	166,790,345	240,509,012	243,628,442	3,119,430
<b>Adjust to Cash basis/Retain for Working Capital</b>	(2,486,884)	80,000,000	0	(80,000,000)
<b>Net Revenue After Debt Service and Retentions</b>	<u>180,619,329</u>	<u>286,898,660</u>	<u>261,197,834</u>	<u>(25,700,826)</u>
<b>Reserve Maintenance Provisions</b>				
Equipment and Facilities	97,348,572	125,079,916	76,752,491	(48,327,425)
Highway and Bridge	0	0	56,103,882	56,103,882
Sub Total	<u>97,348,572</u>	<u>125,079,916</u>	<u>132,856,373</u>	<u>7,776,457</u>
<b>Junior Debt Service (C)</b>				
Junior Debt	23,130,960	46,362,550	63,293,499	16,930,949
<b>Facilities Capital Improvement Provision</b>				
New NY Bridge Project	0	0	0	0
<b>General Reserve Fund</b>				
State Police	59,053,339	63,969,041	64,464,629	495,588
Other	1,086,458	51,487,153	583,333	(50,903,820)
Sub Total	<u>60,139,797</u>	<u>115,456,194</u>	<u>65,047,962</u>	<u>(50,408,232)</u>
<b>Balance</b>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Senior Debt Service Coverage Ratio (A/B)</b>	2.10	1.86	2.07	
<b>Senior &amp; Junior Debt Service Coverage Ratio (A/(B+C))</b>	1.84	1.56	1.64	

## Capital Program Funding Uses

	2020 Actual	2021 Revised	2022 Budget
<b>Thruway</b>			
<u><b>Highway &amp; Bridge</b></u>			
Contracts	156,328,073	67,240,324	244,221,128
Thruway Forces & Materials	9,892,562	23,736,874	26,364,608
Sub Total	<u>166,220,635</u>	<u>90,977,198</u>	270,585,736
<u><b>Architectural (Facilities)</b></u>			
Facilities Contracts	6,176,279	7,861,424	13,516,185
Sub Total	<u>6,176,279</u>	<u>7,861,424</u>	13,516,185
<u><b>Equipment &amp; Systems and ITS</b></u>			
Equipment & Systems	22,485,184	31,266,466	46,082,312
Intelligent Transportation Systems Contracts	254,270,511	157,044,965	17,123,994
Sub Total	<u>276,755,695</u>	<u>188,311,431</u>	63,206,306
<u><b>State Police Equipment/Facilities</b></u>			
Equipment & Systems	0	30,000	30,000
Sub Total	<u>0</u>	<u>30,000</u>	30,000
<b>Sub Total - Thruway</b>	<b><u>449,152,609</u></b>	<b><u>287,180,053</u></b>	<b><u>347,338,227</u></b>
<b>New NY Bridge Project</b>			
<u><b>New NY Bridge</b></u>			
Contracts	84,271,654	27,451,037	49,275,455
Thruway Forces & Materials	4,589,519	2,548,963	724,545
Sub Total - New NY Bridge	<u>88,861,173</u>	<u>30,000,000</u>	<u>50,000,000</u>
<b>GRAND TOTAL</b>	<b><u>538,013,782</u></b>	<b><u>317,180,053</u></b>	<b><u>397,338,227</u></b>

## Capital Program Funding Sources

	2020 Actual	2021 Revised	2022 Budget
<b>Thruway</b>			
<u>Federal Funds</u>			
Highway & Bridge	0	0	0
Sub Total	0	0	0
<u>Note/Bond Proceeds</u>			
Senior Debt - Thruway and Canal	404,320,349	160,521,204	214,468,488
Sub Total	404,320,349	160,521,204	214,468,488
<u>Prior Years Balances/Thruway Revenues</u>			
Reserve Maintenance Fund: Highway & Bridge	661,178	0	0
Reserve Maintenance Fund: Equipment	(99,986,958)	0	0
General Reserve Fund		0	0
Thruway Revenues	97,348,572	125,079,916	132,856,373
Sub Total	(1,977,208)	125,079,916	132,856,373
<u>Other Funds</u>			
State & Miscellaneous - TWY & Canal	(830,472)	1,578,933	13,366
Equipment Auction Proceeds		0	0
Thruway Stabilization Program Funds	47,639,940	0	0
Sub Total	46,809,468	1,578,933	13,366
<b>Sub Total - Thruway and Canal</b>	<b>449,152,609</b>	<b>287,180,053</b>	<b>347,338,227</b>
<b>New NY Bridge Project</b>			
<u>Federal Funds</u>			
Loan and Grant Proceeds	\$0	\$0	\$0
<u>Note/Bond Proceeds</u>			
Junior Debt	68,878,387	6,559,169	50,000,000
Sub Total	68,878,387	6,559,169	50,000,000
<u>Prior Years Balances/Thruway Revenues</u>			
Thruway Revenues	5,667,983	23,440,831	0
Sub Total	5,667,983	23,440,831	0
<u>Other Funds</u>			
Thruway Stabilization Program Funds	14,314,803	0	0
<b>Sub Total - New NY Bridge</b>	<b>88,861,173</b>	<b>30,000,000</b>	<b>50,000,000</b>
<b>GRAND TOTAL</b>	<b>538,013,782</b>	<b>317,180,053</b>	<b>397,338,227</b>

**Actual 2020, Revised 2021 Budget vs. 2022 Budget  
New NY Bridge**

	<b>2020 Actual</b>	<b>2021 Revised</b>	<b>2022 Budget</b>
<b><u>SOURCES:</u></b>			
Thruway Revenues	71,591	95,529	123,900
Prior Year Reserve Balances	5,667,983	23,440,831	0
Junior Debt	68,878,387	6,559,169	50,000,000
Federal Funds	0	0	0
Thruway Stabilization Program Funds	14,314,803	0	0
<b>Total Sources</b>	<b>88,932,764</b>	<b>30,095,529</b>	<b>50,123,900</b>
<b><u>USES:</u></b>			
<b>Operating Expenses:</b>			
Thruway Operating	71,591	95,529	123,900
<b>Thruway Capital - Equipment &amp; Systems/ITS:</b>			
Equipment	0	0	0
<b>Thruway Capital - New NY Bridge:</b>			
Thruway Forces & Materials	4,589,519	2,548,963	724,545
Contracts	84,271,654	27,451,037	49,275,455
Community Benefits Fund	0	0	0
<b>Sub Total</b>	<b>88,861,173</b>	<b>30,000,000</b>	<b>50,000,000</b>
<b>Total Uses</b>	<b>88,932,764</b>	<b>30,095,529</b>	<b>50,123,900</b>

**2022 Budget - Sources and Uses of Funds**

Use of Funds		Source of Funds							
Category	Amount	2022 Thruway Revenues	Prior Year Reserve Balances	Senior Debt	Junior Debt	Federal Funds	Thruway Stabilization Program Funds (1)	Other Funds	Total
<b>Thruway and Canal</b>									
Thruway Operating	374,763,202	374,763,202	0	0	0	0	0	0	374,763,202
Provision for Claims	500,000	500,000	0	0	0	0	0	0	500,000
Provision for Environ. Rem.	500,000	500,000	0	0	0	0	0	0	500,000
Provision for Cashless Tolling	0	0	0	0	0	0	0	0	0
Senior Debt Service	243,628,442	243,628,442	0	0	0	0	0	0	243,628,442
Junior Debt Service	63,293,499	63,293,499	0	0	0	0	0	0	63,293,499
<b>Capital Program</b>	<b>397,338,227</b>	<b>132,856,373</b>	<b>0</b>	<b>214,468,488</b>	<b>50,000,000</b>	<b>0</b>	<b>0</b>	<b>13,366</b>	<b>397,338,227</b>
Highways/Bridges	270,585,736	56,103,882	0	214,468,488	0	0	0	13,366	270,585,736
Architectural (Facilities)	13,516,185	13,516,185	0	0	0	0	0	0	13,516,185
Equipment & Systems/ITS	63,206,306	63,206,306	0	0	0	0	0	0	63,206,306
State Police Equipment/Facilities	30,000	30,000	0	0	0	0	0	0	30,000
New NY Bridge	50,000,000	0	0	0	50,000,000	0	0	0	50,000,000
State Police- Troop T	64,464,629	64,464,629	0	0	0	0	0	0	64,464,629
Subordinate Debt - Line of Credit	583,333	583,333	0	0	0	0	0	0	583,333
<b>Grand Total</b>	<b>1,145,071,332</b>	<b>880,589,478</b>	<b>0</b>	<b>214,468,488</b>	<b>50,000,000</b>	<b>0</b>	<b>0</b>	<b>13,366</b>	<b>1,145,071,332</b>

(1) Represents a portion of the \$1.285 billion included in the enacted 2015-16 New York State Budget, as well as a portion of the \$700 million included in the enacted 2016-17 New York State Budget.

## 2022 Operating Budget Summary by Account

Acct Description	2020 Actual	2021 Revised Budget	2022 Budget	Diff between 2021 Revised & 2022 Budget
SALARIES REGULAR	123,627,553	123,156,156	130,661,499	7,505,343
SALARIES TEMPORARY	11,741,579	2,119,959	1,596,192	(523,767)
SALARIES REIMBURSED FEDERAL	(10,253)	0	0	0
SHIFT DIFFERENTIAL	1,253,430	498,744	504,344	5,600
SALARY SAVINGS	0	(2,710,082)	(4,867,324)	(2,157,242)
SALARY REDISTRIBUTED	(89,712)	(117,000)	(164,300)	(47,300)
OT PAY REGULAR	8,399,675	5,739,825	5,621,061	(118,764)
OT PAY TEMPORARY	538,858	34,122	34,122	0
TOLL INCENTIVE PAYMENTS	(1,224,500)	0	0	0
SALARIES REIMBURSED NONFEDERAL	(162,826)	(76,524)	(76,524)	0
EXCESS/BONUS SICK & VAC	2,009,065	2,003,647	1,976,530	(27,117)
CHECK OUT PAYMENT	525,234	29,000	29,000	0
<b>Total Personal Services</b>	<b>146,608,103</b>	<b>130,677,847</b>	<b>135,314,600</b>	<b>4,636,753</b>
ALLOC TO RESERVE MTCE - EQPT	52,925	(2,091,226)	(3,175,829)	(1,084,603)
ALLOC TO FAC CAP IMPR FUND	(1,979,843)	(1,403,732)	(399,000)	1,004,732
ALLOC TO SP	(520,825)	(604,092)	(690,352)	(86,260)
ALLOC TO TWY CAPITAL PROJ	(10,552,810)	(8,767,382)	(10,267,362)	(1,499,980)
BENE/M&O ALLOC RES MTCE	3,945	(1,706,423)	(2,533,994)	(827,571)
SIGN SHOP LABOR	(119,905)	(90,000)	(90,000)	0
BENEFITS REDISTRIBUTED	(62,609)	(94,091)	(131,095)	(37,004)
BENEFITS REIMBURSED FEDERAL	(7,368)	0	0	0
BENEFITS REIMBURSED-NON FEDERA	(1,053)	(61,541)	(61,058)	483
BEN ALLOC TO SP	(363,592)	(492,811)	(550,832)	(58,021)
BEN ALLOC TO TWY CAPITAL PROJ	(7,367,850)	(7,153,237)	(8,192,328)	(1,039,091)
BEN ALLOC TO FAC CAP IMPR FUND	(1,381,820)	(1,145,231)	(318,362)	826,869
<b>Total Allocations</b>	<b>(22,300,805)</b>	<b>(23,609,766)</b>	<b>(26,410,212)</b>	<b>(2,800,446)</b>
FIBER - CORE SERVICES	599,141	2,731,000	3,016,624	285,624
AUTO - GAS, OIL	2,733,868	3,685,250	4,216,000	530,750
AUTO - SUPPLIES	4,428,768	5,140,000	5,540,345	400,345
AUTO - INSURANCE	0	0	0	0
AUTO - GENERAL EXP	295,394	345,000	390,000	45,000
REPAIRS DUE TO ACCIDENTS - CONTRACTS	2,357,841	60,000	0	(60,000)
R&D PARTS NON INVENTORY	0	0	0	0
REPAIRS DUE TO ACCIDENTS	982,053	1,191,620	791,620	(400,000)
MFG SIGNS - NON INVENTORY	92,956	110,000	110,000	0
SNOW & ICE CONTROL	7,704,105	10,499,990	10,499,990	0
THRUWAY ROADWAY	1,281,392	1,726,681	1,546,681	(180,000)
SIGNS - INVENTORY	294,090	202,143	184,643	(17,500)
BRIDGES	291,519	463,171	683,731	220,560
BRIDGE CONTRACTS OPERATING	5,053,693	9,549,004	8,995,944	(553,060)
HIGHWAY CONTRACTS OPERATING	169,355	2,360,000	2,250,000	(110,000)
BUILDINGS - CONTRACTS	1,187,901	0	0	0
BUILDINGS	1,862,501	2,024,546	2,024,546	0
BLDG ADMIN HQ	0	1,200	1,200	0
REIMB FROM NYPA	(246,000)	(100,000)	0	100,000
TOLL AND ITS EQPT THRUWAYWIDE	380,290	600,000	700,000	100,000
SCRAP & OBSOLETE	27	0	0	0
PARTS REPAIRED FOR RET	0	0	0	0
RETURNABLE CONTAINER	20,337	18,800	18,800	0
REIMB OF MTCE EXP	(42,918)	(50,000)	(50,000)	0
PERISHABLE TOOLS	422,646	694,730	661,376	(33,354)
MISC MTCE SUPPLIES	363,201	442,734	393,234	(49,500)
REIMB BY CLAIM	(6,063,538)	(4,280,000)	(3,930,000)	350,000
<b>Total Mtce &amp; Repairs</b>	<b>24,168,622</b>	<b>37,415,869</b>	<b>38,044,734</b>	<b>628,865</b>
COMPUTER SUPPLIES	20,455	55,610	146,850	91,240
MTCE & REPAIR TO EQPT	2,167,737	2,847,536	3,440,440	592,904
STATIONARY FORMS	128,506	159,368	163,815	4,447
POSTAGE	111,004	125,250	125,250	0
NATURAL GAS	668,351	677,000	665,300	(11,700)
TELEPHONE	1,737,189	1,524,069	1,650,123	46

## 2022 Operating Budget Summary by Account

Acct Description	2020 Actual	2021 Revised Budget	2022 Budget	Diff between 2021 Revised & 2022 Budget
HEATING FUEL	150,363	58,000	58,000	0
WATER	350,617	259,551	177,851	(81,700)
PROPANE	56,710	85,350	65,350	(20,000)
ELECTRIC	2,968,505	3,102,501	3,274,101	171,600
ADVERTISING	0	2,200	2,700	500
PRINTING & DUPLICATING	12,810	40,000	42,000	2,000
PRINTING OUTSIDE	258	1,518	1,518	0
FIRST AID & PERSON SAFETY SUPP	211,743	261,362	259,912	(1,450)
JANITORIAL SUPPLIES	390,716	348,272	340,984	(7,288)
EMPLOYEE SAFETY EQPT	125,976	151,000	156,000	5,000
DUES, BOOKS, SUBSCRIPTIONS	1,032,716	1,279,489	2,044,333	764,844
TUITION ASSISTANCE	114,905	68,000	60,000	(8,000)
TRAINING EXP	32,715	213,969	289,098	75,129
MEDICAL SERVICES	52,405	273,090	397,740	124,650
OVERTIME MEAL EXPENSE	192,060	197,445	159,535	(37,910)
CLOTHES CLEANING	243,869	172,670	201,620	28,950
CLOTHING SUPPLIES	481,929	727,354	629,283	(98,071)
ENGINEERING SUPPLIES	1,241	4,867	6,333	1,466
TRAFFIC CONTROL SAFETY SUPP	283,396	292,513	291,213	(1,300)
RENTALS	1,290,072	1,506,981	1,637,705	130,724
SPECIAL EVENTS	330,852	50,000	25,000	(25,000)
INSURANCE PREM & SURETY BONDS	3,584,047	3,858,500	4,500,000	641,500
PHOTO SUPPLIES	0	475	375	(100)
PROMOTION EXPENSE	635	14,650	29,200	14,550
EZ-PASS ADMINISTRATION	27,066,673	41,914,000	42,520,742	606,742
PROFESSIONAL SERVICES	1,407,402	8,632,535	7,153,685	(1,478,850)
EMPLOYEE DEVELOPMENT	18,567	38,300	38,300	0
FREIGHT PARCEL POST	67,307	79,764	76,764	(3,000)
CREDIT CARD FEES	63,431	40,000	40,000	0
SPECIAL CONTRACTS	5,081,329	6,611,096	7,293,687	682,591
DEMURRAGE	22,593	21,800	21,800	0
ADMIN COST RECOVERY	0	0	0	0
CASH DISCOUNT EARNED	(89,327)	(90,000)	(100,000)	(10,000)
ENVIRONMENTAL EXPENSE	374,481	450,000	450,000	0
SERVICE CHARGE EXP	18,047	115,000	115,000	0
PROVISION FOR DOUBTFUL A/R	360,001	0	0	0
TOLLS BY MAIL ADMINISTRATION	12,347,046	34,763,000	43,145,385	8,382,385
EMPLOYEE CLAIM EXP	759	1,500	1,500	0
CONCESSION UTILITY	11,068	20,000	20,000	0
STANDARD PURCHASE PRICE	0	(2,000)	(2,000)	0
PURCHASE VARIANCE	509	(4,000)	(4,000)	0
INVENTORY VARIANCE	22,448	2,000	2,000	0
INVENTORY ITEMS REPAIRED	(6,849)	(39,000)	(39,000)	0
STORES CLEARING ACCT	370	200	200	0
PROJECTS FROM SAVINGS	0	(24,325)	(83,934)	(59,609)
PROMPT PAYMENT INTEREST EXP	513	4,500	3,000	(1,500)
M&O REIMB FED AID	206,398	(1,900,000)	(1,900,000)	0
TRAVEL EXP REGULAR	55,036	147,972	165,565	17,593
TRAVEL EXP CARS	1,943	887	887	0
REIMB VOLUNTEER FIRE CO	92,437	105,000	105,000	0
REIMB TO NYS LAW DEPARTMENT	84,225	0	0	0
REIMBURSEMENT TO CIVIL SERVICE	450,549	482,300	485,000	2,700
FIDUCIARY FEES	60,306	68,750	68,750	0
PROV RES FOR INVENTORY OBSOL	322,907	200,000	200,000	0
<b>Total Operating Supplies</b>	<b>64,781,951</b>	<b>109,997,869</b>	<b>120,619,960</b>	<b>10,622,091</b>
PENSIONS NYS EMPLOYEES	21,306,248	22,462,000	18,000,000	(4,462,000)
PENSIONS VDCP EMPLOYEES	34,389	40,000	0	(40,000)
EMPLOYEE BENEFIT FUND	5,858,650	5,700,000	5,900,000	200,000
SOCIAL SECURITY	11,045,904	10,026,000	10,441,000	415,000
WORKERS COMPENSATION	8,899,174	7,200,000	7,200,000	0
UNEMPLOYMENT INSURANCE	1,468,771	0	500,000	500,000
HEALTH INSURANCE	27,711,340	22,330,000	23,411,000	1,081,000
HEALTH INSURANCE RETIREES	30,482,000	36,485,000	38,564,000	2,079,000
SURVIVORS BENEFITS	135,000	150,000	150,000	0

## 2022 Operating Budget Summary by Account

Acct Description	2020 Actual	2021 Revised Budget	2022 Budget	Diff between 2021 Revised & 2022 Budget
MTA TAX	98,678	100,000	97,000	(3,000)
EE VACATION LEAVE	591,000	100,000	100,000	0
<b>Total Payroll Benefits</b>	<b>107,631,154</b>	<b>104,593,000</b>	<b>104,363,000</b>	<b>(230,000)</b>
FACILITIES IMPROV EXP	(115,021)	1,100,450	1,483,832	383,382
REPL OF OFFICE EQPT	19,258	49,478	61,700	12,222
REPL OF COMPUTER EQPT	115,889	88,850	388,675	299,825
REPL OF HWY & MARINE EQPT	24,263	146,250	112,860	(33,390)
TOLL & ITS SYS IMPROV	37,467	0	0	0
TECHNOLOGY PROJECTS	159,462	62,500	75,000	12,500
SHOP EQPT REPL	15,713	0	12,000	12,000
HWY & BRIDGE EXP	50,038	180,000	180,000	0
STUDIES	0	0	0	0
COMMUNICATION EQPT REPL	46,422	140,000	254,900	114,900
EQUIPMENT ADDITIONAL	0	0	0	0
COMPUTER HARDWARE NEW	43,063	44,150	91,674	47,524
COMPUTER SOFTWARE NEW	7,990	183,073	123,979	(59,094)
MOTORIZED EQPT NEW	3,200	0	0	0
SHOP EQPT NEW	21,392	0	26,500	26,500
NON LABOR REIMB NON FED PROJ REL	(4,757,500)	0	0	0
OFFICE EQPT NEW	16,246	82,743	20,000	(62,743)
<b>Total Eqpt &amp; Proj not capitalized</b>	<b>(4,312,118)</b>	<b>2,077,494</b>	<b>2,831,120</b>	<b>753,626</b>
PROVISION FOR ENV REMEDIATION	1,999,765	3,500,000	500,000	(3,000,000)
CLAIMS & INDEMNITY EXPENSE	0	500,000	500,000	0
PROVISION FOR CASHLESS TOLLING TRANSITION	0	0	0	0
ROUNDING	(3)	0	0	0
<b>GRAND TOTAL</b>	<b>318,576,669</b>	<b>365,152,313</b>	<b>375,763,202</b>	<b>10,610,889</b>
<b>Total Operating Budget by Account</b>	<b>318,576,669</b>	<b>365,152,313</b>	<b>375,763,202</b>	<b>10,610,889</b>



## 2022 Budgeted Full-Time Employees

Department	2020	2021	Net Change 2020- 2021	2022	Net Change 2021-2022
Board & Executive	20	48	28	51	3
Media and Government Relations	4	4	-	4	-
Legal	23	24	1	24	-
Audit and Management Services	8	7	(1)	7	-
Administrative Services	73	72	(1)	71	(1)
Information Technology	86	87	1	87	-
Engineering	163	155	(8)	149	(6)
Maintenance and Engineering	1,325	1,326	1	1,328	2
Thruway Maintenance	1,016	1,016	-	1,017	1
Equipment & Inventory Management	309	310	1	311	1
Finance and Accounts	127	98	(29)	91	(7)
Operations	359	132	(227)	134	2
Traffic Services	102	111	9	112	1
Toll Collection	257	21	(236)	22	1
<b>Total</b>	<b>2188</b>	<b>1953</b>	<b>-235</b>	<b>1946</b>	<b>-7</b>

## Personnel - History of Budgeted Positions

	Budgeted Positions				Change Since	
	Mainline	I-84 (1)	Canal (2)	Total	Change	1995
1995	3,174	142	557	3,873	NA	NA
1996	3,032	136	536	3,704	(169)	(169)
1997	2,913	112	529	3,554	(150)	(319)
1998	2,873	102	535	3,510	(44)	(363)
1999	2,868	101	539	3,508	(2)	(365)
2000	2,851	95	542	3,488	(20)	(385)
2001	2,881	91	568	3,540	52	(333)
2002	2,887	90	556	3,533	(7)	(340)
2003	2,867	90	555	3,512	(21)	(361)
2004	2,831	90	553	3,474	(38)	(399)
2005	2,796	89	551	3,436	(38)	(437)
2006	2,780	89	544	3,413	(23)	(460)
2007	2,784	89	544	3,417	4	(456)
2008	2,776	89	542	3,407	(10)	(466)
2009	2,730	89	538	3,357	(50)	(516)
2010	2,701	89	539	3,329	(28)	(544)
2011	2,626	0	533	3,159	(170)	(714)
2012	2,590	0	528	3,118	(41)	(755)
2013	2,470	0	498	2,968	(150)	(905)
2014	2,279	0	458	2,737	(231)	(1,136)
2015	2,260	0	457	2,717	(20)	(1,156)
2015 Modified	2,184	0	441	2,625	(92)	(1,248)
2016	2,176	0	435	2,611	(14)	(1,262)
2017	2,162	0	0	2,162	(449)	(1,711)
2018*	2,165	0	0	2,165	3	(1,708)
2019	2,201	0	0	2,201	36	(1,672)
2020	2,188	0	0	2,188	(13)	(1,685)
2021	1,953	0	0	1,953	(235)	(1,920)
2022	1,946	0	0	1,946	(7)	(1,927)

(1) Effective October 11, 2010, the Authority turned over all operation and maintenance responsibilities for I-84 to the New York State Department of Transportation.

(2) Effective January 1, 2017, legal responsibility for the Canal Corporation was transferred to the New York State Power Authority.

\* Please note: 2018 estimates do not include an estimated 38 additional positions associated with Snow and ice and Other Major Initiatives



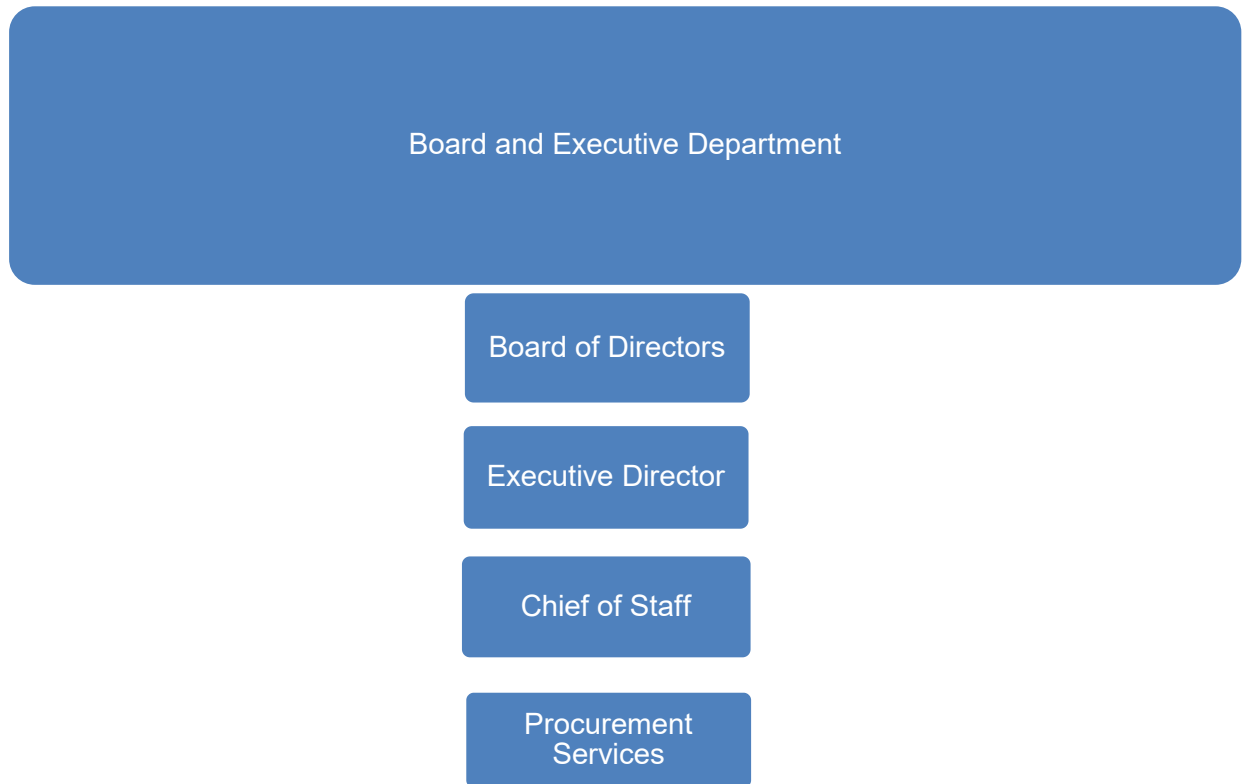
# 2022 DEPARTMENTAL SUMMARY AND BUDGET INFORMATION

## Board and Executive

### Department Description

The Board and Executive Department is responsible for the overall executive management of the Thruway Authority. It includes the Thruway Authority Board of Directors, which consists of seven unsalaried members, the Executive Director, Chief of Staff and support personnel. The Executive Office is also responsible for the oversight of the Authority's Procurement Services, which oversees the Compliance Unit (implementing, monitoring and providing DBE, MWBE, SDVOB and EEO Program oversight in accordance with State and Federal laws, rules, regulations and Executive Orders.), Purchasing Management and Capital and Construction Management.

### Department Organization



## Department Budget Summary

BOARD & EXECUTIVE DEPARTMENT BUDGET					
Account Description	2020 Actual	2021 Revised	2022 Budget	\$ Change	% Change
Personal Services	855,645	3,111,763	3,312,078	200,315	6.4%
Allocations	-	-	-	-	0.0%
Maintenance & Repair	-	-	-	-	0.0%
Operating & Supplies	6,756	206,949	160,978	(45,971)	-22.2%
Equipment/Projects not Capitalized	461	160	5,000	4,840	-
<b>Department Total</b>	<b>862,862</b>	<b>3,318,872</b>	<b>3,478,056</b>	<b>159,184</b>	<b>4.8%</b>

The 2022 Budget request is \$3.5 million, an increase of \$159,184 or 4.8 percent above the 2021 Revised Budget amount. Total wages and salaries are \$3.3 million, this includes 51 positions, including 7 unsalaried Board members.

### Department Budget Highlights

- In 2021 the Authority reorganized several departments to better align the Authority's structure to meet the goals and broad responsibilities. The reorganization included moving Purchasing from Finance and Accounts and Capital and Contracts Management from Engineering, to Board and Executive. In addition, the Office of Procurement Services was established under the Chief of Staff to oversee the Compliance Unit, Purchasing Management and Capital and Contracts Management.
- Personal Services increased by \$200,315, or 6.4 percent, and reflects projected wages based on current salary actions. One position was transferred into the Board and Executive 2022 Budget from Engineering and another position was added for special projects.
- Includes new funding for the cloud base B2Gnow Diversity Management System which will be managed by Procurement Services.

### 2021 Accomplishments

- Finalize reconstruction of Thruway interchanges, improved signage, and other improvements which are part the conversion to Cashless Tolling.
- Through a public-private partnership redevelopment began at the 27 service areas located on the Thruway. This work, coupled with the conversion to cashless tolling, will greatly improve the customer experience on the Thruway.
- Lead the Authority during the COVID-19 Public Health Emergency by maintaining a safe and healthy environment for employees and customers while successfully upholding our commitment to the goal and mission of providing high levels of safety and service on one of the nation's safest highways systems.

- Directed the reassignment of the Real Property unit within the Legal Department, resulting in their ability to take the additional responsibility of Right of Way acquisition and real property disposal work – critical to the timely and successful delivery of capital projects.
- Oversaw the development of the Thruway’s internal fiber optic management and maintenance program, successfully reaching an agreement with our maintenance and marketing service provider to further develop the fiber program and attract new users into lease agreements directly with the Thruway.

## **2022 Goals**

- Continue the process of redeveloping and modernizing the Authority’s 27 service areas through public-private partnerships.
- The Thruway will undertake a top to bottom review and analysis of the toll collection function within the entire organization now that cash collection is eliminated. Thruway will do so with the assistance and support of an outside consultant. Additionally, Thruway will undertake an analysis of our technology department to better align our resources with the demands of the modern system we now have in place.

# Office of Media and Government Relations

## Department Description

The Media Relations and Government Relations Department is housed together to streamline intra- and inter-agency communications. The office works closely to deliver effective strategic messaging to elected officials, government bodies and media outlets in New York State and beyond.

## Media Relations - Roles and Responsibilities

- Draft and issue press releases regarding Thruway projects, policies, initiatives and events
- Respond to media inquiries via email and telephone as needed
- Organize Thruway press events across the state
- Respond to hundreds of public inquiries, concerns and complaints via email
- Issue initial statements and subsequent updates in the event of an emergency situation, such as severe weather or serious incidents on the Thruway
- Manage and update social media accounts (Facebook, Twitter, Instagram) in real-time for the Thruway Authority to keep customers informed of traffic incidents, policies, initiatives, upcoming projects and events
- Coordinate inter-agency communications
- Assist in the creation of numerous marketing materials related to E-ZPass and cashless tolling, including videos and graphics

## Government Relations - Roles and Responsibilities

- Coordinate communications with elected officials at the executive, state and local level
- Work closely with Thruway staff and counsel to develop legislative agenda
- Develop strategies to support the Thruway Authority's legislative agenda
- Work with local elected officials and representatives to respond to constituent concerns
- Monitor legislative committee meetings and session to identify potential impacts on the Thruway Authority

## Department Organization



## Department Budget Summary

MEDIA & GOVERNMENT RELATIONS DEPARTMENT BUDGET						
Account Description	2020 Actual	2021 Revised	2022 Budget	\$ Change	% Change	
Personal Services	482,244	515,116	503,676	(11,440)	-2.2%	
Allocations	-	-	-	-	-	
Maintenance & Repair	-	-	-	-	-	
Operating & Supplies	8,871	27,350	27,750	400	1.5%	
Equipment/Projects not Capitalized	-	-	-	-	-	
<b>Department Total</b>	<b>491,115</b>	<b>542,466</b>	<b>531,426</b>	<b>(11,040)</b>	<b>-2.0%</b>	

The 2022 Budget request is \$0.5 million, a decrease of \$11,040 or 2.0 percent below the fiscal year 2021 Revised Budget amount. Total wages and salaries are \$503,676 and this includes 4 positions.

### Department Budget Highlights

- Personal Services decreased by \$11,440, or 2.2 percent.

### 2021 Accomplishments

- Successfully issued dozens of press releases and advisories to the media and public to generate positive news coverage
- Successfully managed a Cashless Tolling and E-ZPass Marketing Campaign that generated 62 million impressions across multiple digital platforms and led to 142,000 new E-ZPass accounts opened
- Adjusted messaging and amplified awareness about Cashless Tolling and the Tolls By Mail leading up to and following the transition to Cashless Tolling on the Thruway system wide in November
- Effectively communicated with more than 53,000 social media followers on Facebook, Twitter and Instagram
- Successfully managed approximately 400 public inquiries per month
- Updated content and refreshed all sections of the Thruway's website to keep the site easy to navigate and relevant for Thruway customers
- Continued to actively communicate with, and provide project webpage updates for residents, emergency responders and elected officials regarding progress on the \$135 million New England Thruway (I-95) Reconstruction Project, commonly referred to as the "Last Mile" project



- Effectively worked with numerous statewide and municipal officials to address their constituent's questions regarding the Thruway System
- Assisted motorists with questions regarding bill payment and the bill dispute process during and after the implementation of the Emergency Tolling Procedures because of COVID-19
- Successfully notified travelers in real-time about any COVID-19 related modifications at Thruway Service Areas statewide
- Highlighted the work of dozens of Thruway employees who effectively delivered thousands of cases of hand sanitizer, COVID-19 test kits, PPE, and more to locations across the state

## **2022 Goals**

- Continue to adjust messaging on the Thruway's website and social media accounts following the successful system-wide roll out of cashless tolling across the ticketed system
- Continue to strategically communicate an effective and uniform message to all media outlets as needed
- Promote the Thruway's Service Area Project to rebuild or provide major renovations to all 27 service areas including service impacts, etc.

# Legal Department

## Department Description

The Legal Department is responsible for providing legal advice and services to the Board, Executive Director and the Thruway Authority. The Legal Department handles litigation, Thruway Authority contracts, claims against or by the Thruway Authority, Freedom of Information Law (FOIL) requests, legislation, real property transactions, ethics, employment law, Thruway Authority policy, Board issues, supervision of outside counsel services and research as requested. The Legal Department is involved with every aspect of the Thruway Authority's functions.

## Department Organization



## Department Budget Summary

LEGAL DEPARTMENT BUDGET						
Account Description	2020 Actual	2021 Revised	2022 Budget	\$ Change	% Change	
Personal Services	2,086,379	2,340,086	2,501,576	161,490	6.9%	
Allocations	(45,839)	(64,000)	(34,000)	30,000	-46.9%	
Maintenance & Repair	-	-	-	-	-	
Operating & Supplies	149,744	221,788	225,809	4,021	1.8%	
Equipment/Projects not Capitalized	-	1,000	1,000	-	-	
<b>Department Total</b>	<b>2,190,284</b>	<b>2,498,874</b>	<b>2,694,385</b>	<b>195,511</b>	<b>7.8%</b>	

The 2022 Budget request is \$2.7 million, an increase of \$195,511 or 7.8 percent above the fiscal year 2021 Revised Budget amount. Total wages and salaries were \$2.5 million, and this includes 24 positions.

## Department Budget Highlights

- In 2021, the Authority reorganized several departments. The reorganization included moving the Real Property Unit from Finance and Accounts to the Legal Department.
- Personal Services increased by \$161,490, or 6.9 percent, and includes funding for 24 permanent positions and temporary law interns.
- Personal Service Allocations decreased \$30,000, or 46.9 percent, due to less work on the Governor Mario M. Cuomo Bridge as the project draws closer to completion.

## 2021 Accomplishments

- Provided advice and counsel on matters related to COVID-19
- Assisted in the Thruway Authority's and state's response to COVID-19
- Provided advice and counsel on matters related to the Governor Mario M. Cuomo Bridge including, but not limited to contracts, the environment, financing, intellectual property, operations, maintenance and safety
- Assisted with the financial close of a long-term lease agreement for the modernization and transformation of the Thruway Authority's 27 Service Areas
- Provided advice and counsel regarding the lease agreement for the modernization and transformation of the Thruway Authority's 27 Service Areas
- Provided advice and counsel regarding the Thruway Authority's transition to cashless tolling
- Provided advice and counsel regarding the Thruway Authority's fiber optics system and assisted with the negotiation of agreements related to such
- Provided advice and counsel to Thruway Authority Board, Executive Director, departments and Executive Chamber
- Asserted property and equipment damage claims totaling \$3,000,635.94 and collected \$3,689,832.11 as of July 1, 2021
- Reviewed, updated, amended and streamlined Thruway Authority policies and procedures
- Continued with efforts to identify risks to the Thruway Authority and implement risk mitigation strategies and best practices
- Drafted, reviewed and approved contracts for the Thruway Authority
- Responded to 85 percent of the 151 FOIL requests received on or before July 1, 2021
- Responded to 90 subpoenas received from law enforcement as of July 1, 2021
- Provided ethics guidance and training to ensure that all Thruway Authority employees practice the highest ethical standards
- Assisted with the Thruway Authority issuance of debt
- Negotiated leases for the Thruway Authority's use of office space across its multiple divisions
- Absorbed the Thruway Authority's real property operations and progressed numerous long outstanding matters

## 2022 Goals

- Continue to provide advice and counsel on matters relating to the Governor Mario M. Cuomo Bridge including but not limited to contracts, the environment, financing, intellectual property, maintenance, and safety

- Continue to provide advice and counsel regarding the lease agreement for the modernization and transformation of the Thruway Authority's 27 Service Areas
- Continue to assist in the Thruway Authority's transition to cashless tolling
- Continue to pursue lawsuits concerning the Vergnet wind turbines located in the Buffalo Division
- Continue to defend and settle litigation in a cost-effective manner
- Continue to assist in new agreements related to the use of the Thruway Authority's fiber optics system
- Continue to focus on customer service and quality provided by the Legal Department and develop Key Performance Indicators to measure performance
- Continue to ensure that best practices are followed by the Thruway Authority with respect to procurement/contracting matters
- Continue to ensure that the Thruway Authority is in full compliance with new statutory and regulatory requirements and offer ideas to exceed requirements
- Continue to review Thruway Authority policies and procedures to identify existing risks and potential risk mitigation strategies and best practices
- Continue to explore technology opportunities and solutions that apply to legal services to reduce workload and increase productivity while lowering costs
- Continue to prioritize and deliver on collecting revenue from claims
- Analyze administrative processes and streamline tasks to improve efficiency
- Continue to close outstanding real property transactions

# Audit & Management Services

## Department Description

The Department of Audit and Management Services is responsible for performing independent audits, reviews and analyses of all Thruway Authority operations; conducting confidential investigations to detect and prevent fraud, waste, and abuse; promoting and implementing security measures for the protection of Thruway Authority employees, customers and assets which includes the Governor Mario M. Cuomo Bridge; ensuring compliance with the New York State Governmental, Accountability and Internal Control Act; and other requested services from the Thruway Authority Board and Executive management.

## Department Organization



## Department Budget Summary

AUDIT & MANAGEMENT SERVICES DEPARTMENT BUDGET						
Account Description	2020 Actual	2021 Revised	2022 Budget	\$ Change	% Change	
Personal Services	813,716	789,982	806,712	16,730	2.1%	
Allocations	-	-	-	-	-	
Maintenance & Repair	-	-	-	-	-	
Operating & Supplies	7,388	10,650	10,450	(200)	-1.9%	
Equipment/Projects not Capitalized	-	-	-	-	-	
<b>Department Total</b>	<b>821,104</b>	<b>800,632</b>	<b>817,162</b>	<b>16,530</b>	<b>2.1%</b>	

The 2022 Budget request is \$0.8 Million, a decrease of \$16,530 or 2.1 percent above the fiscal year 2021 Revised Budget amount. Total wages and salaries are \$806,712 and this includes 7 positions.

## **Department Budget Highlights**

- Personal Services increased by \$16,730, or 2.1 percent and reflects 7 positions.

## **2021 Accomplishments**

- Conducted Thruway Authority investigations related to fraud, waste and abuse
- Conducted audits of operational programs to ensure compliance with policies, procedures, laws and regulations
- Conducted safety inspections and evaluations of designated Thruway Authority assets
- Coordinated the annual certification of compliance with the New York State Governmental Accountability and Internal Control Act
- Facilitated the annual Certification of Controls Over the Payment Process
- Certified compliance with the Office of the State Comptroller's (OSC) Statewide Financial System (SFS) requirements
- Fulfilled A&MS' annual Public Authorities Reporting Information System (PARIS) reporting requirements

## **2022 Goals**

- Hire audit staff to conduct audits and internal control reviews
- Continue installation of security devices in Thruway Authority properties
- Continue security audits of service areas
- Continue to implement the Fraud, Waste and Abuse Program at the Thruway Authority
- Continue to implement operational, compliance and management audits
- Continuously improve compliance with the New York State Governmental Accountability and Internal Control Act
- Continue to facilitate the annual Certification of Controls Over the Payment Process
- Continue to fulfill the annual Public Authorities Reporting Information System (PARIS) reporting requirements
- Continue to ensure the Authority's annual compliance with the Office of the State Comptroller's (OSC) Statewide Financial System (SFS) requirements
- Continue to fulfill requests for other management services
- Continue to facilitate all external audits
- Continue to facilitate all external investigations and requests

# Administrative Services

## Department Description

Administrative Services provides support to all Departments in the Thruway Authority's Administrative Headquarters, as well as the four Divisions in the areas of Personnel (Staffing Services and Benefits Administration), Training and Employee Development, Equal Employment Opportunity and Diversity, Labor Relations and Employee Safety, Administrative Analysis, and Office and Building Maintenance Services. The Department has nearly 70 employees.

## Department Organization



## Department Budget Summary

ADMINISTRATIVE SERVICES DEPARTMENT BUDGET					
Account Description	2020 Actual	2021 Revised	2022 Budget	\$ Change	% Change
Personal Services	4,169,995	4,431,364	4,885,034	453,670	10.2%
Allocations	-	-	-	-	-
Maintenance & Repair	924	3,750	4,150	400	10.7%
Operating & Supplies	592,982	947,571	1,141,265	193,694	20.4%
Equipment/Projects not Capitalized	3,787	3,000	3,000	-	0.0%
<b>Department Total</b>	<b>4,767,688</b>	<b>5,385,685</b>	<b>6,033,449</b>	<b>647,764</b>	<b>12.0%</b>

The 2022 Budget request is \$6.0 million, an increase of \$647,764 or 12.0 percent above the fiscal year 2021 Revised Budget amount. Total wages and salaries are \$4.8 million and this includes 71 positions.

### Department Budget Highlights

- Personal Services increased by \$453,670, or 10.2 percent. The 2022 budget reflects increased wage rates that are part of negotiated union contracts, as well as the transfer of 1 position to another Department and a reduction in projected savings.
- Operating & Supplies increased by \$193,694, or 20.4 percent, mainly due to Medical Services for SILICA testing and Professional Services for contract negotiations.

### 2021 Accomplishments

- Monitored and modified when necessary the Authority's Site Safety Plan, which adheres to the state's stringent COVID-19 related protocols, including maintaining enhanced cleaning procedures, a daily wellness survey, and collection of the DOH attestation form from employees
- Administered GOER paid leave to accommodate employees required to quarantine due to COVID-19
- Provided support in response to the COVID-19 pandemic, including coordination of volunteer call center initiatives, and development/issuance of numerous internal publications and safety related documents/guidance
- Processed an increased volume of Reasonable Accommodation requests as a result of COVID-19
- Developed the Continuity of Operations Plan for a State Disaster Emergency Involving a Communicable Disease
- Worked with NYS Department of Civil Service to abolish toll impact positions



- Supported staffing needs due to the complete transition to cashless tolling, including expansion of the E-ZPass Office and establishing an Information Systems Auditor 1 in the Finance Department
- Established a Remote Work Policy
- Worked with Departments to develop Succession Plans, which included identifying critical positions and associated potential successors. Information received was entered into a database, analyzed, and then used to create comprehensive reports for Executive leadership
- Administered 2020 Retroactive salary increases for Unit 1, Unit 2 and M/C employees as well as implemented retroactive experience/longevity payments for M/C employees (Grades 16 and above)
- Revised Administrative Traineeship Program guidelines, including the creation of various training development plans
- Finalized and implemented a new contract for the Authority's Flexible Spending Program
- Established four new Authority contracts for Occupation Safety Health Medical Services
- Performed System-wide safety related site visits/inspections
- 13 employees participated in the Tuition Assistance Program including 1 Skilled Trades Scholarship employee
- Conducted 29 non-technical training courses on 17 course topics for 515 employees from January 1 through June 30, 2021, with an additional 12 course topics planned for the remainder of 2021
- Developed online *Conducting Investigations* training course. Additionally, an online, self-paced training series consisting of six courses for *Managing Attendance and Leave for Supervisors* will be developed by the end of 2021.
- Created Language Access Training (to be implemented by the end of 2021)
- Published the Gender Identity Toolkit for training employees in Gender Identity and expression guidance
- Held the 2<sup>nd</sup> Annual Diversity Day
- Assisted with the 2021 Martin Luther King, Jr. event and participated in the annual Martin Luther King, Jr. food drive
- Reestablished the Great Race to promote employee wellness
- Organized annual Wellness Fair (anticipated to be held by the end of 2021)
- Worked with program areas to create/update official publications including the Traffic Safety Manual; Procurement Card Program Guidelines; Requirements of Pesticide Laws, Rules and Regulations; Discretionary Spending Guidelines; Policies for Procurement Contracts, Real Property Management, Personal Property Disposal and Lobbying
- Updated numerous sections of the Supervisor's Handbook and cleared them with the appropriate stakeholders. It is expected the remaining sections will be finalized and the Handbook published by the end of 2021.

## 2022 Goals

- Continue to monitor state and federal mandates and directives to protect the health of Authority employees during the COVID-19 pandemic environment
- Further promote a safe and healthy workplace with an emphasis on injury prevention and enhanced cleaning procedures at Authority facilities
- Successfully negotiate and sign successor agreements with Teamsters (Unit 1) and CSEA (Unit 2)
- Assist and provide support to the selected vendor for the Business Advisory Services RFP

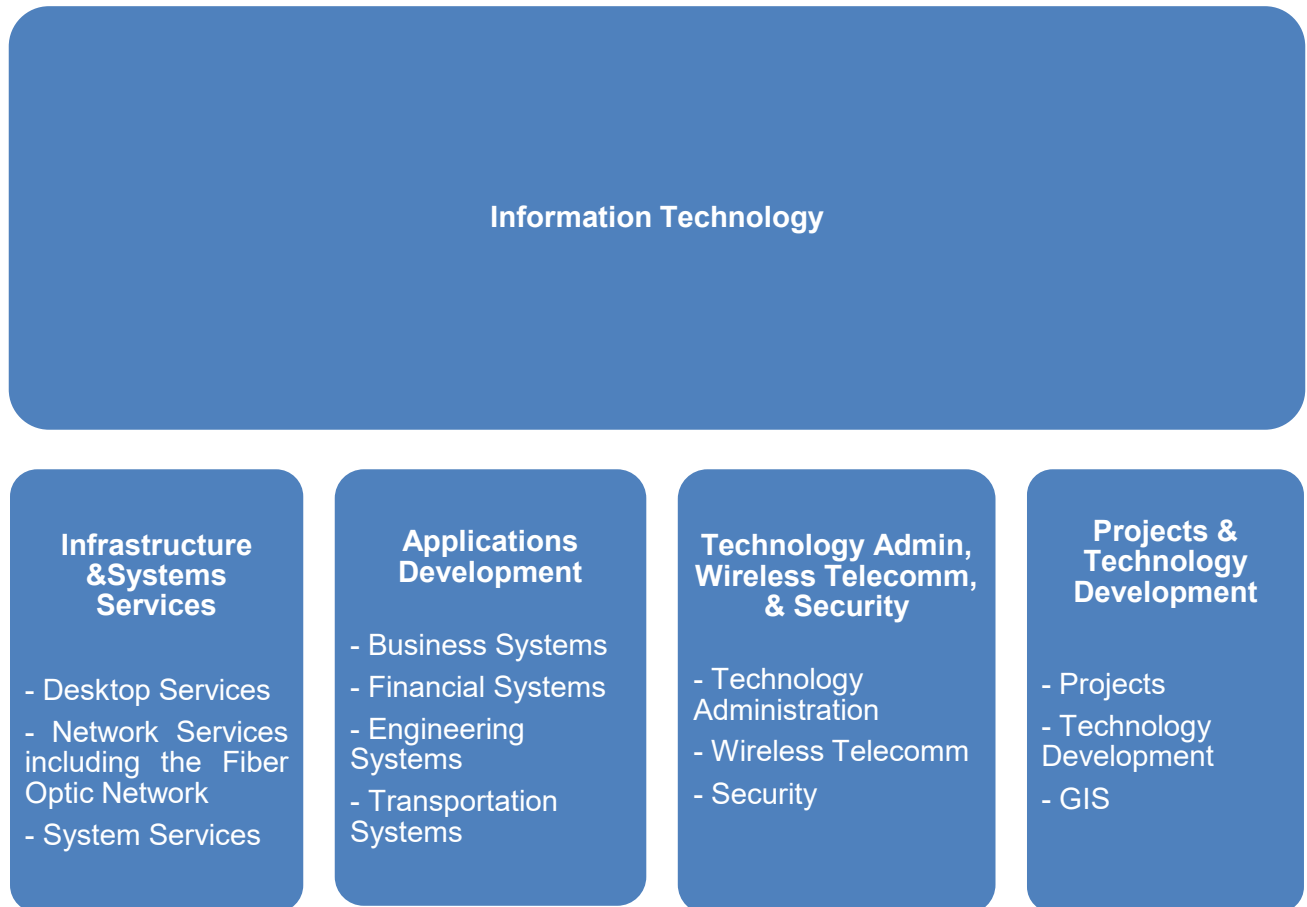
- Provide support for the Administrative Headquarters HVAC and remodeling projects
- Continue to build the Succession Planning process by meeting with Departments periodically to review and enhance their plans
- Review, revise and streamline the hiring process
- Support staffing needs for the Governor Mario M. Cuomo Bridge and cashless tolling, where/when necessary
- Work with Maintenance & Operations to refine and recommence the Skilled Trades Scholarship Program
- Develop a 2022 recruitment plan to help achieve Diversity & Inclusion goals
- Meet with managers and supervisors to reinforce Diversity & Inclusion commitments
- Schedule Diversity Day 2022 and ensure recognition of monthly diversity celebrations
- Promote Wellness initiatives, including a 2022 Wellness Fair, 2022 Great Race, and re-establishing noontime programs for EAP
- Plan and administer Implicit Bias Training for all employees
- Enhance training deliverables by creating and offering in-person, webinar and self-paced online training classes
- Reach 100 percent participation for mandatory GOER training
- Use DocuSign to covert Intranet forms to the new e-signature platform, focusing on implementation of the Executive priorities first
- Update Authority policies and procedures, as necessary

# Information Technology

## Department Description

The Information Technology (IT) Department is responsible for managing the Thruway Authority's computer resources and infrastructure including the fiber optic communications network, video conferencing, cloud computing, Intranet and Internet services, email system, GIS, intelligent transportation systems, security systems, and the use of all computers, software, and telecommunications systems as well as the storing, retrieving, and transmission of the electronic data of the Thruway Authority. IT also develops and maintains financial systems, toll and transportation systems, business systems, engineering systems, network systems, and supports Federal Communications Commission licensing, the Governor Mario M. Cuomo Bridge systems, and all desktop, laptop, modems, wireless phones, and iPad devices. Moreover, IT developed and manages the Thruway Mobile App. In addition, IT maintains several Data Centers including Headquarters, Tarrytown, and a Disaster Recovery site.

## Department Organization



## Department Budget Summary

INFORMATION TECHNOLOGY DEPARTMENT BUDGET					
Account Description	2020 Actual	2021 Revised	2022 Budget	\$ Change	% Change
Personal Services	7,792,893	7,972,778	8,239,617	266,839	3.3%
Allocations	(1,087,752)	(624,456)	(692,734)	(68,278)	10.9%
Maintenance & Repair	599,369	2,731,000	3,016,624	285,624	10.5%
Operating & Supplies	3,667,886	11,472,036	9,992,930	(1,479,106)	-12.9%
Equipment/Projects not Capitalized	248,643	420,228	802,251	382,023	90.9%
<b>Department Total</b>	<b>11,221,039</b>	<b>21,971,586</b>	<b>21,358,688</b>	<b>(612,898)</b>	<b>-2.8%</b>

The 2022 Budget request is \$21.4 million, a decrease of \$612,898 or 2.8 percent below the fiscal year 2021 Revised Budget amount. Total wages and salaries are \$8.2 million and this includes 87 positions.

### Department Budget Highlights

- Personal Services increased by \$266,839, or 3.3 percent, and includes funding for 87 permanent positions.
- Allocations increased by \$68,278, or 10.9 percent relative to anticipated labor hours associated with in-house projects.
- Maintenance & Repairs increased by \$285,624, or 10.5 percent mainly due to Fiber maintenance and repair costs.
- Operating & Supplies decreased by \$1,479,106, or 12.9 percent mainly due to a decrease in Fiber marketing services costs offset by an increase in Fiber Electric and Telephone, Maintenance & Repair to Equipment and Cloud Software Subscriptions.
- Equipment/Projects not Capitalized increased by \$382,023, or 90.9 percent mainly for equipment related to service area reconstruction replacement of computer equipment that were deferred due to the COVID-19 pandemic.

### 2021 Accomplishments and Goals

- Purchasing, configuring, and deploying all available laptops/docks and/or desktops
- Purchased, configured, and deployed all available printers
- Upgraded Windows 10 to version 20H2 and upgraded Microsoft Office to 64-bit
- Deployed the new statewide Computer-Aided Dispatch (CAD) system
- Commenced work on multi-year project to upgrade the Authority's land mobile radio system for compliance with the Governor's mandate for statewide emergency communications interoperability
- Formulated detailed hardware needs for reconfiguration of the Thruway Statewide Operations Center
- Developed and deployed a redesigned and internal GIS interface for Asset Management

- Deployed a Thruway-wide upgrade to the GIS software platform to bring it up to modern
- Accepted the transfer and management responsibilities for numerous technology systems on the Governor Mario M. Cuomo Bridge (including security, structural health, intelligent transportation systems, bridge model, lighting, websites, and networks)
- Continued implementation of Microsoft cloud co-management to better secure and manage devices off our network and modernize our imaging process
- Finalize development of a centralized statewide Computer-Aided Dispatch (CAD) system in partnership with New York State Police, ITS, and DOT
- Completed implementation of Fuel Focus implementation to replace Asset Works
- Completed implementation of the state-wide Contract System (B2G MBE/WBE Spend Analysis)
- Completed various legacy application updates replacing outdated database drivers and back-end report engines
- Continued implementation of Finance RPA processes
- Updated TFP/Oracle-eBusiness Suite for Microsoft Edge Compatibility
- Replaced the Contract Management System with Oracle Primavera Unifier to manage our Construction Contracts, Engineering Agreements, and Personal Services Contracts
- Supported Desktop Services and System Administrators with system and hardware upgrades
- Facilitated troubleshooting efforts for the bridge security management system
- Supported application administration and deployment
- Provided regular application maintenance and support
- Continued implementation of Microsoft cloud co-management to better secure and manage devices off our network and modernize our imaging process.

## 2022 Goals

- Update IT's Disaster Recovery Plan; test selected recovery procedures
- Redevelop desktop GIS tools and applications with new ArcGIS Pro technology to prepare for a future environment
- Integrate the new CAD system into existing systems
- Further development of multi-year radio system upgrade project
- Replace the antiquated Permitting system with a new application
- Augment staffing and training of GIS and project management staff
- Determine path forward for Application Portfolio Management platform for NYSTA's Enterprise Architecture
- Begin upgrade of CobiT (Control Objectives for Information Technology) to the latest release from the Information Systems Audit and Control Association to ensure adherence strategies and controls for IT governance, control, risk, security, and an audit/assurance approach by utilizing the latest guidelines
- Coordinate move of computer equipment to the new TSOC DR site
- Continue implementation of Microsoft cloud co-management to better secure and manage devices off our network and modernize our imaging process.
- Implement Storage Sense to manage disk space on Windows devices
- Work along with Service Area reconstruction project for fiber moves and installations
- Provide Radio System project-fiber moves and network installations
- Participate in the Connected Vehicles project

- Replacement of CAP functionality for commercial postpaid E-ZPASS accounts in the E-ZPASS Customer Service Software from Conduent
- Implement new software to allow for the upload of information (invoices) into TFP API Wizard
- Implementation of new system to track Capital Planning projects and data
- Provide Support for the Service Area Construction Project
- Investigate the retirement of the of old New NY Bridge website
- Expand the state-wide Streaming public Traffic Camera to include Service Area and Tandem Lot parking areas
- Re-engineer Travel Plaza Inspection apps
- Re-engineer Traffic Data System app
- Continue to rewrite legacy applications, including: Radio Inventory (RIMS), Injury Reporting
- Convert Pool Vehicle Request process from a Paperless Form to a web application
- Implement year-over-year data comparisons for People Counter dashboard
- Integrate cameras into PSIM environment
- Upgrade Kronos server OS to latest release
- Continue developing RPA Automation – HR Processes
- Enhance HRMS W2 process

# Finance and Accounts

## Department Description

The Finance Department is responsible for the Thruway Authority’s fiscal matters. The Department ensures compliance with financial requirements, manages the Thruway Authority’s resources, structures financial plans to maintain debt service coverage, and works with all Departments to manage costs. Overall financial policies and reporting requirements are dictated by the terms of the Thruway Authority’s Bond Resolution and mandated by statute or Executive Order. The Finance Department is also responsible for meeting deadlines and financial covenants of the bond resolution.

## Department Organization



## Department Budget Summary

FINANCE & ACCOUNTS DEPARTMENT BUDGET						
Account Description	2020 Actual	2021 Revised	2022 Budget	\$ Change	% Change	
Personal Services	7,759,035	6,084,068	6,332,704	248,636	4.1%	
Allocations	(27,591)	(15,000)	(15,000)	-	0.0%	
Maintenance & Repair	-	-	-	-	-	
Operating & Supplies	486,545	164,790	230,593	65,803	39.9%	
Equipment/Projects not Capitalized	1,929	33,260	44,660	11,400	34.3%	
<b>Department Total</b>	<b>8,219,918</b>	<b>6,267,118</b>	<b>6,592,957</b>	<b>325,839</b>	<b>5.2%</b>	

The 2022 Budget request is \$6.6 million, an increase of \$325,839 or 5.2 percent above The 2021 Revised Budget amount. Total wages and salaries are \$6.3 million, and this includes 91 permanent positions, a decrease of 7 positions.

## **Department Budget Highlights**

- In 2021, the Authority reorganized several departments. The reorganization included moving Purchasing from Finance and Accounts to Board and Executive. In addition, the Real Property Unit was also moved from Finance and Accounts to the Legal Department.
- Personal Services increased by \$248,636, or 4.1 percent, and includes funding for 91 permanent positions. The 2022 budget reflects increased wage rates that are part of negotiated union contracts, as well as the decrease of 7 positions.
- Operating & Supplies increased by \$65,803, or 39.9 percent, mainly due to new funding for an automated travel system and specialized support services.

## **2021 Accomplishments**

- Completed the issuance of the \$552 million New York State Thruway Authority, General Revenue Bonds, Series O issuance.
- Monitored the negative revenue impacts associated with COVID-19 effects on the regional and national economy to ensure the Authority Financial Plan remained in compliance with its Financial Guidelines.
- Developed new toll auditing methods required as a result of the system-wide conversion to cashless tolling.
- Developed and published the monthly financial reports, which can be found on the Thruway Authority's website

## **2022 Goals**

- Continue to monitor and respond to the revenue impacts associated with COVID-19 effects on the regional and national economy.
- Continuously improve the annual plan process for clarity and more transparency
- Implement GASB Statement 87 which establishes a new model of accounting for leases
- Work toward implementation of GASB Statement 94, which addresses the financial reporting of Public-Private Partnerships and GASB Statement 96 which addresses the financial reporting of subscription-based information technology arrangements, also known as cloud based IT services. GASB Statements 94 and 96 are required to be implemented by no later than 2023.
- Produce a five-year capital plan based on best estimates for future planning needs
- Continue the complete and accurate reporting of the Thruway Authority's finances, including producing monthly financial statements, and focus on development of policies and procedures.

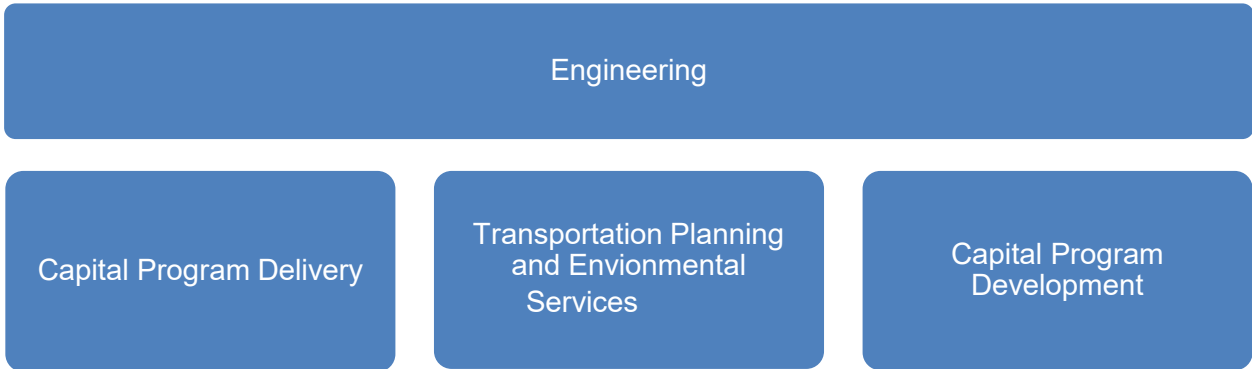


# Engineering

## Department Description

The Department of Engineering, led by the Chief Engineer, is comprised of Headquarters and Division staff, responsible for the engineering needs of the Thruway Authority. These functional areas of the Department all work collectively to develop and implement the Capital Program, starting with planning and program development, through project inception and design, to construction completion. The Engineering Department also supports the Department of Maintenance and Operations, at both the Headquarters and Division levels. The Department manages the Capital and Contracts Programs in consultation with the appropriate Thruway Offices and Divisions.

## Department Organization



## Department Budget Summary

ENGINEERING DEPARTMENT BUDGET						
Account Description	2020 Actual	2021 Revised	2022 Budget	\$ Change	% Change	
Personal Services	13,425,015	13,504,713	13,886,408	381,695	2.8%	
Allocations	(7,452,559)	(8,003,562)	(8,122,002)	(118,440)	1.5%	
Maintenance & Repair	2,058	9,387	10,631	1,244	13.3%	
Operating & Supplies	512,452	705,493	801,276	95,783	13.6%	
Equipment/Projects not Capitalized	40,988	13,236	45,550	32,314	244.1%	
<b>Department Total</b>	<b>6,527,954</b>	<b>6,229,267</b>	<b>6,621,863</b>	<b>392,596</b>	<b>6.3%</b>	

The 2022 Budget request is \$6.6 million, an increase of \$392,596 or 6.3 percent above the 2021 Revised Budget amount. Total wages and salaries are \$13.8 million and this includes 149 positions.

## Department Budget Highlights

- In 2021, the Authority reorganized several departments. These changes included moving Capital and Contracts Management from Engineering to Board and Executive.
- Personal Services increased by \$381,695 or 2.8 percent and includes funding for 149 permanent positions. The 2022 budget reflects increased wage rates that are part of negotiated union contracts.
- Allocations increased by \$118,440 or 1.5 percent, mainly due to projected increased wage rates which will result in higher allocations.
- Operating & Supplies increased by \$95,783 or 13.6 percent mainly due to an increase in Rentals and Maintenance & Repair to Equipment.
- Equipment/Projects not capitalized increased \$32,314 or 244.1 percent mainly to replace computer equipment that was deferred due to the COVID-19 pandemic.

## 2021 Accomplishments

- Completed work on the Shared Use Path crossing the Gov. Mario M Cuomo bridge to include conversion of Interchange 10 to incorporate a Comfort Station and parking lot on the Rockland County side of the path.
- Completed the conversion of the ticketed system to Cashless Tolling. (Phase 1 of the Design-Build Best Value Contract). The implementation of cashless tolling resulted in GHG emission reductions estimated to equate to an approximate annual savings of 4.4 million gallons of gasoline, or \$10.7 million.
- Completed rehabilitation of the pavement and reconstruction of the shoulders through the Cattaraugus Territory of the Seneca Nation of Indians.
- Continued progress on the I-95 (New England Thruway) “Last Mile” construction contract, which was awarded using a Design-Bid-Build Best Value procurement process. Notable completions include the replacement of the bridge over I-95 from I-287 northbound (Ramp B).

## 2022 Goals

- Continue coordination efforts and initiatives with our transportation partners (including NYSDOT, NYS Bridge Authority and NYS Power Authority), with the result of realizing efficiencies and savings through “shared services” and other arrangements.
- Reorganize and re-align Engineering Staff positions and tasks to optimize Engineering Consultant expenditures and improve overall Department efficiency.
- Continue working with all Program Areas to promote environmental awareness in support of environmental compliance.
- Continue process to replace the existing Capital and Contracts Management Systems with a new system that supports electronic bidding, electronic submission of estimates for contractors and consultants, and enhanced reporting.
- Continue development of long range planning for all 814 bridges.
- Complete the removal of existing toll plaza structures following the conversion of the ticketed system to Cashless Tolling. (Phase 2 of the Design-Build Best Value Contract).
- Completion of the I-95 (New England Thruway) “Last Mile” construction contract.
- Begin structural steel rehabilitation and deck replacement of the Castleton Bridge over the Hudson River.

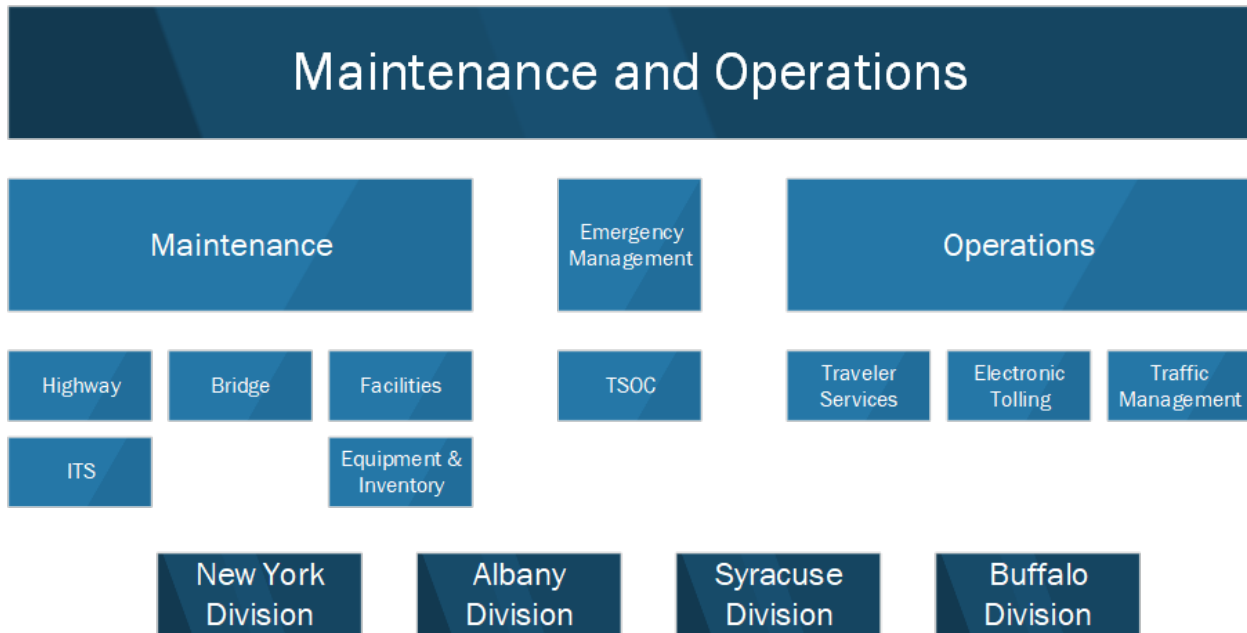
# Maintenance and Operations

## Department Description

The Department of Maintenance and Operations establishes budgets, priorities and performance standards for maintenance activities for the highway, bridge and facilities infrastructure, as well as the motorized, toll and ITS equipment owned and operated by the Thruway Authority. The Department includes the four Divisions where the daily operations of the Thruway Authority are directed. Whether repairing bridge and highway infrastructure, maintaining vehicles and construction equipment, employees work to ensure safe and reliable travel for patrons each day. The Thruway Authority's winter maintenance program is implemented in the Divisions with overall program direction provided by Headquarters staff. The Department works in collaboration with the Department of Engineering to develop the Authority's multi-year Capital Program. This effort involves project initiation, prioritization and programming of capital work for the entire Thruway system.

The Department is also responsible for managing programs for Travelers' Services, which manage contracts that operate 27 Service Areas throughout the system. Traffic Management includes administration of the Thruway Authority's authorized towing program and the tandem truck permit program. The E-ZPass office manages electronic toll collection contracts which include E-ZPass, cashless tolling and violation enforcement. In addition, Maintenance and Operations includes the Thruway Statewide Operations Center (TSOC). TSOC is a 24 hours a day modified 9-1-1 center. The Department is also responsible for the Thruway Authority's emergency response and incident management activities through the Office of Emergency Management.

## Department Budget Summary



MAINTENANCE BUDGET						
Account Description	2020 Actual	2021 Revised	2022 Budget	\$ Change	% Change	
Personal Services	62,408,728	64,848,523	66,164,352	1,315,829	2.0%	
Allocations	(2,868,116)	(3,348,301)	(4,550,000)	(1,201,699)	35.9%	
Maintenance & Repair	15,815,141	24,675,285	23,925,285	(750,000)	-3.0%	
Operating & Supplies	6,846,873	6,128,639	6,595,537	466,898	7.6%	
Equipment/Projects not Capitalized	40,395	1,429,750	1,745,932	316,182	22.1%	
<b>Department Total</b>	<b>82,243,021</b>	<b>93,733,896</b>	<b>93,881,106</b>	<b>147,210</b>	<b>0.16%</b>	

The 2022 Budget request is \$93.9 million, an increase of \$147,210 or 0.16 percent above the fiscal year 2021 Revised Budget amount. Total wages and salaries are \$66.1 million and this includes 1,017 positions.

### Maintenance Budget Highlights

- Personal Services increased by \$1,315,829, or 2.0 percent, and includes funding for 1,017 permanent positions.
- Personal Service Allocations increased \$1,201,699, or 35.9 percent, based on planned capital projects.

- Maintenance and Repair decreased \$750,000 or 3.0 percent, mainly due to anticipated decreases in bridge inspection, pavement striping and accident contract costs, partially offset by an increase in non-contract bridge costs and lower accident reimbursements.
- Operating and Supplies increased \$466,898 or 7.6 percent, mainly attributed to special contracts for the Governor Mario M. Cuomo Bridge.
- Equipment & Projects Not Capitalized increased \$316,182, or 22.1 percent, mainly attributable to an increase in operating project funding and work.

## **2021 Accomplishments**

- Completed comprehensive program of preventive and corrective maintenance on the bridge, highway, and facility infrastructure
- Changed the storage location of critical snow and ice equipment to improve response to winter storms.
- Improved winter operations program with addition of strategic salt storage and operational enhancements.
- Created and managed newly developed COVID-19 protocols in all Maintenance and Operations work units providing maximum protection possible for all employees while still maintaining critical functionality in all programs.
- Partnered with local emergency responders that service the new Governor Mario M. Cuomo Bridge to develop emergency response practices for the new bridge spans and Shared Use Path.
- Expanded Emergency Management office to focus on training.
- Buffalo Division staff built an addition to the Silver Creek Maintenance Section Building with inhouse forces.
- Ramapo/Sloatsburg Service Areas buildings sewer discharge was redirected into the Rockland County Sewer District sewer plant.
- Developed Maintenance contracts for specialized systems attached to the Governor Mario M. Cuomo Bridge.
- Repurposed the exit 24 Toll Utility building into an updated backup emergency TSOC office.
- Completed the new Albany Maintenance salt shed.

## **2022 Goals**

- Complete all programmed maintenance projects and preventive maintenance.
- Implement training and resources for new required safety standards.
- Continue strategic plan to upgrade facilities to meet current standards and operational needs.
- Further expand the Thruway Authority's alternative energy initiatives.
- Refine sustainable right-of-way management practices to advance environmental stewardship goals.
- Continue to review Maintenance and Operations positions across Headquarters and all Divisions to identify inconsistencies and improve operational efficiency.
- Partner with NYS DOT to move to a new vehicle fueling system that allows for interoperability between the entities allowing for sharing of services during emergencies, deployments or time of critical need.
- Train first responder partners utilizing a modified Highway Safety Training and Traffic Incident Management principles (TIMS) program.
- Continue to conduct simulated "road closure" drills in all Divisions.
- Connect Weedsport Maintenance Section into the Weedsport Municipal Sewer System.
- Decommission the Ramapo/Sloatsburg Wastewater Treatment Plant.

## EQUIPMENT & INVENTORY MANAGEMENT BUDGET

Account Description	2020 Actual	2021 Revised	2022 Budget	\$ Change	% Change
Personal Services	17,397,473	18,012,168	19,095,949	1,083,781	6.0%
Allocations	(1,525,602)	(839,118)	(1,118,807)	(279,689)	33.3%
Maintenance & Repair	8,032,353	10,143,747	11,135,344	991,597	9.8%
Operating & Supplies	1,467,084	3,105,419	3,210,178	104,759	3.4%
Equipment/Projects not Capitalized	103,806	146,250	151,360	5,110	3.5%
<b>Department Total</b>	<b>25,475,114</b>	<b>30,568,466</b>	<b>32,474,024</b>	<b>1,905,558</b>	<b>6.2%</b>

The 2022 Budget request is \$32.4 million, an increase of \$1,905,558 or 6.2 percent above the fiscal year 2021 Revised Budget amount. Total wages and salaries are \$19.0 million and this includes 311 positions.

### Equipment and Inventory Budget Highlights

- Personal Services increased by \$1,083,781, or 6.0 percent, and includes funding for 311 permanent positions. The 2022 budget reflects increased wage rates that are part of negotiated union contracts.
- Allocations increased by \$279,689 or 33.3 percent, mainly due to anticipated labor hours associated with ITSM capital work.
- Maintenance & Repairs increased by \$991,597 or 9.8 percent mainly due to increases in Auto Repairs and Fuel.
- Operating & Supplies increased \$104,759 or 3.4 percent, mainly due to a reimbursement received in 2021 for the vehicle GPS system.

### 2021 Accomplishments

- Electric Vehicles – Deployed electric vehicles to all four Divisions and Headquarters.
- Added special use battery powered UTV for rescue/ambulance service for use by local EMTs to minimize the response time to medical emergencies on the Shared Use Path (SUP) of the Governor Mario M. Cuomo Bridge.
- Factory authorized training for diesel emissions for Service and Repair Mechanics.
- Implementing a new under-the-rail tractor mounted mowing system.
- Fuel System Upgrade – Worked with NYSDOT. The Thruway is upgrading the automated fuel system that allows seamlessly fueling of other state agency vehicles in declared emergencies.
- Completed the sale and surplus of all toll ticket system machines, components and parts, thus reducing the overall ITS Maintenance inventory.
- Completed training all ITS Maintenance staff on the two new cashless tolling systems.
- Replaced all 3G modems used to communicate with ITS devices.

## **2022 Goals**

- Electric vehicle charging - integrate to the new fuel system to allow for automated upload of electric vehicle information.
- Fleet interface with the statewide AMS system to upload vehicle data required by OEM.
- Expanded factory training for SRM (Motorized) from International, Cummins, and Chrysler.
- Work with the DMV to self-register fleet vehicles.

TRAFFIC & COMMUNICATIONS BUDGET					
Account Description	2020 Actual	2021 Revised	2022 Budget	\$ Change	% Change
Personal Services	7,005,491	7,648,516	8,087,410	438,894	5.7%
Allocations	-	(3,125)	-	3,125	-
Maintenance & Repair	2,319	2,700	2,700	-	0.0%
Operating & Supplies	1,970,465	2,278,196	2,521,405	243,209	10.7%
Equipment/Projects not Capitalized	3,998	29,485	30,667	1,182	4.0%
<b>Department Total</b>	<b>8,982,273</b>	<b>9,955,772</b>	<b>10,642,182</b>	<b>686,410</b>	<b>6.9%</b>

The 2022 Budget request is \$10.6 million, an increase of \$686,410 or 6.9 percent above the fiscal year 2021 Revised Budget amount. Total wages and salaries are \$8.0 million, and this includes 112 positions.

**Traffic and Communications Budget Highlights**

- Personal Services increased by \$438,894, or 5.7 percent, and includes funding for 112 permanent positions. The 2022 budget reflects increased wage rates that are part of negotiated union contracts.
- Operating & Supplies increased by \$243,209 or 10.7 percent, mainly due to Maintenance & Repair to Equipment for the State Police Computer Aided Dispatch system.

**2021 Accomplishments**

- Integrated laptops into Traffic Supervisor vehicles to support emergency response.
- Implemented aggressive Move Over Law education campaign through events on and off the Thruway system.
- Developed a public service announcement for Move Over safety campaign
- Developed a Continuity of Operations plan.
- Updated the Thruway Authority’s Emergency Management Operations Protocol (EMOP) document.
- Completed the Service Area procurement with the selection of a vendor to modernize and operate the Thruway Authority’s 27 Service Areas.
- Installed Level 2 Electric Vehicle charging stations at select commuter lots, Level 3 at select service areas and Level 2 and Level 3 units at the Governor Mario M. Cuomo Bridge landings.
- Trained first responder partners utilizing a modified Highway Safety Training/TIMS program.
- Held the first of three, first responder partners meetings to discuss access and response to incidents on the Governor Mario M. Cuomo Bridge Shared Use Path (SUP).



## **2022 Goals**

- Continue to work with local first responders to improve and streamline response to incidents on the new Governor Mario M. Cuomo Bridge.
- Replace the CARS System used for Traffic Management in TSOC with DYNAC, the new technology used on the new Governor Mario M. Cuomo Bridge.
- Continue to educate motorists and train staff, including Authorized Tow Operators, on the Move Over Law.
- Implement a new Computer Aided Dispatch in conjunction with State Police and NYSDOT.
- Build out a new TSOC that will upgrade the capabilities for traffic management and dispatching services.
- Begin construction at select Service Areas.
- Update Service Area inspections to account for change in services due to the new lease agreement and impacts due to COVID-19.
- Increase efficiencies within the Office of Travelers' Service and Traffic Management by processing forms online and via email.

TOLL COLLECTION BUDGET					
Account Description	2020 Actual	2021 Revised	2022 Budget	\$ Change	% Change
Personal Services	22,418,402	1,449,900	1,499,084	49,184	3.4%
Allocations	-	-	-	-	0.0%
Maintenance & Repair	5,375	-	-	-	0.0%
Operating & Supplies	41,045,350	77,263,562	86,310,289	9,046,727	11.7%
Equipment/Projects not Capitalized	1,373	1,125	1,700	575	51.1%
<b>Department Total</b>	<b>63,470,500</b>	<b>78,714,587</b>	<b>87,811,073</b>	<b>9,096,486</b>	<b>11.6%</b>

The 2022 Budget request is \$87.8 million, an increase of \$9,096,486 or 11.6 percent below the fiscal year 2021 Revised Budget amount. Total wages and salaries are \$1.5 million and this includes 22 positions.

**Toll Collection Budget Highlights**

- Personal Services increased by \$49,184 or 3.4 percent and includes funding for 22 permanent positions.
- Operating & Supplies increased \$9,046,727, or 11.6 percent, mainly due to increased costs associated with E-ZPass Administration and Tolls By Mail Administration.

**2021 Accomplishments**

- Coordinated with Kapsch to implement their cashless tolling system at the mainline gantries.
- Implemented Emergency Tolling Program on ticketed system in response to COVID-19.
- Reissued the systems and operations RFPs for the E-ZPass/Tolls By Mail Customer Service Center services.
- Continued to work with Human Resources to implement strategies to assist affected toll positions in obtaining other employment and retention until Cashless Tolling Go Live.
- Developed and implemented a Toll Advocacy Program.
- Developed an E-ZPass email snapshot that is sent to E-ZPass customers with their statement notification.
- Worked with MTA Bridges & Tunnels and Port Authority of NY & NJ to implement a TollsNY app to support E-ZPass and Tolls By Mail customers.
- Issued RFP for collections contract.
- Assisting New York Bridge Authority in their transition to cashless tolling.
- Working with Conduent to implement transaction processing changes to support the cashless tolling on the ticketed system.
- Worked with E-ZPass group to convert entire state of Florida and Georgia to E-ZPass.
- Worked with New York Department of Motor Vehicles to receive updated plate files to support E-ZPass customers.

## **2022 Goals**

- Implement first-call resolution to improve customer service.
- Develop methods for third party applications (Amazon Alexis, Google Voice, chat bots) to enhance the E-ZPass customer experience.
- Further efforts with the E-ZPass Interagency Group to implement a HUB that will support regional and national interoperability.
- Develop pilot program with State Police to focus on E-ZPass violators/DMV suspensions.
- Execute reciprocal agreements with other states in support of violation enforcement.
- Adjust E-ZPass office staffing levels to provide service levels that support the growth in cashless tolling.
- Develop an Agreement with the Province of Ontario for obtaining customer names and addresses in support of Cashless Tolling.



# LONG RANGE FINANCIAL PLAN

**Long-Term Financial Plan**  
**Per the Thruway Authority General Revenue Bond Resolution**  
**(millions)**

	ACTUAL 2020	Revised Rev. Budget 2021	Proposed 2022	Estimated 2023	Estimated 2024	Estimated 2025
Toll Revenue	615.3	750.8	805.6	807.7	816.3	823.9
Other Revenues	53.2	61.7	75.0	72.1	71.8	71.2
Additional Revenue Need					3.7	82.0
Total Revenue Target	668.5	812.6	880.6	879.8	891.7	977.1
Thruway Operating Expenses	316.6	361.2	374.8	382.3	389.9	397.7
Reserve for Claims and Indemnities, Environmental Remediation & Cashless Tolling Transition	2.0	4.0	1.0	1.0	1.0	1.0
Net Revenue (A)	349.9	447.4	504.8	496.5	500.8	578.4
Current Senior Debt Service Outstanding	167.8	241.2	244.4	252.9	261.6	283.6
Proposed Senior Bonds and refunding	0.0	0.0	0.0	0.0	0.0	23.1
Less Interest Earnings on Sr. Debt Srvc Res Funds	(1.0)	(0.7)	(0.8)	(0.8)	(0.9)	(0.9)
Net Senior Debt Service (B)	166.8	240.5	243.6	252.0	260.8	305.8
Net Revenue after Senior Debt Service	183.1	206.9	261.2	244.5	240.0	272.6
Adjust to Cash basis/Retain for Working Capital	(2.5)	80.0	0.0	0.0	0.0	0.0
Reserve Maintenance Deposit	97.3	125.1	132.9	70.3	62.8	81.5
Total Junior Debt Service	23.5	46.7	63.6	108.7	110.5	112.4
Proposed Junior Bonds	0.0	0.0	0.0	0.0	0.0	10.6
Less Interest Earnings on Jr. Debt Srvc Res Funds	(0.4)	(0.4)	(0.3)	(0.3)	(0.3)	(0.3)
Net Junior Debt Service (C)	23.1	46.4	63.3	108.4	110.2	122.6
Facilities Capital Improvement Deposit	0.0	0.0	0.0	0.0	0.0	0.0
General Reserve Fund Provision - State Police and JIAN int.	60.1	115.5	65.0	65.8	67.1	68.4
Balance	0.0	0.0	0.0	0.0	0.0	0.0
Senior Debt Service Coverage Ratio (A/B) (1)	2.10	1.86	2.07	1.97	1.92	1.89
Senior & Junior Debt Service Coverage Ratio (A/(B+C))	1.84	1.56	1.64	1.38	1.35	1.35

Schedule of Senior Debt Service for The Thruway Capital Program (millions)							
Series	Principal Balance 1/1/22 or when issued	Year of Issuance	2021	2022	2023	2024	2025
Series I	-	2012	32.2	0.0	0.0	0.0	0.0
Series J	577.0	2014	44.8	44.7	69.1	82.3	104.1
Series K	658.8	2014	61.9	61.9	61.9	48.8	48.8
Series L (Refunding)	459.2	2018	56.5	79.1	54.7	54.7	36.2
Debt Refunding (Series M)	857.6	2019	26.3	26.3	44.2	49.0	54.4
Series N	450.0	2020	18.6	18.6	18.6	18.6	18.6
Series O	549.5	2021	1.0	13.8	4.3	8.3	21.5
<b>Subtotal : Current Debt Service</b>			<b>241.2</b>	<b>244.4</b>	<b>252.9</b>	<b>261.6</b>	<b>283.6</b>
Series P (Proposed)	34.7	2023	0.0	0.0	0.0	0.0	1.7
Series Q (Proposed)	260.3	2024	0.0	0.0	0.0	0.0	13.0
Series R (Proposed)	222.1	2025	0.0	0.0	0.0	0.0	8.3
<b>Summary</b>			<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>
Total Annual Senior Debt Service			241.2	244.4	252.9	261.6	306.6
Annual Change in Senior Debt Service as a % of Revenues			4.6%	-1.9%	1.0%	1.6%	2.6%
Cumulative Senior Debt Service as a % of Revenues			29.7%	27.8%	28.7%	29.3%	31.4%
Outstanding Senior Debt at End of Year			3,552.1	3,439.1	3,347.3	3,470.5	3,540.6

*Notes:*

*The Projected Senior Debt Service is based on issuing 30 year bonds in the amount needed to fund the Thruway Capital Program and assumes it would be issued during the year at an interest rate between 3.5 percent and 5.0 percent. In some years, Capitalized interest is used to fund Debt service. Total revenues from Thruway tolls, concessionaire revenue, interest and other revenue sources are pledged to senior debt service. The limit on senior debt capacity is reached once the debt service coverage ratio drops below 1.2 X coverage.*

## Schedule of Junior Indebtedness Obligation for The New NY Bridge Project

Series	Principal Balance 1/1/22 or when issued	Year of Issuance	2021	2022	2023	2024	2025
Series 2016 A	849.5	2016	41.2	41.2	41.2	42.9	44.8
TIFIA 2019 B	1,628.0	2019	1.7	18.5	63.7	63.7	63.7
Series 2019 B (New)	63.6	2019	3.9	3.9	3.9	3.9	3.9
Series 2022 A (Proposed)	282.1	2022	0.0	0.0	0.0	0.0	10.6

Summary	2021	2022	2023	2024	2025
Total Annual Junior Debt Service	46.7	63.6	108.7	110.5	122.9
Annual Change in Junior Debt Service as a % of Revenues	2.3%	1.5%	5.1%	5.1%	0.2%
Cumulative Junior Debt Service as a % of Revenues	5.8%	7.2%	12.4%	12.4%	12.6%
Outstanding Junior Debt at End of Year	2,541.1	2,821.7	2,820.3	2,817.0	2,811.7

*Notes:*

*The Projected Jr. Debt Service is based on issuing short term notes and bonds in the amount needed to fund the New NY Bridge Project and includes the Series 2013 A JIO's taken out in September 2019 with the Tifia Loan which was then refinanced in October 2019. After 2019, JIO's would be issued between 3.5 percent and 5.0 percent. Total revenues from Thruway tolls, concessionaire revenue, interest and other revenue sources are pledged to debt service. The limit on debt capacity is reached once the debt service coverage ratio drops below 1.2 X coverage.*



# MULTI-YEAR CAPITAL PLAN



**2022 Budget - Capital Program Sources and Uses**  
(millions)

	2020	2021 Revised	2022 - 2026 Capital Program					2022-26 Total
			2022	2023	2024	2025	2026	
Thruway:								
Highways	109.7	44.4	193.2	169.8	180.0	157.0	169.7	869.8
Bridges	56.5	46.6	77.4	105.4	106.5	120.7	111.0	520.9
Facilities	6.2	7.9	13.5	11.1	11.7	7.9	10.1	54.2
Equipment	22.5	31.3	46.1	34.2	34.8	34.8	35.5	185.5
Cashless Tolling	250.6	156.1	11.9	0.0	0.0	0.0	0.0	11.9
Intelligent Transportation Systems	3.6	1.0	5.2	2.1	0.3	1.4	4.5	13.5
<b>Sub Total - Thruway</b>	<b>449.2</b>	<b>287.2</b>	<b>347.3</b>	<b>322.6</b>	<b>333.3</b>	<b>321.8</b>	<b>330.7</b>	<b>1,655.8</b>
New NY Bridge Project:								
New NY Bridge	88.9	30.0	50.0	194.9	0.0	0.0	0.0	244.9
<b>Sub Total - New NY Bridge Project</b>	<b>88.9</b>	<b>30.0</b>	<b>50.0</b>	<b>194.9</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>244.9</b>
<b>Grand Total</b>	<b>538.0</b>	<b>317.2</b>	<b>397.3</b>	<b>517.5</b>	<b>333.3</b>	<b>321.8</b>	<b>330.7</b>	<b>1,900.7</b>

	2020	2021 Revised	2022 - 2026 Capital Program					2022-26 Total
			2022	2023	2024	2025	2026	
Thruway:								
Senior Debt	404.3	160.5	214.5	251.0	268.3	237.5	241.7	1,213.0
Reserve Maintenance Fund	-2.0	125.1	132.9	70.3	62.8	81.5	87.1	434.5
General Reserve Funds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Federal, State and Other Funds	-0.8	1.6	0.0	1.3	2.2	2.8	1.9	8.3
Thruway Stabilization Program Funds	47.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Sub Total - Thruway and Canal</b>	<b>449.2</b>	<b>287.2</b>	<b>347.3</b>	<b>322.6</b>	<b>333.3</b>	<b>321.8</b>	<b>330.7</b>	<b>1,655.8</b>
New NY Bridge Project:								
Junior Debt	68.9	6.6	50.0	194.9	0.0	0.0	0.0	244.9
Facilities Capital Improvement Fund	5.7	23.4	0.0	0.0	0.0	0.0	0.0	0.0
Federal, State and Other Funds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Thruway Stabilization Program Funds	14.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Sub Total - New NY Bridge Project</b>	<b>88.9</b>	<b>30.0</b>	<b>50.0</b>	<b>194.9</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>244.9</b>
<b>Grand Total</b>	<b>538.0</b>	<b>317.2</b>	<b>397.3</b>	<b>517.5</b>	<b>333.3</b>	<b>321.8</b>	<b>330.7</b>	<b>1,900.7</b>

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## CAPITAL PROGRAM DEVELOPMENT SUMMARY

### Overview:

- The Authority maintains a “rolling” 5-year Capital Program. Annually, a team comprised of members from Maintenance & Operations, Engineering, and Divisions, will develop a draft new fifth year of the Program and re-evaluate the current Program based on conditions, finances, emergencies, regulatory requirements, etc.

### Tasks and Timeline:

- **By 1<sup>st</sup> week in January** – Engineering and Maintenance & Operations will meet to discuss programmatic or other priorities and any new/revised construction methods which could influence project identification or prioritization for Highway, Bridge, Architecture and ITS needs Thruway-wide.
- **By 3<sup>rd</sup> week in January** – Based upon asset management data, Engineering will provide the following in order to start preparing for the annual project review field visits:
  - A draft proposed list of projects for the new fifth year of the Capital Program with recommended treatments.
  - A draft proposed list of projects that may need to be reviewed/re-scoped based upon discussions (see above) and trends/conditions. These changes will be limited to the 4<sup>th</sup> and 5<sup>th</sup> years of the current capital program.
  - Note: In the revised process, the Capital Program Project Proposal (CPPP) will be replaced with project lists and some project detail sheets (for field visit use). These will be used to document the Capital Program update.
- **By 4<sup>th</sup> week in January** - Maintenance & Operations sends the draft lists to the Divisions for review and input.
- **By 2<sup>nd</sup> week in March** – Using the draft lists provided to them, the Divisions will submit their program recommendations for the new fifth year to Maintenance & Operations. The submission will include appropriate project checklists for new projects, as well as an identification of any unusual items of work likely to have significant cost impact. For changes requested to existing projects, a revised project checklist will be submitted. (Revised checklists will be developed for this effort and they will be used during the field visits).
- **By 3<sup>rd</sup> week in March** – Working together, Maintenance & Operations and Engineering will develop a final list of projects to be reviewed during the field visits. Lists can be updated based upon spring conditions.

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- **By end of April** - The Department of Finance & Accounts will provide funding projections to Capital Program & Contracts Management. Capital Program & Contracts Management will provide proposed annual letting totals to the Department of Maintenance & Operations to assist in program development.
  - **By 2<sup>nd</sup> week of May** – Maintenance & Operations will ensure completion of all capital project field visits. Attendees for the field visits will include staff from Maintenance & Operations, Division Maintenance, Engineering and others as determined by the team.
  - **By 2<sup>nd</sup> week of June** - Maintenance & Operations and Engineering will develop a new draft 5-year Program based on review and concurrence of the Division submissions and the outcome of the field visits. This 5-year Program will be submitted to Capital Program & Contracts Management.
  - **By 3<sup>rd</sup> week of June** - Capital Program & Contracts Management will coordinate review by Design and Environmental Services for program deliverability. Any necessary changes will be coordinated with Maintenance & Operations and the Department of Engineering, as appropriate.
  - **By 1<sup>st</sup> week of July** - Capital Program & Contracts Management will review the program for final conformance to the financial model to meet cash flow requirements. Any necessary changes will be coordinated with the Department of Maintenance & Operations and Department of Engineering, as appropriate.
  - **By mid-July** - The Capital Program Executive Committee will review the proposed Capital Program for conformance to established goals and objectives.
  - **By late-July** - Cash flow numbers for inclusion in the annual Budgets (to be presented to the Boards for final approval) will be finalized.
  - **By early September** – Final 5-year Capital Program project lists will be developed for inclusion in the annual budget books for presentation to the Boards and public.

# NYS THRUWAY AUTHORITY

## Proposed 2022-2026 Capital Program Letting List as of 10/04/2021

### New York Division Projects

LETTING YEAR	QTR.	ITEM NO.	MILEPOST	PROJECT DESCRIPTION	ESTIMATED CONSTRUCTION CONTRACT VALUE
2022	3	H9.1	MP: 12.85	MP 12.85: Improvements to I-87 Interchange 9 Ramp Intersection with Route 9 and Construct Route 9/I-87 Pedestrian Bridge	\$14,000,000
	1	H342.1	MP: 16.20	South of Nyack (MP 16.2) to south of Spring Valley Toll Barrier: Pavement Resurfacing	\$24,000,000
	2	H165.1	MP: 29.40	I-287/Route 17S (Exit 15, MP 29.4) to north of Suffern (MP 38.7): Pavement Resurfacing	\$35,000,000
	1	H440.1	MP: 43.00	South of Harriman Toll Barrier (Exit 16, MP 43.5) to north of Woodbury Toll Barrier (MP 46.0): Pavement Resurfacing	\$6,000,000
	2	A750.1	MP: 45.20	Harriman Maintenance Section and Toll Building (Exit 16, MP 45.2): Connect to Municipal Water, Sewer and Gas	\$1,600,000
	4	A359.1	MP: 45.20	MP 45.2: Replacement of a Deteriorated Roof at the Harriman Maintenance Section	\$400,000
	4	A370.1	MP: 45.20	MP 45.2: Harriman Maintenance Section - Renovations	\$1,000,000
	4	B762.1	MP: 60.95	MP 60.95: Meadow Hill Road Bridge over Thruway - Rehabilitation	\$2,500,000
	1	H369.1	MP: 74.50	South of New Paltz (MP 74.5) to New Paltz (Exit 18, MP 76.5): Pavement Resurfacing	\$5,000,000
	1	H345.1	MP: 600.00	MP 600.00 to MP 604.00: I-95, New England Thruway: Highway Rehabilitation 2023-2024	\$48,000,000
	1	B780.1	MP: 600.17	I-95 (New England Thruway) Bridge Maintenance Cleaning for Steel Preservation - 2022	\$700,000
	2	B284.1	MP: 605.76	MP NE5.76: North Avenue Bridge over I-95 (New England Thruway) - Replacement	\$18,000,000
	1	H864.2	MP: 640.00	Garden State Parkway Connector (MP GS0.00 to MP GS2.40): Pavement Resurfacing	\$5,000,000
	1	I112.1	NY Div.	Replacement of ITS Equipment in New York Division	\$2,500,000
	2	H382.1	NY Div.	New York Division Pavement Repairs at Various Locations	\$10,000,000
<b>2022 Total</b>					<b>\$173,700,000</b>
2023	1	B776.1	MP: 23.53	NY Division: Bridge Preservation for Various Bridges - 2023	\$8,000,000
	1	H555.1	MP: 60.10	Newburgh (Exit 17, MP 60.1) to south of New Paltz (MP 68.0): Pavement Resurfacing	\$12,500,000
	4	H556.1	MP: 600.00	I-95, New England Thruway: Highway Improvements 2024-2025	\$10,000,000
	1	B782.1	MP: 600.17	I-95 (New England Thruway) Bridge Maintenance Cleaning for Steel Preservation - 2023	\$700,000
	4	B872.1	NY Div.	New York Division: On-Demand Repair Contract - 2024-2025	\$3,000,000
<b>2023 Total</b>					<b>\$34,200,000</b>

**New York Division Projects**

LETTING		ITEM NO.	MILEPOST	PROJECT DESCRIPTION	ESTIMATED
YEAR	QTR.				CONSTRUCTION
					CONTRACT VALUE
2024	1	A169.1	MP: 18.80	MP 18.80: New York Maintenance Facility - Replace Metal Buildings	\$2,500,000
	1	A361.1	MP: 18.80	MP 18.8: Nyack Maintenance - Construct Vehicle Wash Bay and Storage	\$2,313,000
	1	H161.1	MP: 46.00	North of Harriman Toll Barrier (MP 46.0) to Newburgh (MP 60.1): Pavement Resurfacing	\$26,500,000
	4	B884.1	MP: 47.58	MP 47.58: Pine Hill Road Bridge over Thruway - Replacement	\$6,500,000
	1	H355.1	MP: 600.00	I-95, New England Thruway MP 604.0 to MP 608.8: Highway Rehabilitation 2024-2025	\$34,000,000
	1	B797.1	MP: 600.17	I-95 (New England Thruway) Bridge Maintenance Cleaning for Steel Preservation - 2024	\$700,000
	4	B728.1	MP: 600.23	Rehabilitation of Four I-95 (New England Thruway) Bridges	\$1,500,000
	4	B630.1	MP: 601.56	222nd Street and Dyre Avenue Pedestrian Bridges and Baychester Road Bridge: Substructure Rehabilitations	\$3,500,000
	1	A299.1	NY Div.	Construct Sandblast Booth in New York Division	\$750,000
<b>2024 Total</b>					<b>\$78,263,000</b>
2025	2	H138.1	MP: 11.30	I-287 (MP 11.00) to Governor Mario M. Cuomo Bridge Toll Barrier (MP 13.0): Pavement Resurfacing	\$7,000,000
	4	B635.1	MP: 16.56	New York Division: Paint 5 Bridges with Poor Paint Condition Ratings	\$5,300,000
	1	H139.1	MP: 24.00	North of Garden State Parkway Connector (MP 24.0) to south of I-287/Route 17S (Exit 15, MP 29.4): Pavement Resurfacing	\$15,500,000
	4	B799.1	MP: 25.52	Thruway Bridges over Abandoned RR (South of Airmont Road): Rehabilitations	\$3,000,000
	1	B798.1	MP: 600.17	I-95 (New England Thruway) Bridge Maintenance Cleaning for Steel Preservation - 2025	\$700,000
	1	B661.1	MP: 605.09	MP NE5.09: I-95 (New England Thruway) Viaduct, Railroad Span (New Rochelle) - Rehabilitation	\$4,000,000
	1	B2223.1	MP: 607.64	MP 607.64: Chatsworth Avenue Bridge over I-95 (New England Thruway) - Rehabilitation	\$2,500,000
	1	B700.1	MP: 607.72	MP NE7.72: Larchmont Station Plaza - Substructure Repairs	\$2,000,000
	4	H371.1	MP: 608.80	I-95, New England Thruway: North of Larchmont (Exit 17) to north of White Plains (Exit 18B) Southbound and to Rye (Exit 20): Pavement Resurfacing	\$30,000,000
<b>2025 Total</b>					<b>\$70,000,000</b>

**New York Division Projects**

LETTING		ITEM NO.	MILEPOST	PROJECT DESCRIPTION	ESTIMATED CONSTRUCTION CONTRACT VALUE
YEAR	QTR.				
2026	1	H1045.1	MP: 0.00	Major Deegan Expressway (MP 0.00) to Cross Westchester Expressway (Exit 8, MP 11.3): Pavement Resurfacing	\$32,800,000
	1	H370.1	MP: 68.00	North of Newburgh (Exit 17, MP 68.0) to south of New Paltz (Exit 18, MP 74.5): Pavement Resurfacing	\$11,500,000
	1	B800.1	MP: 600.17	I-95 (New England Thruway) Bridge Maintenance Cleaning for Steel Preservation - 2026	\$700,000
	4	A2016.1	MP: 607.00	MP 607.0: Larchmont Maintenance Section - Building Additions, Renovations and Roof Replacement	\$2,200,000
	4	A362.1	MP: 607.70	MP 607.7: Larchmont Maintenance - Construct New Vehicle Storage Building with Wash Bay	\$3,000,000
	4	H434.1	MP: 608.80	I-95 (New England Thruway), Mamaroneck (MP NE8.8, Exit 18A) to White Plains (MP NE10.8, Exit 18B): Pavement Resurfacing (SB Only)	\$2,500,000
	1	H25.1	NY Div.	New York Division: Various Culvert Rehabilitations/Replacements - 2026	\$5,000,000
<b>2026 Total</b>					<b>\$57,700,000</b>
<b>2022-2026 New York Total</b>					<b>\$413,863,000</b>

**Albany Division Projects**

2022	1	H1138.1	MP: 93.80	North of Kingston (MP 93.8) to south of Saugerties (MP 100.8): Pavement Resurfacing, Paving Only	\$14,000,000
	2	H356.1	MP: 141.90	I-787 (Exit 23, MP 141.9) to Northway (Exit 24, MP 148.2): Concrete Pavement Diamond Grinding Northbound Only	\$3,000,000
	2	A368.3	MP: 141.92	MP 141.92: Administrative Headquarters - TSOC and State Police - Renovations	\$3,000,000
	1	I113.1	ALB Div.	Replacement of ITS Equipment in Albany Division	\$2,000,000
	4	B778.2	ALB Div.	Albany Division: On-Demand Repair Contract - 2023-2024	\$3,000,000
<b>2022 Total</b>					<b>\$25,000,000</b>
2023	1	B975.1	MP: 81.72	MP 81.72: Thruway Bridge over Wallkill River - Rehabilitation	\$13,000,000
	1	H1138.2	MP: 93.80	North of Kingston (MP 93.8) to south of Saugerties (MP 100.8): Safety Upgrades	\$3,000,000
	4	H435.1	MP: 100.80	South of Saugerties (MP 100.80) to south of Catskill (MP 109.30): Pavement Resurfacing	\$15,500,000
	1	B773.1	MP: 111.13	Albany Division: Bridge Preservation for Various Bridges - 2023	\$5,000,000
	3	B346.1	MP: 112.57	MP 112.57: Leeds-Old Kings Highway Bridge over Thruway - Replacement	\$6,500,000
<b>2023 Total</b>					<b>\$43,000,000</b>

**Albany Division Projects**

LETTING		ITEM NO.	MILEPOST	PROJECT DESCRIPTION	ESTIMATED
YEAR	QTR.				CONSTRUCTION
					CONTRACT VALUE
2024	1	A171.1	MP: 103.00	MP 103 NB: Malden Service Area - Rehabilitate/Replace Wastewater Treatment Plant	\$1,000,000
	4	B787.1	MP: 103.16	MP 103.16: Malden Road - Replacement	\$5,000,000
	1	H140.1	MP: 154.40	West of Schenectady / I-890 (Exit 25, MP 154.40) to west of Schenectady / Scotia (Exit 26, MP 163.30): Pavement Resurfacing	\$20,000,000
	1	B789.1	MP: 177.86	MP 177. 86: Schoharie Creek Bridge - Rehabilitations (Deck & Joints)	\$1,500,000
	4	B872.2	ALB Div.	Albany Division: On-Demand Repair Contract - 2025-2026	\$3,000,000
<b>2024 Total</b>					<b>\$30,500,000</b>
2025	1	H357.1	MP: 74.50	North of New Paltz (Exit 18, MP 76.5) to south of Kingston (Exit 19, MP 86.8): Pavement Resurfacing	\$19,000,000
	1	B792.1	MP: 122.21	MP 122.21 and MP 134.61:Coxsackie-Greenville Road (Route 81) and River Road (Route 396) Bridges over Thruway - Deck Replacements	\$3,000,000
	3	B786.1	MP: 801.08	MP 801.08: Castleton Bridge - Rehabilitation	\$30,000,000
	1	H558.1	MP: 817.90	Berkshire Thruway, Canaan Toll Barrier (MP BS17.9) to Massachusetts State Line (MP BS24.3): Pavement Resurfacing	\$11,000,000
<b>2025 Total</b>					<b>\$63,000,000</b>
2026	1	A828.2	MP: 91.40	MP 101.30: Salt Storage Building at Saugerties Maintenance Section	\$450,000
	1	B790.1	MP: 95.27	MP 95.27 Sawkill-Ruby Rd, MP 172.55 Amsterdam-Morris Cor Rt 160, MP 812.89 Old Chaham-Malden Br Tpk, MP 819.04 Frisbee Creek (EB): Substructurs Rehabs	\$3,500,000
	1	B629.1	MP: 128.08	MP 128.08: Thruway Bridge over Hannacroix Creek - Rehabilitation	\$3,000,000
	3	A360.1	MP: 141.90	MP 141.9: Albany Maintenance Facility - Replace Metal Building	\$3,000,000
	1	H360.1	MP: 163.30	West of Rotterdam (Exit 26, MP 163.3) to East of Amsterdam (Exit 27, MP 170.0): Pavement Resurfacing	\$10,500,000
	1	H362.1	MP: 801.60	MP 801.6 to MP 805.7 (Berkshire Spur): Pavement Resurfacing	\$7,500,000
	1	B678.1	MP: 816.09	MP BS16.09 & MP BS16.10: Berkshire Thruway Bridge (eastbound and westbound) over Stony Kill Rehabilitations	\$3,000,000
	4	H359.1	ALB Div.	Albany Division: Various Culvert Rehabilitations/Replacements - 2027	\$5,000,000
<b>2026 Total</b>					<b>\$35,950,000</b>
<b>2022-2026 Albany Total</b>					<b>\$197,450,000</b>

**Syracuse Division Projects**

					<b>ESTIMATED CONSTRUCTION CONTRACT VALUE</b>
<b>LETTING YEAR</b>	<b>QTR.</b>	<b>ITEM NO.</b>	<b>MILEPOST</b>	<b>PROJECT DESCRIPTION</b>	
2022	1	B690.1	MP: 240.48	MP 240.48: Judd Road Bridge over Thruway - Replacement	\$4,800,000
	3	B400.1	MP: 262.01	MP 262.01: North Main Street Bridge Over Thruway - Replacement	\$4,600,000
	1	B413.1	MP: 278.93	MP 278.93: Syracuse Interchange (Exit 35) Bridge Over Thruway - Replacement	\$8,000,000
	1	B914.1	MP: 292.06	MP 292.06: Canton Street Bridge over Thruway - Replacement	\$8,000,000
	4	B439.1	MP: 292.49	MP 292.49: Warners-Ionia Road Bridge over Thruway - Replacement	\$8,000,000
	1	H1147.2	MP: 304.50	Weedsport (Exit 40, MP 304.5) to east of Waterloo (MP 313.8): Safety Upgrades	\$3,000,000
	1	A865.4	MP: 310.00	MP 310 EB: Port Byron Service Area - Replace Waterline	\$500,000
	1	H350.1	MP: 320.70	Waterloo (Exit 41, MP 320.70) to Geneva (Exit 42, MP 327.50): Pavement Resurfacing	\$16,600,000
	1	I114.1	SYR Div.	Replacement of ITS Equipment in Syracuse Division	\$2,000,000
					<b>2022 Total</b>
					<b>\$55,500,000</b>
2023	1	B754.1	MP: 197.93	Syracuse Division: Bridge Preservation for Various Bridges - 2023	\$4,000,000
	2	A865.1	MP: 210.00	MP's 210 WB and 266 WB: Iroquois and Chittenango Service Areas - Rehabilitate/Replace Wastewater Treatment Plants	\$1,450,000
	4	B742.1	MP: 219.91	MP 219.91: Thruway Bridge Over Mohawk Street (Route 28): Replacement	\$9,100,000
	3	B499.1	MP: 238.22	MP 238.22: Thruway Bridge over Oriskany Boulevard (Route 69) - Replacement	\$9,100,000
	3	B801.1	MP: 274.48	MP 274.48: Shepps Corners Road - Replacement	\$7,000,000
	1	A172.1	MP: 304.20	MP 304.20: Weedsport Maintenance Section - Renovations to Section Maintenance Building and Roof Replacement	\$1,250,000
	4	A865.2	MP: 310.00	MP's 310 EB and 337 EB: Port Byron and Clifton Springs Service Areas - Rehabilitate/Replace Wastewater Treatment Plants	\$1,900,000
	1	A356.1	SYR Div.	Syracuse Division: Upgrade Waste Water Treatment Plants Division-Wide	\$2,000,000
	4	B778.3	SYR Div.	Syracuse Division: On-Demand Repair Contract - 2024-2025	\$3,000,000
					<b>2023 Total</b>
					<b>\$38,800,000</b>



**Syracuse Division Projects**

LETTING		ITEM NO.	MILEPOST	PROJECT DESCRIPTION	ESTIMATED
YEAR	QTR.				CONSTRUCTION
					CONTRACT VALUE
2024	1	A354.1	MP: 252.71	MP 252.71: Verona Maintenance - Construct Municipal Sewer / Water Connections	\$750,000
	3	B802.1	MP: 280.31	MP 280.31: Town Line Road over Thruway - Replacement	\$8,500,000
	4	B559.1	MP: 282.62	MP 282.62: Thruway over Bear Trap Creek Bridge - Replacement	\$6,900,000
	4	B498.1	MP: 310.98	MP 310.98: Thruway Bridge over Crane Brook - Replacement	\$10,000,000
	3	B697.1	MP: 327.54	MP 327.54: Thruway Bridge over Canandigua Outlet - Replacement	\$13,400,000
	1	H562.1	MP: 337.50	East of Manchester (MP 337.5) to Canandaigua (Exit 44, MP 347.1): Pavement Resurfacing	\$11,500,000
<b>2024 Total</b>					<b>\$51,050,000</b>
2025	3	A173.1	MP: 252.70	MP 252.70: Verona Maintenance Section - Equipment Storage Building Wash Bay	\$750,000
	3	B803.1	MP: 257.09	MP 257.09: North Main Street (Rte 46) Bridge over Thruway - Replacement	\$6,000,000
	1	B573.1	MP: 261.73	MP 261.73: North Peterboro Street (Route 13) Bridge over Thruway - Replacement	\$6,000,000
	3	A348.1	MP: 278.90	MP 278.90: Tarbell Road Maintenance Building (M3341) - Reconfigure/Refurbish	\$8,500,000
	1	A864.1	MP: 340.20	Manchester Maintenance Section: Addition and Roof Replacememts	\$1,500,000
	1	H557.1	MP: 347.10	Canandaigua (Exit 44, MP 347.1) to Rochester (Exit 45, MP 351.4): Concrete Pavement Restoration	\$11,000,000
	3	A299.3	SYR Div.	Construct Sandblast Booth in Syracuse Division	\$750,000
<b>2025 Total</b>					<b>\$34,500,000</b>
2026	4	H430.1	MP: 210.30	Little Falls (Exit 29A, MP 210.3) to Herkimer (Exit 30, MP 220.0): Pavement Resurfacing	\$14,500,000
	1	B553.1	MP: 210.62	MP 210.62: Thruway Westbound Bridge over Little Falls Interchange Ramp (Exit 29A) - Rehabilitation	\$3,000,000
	4	A373.1	MP: 219.70	MP 219.70: Herkimer Section Maintenance - Building Renovations	\$750,000
	4	H163.1	MP: 253.00	West of Verona (MP 253.0) to west of Canastota (MP 262.0): Pavement Resurfacing	\$18,000,000
	1	H373.1	MP: 279.30	East Syracuse (Exit 35, MP 279.3) to Syracuse - Electronics Parkway (Exit 37, MP 284.1): Pavement Resurfacing	\$8,000,000
	1	H428.1	MP: 313.80	West of Weedsport (MP 313.8) to Waterloo (Exit 41, MP 320.7): Pavement Resurfacing	\$13,000,000
	1	H561.1	MP: 327.50	Geneva (Exit 42, MP 327.5) to east of Manchester (MP 337.5): Pavement Resurfacing	\$14,000,000
<b>2026 Total</b>					<b>\$71,250,000</b>
<b>2022-2026 Syracuse Total</b>					<b>\$251,100,000</b>

**Buffalo Division Projects**

LETTING		ITEM NO.	MILEPOST	PROJECT DESCRIPTION	ESTIMATED
YEAR	QTR.				CONSTRUCTION
					CONTRACT VALUE
2022	1	H1153.1	MP: 378.20	LeRoy (Exit 47, MP 378.2) to West of Batavia (Exit 48, MP 393.7): Pavement Resurfacing, Paving Only	\$20,500,000
	4	H1153.2	MP: 378.20	LeRoy (Exit 47, MP 378.2) to West of Batavia (Exit 48, MP 393.7): Safety Upgrades	\$3,000,000
	1	H143.1	MP: 393.70	West of Batavia (MP 393.7) to West of Pembroke (MP 404.7): Pavement Resurfacing, Paving Only	\$23,000,000
	4	H143.2	MP: 393.70	West of Batavia (MP 393.7) to West of Pembroke (MP 404.7): Safety Upgrades	\$3,000,000
	3	B230.1	MP: 411.60	MP 411.60: Ransom Road Bridge over Thruway - Replacement	\$7,800,000
	1	B668.1	MP: 485.59	MP 485.59, MP 485.60 and MP 485.86: Chautauqua Creek (Eastbound & Westbound) and Hawley Street Bridges - Rehabilitations	\$3,000,000
	1	B772.1	MP: 914.35	South and North Grand Island Bridges: Maintenance Cleaning for Steel Preservation - 2022	\$800,000
	3	B469.1	MP: 914.35	MP 914.35, MP 914.99, MP 920.35 and MP 921.12: North and South Grand Island Bridges - Retrofit / Repair Roller Bearings, Pins and Hangers	\$20,500,000
	3	B645.1	MP: 920.35	North Grand Island Bridges - Steel Repairs	\$15,000,000
	2	H381.1	BUF Div.	Buffalo Division Pavement Repairs at Various Locations	\$10,000,000
<b>2022 Total</b>					<b>\$106,600,000</b>
2023	2	H152.1	MP: 900.70	I-190, MP 900.7 – MP 904.2 (South end of Viaduct): Pavement Rehabilitation	\$36,000,000
	1	A228.1	BUF Div.	Niagara Section pumphouse upgrade	\$300,000
	1	B773.2	BUF Div.	Buffalo Division: Bridge Preservation for Various Bridges - 2023	\$4,000,000
	1	H20.2	BUF Div.	Buffalo Division: Various Culvert Rehabilitations/Replacements - 2023	\$1,750,000
	1	H354.1	BUF Div.	Buffalo Division: Sign Structure - Replacement	\$1,000,000
	4	B872.4	BUF Div.	Buffalo Division: On-Demand Repair Contract - 2024-2025	\$3,000,000
<b>2023 Total</b>					<b>\$46,050,000</b>
2024	1	B699.1	MP: 434.48	MP 434.48 EB and 434.49 WB: Thruway Bridges over Erie RR - Rehabilitations	\$2,000,000
	1	H366.1	MP: 438.50	West of Hamburg (MP 438.50) to east of Eden-Angola (MP 443.60) (WB) and east Angola (MP 443.6) to east of Silver Creek (MP 451.5): Microsurfacing	\$2,000,000
	1	B679.1	MP: 447.78	Buffalo Division: Bridge Painting at Various Locations	\$4,000,000
	3	B521.1	MP: 901.06	MP 901.06: Weiss Street Bridge over Thruway - Removal	\$1,000,000
	1	B784.1	MP: 908.75	Thruway Bridge over Scajaquada Creek - Retaining Wall Stabilization	\$5,500,000
	1	B779.1	MP: 914.35	South and North Grand Island Bridges: Maintenance Cleaning for Steel Preservation - 2024	\$800,000
	3	B558.1	MP: 915.46	MP N15.46: Beaver Island State Parkway Bridge over I-190 Thruway - Replacement	\$9,000,000
<b>2024 Total</b>					<b>\$24,300,000</b>

**Buffalo Division Projects**

LETTING		ITEM NO.	MILEPOST	PROJECT DESCRIPTION	ESTIMATED CONSTRUCTION CONTRACT VALUE
YEAR	QTR.				
2025	3	B724.1	MP: 362.44	MP 362.44: West Henrietta Interchange Bridge over Thruway - Replacement	\$9,000,000
	1	H152.2	MP: 425.90	I-90, West of Williams St. (Exit 52A) to west of West Seneca (exit 54) and I-190 (Niagara Section), I-90 to MP 900.7: Pavement Resurfacing	\$12,000,000
	1	H146.1	MP: 467.00	Dunkirk (Exit 59, MP 467.0) to east of Westfield (Exit 60, MP 483.0): Pavement Resurfacing	\$23,500,000
	1	B641.1	MP: 920.35	MP N20.35 and MP N21.12: North Grand Island Southbound and Northbound Bridges - Painting	\$20,000,000
<b>2025 Total</b>					<b>\$64,500,000</b>
2026	4	H142.1	MP: 351.40	Victor (Exit 45, MP 351.4) to Henrietta (Exit 46, MP 362.5): Pavement Rehabilitation	\$18,500,000
	4	H438.1	MP: 416.90	East of Depew (Exit 49, MP 416.90) to east of Niagara Falls (Exit 50, MP 419.40): Pavement Resurfacing	\$6,000,000
	3	B770.1	MP: 900.37	MP 900.37: Rossler Street Bridge over Thruway - Replacement	\$6,500,000
	1	H152.3	MP: 905.60	I-190, MP 905.6 (North end of Viaduct ) to 914.0: Pavement Resurfacing	\$21,000,000
	1	B796.1	MP: 914.35	South and North Grand Island Bridges: Maintenance Cleaning for Steel Preservation - 2026	\$800,000
	3	B908.1	MP: 917.27	MP 917.27: Whitehaven Road Bridge over I-190 Thruway - Replacement	\$8,500,000
	1	A299.4	BUF Div.	Construct Sandblast Booth in Buffalo Division	\$750,000
	1	A374.1	BUF Div.	Buffalo Division: Rehabilitations of Various Maintenance Facilities	\$750,000
	1	B794.1	BUF Div.	Buffalo Division: Steel Repairs at Various Bridges	\$4,000,000
	1	B795.1	BUF Div.	Buffalo Division: Bridge Preservation for Various Bridges - 2026	\$4,000,000
	1	I117.1	BUF Div.	Replacement of ITS Equipment in Buffalo Division	\$3,000,000
<b>2026 Total</b>					<b>\$73,800,000</b>
<b>2022-2026 Buffalo Total</b>					<b>\$315,250,000</b>
<b>Statewide Projects</b>					
2022	1	A175.1	TWY wide	Radio System Upgrade Project - Engineering Analysis and Link Upgrade	\$2,000,000
	4	H749.1	TWY wide	Statewide: Pavement Safety Striping - 2023	\$3,000,000
<b>2022 Total</b>					<b>\$5,000,000</b>
2023	1	H376.1	TWY wide	Statewide: Wetland Mitigation Site Repairs	\$1,000,000
	4	H750.5	TWY wide	Statewide: Pavement Safety Striping - 2024	\$3,000,000
<b>2023 Total</b>					<b>\$4,000,000</b>

**Statewide Projects**

					<b>ESTIMATED CONSTRUCTION CONTRACT VALUE</b>
<b>LETTING YEAR</b>	<b>QTR.</b>	<b>ITEM NO.</b>	<b>MILEPOST</b>	<b>PROJECT DESCRIPTION</b>	
2024	1	B785.1	TWY wide	Statewide: Bridge Rehabilitations - 2024-2025	\$22,500,000
	1	H377.1	TWY wide	Statewide: Permanent Stormwater Infrastructure Repairs	\$2,000,000
	4	H378.1	TWY wide	Statewide: Pavement Safety Striping - 2025	\$3,000,000
	4	I116.1	TWY wide	Replacement of ITS Equipment Statewide	\$3,000,000
					<b>2024 Total</b>
					<b>\$30,500,000</b>
2025	4	H379.1	TWY wide	Statewide: Pavement Safety Striping - 2026	\$3,000,000
					<b>2025 Total</b>
					<b>\$3,000,000</b>
2026	4	H380.1	TWY wide	Statewide: Pavement Safety Striping - 2027	\$3,000,000
					<b>2026 Total</b>
					<b>\$3,000,000</b>
					<b>2022-2026 Statewide Total</b>
					<b>\$45,500,000</b>

**Thruway Project Totals by Division**

<b>2022-2026 New York Division Total:</b>	<b>\$413,863,000</b>
<b>2022-2026 Albany Division Total:</b>	<b>\$197,450,000</b>
<b>2022-2026 Syracuse Division Total:</b>	<b>\$251,100,000</b>
<b>2022-2026 Buffalo Division Total:</b>	<b>\$315,250,000</b>
<b>2022-2026 Statewide Total:</b>	<b>\$45,500,000</b>
<b>2022-2026 Thruway Authority Total:</b>	<b>\$1,223,163,000</b>

**Thruway Project Totals by Year**

<b>2022 Total:</b>	<b>\$365,800,000</b>
<b>2023 Total:</b>	<b>\$166,050,000</b>
<b>2024 Total:</b>	<b>\$214,613,000</b>
<b>2025 Total:</b>	<b>\$235,000,000</b>
<b>2026 Total:</b>	<b>\$241,700,000</b>
<b>2022-2026 Thruway Authority Total:</b>	<b>\$1,223,163,000</b>

10/08/2021



# APPENDIX

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To: Karen Osborn, New York State Thruway Authority      From: Suzanne Seegmuller  
Subject: Budget Forecast  
Date: September 21, 2021

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**Reference: NYS Thruway Authority 2022 Budget Forecast**

The New York State Thruway Authority (“the Authority”) has requested that Stantec Consulting Services, Inc. (“Stantec”) provide updated estimates of traffic and revenue for budgeting purposes. These traffic and revenue forecasts are based on the Authority’s toll modifications adopted in December 2020, summarized as follows:

- Passenger cars with NY *E-ZPass* at the Gov. Mario M. Cuomo Bridge had a \$0.50 toll increase in January 2021 and will have another \$0.50 increase in January 2022. Trucks tolls were increased proportionately with additional 20 percent increases for those with five or more axles. The commuter plan remains (with a 40 percent discount for 20 trips), and a new resident plan keeps tolls at 2020 rates for Westchester and Rockland County residents with NY *E-ZPass* who qualify.
- On the rest of the Thruway System, NY *E-ZPass* customers continue to be charged 2020 toll rates.
- Starting in January 2021, customers with a non-NY *E-ZPass* were charged tolls 15 percent above the NY *E-ZPass* rate.
- Starting in January 2021, Tolls by Mail (“TBM”) customers were charged 30 percent above the NY *E-ZPass* toll rate, in addition to a \$2 administrative surcharge per billing statement.
- In addition, *E-ZPass* transactions that are processed as image tolls now pay the TBM toll rate.

The forecasts also include recent conversions of all facilities to all-electronic toll collection (AETC), also known as cashless tolling, as follows:

- The Governor Mario M. Cuomo Bridge (formerly Tappan Zee Bridge barrier) in 2016
- The remaining toll barriers between March and December 2018
- The controlled system on November 14, 2020

It should be noted that the COVID-19 pandemic that began in March 2020 resulted in significant declines in Thruway traffic and toll revenues followed by substantial recovery by the summer of 2021. Impacts of the pandemic are discussed in the following section of this memorandum.

Taking into account the impacts of COVID-19, socioeconomic indices and forecasts, the conversion to AETC, and the approved toll increases, traffic and revenue forecasts have been prepared for 2021 – 2025.

## COVID-19 Impacts

Stantec has been monitoring data from the Authority to determine how the COVID-19 pandemic has affected the Authority’s traffic and revenue. Figure 1 compares monthly trips and revenue over the 2019-2021 period. While these declines were most severe during the height of the outbreak, significant improvement has been seen in recent months – traffic in June 2021 was only 2 percent below June 2019. Toll revenue in recent months has slightly exceeded 2019, however, considering the January 2021 toll increase, it has not reached previously projected levels.

**Figure 1: Monthly Toll Trips and Revenue, 2019-2021**

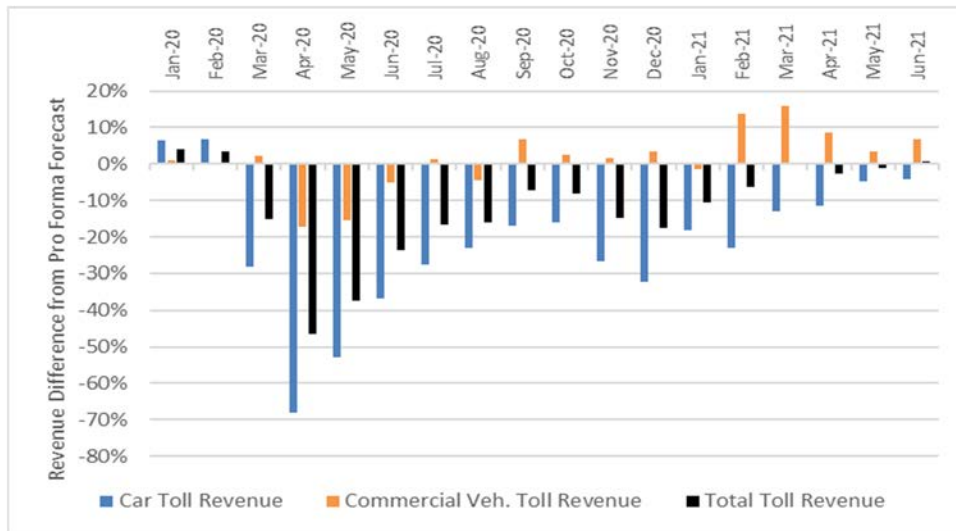


\* With the new AETC system, there may now be multiple toll transactions per trip on the Woodbury-Williamsville section. Starting in November 2020 these have been converted to trips for graphing purposes to provide a better comparison to pre-AETC conditions.

These “previously projected levels” are also known as the “Pro Forma forecast” – Stantec’s traffic and revenue forecast prior to COVID-19. Comparing this to actual data, we were able to identify monthly COVID-19 impacts since the start of the pandemic. From there, we estimated the impacts on Thruway System traffic and revenue for the full year 2021 and future years through 2025.

Figure 2 shows the monthly difference between COVID-impacted and Pro Forma toll revenue on the Thruway System, split by passenger cars and commercial vehicles. While car toll revenue was about 4 percent under Pro Forma projections in June 2021, commercial revenue was 7 percent above Pro Forma projections. Total revenues for June 2021 exceeded Pro Forma projections by 1 percent.

**Figure 2: Thruway System COVID-19 Impacts\* on 2020-2021 Monthly Toll Revenue**



\*Compared to a Pro Forma forecast

Preliminary data from July 2021 indicates that car traffic has nearly recovered to Pro Forma levels. With no further widespread, pandemic-related closures currently anticipated in the state of New York, plus the return to in-person schooling statewide, we have concluded that car traffic will likely stay just under Pro Forma levels through September. We have assumed a slight decrease into the fall and winter to account for potentially less travel demand for indoor activities and a potential delay in returning to offices due to the Delta variant. Going forward, we have estimated that passenger car traffic for 2022 through 2025 will be 2 to 3 percent below Pro Forma forecasted levels. This reduction from Pro Forma assumes that many office workers will work from home more often than before the pandemic.

COVID-19 has had a different impact on commercial vehicle traffic on the Thruway System – while there were losses in 2020, they have been very minor compared to car traffic. Additionally, commercial traffic has exceeded Pro Forma projections for the first six months of 2021. Commercial traffic in June 2021 was more than 13 percent above Pro Forma projections, and preliminary numbers from July 2021 show that it may have reached 15 percent above Pro Forma levels. Our research on trucking indicates that the considerably higher-than-normal volume of truck trips is not necessarily here to stay. During COVID-19, various factors produced changes in the supply chain. Our discussions with the trucking industry strongly suggest there will be improvements in supply chain efficiency, bringing long-term traffic closer to previous levels. We have assumed a reduction closer to Pro Forma levels will occur between this fall and 2023, with a minor reduction from the Pro Forma (less than 0.5 percent) in 2024 and 2025.

Revenue impacts for the remainder of the forecast period are expected to be similar to the traffic impacts by vehicle type. For the full year of 2021, total toll revenue is anticipated to be some 16 percent below what was forecasted without COVID-19 impacts. Because of the recent increase in commercial volumes, and the fact that these vehicles typically account for about 40 percent or more of systemwide toll revenue, the total toll



revenue loss for the remainder of the forecast period due to COVID-19 is anticipated to be around 1 to 2 percent as shown in Table 1.

**Table 1: Thruway System Projected COVID-19 Impacts on Future Toll Revenue**

Difference between Projected Revenue with COVID-19 Impacts and Pro Forma Forecasts						
Year	Car Revenue		Comm. Veh. Revenue		Total Toll Revenue	
	Millions of \$	%	Millions of \$	%	Millions of \$	%
2020 (Actual)	\$(113.1)	-26%	\$(6.3)	-2%	\$(119.4)	-16%
2021	\$(30.4)	-7%	\$22.7	7%	\$(7.7)	-1%
2022	\$(14.6)	-3%	\$9.5	3%	\$(5.1)	-1%
2023	\$(12.0)	-3%	\$(0.7)	0%	\$(12.8)	-2%
2024	\$(11.6)	-2%	\$(1.0)	0%	\$(12.6)	-2%
2025	\$(11.4)	-2%	\$(1.2)	0%	\$(12.6)	-2%

### Traffic and Revenue Forecasts

Table 2 includes a recent history of tolled transactions on the various elements of the Thruway System. “Other Barriers” includes the barrier toll locations in Yonkers, New Rochelle, Spring Valley (trucks only), Harriman, and the Grand Island Bridges. The system experienced several years of very low growth from 2012 through 2014. From 2014 through 2016 there was moderate growth, with toll transactions exceeding the pre-recession 2007 volumes. In 2017 through 2019 overall transactions had remained relatively flat, following the nationwide trend in vehicle miles traveled as shown in Appendix Figure A-4 (page 17). COVID-19 impacted traffic beginning in March 2020 leading to a significant decline in toll transactions. Note that commercial traffic was impacted much less than passenger car traffic.

Table 2 also presents Stantec’s forecast of traffic through 2025 considering the economic information and expectations regarding COVID-19 recovery as discussed within this memorandum and Appendix. Sufficient traffic recovery from COVID-19 impacts is forecasted to occur by the end of 2022 with moderate growth thereafter. It is important to note that due to the November 2020 AETC conversion, traffic appears to more than double on the controlled system in 2021. In reality, this is not the case. With the AETC conversion, the controlled system now records trips by segment (one segment-trip is one toll transaction), and there are a total of thirteen tolling segments. Previously, one vehicle was recorded as one toll transaction, and with AETC there may now be multiple toll transactions per controlled system trip.

**Table 2: The Thruway System's Actual and Forecasted Tolloed Transactions (millions)**

Year	Passenger Cars			Commercial Vehicles			Total	Growth
	Controlled System	TZB/ Cuomo Br.	Other Barriers	Controlled System	TZB/ Cuomo Br.	Other Barriers		
2012	127.3	22.9	71.1	15.9	1.5	7.9	246.5	0.5%
2013	128.2	23.3	71.1	16.0	1.7	8.1	248.4	0.7%
2014	129.5	23.4	71.4	16.5	1.9	8.3	250.8	1.0%
2015	134.2	23.6	72.7	17.0	2.0	8.8	258.2	3.0%
2016 <sup>1</sup>	137.8	24.4	73.5	17.4	2.2	9.0	264.2	2.3%
2017	139.6	24.6	73.3	17.6	2.4	9.1	266.6	0.9%
2018 <sup>2</sup>	139.5	24.8	72.5	18.0	2.4	9.3	266.4	-0.1%
2019	139.6	25.5	72.1	18.0	2.5	9.3	267.0	0.2%
2020 <sup>3 4</sup>	108.7 <sup>(4)</sup>	19.2	56.0	20.5 <sup>(4)</sup>	2.4	8.6	215.5	<sup>(4)</sup>
2021 <sup>5</sup>	213.7 <sup>(4)</sup>	23.7	66.7	46.8 <sup>(4)</sup>	2.7	9.5	363.1	<sup>(4)</sup>
2022 <sup>6</sup>	224.9	25.5	70.4	44.2	2.6	9.5	377.1	3.9%
2023	228.2	25.9	71.1	42.4	2.6	9.5	379.7	0.7%
2024	230.4	26.2	71.5	42.5	2.6	9.6	382.8	0.8%
2025	232.5	26.5	71.9	42.7	2.6	9.7	385.9	0.8%

Notes: Totals may not add due to rounding. Traffic classified as non-revenue is not included.

<sup>1</sup> AETC began at the Governor Mario M. Cuomo Bridge (formerly Tappan Zee Bridge Barrier) April 23, 2016.

<sup>2</sup> AETC began on Grand Island Bridges in March 2018, at the Harriman Barrier in September 2018, Yonkers Barrier in November 2018, and Spring Valley and New Rochelle Barriers in December 2018.

<sup>3</sup> COVID-19 impacts began in March 2020

<sup>4</sup> AETC began at all Controlled System toll locations on November 14, 2020; with the new configuration a vehicle can have multiple transactions per trip on the Woodbury-Williamsville section. The toll transactions in 2020 and 2021 are therefore not indicative of traffic growth.

<sup>5</sup> Toll modification on January 1, 2021 (system-wide); first full year of systemwide

<sup>6</sup> Toll modification on January 1, 2022 (Gov. Mario M. Cuomo Bridge only)

Table 3 includes a recent history of toll revenue on the Thruway System. Revenue from cars and trucks are shown separately for the controlled system, the Governor Mario M. Cuomo Bridge, and the remaining toll barriers. Adjustments for commercial vehicle volume discounts are also included. There was a slight reduction in revenue at the Governor Mario M. Cuomo Bridge in 2016; this is due to its conversion to AETC and the inability to bill or collect revenue from some TBM customers (due to factors such as bad license plate images, inability to find customer DMV mailing addresses, or customers not paying the invoice). In January 2017, the *E-ZPass* discount for customers with non-NY *E-ZPass* was discontinued, which is why the revenue growth for 2017 (3.3 percent) was noticeably higher than the traffic growth (0.9 percent) shown previously in Table 2. All of the remaining toll barriers were converted to AETC in 2018, which, due to some uncollectable TBM revenue, led to a small reduction in revenue at these locations in 2018. Even with the conversion, 2018 saw positive system-wide toll revenue growth over 2017. Toll revenues in 2018 and 2019 grew by less than one percent. In 2020, toll revenues dropped by 16.8 percent due to COVID-19. Because truck traffic has not been as affected by the pandemic as car traffic, and trucks pay higher tolls, the revenue loss was not as deep as the traffic loss. In addition, with the conversion of the controlled system to AET, there are additional losses due to some uncollectable TBM revenues and lag in collection of this revenue.

Table 3 also presents the gross toll revenue forecasts for the Thruway System from 2021 through 2025. Implementation of AETC began on the entire controlled system in mid-November 2020. In the forecasts, TBM revenue collectability similar to that experienced at the toll barriers was applied to the controlled system after its conversion to AETC. Incorporating the effects of AETC, partial recovery from COVID-19, and the 2021 systemwide toll increase, the 2021 forecasted toll revenue of \$750.8 million is slightly higher than 2019 annual toll revenue. There is additional growth in toll revenue in 2022 on the Governor Mario M. Cuomo Bridge due to the approved toll increase that year. Like toll traffic, toll revenue is expected to experience sufficient recovery from COVID-19 impacts by the end of 2022. After that point, moderate growth in toll revenue is expected. Note that the forecasts shown in this memorandum do not include any toll modifications beyond the approved 2022 toll increase at the Governor Mario M. Cuomo Bridge.

**Table 3: The Thruway System’s Actual and Forecasted Toll Revenues (millions)**

Year	Passenger Cars			Commercial Vehicles				Total	Growth
	Controlled System	TZB/Cuomo Br.	Other Barriers	Controlled System	TZB/Cuomo Br.	Other Barriers	CV Disc		
2012	\$220.7	\$103.4	\$81.2	\$196.9	\$26.2	\$32.1	\$(22.8)	\$637.7	0.6%
2013	225.6	105.1	81.3	199.1	28.8	32.8	(23.8)	648.9	1.8%
2014	226.5	105.1	81.6	209.6	32.2	33.6	(24.6)	664.1	2.3%
2015	237.8	106.5	83.5	219.3	34.4	35.6	(25.5)	691.7	4.2%
2016 <sup>1</sup>	245.2	103.4	84.0	227.6	38.2	36.4	26.6	708.3	2.4%
2017 <sup>2</sup>	251.6	103.4	84.1	233.3	47.8	38.7	27.4	731.5	3.3%
2018 <sup>3</sup>	250.3	104.2	81.3	242.0	47.8	39.1	28.0	736.5	0.7%
2019	253.0	105.1	77.7	243.1	50.2	38.8	28.0	739.9	0.5%
2020 <sup>4,5</sup>	177.2	80.6	59.9	240.8	48.2	37.7	29.0	615.3	-16.8%
2021 <sup>6</sup>	213.8	110.9	75.5	260.4	75.9	45.0	30.6	750.8	22.9%
2022 <sup>7</sup>	230.9	128.5	83.3	257.9	91.1	45.6	31.8	805.6	7.3%
2023	236.0	130.6	84.8	253.2	89.1	45.2	31.2	807.7	0.3%
2024	239.6	132.5	85.5	254.6	89.9	45.7	31.4	816.3	1.1%
2025	242.7	134.3	86.1	255.9	90.4	46.1	31.6	823.9	0.9%

Notes: Totals may not add due to rounding.

<sup>1</sup> AETC began at the Governor Mario M. Cuomo Bridge April 23, 2016.

<sup>2</sup> Removal of discounts for vehicles with out-of-state E-ZPass began on 1/1/17.

<sup>3</sup> AETC began on Grand Island Bridges in March 2018, at the Harriman Barrier in September 2018, Yonkers Barrier in November 2018, and Spring Valley and New Rochelle Barriers in December 2018.

<sup>4</sup> AETC began at all controlled system toll locations on November 14, 2020

<sup>5</sup> COVID-19 impacts began in March 2020

<sup>6</sup> Toll modification on January 1, 2021 system-wide; first full year of systemwide

<sup>7</sup> Toll modification on January 1, 2022 Gov. Mario M. Cuomo Bridge only

## Fee Revenues

Violation and late fee revenues are also collected from TBM customers who do not pay their toll invoices on time. Violations are charged to E-ZPass customers who travel through a toll location without sufficient funds in their accounts, and, up until November 14, 2020, cash customers who evaded the toll. Some changes were made in recent years to violation fees charged on the Thruway System:

- On January 20, 2016, an enforcement measure was enacted whereby drivers of New York-state registered vehicles with toll violations on five days over an 18-month period would have their registration suspended. In 2017 this was changed to three violations over a five-year period. This enforcement measure was applied to all past unpaid tolls and violations from prior years.
- Starting January 1, 2017, violations for systemwide E-ZPass vehicles and Gov. Mario M. Cuomo Bridge TBM customers that did not pay their toll bills increased from \$25 to \$50.
- Starting January 17, 2017, this TBM violation fee increased again to \$100 at the Gov. Mario M. Cuomo Bridge.
- On January 9, 2018, the Authority announced a short-term amnesty program that allowed TBM customers with open toll violations to pay their outstanding tolls and have all violations and late fees waved. This program ran from January 22, 2018 through February 26, 2018 and resulted in \$1.1 million in additional toll revenue for the Governor Mario M. Cuomo Bridge.
- On May 15, 2018, the TBM violation fee was reduced to \$50 per transaction at the Gov. Mario M. Cuomo Bridge. This TBM \$50 violation fee applies to all the other Barriers that have converted to AETC.
- Starting in 2021, a \$2 billing fee was added to TBM invoices, and the TBM violation fee was changed from \$50 per transaction to \$50 per violation notice systemwide.
- During the period of transitioning to a new collection agent in the fall of 2020 the Authority temporarily suspended sending violations to collections; this will resume later in 2021, to include violations incurred in 2021.
- As part of the conversion to systemwide cashless tolling, beginning February 2021, the Authority temporarily suspended mailing of violation notices which resumed in the summer of 2021.

In 2016, the first year with AETC, \$5.3 million was collected in *E-ZPass* violation fees. This grew to \$7.7 million in 2017 and \$10.6 million in 2018. The increases can be attributed to enforcement measures and included a significant amount of delayed violation payments (i.e., violations from trips made in prior years). In addition, all *E-ZPass* violation trips made in 2017 and after were charged the increased *E-ZPass* violation fee of \$50. In 2019 and 2020 collected *E-ZPass* violation fees dropped to \$9.6 million and \$8.3 million, respectively. This was expected because *E-ZPass* violation fees also included non-*E-ZPass* customers at facilities where cash was collected, and by late 2018 all barriers had been converted to cashless.

Also in 2016, \$0.3 million was collected in \$5 per bill late fee charges which appear on the second bill sent to TBM customers, and \$2.2 million was collected in TBM violation fees which were charged per transaction on the third bill sent to TBM customers. These collected revenues grew significantly to \$1.0 million and \$14.6 million in TBM late fees and violations, respectively, in 2017. This growth was because 2017 was the first full year with TBM at the Governor Mario M. Cuomo Bridge, and because the TBM violation fee increased from \$25 to \$50 to \$100. In 2018, the amnesty program and the reduction in TBM violation fees to \$50 at the Bridge resulted in a reduction of late fees from TBM customers; the Authority collected \$0.9 million in second bill late fees plus \$10.6 million in violations during this year. These revenues grew to \$1.4 million in late fees plus \$14.2 million in violations in 2019, the first full year with AETC at all Barriers. COVID-19 impacts have

slightly reduced the growth of fees and fine revenue in 2020, with \$1.1 million collected in late fees plus \$14.3 million collected in violations.

The Authority also began to charge TBM billing fees in 2021 after the entire system was converted to cashless. Table 4 provides forecasts of billing fee, late fee, and violation fee revenues. The current TBM billing fee of \$2 per bill, late fee of \$5 per bill, and violation fee of \$50 per bill has been assumed at all facilities going forward. The forecasts show a decline in systemwide *E-ZPass* violation revenues as more facilities were converted to AETC. This is because these revenues include both *E-ZPass* and cash customer violations, and there are no longer cash customer violations at AETC facilities.

With these assumptions, based on seven months of fee collection data this year, a total of \$36.7 million in annual violation and late fee revenues is projected for 2021, growing to more than \$51.9 by 2022, after there has been more than a full year of AETC systemwide. This number is expected to decline slightly in the following years as some TBM customers acquire an *E-ZPass* in the future.

**Table 4: Violation, Late Fee, and Billing Fee Revenue Forecast (in millions)**

Year	<i>E-ZPass</i> Violations <sup>1</sup>	TBM Violations <sup>2</sup>	TBM Late Fees	TBM Billing Fees	TOTAL
2016 <sup>3</sup>	\$5.3	\$2.2	\$0.3		\$7.8
2017 <sup>3</sup>	7.7	14.6	1.0		23.3
2018 <sup>3 4</sup>	10.6	10.6	0.9		22.1
2019 <sup>3</sup>	9.6	14.2	1.4		25.2
2020 <sup>3 5 6</sup>	8.3	14.3	1.1		23.7
2021 <sup>7</sup>	2.5	24.7	2.7	\$6.8	36.7
2022 <sup>8</sup>	1.8	33.6	4.5	12.0	51.9
2023	1.8	32.2	4.5	11.7	50.2
2024	1.8	31.6	4.4	11.5	49.3
2025	1.8	31.1	4.3	11.4	48.6

<sup>1</sup> Includes both *E-ZPass* and cash customer violations. The *E-ZPass* violation fee increased from \$25 in 2016 to \$50 on 1/1/17.

<sup>2</sup> AETC violation fee increased from \$25 in 2016 to \$50 on 1/1/17 and to \$100 on 1/17/17. This was reduced back to \$50 on 5/15/18. In 2020, the \$50 violation changed from per transaction to per bill.

<sup>3</sup> Actual

<sup>4</sup> An amnesty program ran from 1/22/18 through 2/26/18 waiving violation fees for customers who paid outstanding tolls. AETC began at the Grand Island Bridges on 3/30/18, Harriman Barrier on 9/28/18, Yonkers Barrier on 11/19/18, and Spring Valley and New Rochelle Barriers on 12/20/18.

<sup>5</sup> The rest of the system – the controlled system – began operating with AETC in mid-November 2020.

<sup>6</sup> COVID-19 impacts began in March 2020

<sup>7</sup> Toll modification on January 1, 2021 (system-wide); first full year of systemwide AETC

<sup>8</sup> Toll modification on January 1, 2022 (Gov. Mario M. Cuomo Bridge only)

## Comparison to Previous Budget Forecast

Table 5 and Table 6 compare Stantec’s new estimates of toll transactions and total revenue (toll revenue plus late, violation, and billing fees) to the previous Budget Forecast completed in August 2020. Note that while Stantec had previously produced forecasts for three different levels of COVID-19 impacts; the “Mid-Duration” forecast was the one the Authority used for the 2021 Budget and is included in the two tables.

It is important to note that prior to AETC, one trip on the Woodbury-Williamsville section was counted as one toll transaction. With the conversion to the new AETC system on November 14, 2020, there may now be multiple toll transactions per trip on the Woodbury-Williamsville section, depending on the number of tolling segments over which a vehicle travels (the Woodbury-Williamsville section is now divided into 12 tolling segments and the Erie section comprises the 13<sup>th</sup> segment). In order to provide a true comparison, both 2020 actual traffic and the previous forecast’s traffic have been converted to “new system” transactions in Table 5.

Actual total toll transactions for 2020 were slightly lower than previously forecasted (about 2 percent), though 2020 truck transactions were slightly higher than forecasted. Based on updated estimates of traffic recovery from COVID-19, toll transactions for each year of the current forecast are about 2 to 4 percent higher than the previous forecast.

**Table 5: Baseline Annual Toll Transactions, Comparison of Current to Previous Forecast (in millions)**

Year	Current Forecast				Previous Forecast (2021 Budget) <sup>1</sup>				Difference Between Current & Previous Forecast	
	Car	Truck	Total	Annual	Car	Truck	Total	Annual	Amount	%
	Traffic	Traffic	Traffic	Growth	Traffic	Traffic	Traffic	Growth		
2020	237.3	50.7	288.0 <sup>2</sup>		244.6	49.8	294.4		(6.4)	-2%
2021	304.1	59.0	363.1	26.1%	297.4	53.2	350.6	19.1%	12.4	4%
2022	320.7	56.4	377.1	3.9%	307.5	53.4	360.9	2.9%	16.2	4%
2023	325.2	54.5	379.7	0.7%	315.2	53.6	368.8	2.2%	10.9	3%
2024	328.1	54.8	382.8	0.8%	322.1	54.1	376.2	2.0%	6.6	2%
2025	330.9	55.0	385.9	0.8%						

*Note: Numbers may not add due to rounding.*

<sup>1</sup> All years of previous forecast traffic converted to “new system” transactions for comparison purposes.

<sup>2</sup> Actual 2020, with entire year converted to “new system” transactions.

As shown in Table 6, actual toll plus fee revenue in 2020 was less than 0.2 percent different from the previous forecast. Because of changes to the fee structure (the \$50 violation was charged per transaction in 2020; this changed to \$50 per violation notice in 2021) less fee revenue will be collected than previously forecasted. However, more toll revenue is expected to be collected than previously forecasted due to several reasons, including a higher share of TBM customers paying due to the reduction in violation charges and enhanced enforcement measures, and the better-than-expected revenue recovery from COVID-19 resulting from large increases in truck volumes over the past year. In all, future total revenues are projected to be 2 to 5 percent higher per year than previously forecasted.

**Table 6: Total Revenue Forecast Comparison, Current Baseline Forecast Compared to Previous Budget Forecast (in millions)**

Year	Current Forecast				Previous Forecast (2021 Budget)				Difference Between Current & Previous Forecast	
	Toll Revenue	Fee Revenue	Total Revenue	Annual Growth	Toll Revenue	Fee Revenue	Total Revenue	Annual Growth	Amount	%
2020	\$615.3	\$23.7	\$639.0 <sup>1</sup>		\$616.6	\$23.5	\$640.2		-\$1.2	0%
2021 <sup>2</sup>	750.8	36.7	787.5	23.2%	708.6	49.3	757.9	18.4%	29.6	4%
2022	805.6	51.9	857.5	8.9%	750.5	68.0	818.5	8.0%	39.0	5%
2023	807.7	50.2	857.9	0.0%	765.8	65.0	830.8	1.5%	27.1	3%
2024	816.3	49.3	865.5	0.9%	785.7	64.7	850.4	2.4%	15.1	2%
2025	823.9	48.6	872.5	0.8%						

Note: Numbers may not add due to rounding.

<sup>1</sup>Actual

<sup>2</sup> With the current forecast, the \$50 violation was charged per violation notice starting in 2021. The previous forecast had assumed that the \$50 violation per transaction charged in 2020 would remain throughout the forecast period.

## Limits and Disclaimers

It is Stantec’s opinion that the traffic and toll revenue estimates provided herein made for the Authority for their budget forecasting have been prepared in accordance with accepted industry-wide practice. In Stantec’s opinion, the assumptions underlying the study provide a reasonable basis for the analysis. There are likely to be differences between the projections and actual results, and those differences may be material. Because of these uncertainties, Stantec makes no guaranty or warranty with respect to the projections in this study.

The estimates contained in this document, while presented with numeric specificity, are based on a number of estimates and assumptions which, though considered reasonable to us, are inherently subject to uncertainties and contingencies, most of which are beyond the control of the Authority and cannot be predicted with certainty. In many instances, a broad range of alternative assumptions could be considered reasonable, and any changes in the assumptions used could result in material differences in estimated outcomes.

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## **APPENDIX**

### **A. Economic Backdrop and Outlook for the Future**

### **B. COVID-19 and its Impact on Travel**

## A. ECONOMIC BACKDROP AND OUTLOOK FOR THE FUTURE

Historically, Thruway traffic trends have been influenced by socio-economic conditions and correlations have been found between passenger car growth and Gross Domestic Product (GDP) growth, and between commercial vehicle growth and Industrial Production Index (IPI) growth.

Stantec typically uses the consensus forecast from a group of financial institutions and economic forecasting firms as an input into its traffic growth forecasts for revenue estimation purposes. The most recent consensus forecast, derived from projections from more than 50 financial institutions and professional forecasting firms, is that real GDP will increase by 5.9 percent in 2021 and by 4.3 percent in 2022.<sup>1</sup> Most of this growth is related to recovery from the pandemic.

Any forecast of toll traffic and revenues will, of necessity, recognize the significant variations that can and do occur in the national, regional and local economies and population changes within the Thruway corridors. Considering this, Stantec performed a detailed analysis of the historical economic trends seen over the last few decades, particularly as they relate to the economic influences that occurred and how traffic on the Authority's facilities reacted to those trends. In addition, Stantec has been monitoring the impact of COVID-19 which had major impacts in 2020 and continues to have long-term implications for economic growth and traffic impacts. Information on COVID-19 and its impacts on travel is further detailed in Appendix B.

### A.1 RECENT MACROECONOMIC TRENDS

#### A.1.1 Gross Domestic Product

As noted previously, Thruway passenger car traffic growth trends have been influenced by socio-economic conditions, and correlations have been found between car traffic growth and GDP growth. Figure A- shows the real *annual* GDP from 1980 through the second quarter of 2021. From 2000 through 2018, real GDP in the United States increased at an average annual rate of 1.9 percent. This period included the 2001 recession and the recession that began in late 2007 and ended in June 2009 – the “Great Recession” - which was far more severe than originally predicted and significantly deeper and longer than previous recessions. In 2008, real GDP decreased by 0.3 percent, and in 2009 the recession reached its nadir, with real GDP decreasing by 2.8 percent. From 2009 until 2019, the U.S. economy had recovered and shown consistent growth. Real GDP increased on an annual basis by between 1.6 and 2.9 percent in the years 2010 to 2016,<sup>2</sup> then increased at annual rates of 2.4 percent in 2017, 2.9 percent in 2018, and 2.1 percent in 2019.<sup>3</sup> The fourth quarter 2019 real GDP was estimated at over \$19 trillion before the negative economic growth experienced in the first half of 2020 resulting from the effects of COVID-19.<sup>4</sup> Note that gray shaded areas on the figures in this section represent U.S. recessions according to the Federal Reserve Bank of St Louis.

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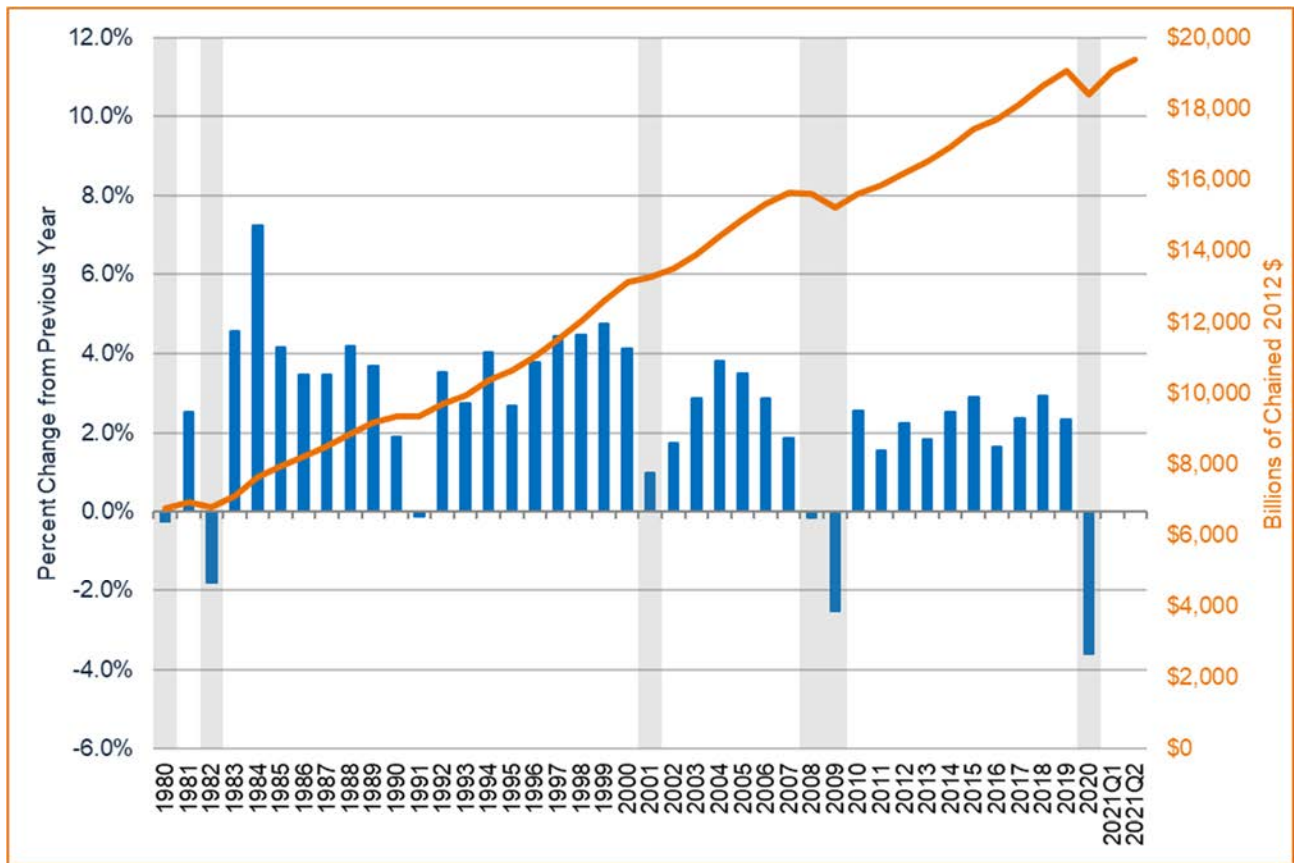
<sup>1</sup> Blue Chip Economic Indicators, Top Analysts' Forecasts of the U.S. Economic Outlook for the Year Ahead”, Wolters and Kluwer Law & Business, September 13, 2021

<sup>2</sup> U.S. Bureau of Economic Analysis, Real Gross Domestic Product [A191RL1A225NBEA], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/A191RL1A225NBEA>, March 14, 2019

<sup>3</sup> Bureau of Economic Analysis, News Release, “Gross Domestic Product, Second Quarter 2021 (Advance Estimate), July 29, 2021

<sup>4</sup> Ibid.

**Figure A-1: Real Gross Domestic Product (GDP), Historical Annual, 1980 – 2nd Quarter 2021**



Source: U.S. Census Bureau, Bureau of Economic Analysis, National Bureau of Economic Research

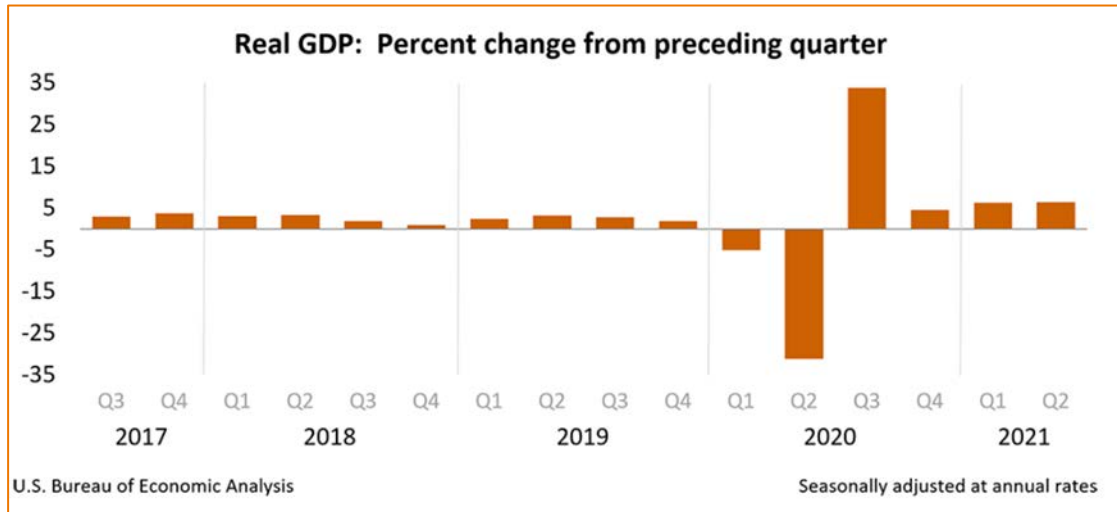
Note: Gray shaded areas of the graphic represent U.S. recessions according to the Federal Reserve Bank of St Louis.

As shown in Figure A-2, real gross domestic product (GDP) *decreased* for two consecutive quarters in 2020 but has since recovered with positive growth rates for four consecutive quarters. The latest estimate for the second quarter of 2021 confirms that the U.S. continues its recovery from the effects of COVID-19, experiencing a 6.6 percent growth rate in the second quarter of 2021<sup>5</sup> with real GDP estimated at \$19.4 trillion.<sup>6</sup>

<sup>5</sup> U.S. Bureau of Economic Analysis New Release, August 26, 2021. As accessed on 9-14-2021 at <https://www.bea.gov/news/2021/gross-domestic-product-2nd-quarter-2021-second-estimate-corporate-profits-2nd-quarter>

<sup>6</sup> U.S. Bureau of Economic Analysis, Interactive Data, accessed 9-14-2021 at <https://apps.bea.gov/iTable/iTable.cfm?reqid=19&step=2#reqid=19&step=2&isuri=1&1921=survey>

**Figure A-2: Quarterly Changes in Real Gross Domestic Product (GDP)- 2017-2021**

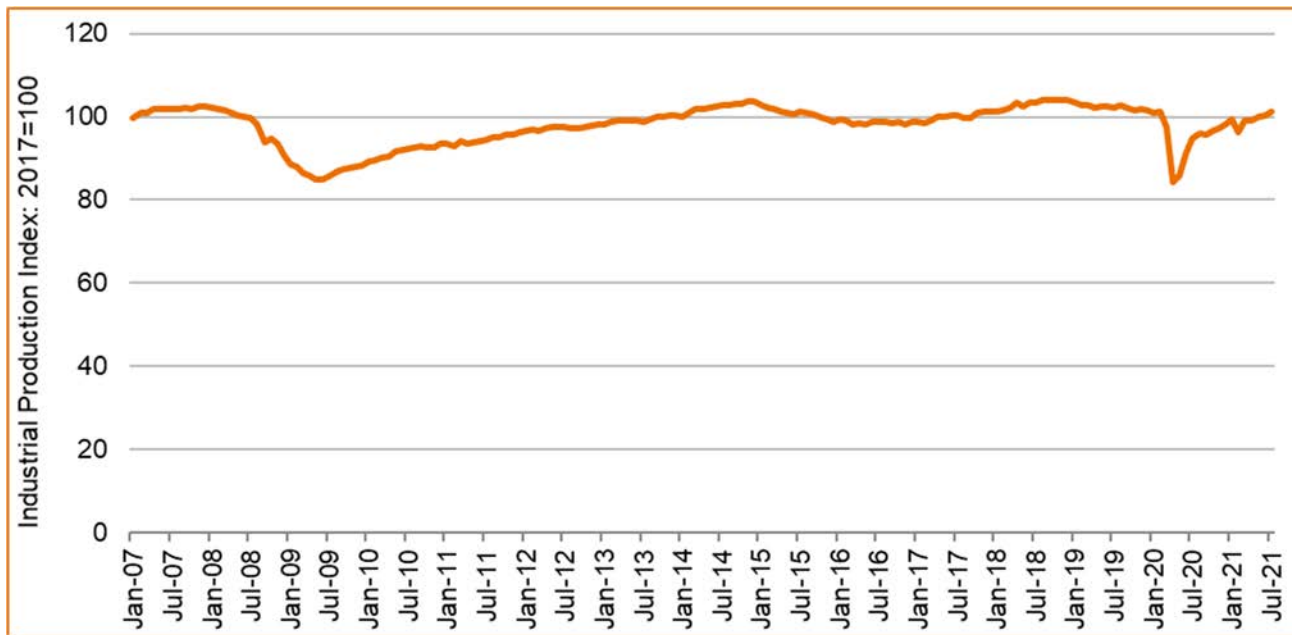


### A.1.2 Industrial Production Index

Stantec has tracked the traffic volumes on the Thruway and other toll facilities throughout the Northeastern US for over a decade and has found that growth in commercial vehicle traffic generally correlates to growth in Industrial Production Index (IPI) growth. The IPI is a measure of real output in the manufacturing, mining, electric and gas industries published by the Board of Governors of the Federal Reserve System. The Index is measured as a percentage of real output of a given base year, in this case 2017.

As shown in Figure A-3, the IPI hit a trough in June 2009, the last month of the 2007 to 2009 recession. Since that time, with the exception of a slow but small decline throughout 2015 and 2016, it had generally been on an upward trajectory, increasing by almost 20 percent from June 2009 through the end of 2019. The IPI then fell by almost the same magnitude in the first five months of 2020, with the index falling below the June 2009 trough as a result of COVID-19, before beginning to recover to close to “pre-COVID” levels in recent months.

**Figure A-3: Industrial Production Index (IPI), Historical Monthly, January 2007 to July 2021**



Source: Board of Governors of the Federal Reserve System (US), Industrial Production: Total Index [INDPRO], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/INDPRO>, September 14, 2021.

### A.1.3 Trends in Vehicle Miles Traveled (VMT)

The United States experienced an historic flattening and drop in vehicle-miles traveled (VMT) on its highways, starting in 2008 and lasting until approximately 2014. A reduction in VMT means less revenue – in the form of gasoline taxes or tolls - for funding transportation operation, maintenance and capital expenses. However, beginning in mid-2014, national VMT experienced a growth trend, increasing at an even more rapid rate than in the 1990s until a recent period of low growth began in late 2017, a pattern recently disrupted by COVID-19.

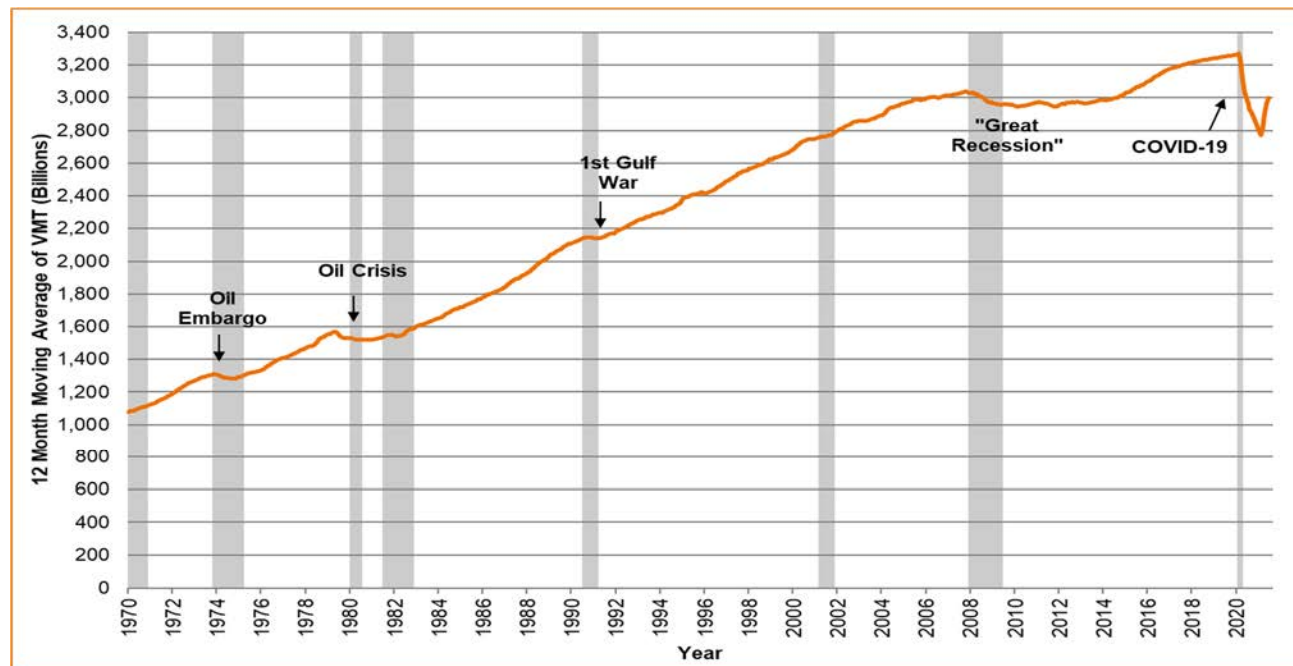
Figure A-4 depicts the 12-month moving total of national VMT on all U.S. highways, from 1970 through June 2021. Even before COVID-19, a number of demographic factors were cited as having a downward influence on VMT, including baby boomers retiring and driving less, the ability of many workers to work remotely in the internet era, communication technologies that can substitute for in-person interaction,<sup>7</sup> and a rising preference for compact, mixed-use neighborhoods which reduce the need for driving.<sup>8</sup> More immediately, the pace of economic recovery from COVID-19 will significantly affect trends in VMT; among the factors at play are the

<sup>7</sup> “Vehicle Miles Traveled: Another Look at Our Evolving Behavior”, [Jill Mislinski](#), March 17, 2017.

<sup>8</sup> State Smart Transportation Initiative News, [“Per capita VMT drops for ninth straight year; DOTs taking notice,”](#) Chris Cahill, February 24, 2014.

extent of a long-term or permanent shift to more work from home and preference for private auto travel over mass transit (which a recent IBTTA presentation described as a “social distancing gap”<sup>9</sup>).

**Figure A-4: Vehicle Miles Traveled (VMT) – National, Historical 12-month Moving Average, 1971 – June 2021**



Source: U.S. Department of Transportation, Federal Highway Administration, National Bureau of Economic Research

While Figure A-4 represents a rolling 12-month average VMT, it may be more impactful to look at VMT by month, and at a regional level. As shown in Table A-1, with the advent of COVID-19, VMT fell beginning in March 2020; national traffic data show that the impact was greatest in the Northeastern U.S. which was the early epicenter of the pandemic, although traffic began to rebound in May 2020 and has steadily increased since then. Looking at more recent months, at the national level seasonally adjusted VMT in May 2021 was just 3 percent below May 2019’s VMT. Similarly, June’s seasonally adjusted national VMT was only 2 percent below 2019<sup>10</sup>, signifying significant recovery. The northeast has lagged in recovery, with May 2021 VMT some 9.9 percent below May 2019, and June 2021 VMT some 2.9 percent below June 2019 levels.

**Table A-1: Monthly COVID-19 Traffic Impact on Vehicle Miles Traveled, Northeast vs. National**

Location	March 2020 vs. March 2019	April 2020 vs. April 2019	May 2020 vs. May 2019	May 2021 vs. May 2019	June 2021 vs. June 2019
Northeast states	-21.7%	-47.3%	-34.9%	-9.9%	-2.9%
U.S. overall, seasonally adjusted	-19.1%	-40.8%	-26.1%	-3.0%	-2.0%

Source: Traffic Volume Trends, FHWA Office of Highway Policy Information

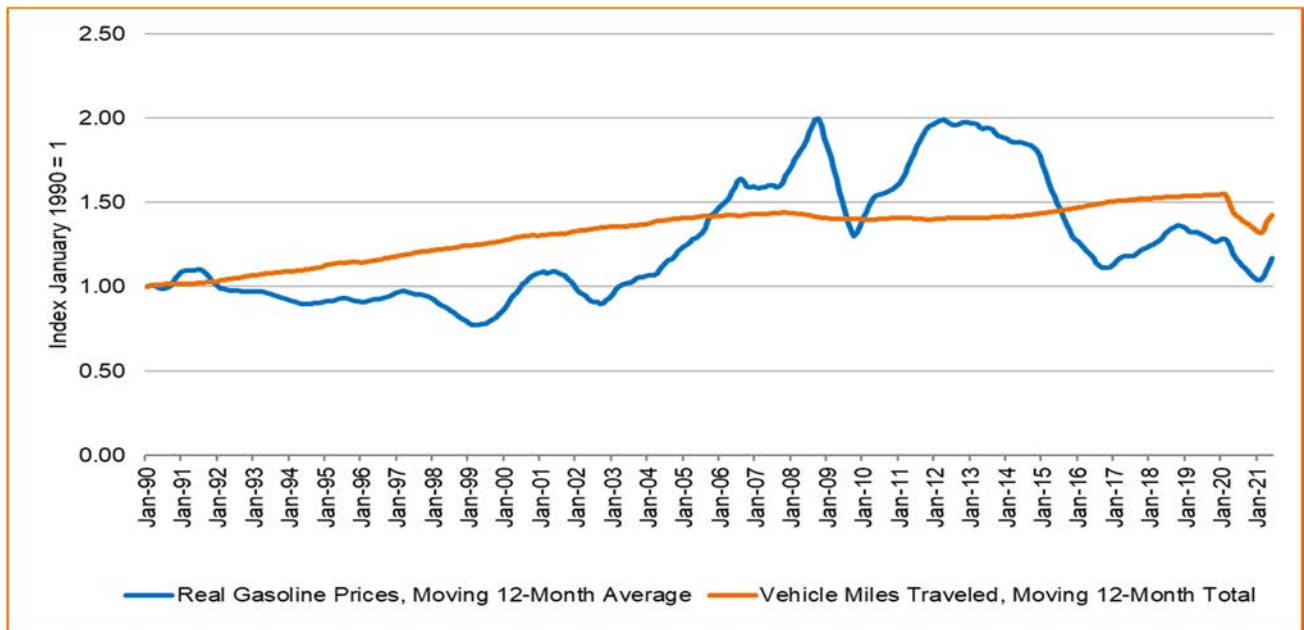
<sup>9</sup> Keeping Pace: The Financial Effects of a New Travel & Commuting Landscape on Toll Agencies, IBTTA Webinar, July 9, 2020

<sup>10</sup> FHWA Traffic Volume Trends, [https://www.fhwa.dot.gov/policyinformation/travel\\_monitoring/tvt.cfm](https://www.fhwa.dot.gov/policyinformation/travel_monitoring/tvt.cfm)

### A.1.4 National Vehicle Miles Traveled (VMT) vs. Gas Prices (Fuel Costs)

A number of factors may have caused the recent changes in VMT; however, fuel costs (gas prices) are often cited as one of the primary factors that can have a significant impact on travel trends. Figure A-5 shows the historical correlation between VMT and gas prices, presenting VMT across the United States (national) as compared to real retail gasoline prices, from 1990 through mid-2021. The VMT and real gas prices represent a 12-month moving average to remove any seasonality factors; all data are indexed to the 12 months ending January 1990. The decline in VMT seen after the fall of 2008 is likely more attributable to the economic meltdown than gas price changes, as prices dropped significantly by early 2009. Throughout the rest of 2009 and through the spring of 2011 gas prices increased with no noticeable change to VMT. However, between 2014 and 2016 there was a precipitous drop in gas prices which coincided with a steep increase in VMT at the national level. Between late 2016 and early 2020, VMT grew at a slow rate and did not appear to be affected by fluctuations in real gas prices. These data show that it is difficult to pinpoint the elasticity of travel as it relates to gas prices, yet very large gas price changes do generally result in a change in driving behavior. The more recent decline, followed by increases, in both real VMT and real gas prices, however, are presumably related to COVID-19 and associated changes in economic activity.

**Figure A-5: National Vehicle Miles Traveled (VMT) vs. Real Gas Prices, Historical 12-month Moving Average, Indexed to January 1990, 1990 – June 2021**



Source: U.S. Department of Energy, Energy Information Administration and U.S. Department of Transportation, Federal Highway Administration

### A.1.5 Unemployment Rate

At the beginning of 2008, the national unemployment rate was 5.0 percent, as it had been similarly for years. By October 2009 during the depth of the “Great Recession”, unemployment peaked at approximately 10.0

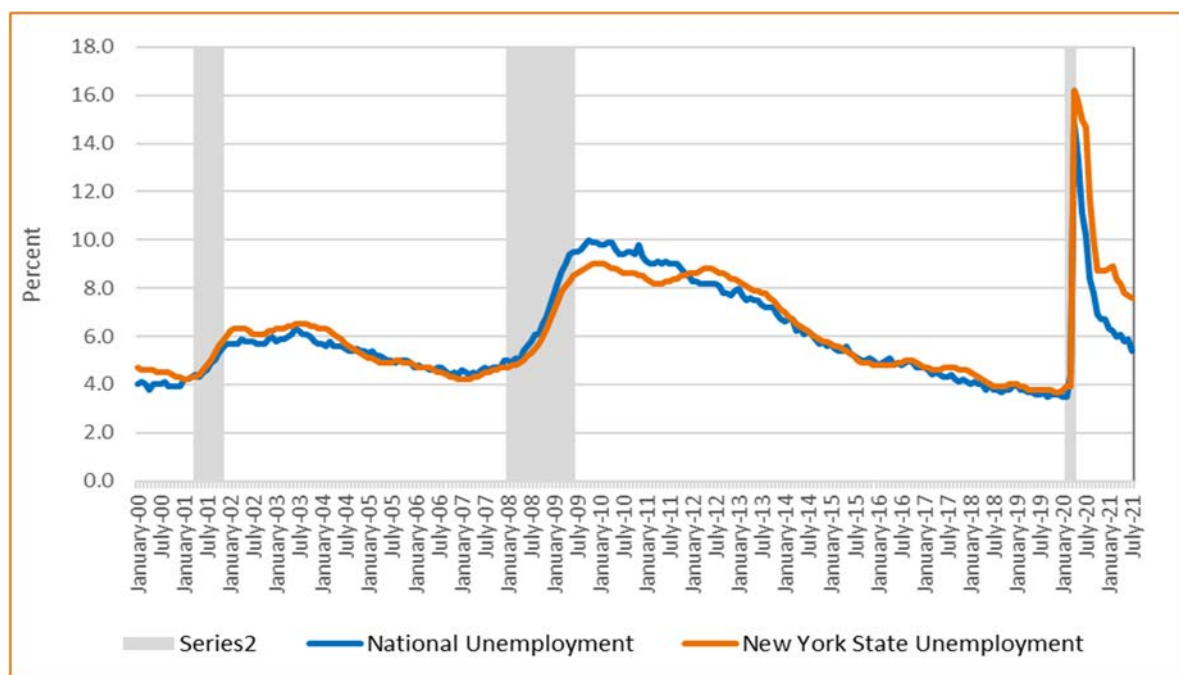
percent. Over the following decade, total employment slowly recovered and eclipsed its pre-recession peak, reaching 156.9 million persons in February 2019.<sup>11</sup> Consequently, as shown in

Figure A-6, the national unemployment rate had fallen to 4.0 percent as of January 2019 and stayed below 4 percent until March 2020.

Figure A-6 also shows that the New York State unemployment rate has closely tracked national trends, except for immediately after the recession when the state recovered more quickly than the U.S. and very recently with state unemployment higher than the national rate in the COVID-19 era.

While the 2008-2009 recession caused a spike in unemployment and a notable reduction in VMT, there otherwise was no distinct correlation between the two. For example, U.S. post-recession VMT was nearly flat for about four years after the recession, while unemployment dropped by around 40 percent, and unemployment continued to decline in 2018 and 2019 while VMT saw almost no growth. With the impact of COVID-19, national unemployment increased dramatically from a near-historic low of 3.5 percent in February 2020 to a peak of almost 15 percent in April 2020. In July 2021, the national unemployment rate averaged around 5.4 percent with New York State at 7.6 percent. New York City and New York State unemployment rates in selected months are compared to national data in Table A-2.

**Figure A-6: Civilian Unemployment Rate, National vs. New York State, Historical Monthly, Seasonally Adjusted, January 2000 – July 2021**



Source: U.S. Department of Labor, Bureau of Labor Statistics, National Bureau of Economic Research

<sup>11</sup> Bureau of Labor Statistics, “The Employment Situation- February 2019,” as accessed on March 14, 2019 at <https://www.bls.gov/news.release/pdf/empsit.pdf>. Employment figure is based on Household Data Summary Table A.



**Table A-2: National and New York Unemployment Rates (%), Selected Months**

Location	Pre-Pandemic	Early Pandemic		Recent Months		
	Apr-19	Apr-20	May-20	May-21	Jun-21	July 2021 <sup>1</sup>
United States	3.7	14.8	13.3	5.8	5.9	5.4
New York State (NYS)	3.8	16.2	15.7	7.8	7.7	7.6
New York City (NYC)	4.0	15.6	20	10.9	10.6	10.5

<sup>1</sup> Preliminary

Source: U.S. Department of Labor, Bureau of Labor Statistics

## A.2 SHORT-TERM ECONOMIC FORECASTS

Following the sharp contraction in early 2020 due to the COVID-19 pandemic, financial and economic analysts expect the U.S. economy to continue in a recovery mode in the near-term future.

### A.2.1 Gross Domestic Product

The most recent (September 2021) consensus forecast, derived from projections from more than 50 financial institutions and professional forecasting firms, is that real GDP will increase by 5.9 percent in 2021 and by 4.3 percent in 2022.<sup>12</sup> Figure A-7 presents Real GDP Forecasts by six different forecasting groups for the short-term timeframe through 2022. In the 2023-2027 timeframe, the consensus forecast is for real GDP to continue to grow by an average of 2.1 percent annually.<sup>13</sup> The Congressional Budget Office (CBO) projects only a 1.4 percent rate of growth over the same time period.<sup>14</sup> For “the longer run” beyond 2023, the median real GDP growth rate forecast across Federal Reserve Bank Board members and presidents is 1.8 percent.<sup>15</sup>

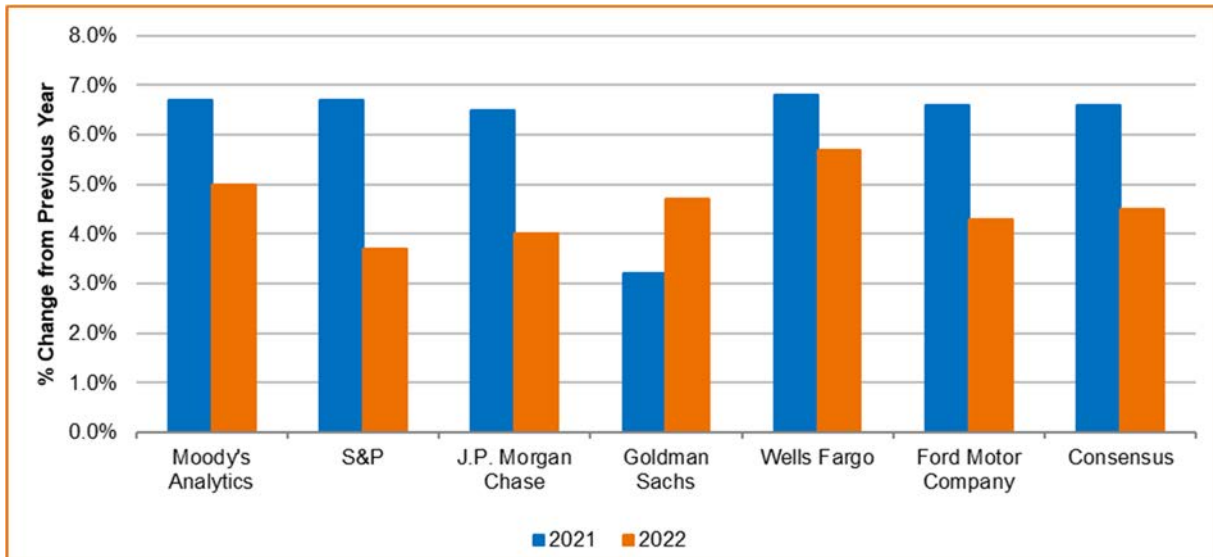
<sup>12</sup> “Blue Chip Economic Indicators: Top Analysts’ Forecasts of the U.S. Economic Outlook for the Year Ahead”, Wolters and Kluwer Law & Business, September 13, 2021.

<sup>13</sup> Blue Chip Economic Indicators: Top Analysts’ Forecasts of the U.S. Economic Outlook for the Year Ahead”, Wolters and Kluwer Law & Business, March 12, 2021.

<sup>14</sup> <https://www.cbo.gov/publication/57218>

<sup>15</sup> Summary of Economic Projections, Federal Reserve Bank Open Market Committee, released March 17, 2021 as accessed July 28, 2021 at <https://www.federalreserve.gov/monetarypolicy/files/fomcproitabl20210317.pdf>

**Figure A-7: Real Gross Domestic Product (GDP), Short-term Forecasts for 2021 and 2022**



Source: *Blue Chip Economic Indicators: Top Analysts' Forecasts of the U.S. Economic Outlook for the Year Ahead*, Wolters and Kluwer Law & Business, September 13, 2021.

## A.2.2 Industrial Production Index

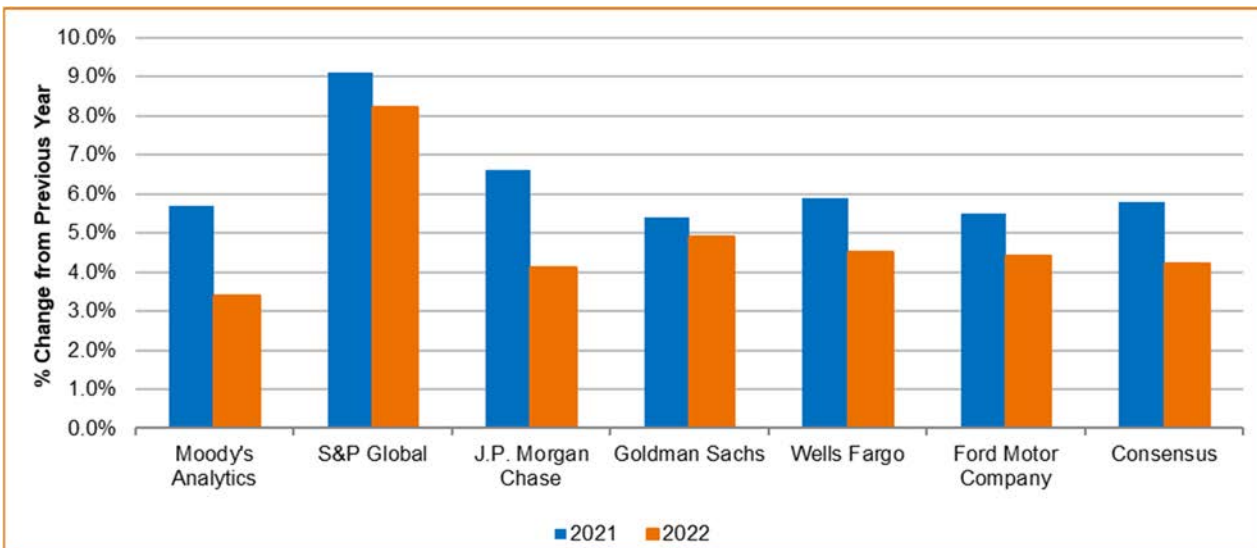
Based on consensus forecasts developed by financial institutions and industry analysts, the Industrial Production Index (IPI) is forecasted to increase by 6.0 percent in 2021 and by 4.3 percent in 2022.<sup>16</sup> Figure A-8 presents Industrial Production Index forecasts by six different forecasting groups for this year and next. *Blue Chip* consensus forecasts for the 2023-2027 timeframe project the IPI to grow by 2.0 percent annually.<sup>17</sup>

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<sup>16</sup> *Blue Chip Economic Indicators: Top Analysts' Forecasts of the U.S. Economic Outlook for the Year Ahead*, Wolters and Kluwer Law & Business, September 13, 2021.

<sup>17</sup> *Blue Chip Economic Indicators: Top Analysts' Forecasts of the U.S. Economic Outlook for the Year Ahead*, Wolters and Kluwer Law & Business, March 12, 2021.

**Figure A-8: Industrial Production Index (IPI), Short-term Forecasts for 2019 and 2020**



Source: *Blue Chip Economic Indicators: Top Analysts' Forecasts of the U.S. Economic Outlook for the Year Ahead*, Wolters and Kluwer Law & Business, September 13, 2021.

### A.2.3 Fuel Cost Trends

Figure A-9 presents historical and projected gasoline and crude prices from the U.S. Energy Information Administration (EIA). From September 2017 through March 2020, prices averaged \$2.62 per gallon, before plunging to under \$2.00 a gallon with the advent of COVID-19. U.S. regular gasoline retail prices remained low, averaging \$2.09 a gallon for April through December of 2020 but increased to \$2.76 a gallon over the first half of 2021. Energy experts attribute the increased prices largely to OPEC cuts in oil production as global energy demand decreased during the pandemic. There was also a short-term jump in prices in the southern U.S. as a result of the Colonial Pipeline shutdown in May. The September Short Term Energy Outlook noted U.S. regular gasoline retail prices averaged \$3.16 per gallon in August, the highest monthly average price since October 2014. Recent gasoline price increases reflect rising wholesale gasoline margins amid relatively low gasoline inventories. In addition, recent impacts from Hurricane Ida on several U.S. Gulf Coast refineries are adding upward price pressures in the near term. Prices are forecast to fall to \$2.91 per gallon in the fourth quarter of 2021 and fall further to an average of \$2.75 per gallon in 2022.<sup>18</sup> It is important to note that average fuel economy increased by almost 30 percent between 2004 and 2019, with preliminary data for the 2020 model year indicating a 33 percent improvement in real world fuel economy<sup>19</sup>

<sup>18</sup> "Short-Term Energy Outlook," U.S. Energy Information Administration, September 2021

<sup>19</sup> Executive Summary, EPA Automotive Trends Report: Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975, U.S. Environmental Protection Agency, January 2021, Report Tables as accessed on August 2, 2021 at <https://www.epa.gov/automotive-trends/download-automotive-trends-report#Summary>

**Figure A-9: U.S. Gasoline and Crude Oil Prices, Historical and Short-term Forecasts, 2017 – 2022**

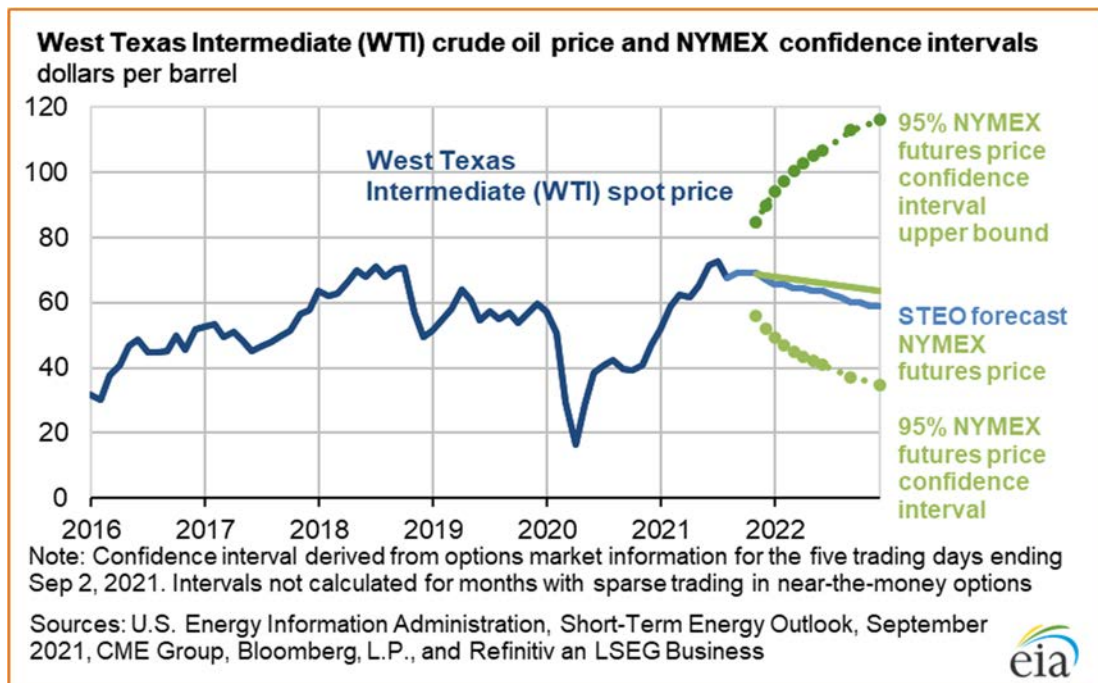


Source: U.S. Department of Energy, U.S Energy Information Administration, Short-Term Energy Outlook, September 2021

This relatively low, static forecast of future oil and gas prices may be reassuring; however, this figure does not show the level of uncertainty in these projections. Figure A-10 presents the EIA’s projections for West Texas Intermediate (WTI) Crude Oil Price. The base projection is similar to that illustrated in Figure A-9, but it is the possible range of this price that represents a downside risk to the U.S. economy and VMT. Based on options markets, the 95 percent confidence interval for WTI is between 97 percent more to 41 percent less than current forecasts for December 2022.<sup>20</sup> The wide range of likely future prices of oil and gasoline, knowing their impact on motorist behavior, presents one of the challenges in accurately projecting future traffic volumes.

<sup>20</sup> Short-Term Energy Outlook U.S. Energy Information Administration, September 2021

**Figure A-10: Crude Oil Prices, Historical and Short-term Forecasts, with Confidence Intervals, 2016 – 2022**



### A.2.4 Unemployment Rate

Based on consensus forecasts developed by financial institutions and industry analysts, the national unemployment rate is projected to average 4.0 percent over the 2023-2027 time period.<sup>21</sup> In the shorter term, CBO forecasts that unemployment will average 4.5 percent for 2021. CBO forecasts unemployment will improve slightly in 2022 to an average of 4.4 percent and remain at that level on average between 2023 and 2027.<sup>22</sup>

## A.3 LONG-TERM ECONOMIC FORECASTS

### A.3.1 Gross Domestic Product and Industrial Production Index

In the longer-term, 2028-2032 timeframe, the consensus forecast developed by financial institutions and industry analysts on March 12, 2021 was for real GDP to continue to grow by 1.9 percent annually and for the Industrial Production index to continue to grow by 1.8 percent annually.<sup>23</sup>

<sup>21</sup> Blue Chip Economic Indicators: Top Analysts' Forecasts of the U.S. Economic Outlook for the Year Ahead", Wolters and Kluwer Law & Business, March 12, 2021.

<sup>22</sup> Congressional Budget Office, An Update to the Budget and Economic Outlook: 2021 to 2031, July 1, 2021 as accessed August 2, 2021 at <https://www.cbo.gov/publication/57218>

<sup>23</sup> Blue Chip Economic Indicators: Top Analysts' Forecasts of the U.S. Economic Outlook for the Year Ahead", Wolters and Kluwer Law & Business, March 12, 2021.

### A.3.2 Vehicle Miles Traveled (VMT)

The Federal Highway Administration prepares long term (20- and 30-year) forecasts of VMT each year and projects VMT growth under three different economic outlooks- baseline, low economic growth, and high economic growth, with the most recent forecasts shown in Table A-3.<sup>24</sup> Interestingly, growth in vehicle mileage for single unit and combination trucks is forecast to be at a higher rate than light duty vehicles.

**Table A-3: FHWA Long-Term Growth Forecasts of National Vehicle Miles Traveled (VMT)**

Vehicle Class	Compound Annual Growth Rates					
	Low Economic Growth Outlook		Baseline Economic Growth Outlook		High Economic Growth Outlook	
	2019-2039 (20-Year)	2019-2049 (30-Year)	2019-2039 (20-Year)	2019-2049 (30-Year)	2019-2039 (20-Year)	2019-2049 (30-Year)
Light-Duty Vehicles	0.8%	0.5%	0.9%	0.6%	1.1%	0.8%
Single-Unit Trucks	1.3%	1.5%	2.1%	2.3%	2.3%	2.5%
Combination Trucks	1.4%	1.4%	1.7%	1.6%	1.9%	1.9%
TOTAL	0.8%	0.6%	1.0%	0.7%	1.2%	0.9%

Source: Office of Highway Policy Information U.S. DOT, Federal Highway Administration, May 2021.

The 2021 forecast from the Energy Information Administration (EIA) projects a similar differential between light duty vehicles and trucks for the 2020-2050 timeframe and similar projected rates of growth relative to the FHWA forecasts over a slightly different horizon for all three vehicle categories:<sup>25</sup>

- 0.9 percent annually for light duty vehicles less than 8,501 pounds
- 1.4 percent annually for light duty trucks (commercial trucks 8,501 to 10,000 pounds gross vehicle weight rating)
- 1.4 percent annually for freight trucks greater than 10,000 pounds

### A.3.3 Unemployment Rate

Long-term forecasts of the unemployment rate tend to differ, depending on varying assumptions of the impact of long-term structural trends such as advances in information technology, outsourcing, and an aging population. In its latest 10-year economic projections, the CBO has forecasted that the unemployment rate will average 4.4 percent in the 2021-2031 time period.<sup>26</sup>

<sup>24</sup> “FHWA Forecasts of Vehicle Miles Traveled (VMT): Spring 2020,” Office of Highway Policy Information, May 2021, as accessed on July 27, 2021 at [https://www.fhwa.dot.gov/policyinformation/tables/vmt/vmt\\_forecast\\_sum.pdf](https://www.fhwa.dot.gov/policyinformation/tables/vmt/vmt_forecast_sum.pdf)

<sup>25</sup> Annual Energy Outlook, 2021, Transportation Sector Key Indicators accessed on July 15, 2021 at <https://www.eia.gov/outlooks/aeo/data/browser/#/?id=7-AEO2021&cases=ref2021&sourcekey=0>

<sup>26</sup> Congressional Budget Office, An Update to the Budget and Economic Outlook: 2021 to 2031, July 1 2021, as accessed August 2, 2021 at <https://www.cbo.gov/publication/57218>

Based on consensus forecasts developed by financial institutions and industry analysts, the unemployment rate is projected to average 4.1 percent over the 2028-32 timeframe<sup>27</sup>, slightly lower than the 4.3 percent rate forecasted by the CBO for the 2027-2031 timeframe.

### A.3.4 Conclusion

The most recent economic data suggest a slowing of momentum in economic recovery, heightened concerns over inflation, and continuing uncertainty over the impacts of COVID-19. Stantec will continue to monitor developments in the underlying data and the overall socioeconomic picture in the coming months to assess any change in future budget forecasts.

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<sup>27</sup> Blue Chip Economic Indicators: Top Analysts' Forecasts of the U.S. Economic Outlook for the Year Ahead", Wolters and Kluwer Law & Business, March 12, 2021

## **B. COVID-19 AND ITS IMPACT ON TRAVEL**

The COVID-19 pandemic has had an unprecedented effect on traffic throughout the nation, especially the Northeastern U.S. Its effects can be seen as threefold: government-mandated closures and restrictions and suggested behaviors meant to reduce the spread of the disease; economic fallout from job losses related to these restrictions and behaviors; and long-term behavioral changes that are likely to occur as a large share of the population has shifted to working from home, and may continue to work from home, more often than before the pandemic. Closures and restrictions are discussed below.

The COVID-19 pandemic began in March 2020, severely affecting travel on Thruway facilities and across the world. While the impacts are still ongoing, there has been significant progress toward reopening and the recovery of travel. This section highlights the impacts of the COVID-19 pandemic as background information for evaluating the Thruway traffic and revenue forecasts.

As was the case nationally and throughout New York State, traffic declined significantly starting in mid-March 2020. The first confirmed case of COVID-19 in New York State was on March 1, 2020, which quickly grew to over 25,000 confirmed cases by late March. The state's suggested/required public responses included implementing "social distancing", closure of educational facilities (March 18), closure of non-essential services (March 20), and the "NY on PAUSE" stay at home order (March 22).

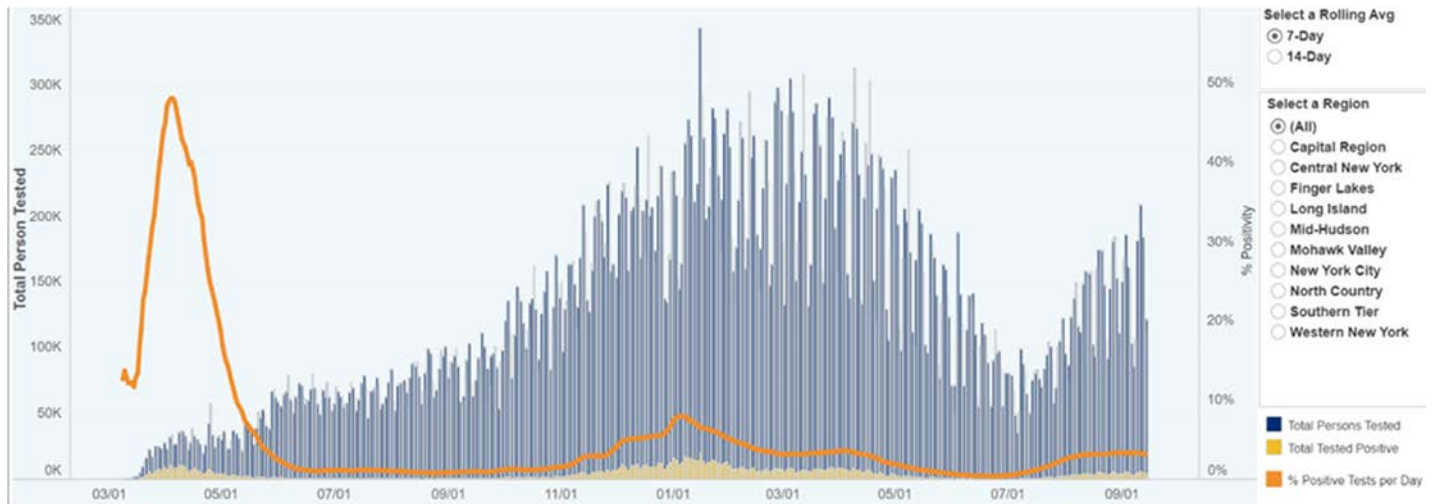
### **B.1 NEW YORK PHASED REOPENING AND COVID-19 VACCINES**

After about two months of closures and restrictions, the state saw marked reduction in the number of COVID-19 infections and deaths since a mid-April 2020 peak. New York State had a very defined, phased reopening process, creating ten geographic regions for this process. Each region monitored key metrics established with guidance from the CDC and WHO and other public health experts related to hospitalizations, available beds, deaths, testing, and contact tracing resources before advancing to the next phase, with a minimum period of two weeks between phases. Phase I, which included the reopening of construction, manufacturing, supply-chain businesses, and retail curbside pickup, began in the Finger Lakes, Southern Tier, and Mohawk Valley Regions on May 15. New York City was the last region to enter Phase I on June 8. By early August 2020, all ten regions had progressed to Phase IV, with New York City entering this phase last on July 20, 2020. Phase IV allowed for gatherings of up to 50 people as well as the reopening of schools, low-risk arts, entertainment, and recreation businesses, all with social distancing requirements. At that point, indoor dining/bars, movie theatres, shopping malls, museums, and gyms were still prohibited from reopening; these businesses resumed (with capacity limits) throughout the late summer and fall of 2020, based on health metrics for the region. Schools reopened to in-person learning throughout the state in September 2020.

New York State and much of the US experienced a second wave of COVID-19 infections beginning in November 2020 and lasting into the winter 2021 which led to school and indoor dining closures during that timeframe. This was followed by a significant reduction in the spread of the virus as COVID-19 vaccines began to be distributed, and resumption of indoor dining and in-person learning by February/March 2021. Trends in New York State COVID-19 infection rates from March 2020 through early August 2021 are shown in Figure B-.



Figure B-1: NY State COVID-19 Positivity Totals, September 13, 2021



Source: NY State COVID-19 Dashboard, <https://forward.ny.gov/percentage-positive-results-region-dashboard>

On December 11, 2020, the U.S. Food and Drug Administration (FDA) issued the first emergency use authorization (EUA) for a COVID-19 vaccine when the Pfizer-BioNTech COVID-19 Vaccine was authorized for individuals 16 years of age and older. On May 10, 2021, the FDA expanded the emergency use authorization for the Pfizer-BioNTech COVID-19 Vaccine to include adolescents 12 through 15 years of age.<sup>28</sup> On December 18, 2020, the U.S. Food and Drug Administration issued an EUA for the second COVID-19 vaccine, allowing for the Moderna COVID-19 Vaccine to be distributed in the U.S for use in individuals 18 years of age and older.<sup>29</sup> On February 27, 2021, the FDA issued an emergency use authorization (EUA) for the third vaccine, allowing the Janssen COVID-19 Vaccine (also referred to as the Johnson & Johnson Vaccine) to be distributed in the U.S. for use in individuals 18 years of age and older.<sup>30</sup>

Throughout New York and much of the country, the elderly, front line workers, and vulnerable populations were generally prioritized for vaccine distribution. Throughout the spring, the portion of the population having received at least one dose of the vaccine grew steadily, and infection rates declined. However, by late spring 2021, the demand for vaccines plateaued, and in mid-summer 2021, another wave of coronavirus infections associated with the Delta variant began spreading rapidly throughout the US.

As of early August 2021, the demand for vaccines began to increase once more. As of September 12, 2021, almost 69 percent of the state population had received at least one dose of a vaccine and 61.5 percent had received a completed vaccine series, with eligibility extending to ages 12 and older. On August 23, 2021, the

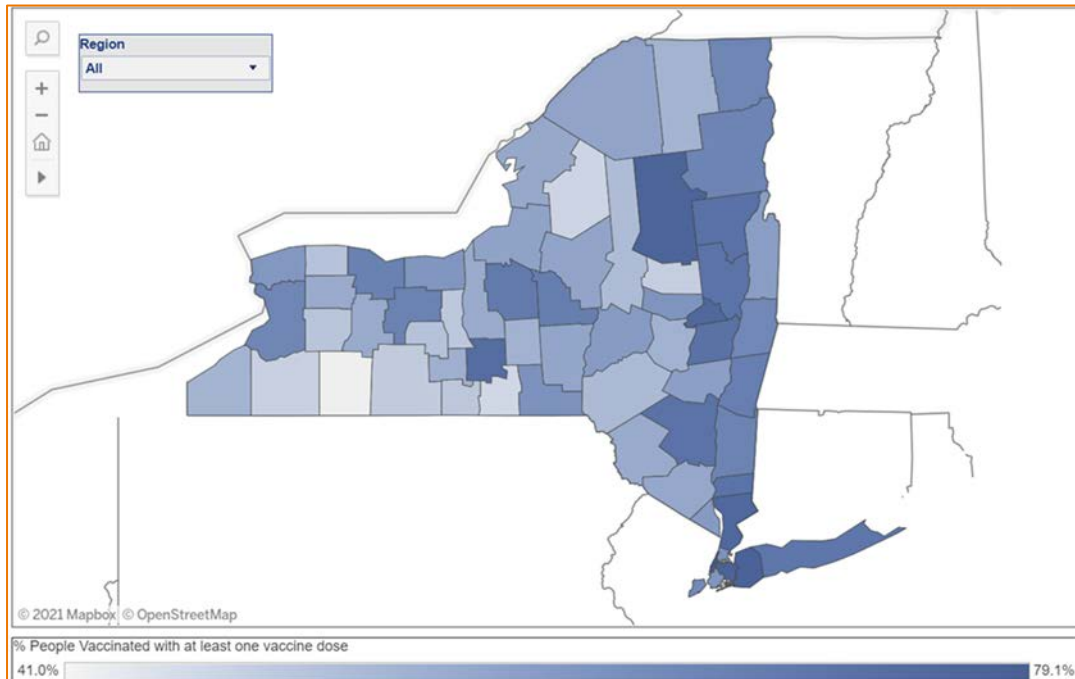
<sup>28</sup> <https://www.fda.gov/emergency-preparedness-and-response/coronavirus-disease-2019-covid-19/pfizer-biontech-covid-19-vaccine>

<sup>29</sup> <https://www.fda.gov/emergency-preparedness-and-response/coronavirus-disease-2019-covid-19/moderna-covid-19-vaccine>

<sup>30</sup> <https://www.fda.gov/emergency-preparedness-and-response/coronavirus-disease-2019-covid-19/janssen-covid-19-vaccine>

Pfizer vaccine received full approval from the FDA. Figure B-2 is a snapshot of current vaccination status by county.<sup>31</sup>

**Figure B-2: NY State Vaccine Tracker, September 12, 2021**



Source: NY State Vaccine Tracker, <https://covid19vaccine.health.ny.gov/covid-19-vaccine-tracker>

On July 15, 2021, with over 70 percent of adult New Yorkers having received at least the first dose of the COVID-19 vaccine and the lowest levels of new COVID-19 cases in the nation, the State lifted most COVID-19 restrictions, except the mask requirement for unvaccinated individuals and in certain settings (e.g., health care) as advised by the CDC<sup>32</sup>. In addition, then-Governor Cuomo had announced that the state disaster emergency declared in early March 2020 would expire on June 25, 2021. As of early August 2021, most of New York State was identified by the CDC as having Substantial or High virus transmission rates and recommended indoor masking for all individuals regardless of vaccination status.<sup>33</sup>

With renewed outbreaks across the country due to new COVID-19 variants, the overall situation continues to be fluid. Though many offices have reopened both with and without social distancing restrictions, a significant portion of employees who began working from home in March 2020 are continuing to work mainly from home. This is due both to personal and employer choices as a result of the pandemic, but is largely affected by the uncertainty of schools, childcare facilities, and quarantine protocols. In May 2021, New York City Mayor Bill

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<sup>31</sup> On August 13th, 2021, CDC recommended that people who are moderately to severely immunocompromised receive an additional dose of the COVID-19 vaccine. The state vaccination tracking system does not appear to include these “booster” vaccines yet.

<sup>32</sup> <https://forward.ny.gov/archived-industry-guidance>.

<sup>33</sup> <https://www.cdc.gov/coronavirus/2019-ncov/index.html>

De Blasio announced that New York City would not offer remote schooling as an option for the 2021-2022 school year<sup>34</sup> and the CDC recommends all schools resume in-person learning. Statewide guidance was released on September 2, 2021 by Governor Kathy Hochul which included a mask requirement for everyone in school buildings during teaching and extracurricular activities and requiring all teachers, administrators and other school employees to submit to weekly COVID-19 testing unless they show proof of vaccination, with either a CDC vaccine card or the Excelsior Pass.<sup>35</sup>

Restrictions specific to tourism and entertainment that have been in place throughout the pandemic are beginning to loosen as well. Indoor entertainment venues, such as Broadway theaters in New York City and popular tourist destinations such as the Canadian side of Niagara Falls have been inaccessible to New Yorkers. Theaters and entertainment venues in New York City are slowly reopening, with recent announcements that attendees will need to show proof of vaccination. Canada recently reopened the border to vaccinated American tourists as of August 9<sup>th</sup>, while the US has announced that border restrictions toward Canadian tourists will remain in place until at least September 21<sup>st</sup>.<sup>36</sup> The border has remained open to essential travelers throughout the majority of the pandemic.

## B.2 U.S. DOT'S GENERAL COMMENTARY ON TRAVEL IMPACTS

At the national level, there has been much discussion of the impact of COVID-19 on travel, both during the pandemic and for the future. Some broad observations excerpted from a January 2021 study by U.S. DOT entitled *COVID-19's Effects on The Future of Transportation*<sup>37</sup> include:

*"Most importantly, communications as a substitute to travel has been actively deployed in many areas, from telework to e-commerce, telemedicine, web-based meetings in lieu of traditional business communications, distance learning, delivery of restaurant meals and online worship services among others. As these behaviors have become more engrained, analysts are envisioning a different future than what might have been anticipated only a year ago."*<sup>38</sup>

*The COVID-19 crisis dramatically reduced the demand for transportation because the government ordered large parts of the economy to shut down and instructed a large part of the population to stay at home. Freight travel escaped the most dramatic consequences as freight remained critical to sustaining the population. Beyond mandatory shutdowns, many sporting, entertainment, business and other functions that involve large groups have remained curtailed and are scheduled to remain so well into 2021. Large swaths of the population have limited their normal activities and movements voluntarily for fear of infection and will continue to exercise caution for some time."*<sup>39</sup>

*Major developments had been underway before COVID-19 that were changing travel supply and demand. The Internet gave rise to electronic commerce and rapid growth of companies that use the*

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<sup>34</sup> <https://www.nytimes.com/2021/05/24/nyregion/nyc-schools-reopening-remote-learning.html>

<sup>35</sup> [https://www.governor.ny.gov/sites/default/files/atoms/files/P12\\_EDU\\_Summary\\_Guidelines.pdf](https://www.governor.ny.gov/sites/default/files/atoms/files/P12_EDU_Summary_Guidelines.pdf)

<sup>36</sup> <https://www.forbes.com/sites/sandramacgregor/2021/08/25/us-extends-land-border-closure-with-canada-until-sept-21/?sh=4256a88b4a45>

<sup>37</sup> [Polzin, Steven; and Tony Choi. \(2021\). COVID-19's Effects on The Future of Transportation. United States Department of Transportation, Office of the Assistant Secretary for Research and Technology](https://www.doi.gov/sites/doi/files/documents/2021-01/COVID-19s_Effects_on_The_Future_of_Transportation_United_States_Department_of_Transportation_Office_of_the_Assistant_Secretary_for_Research_and_Technology.pdf), accessible at <https://doi.org/10.21949/1520705>

<sup>38</sup> Polzin and Choi, op cit, page 4 of 44

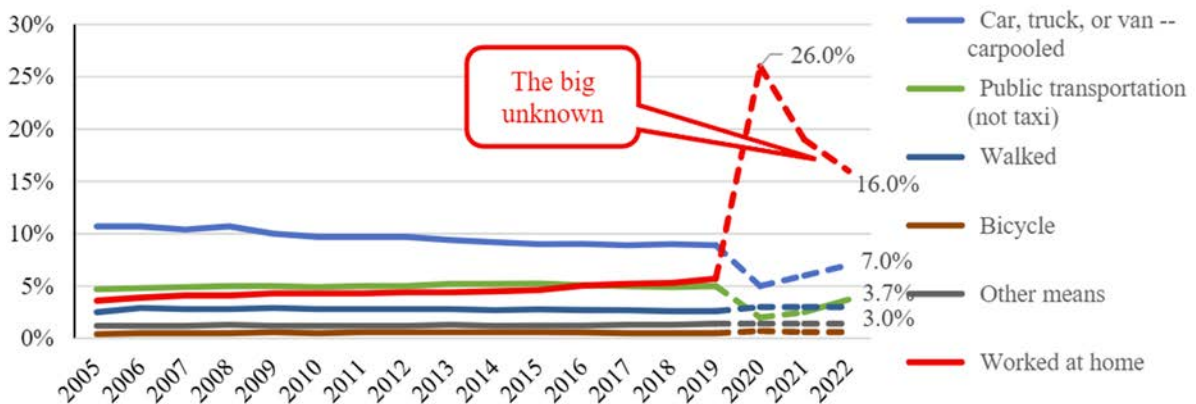
<sup>39</sup> Polzin and Choi, op cit, page 7 of 44

Internet to provide both new services (Facebook) and conventional services in new ways (Amazon). The Internet enables new forms of communication and telework, which was a growing practice by some employers pre-COVID-19. Urbanization and the aging of the U.S. population had been moderating travel demand growth. Transportation network companies offering app-based ride-hailing, bikeshare and e-scooters were also changing travel choices. The COVID-19 outbreak has profoundly transformed the economy, society, and the transportation sector in the near-term, and analysts anticipate that some elements of the short-term responses of individuals and businesses will become permanently changed behaviors.

Segments of the population will certainly moderate behaviors because they fear the risk of contracting COVID-19. The success of vaccines and therapeutics will certainly lessen such fears but other unknown viral infections may arise. Choices to participate in certain activities and travel changes made during COVID-19 may become more pronounced and create new habits or patterns that travelers continue even when concerns of COVID-19 no longer directly influence their decisions. New habits could include higher auto use as households buy additional vehicles and changes in travel destinations as the pandemic has motivated home, work and other activity location changes for some.

Some of these changes are likely to affect travel long-term. The most apparent of these is the adaption of communications as a substitute for travel. Remote working and shopping are trends that the crisis has dramatically accelerated but it is still speculative to gauge at what level they will settle once the threat of infection recedes. Analysts are speculating whether the 5.7 percent share of individuals who reported in the 2019 American Community Survey as usually working at home the week prior to their survey in 2019 will be exceeded by a few percentage points or as much as 10 to 20 points higher after the health crisis passes.<sup>40</sup> This is shown as “The big unknown” in the graph below.<sup>41</sup>

**Figure B-3: “Usual” Means of Commuting**



Source: ACS Commute data with post-Covid future scenario

<sup>40</sup> Polzin and Choi, op cit, page 9 of 44

<sup>41</sup> Polzin and Choi, op cit, page 10 of 44

*Communications substitution for travel also influences business travel. Conferences, sales calls, client/customer meetings and other interactions are being replaced by remote communications. The pandemic has rapidly enhanced how well individuals and institutions can function differently, learn new software, deploy and understand new communication technologies, work through learning curves and adjust to less travel. Preference surveys of various consumers suggest this new behavior will continue in full measure. The Wall Street Journal reported on November 15, 2020 that according to a recent survey conducted by McKinsey & Co., 75 percent of American consumers tried a new shopping method due to the coronavirus, and 50 percent of respondents said they intended to shop via curbside pickup and/or delivery services in the future.<sup>42</sup>*

*While the economic recovery time frame and its impact on travel remain uncertain, travel demand may remain dampened for an extended period of time. The great recession only reduced vehicle miles of travel by a few percent yet the peak vehicle miles of travel level reached in 2007 was not exceeded until 2015, eight years later, well into the economic recovery. Given slower population growth and a growing shift toward an information economy, VMT is less directly tied to economic activity levels and may recover more slowly from downturns than it used to. ... [W]e may well see an extended period of adjustment and recovery, especially for some segments of the transportation sector. It remains unclear how long the public health crisis will dampen overall transportation demand. Travel demand has been growing slowly, and 2019 is likely to mark the peak year of travel demand for many modes.<sup>43</sup>*

*On the other hand, it should be noted that roadway travel has proven to be the most resilient as it is least affected by fear of contagion. It has recovered from a peak decline during the shutdown of over 40 percent for several weeks to being within 10 percent of pre-pandemic levels during the fall of 2020. Personal vehicle travel offers travelers the ability to control exposure during travel and also avoids traversing terminals where crowds, lines, and check-in/payment interactions introduce exposure risk. However, future personal VMT levels post-pandemic will continue to be shaped by competition from other modes, increased teleworking, and other economic stressors.*

*While personal VMT has recovered far more rapidly than has demand for shared mode travel, the magnitude of change is sufficiently large to meaningfully change the performance of the roadway transportation system. The importance of changes in personal VMT become most relevant as changes persist after the direct influence of the pandemic has passed. Residual effects on personal travel may persist due to several factors.*

*The magnitude of the respective factors will determine post-pandemic VMT levels. For perspective, work commuting constitutes nearly 30 percent of household travel and approximately 20 percent of total roadway VMT (inclusive of freight, commercial vehicle and business travel). If telework reduces commuting by 10 percent, this would dampen overall VMT by approximately two percent in the absence of offsetting additional travel. While these are modest numbers, recognizing that VMT has been growing at less than one percent annually in spite of a very strong economy, it does support estimates of soft VMT extending well into the future. Communication substitution for other activities*

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<sup>42</sup> Polzin and Choi, op cit, page 11 of 44

<sup>43</sup> Polzin and Choi, op cit, PDF page 12 of 44

*such as shopping, personal business, worship, and education, etc. would enhance this softening of demand on total VMT.<sup>44</sup> “*

### B.3 RETURN TO WORKPLACE SURVEY RESULTS

On a more local level, though much of the Thruway System does not serve New York City directly, New York City's experience may offer an indication of how upstate locations will be affected in terms of employees returning to the workplace instead of working remotely from home. Some recent information reported:

- Results from a survey of major employers by the Partnership for New York City released in March 2021 found that only 10 percent of Manhattan office employees had returned to the workplace but almost 50 percent were expected back by September, at least part time, as vaccination availability continued to increase.<sup>45</sup> However, the most recent Partnership survey (conducted in August 2021) found only 23 percent of Manhattan office workers had returned to the workplace. Employers expected that 41 percent of office workers would return by September 30. This is still significantly below estimates from a previous Partnership survey in late May, when employers projected that 62 percent of employees would return to the office by the end of September. By January 2022, employers expect a full 76 percent of office employees to have returned to the office. The new survey also finds that 81 percent of New York City-based employees of the companies represented in the survey are fully vaccinated.<sup>46</sup>
- COVID-19 continues to be a major factor in employees' return to the workplace. The August survey by the Partnership for New York City noted that 44 percent of employers had delayed their return-to-office plans because of the recent rise in COVID-19 cases due to the Delta variant, 54 percent had not delayed their return-to-office plans and 2 percent had not yet determined whether to delay. Among employers that have delayed their return-to-office plans, 42 percent postponed for one month or less, 18 percent for between two and three months, 10 percent for three months or more, and 28 percent are evaluating on an ongoing basis.
- A March 2021 report by NYC Dept of Planning<sup>47</sup> noted that by May 2020, traffic volumes had recovered to about 50 percent compared to the 2019 average. By June 2020, bridge and tunnel traffic at MTA crossings was already edging close to pre-pandemic levels, with volumes of about 90 percent of normal. Patterns themselves remained atypical; daytime volumes were higher, but evening traffic was minimal, indicative of fewer entertainment and nightlife-oriented visits. In June 2021, more than 27.9 million vehicles crossed the MTA toll crossings, the most since October 2019, though mass transit use lags.<sup>48</sup>
- As the pandemic is brought under control, New Yorkers will ultimately embrace working, socializing, learning, congregating, and traveling together once again. However, all expectations suggest that

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<sup>44</sup> Polzin and Choi, op cit, pages 21-22 of 44

<sup>45</sup> <https://pfnyc.org/news/return-to-office-survey-results-released-march-2021/>

<sup>46</sup> <https://pfnyc.org/news/return-to-office-results-released-august-2021/>

<sup>47</sup> <https://storymaps.arcgis.com/stories/9ae470177d134f7fb42dac3ed61e37ad>

<sup>48</sup> <https://www.thecity.nyc/2021/7/26/22595195/nyc-bridge-and-tunnel-traffic-to-pre-pandemic-gridlock>

remote work will play a greater role in the future than it has before. This expectation aligns with findings from several national studies<sup>49</sup> that there will be a hybrid work model in the future. As one example, a survey conducted by Rensselaer's Center for Infrastructure, Transportation and the Environment (CITE) found that 53 percent of respondents expect they will work from home to some extent after the pandemic. This finding, along with information on many other effects from COVID, can be found at <https://cite.rpi.edu/index.php/training-and-outreach/>. CITE advises they are continuing to collect data to measure actual vs. expected behavior as pandemic restrictions are removed. The Partnership for New York City surveys also support the expectation of a hybrid workplace- the August 2021 survey found that the vast majority (70 percent) of employers are adopting a rotating or "hybrid" office schedule in which employees can work remotely for part of the week; only 26 percent of employers are requiring employees to be in the office full time; 5 percent will not require employees to return to the office at all.

## B.4 COVID-19 IMPACT ON HOME RELOCATION

Press coverage suggested the Hudson Valley Region, which accounts for almost half of Thruway System toll revenue, saw a very active real estate market as people migrated from densely urban areas, benefitted from low interest rates, and had fewer constraints on residential location as a result of the increased ability to work remotely. This March 21, 2021 headline from the Times-Union is illustrative: "Record-breaking Hudson Valley real estate market pace continues."

Stantec found limited detailed analysis or projection of impacts of COVID-19 on the Hudson Valley region. Data on residential real estate transactions from the New York Department of Taxation and Finance<sup>50</sup> suggest that the reality was not as dramatic as the press indicated. The data suggest sales were up in Albany, Greene, Dutchess, Rensselaer, Ulster and Westchester counties in the Hudson Valley Region, while average sale price did increase in all Hudson Valley counties from 2019 to 2020. In general for the region, 2020 real estate transactions increased by 10 percent over 2019 with median price up by 13 percent. Statewide, the data suggest sales were down by some 11 percent, with a slight increase in median sales price of two percent. It should be noted that the New York City is not included in this data source.

Stantec believes these developments in the housing market do not warrant adjustments to the traffic and revenue forecast for Thruway facilities. Even if there is population growth, travel demand will be largely unaffected as new residents are more likely to be remote workers than new commuters to local businesses.

## B.5 COVID-19 IMPACT ON TRUCKING

Based on research from various of sources and organizations, the near-term outlook for truck traffic remains strong. A number of articles has noted the impact of e-commerce in increasing business to consumer

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<sup>49</sup> <https://www.pwc.com/us/en/library/covid-19/us-remote-work-survey.html>

<https://www2.deloitte.com/us/en/insights/focus/human-capital-trends/2020/covid-19-and-the-future-of-work.html>

<sup>50</sup> <https://www.tax.ny.gov/research/property/assess/sales/resmedian.htm>

deliveries as COVID-19 closures and working remotely have led to more goods being ordered online versus purchased in brick-and-mortar stores. Package volume has increased significantly.

The American Trucking Association (ATA) Chief Economist Bob Costello gave a big picture overview of the freight market in a December 17, 2020 podcast with the editor of Logistics Management<sup>51</sup> as being affected by three conceptual “buckets:”

1. Consumer retail demand where e-commerce sales have soared, increasing over 20 percent in 2020 relative to 2019
2. Manufacturing output which had been soft but based on the latest outlook for the Industrial Production Index began to trend upward
3. Construction, including housing starts which were up 8 percent in 2020

A fourth factor cited by ATA as supporting continued strong truck traffic is the inventory to sales ratio which has decreased significantly, and ATA expects that rebuilding inventory will continue to drive freight traffic increases. Potentially related to this is an increase in imports accumulating in U.S. ports which then need to be shipped via truck to final destinations or distribution centers.

The one potential constraint ATA noted is drivers; a recent article noted over 45,000 truck drivers are no longer driving<sup>52</sup> due to the national Commercial Driver’s License Alcohol and Drug Clearinghouse established in January 2020 and it being difficult to train new drivers because of the pandemic.

The most recent quarterly report from U.S. Bank<sup>53</sup> indicates that “the national truck freight market improved during the second quarter of 2021, as the economy gained momentum emerging from the effects of the pandemic. Shipments increased 4.4 percent during the second quarter, after dropping 8.3 percent in the first quarter. Compared with a year earlier, this metric rose a solid 6.8 percent. While freight shipments outperformed many economic sectors during the pandemic, they still contracted appreciably. Shipments during the second quarter were helped by some industries that are emerging from the impacts of the pandemic, including travel and restaurants.” In part, the improvement over first quarter shipments was also due to the normal seasonal slowing in the first quarter each year and the severe weather experienced across the country in February.

Freight Transportation Research (FTR) suggests that the overall freight environment is strong and will continue to be so as the supply chain catches up with shortages incurred during the pandemic. Figure B-4 illustrates that truck growth is expected to grow year over year into 2022, though at more moderate rates.<sup>54</sup> It should be noted that the trucking industry remains constrained by a shortage of drivers.

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<sup>51</sup>

[https://www.logisticsmgmt.com/podcast/talking\\_trucking\\_with\\_bob\\_costello\\_chief\\_economist\\_for\\_the\\_american\\_truckin/podcast](https://www.logisticsmgmt.com/podcast/talking_trucking_with_bob_costello_chief_economist_for_the_american_truckin/podcast)

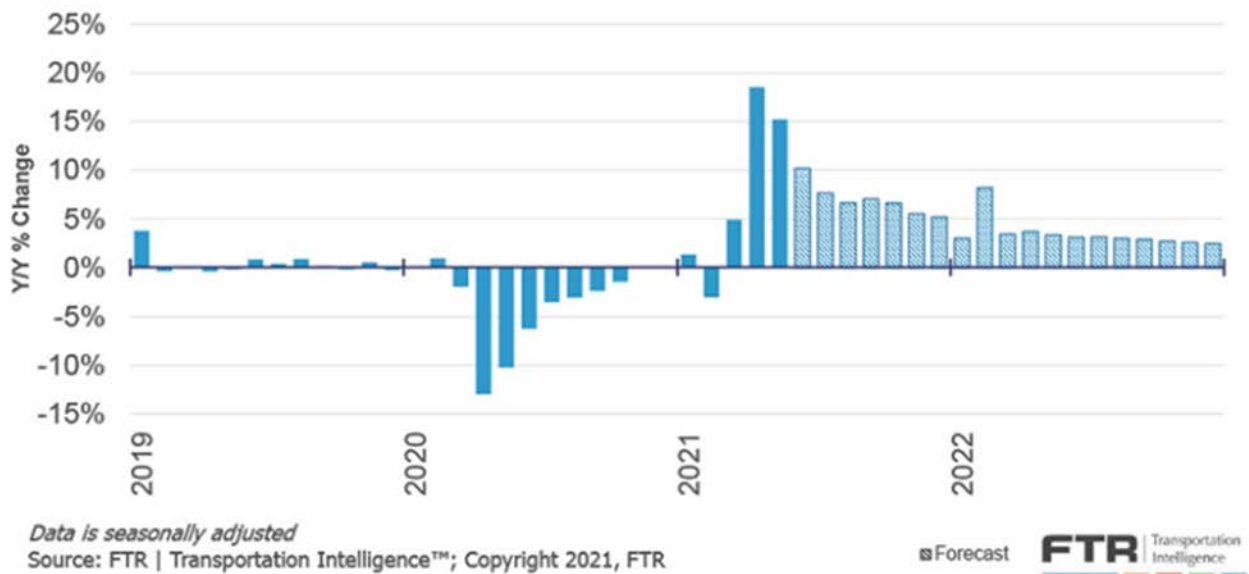
<sup>52</sup> [North American Freight Market Insights | C.H. Robinson \(chrobinson.com\)](#)

<sup>53</sup> U.S. Bank Freight Payment Index, as accessed on July 27, 2021 at [https://freight.usbank.com/download/USB\\_FreightIndex\\_2021\\_Q2\\_Final.pdf](https://freight.usbank.com/download/USB_FreightIndex_2021_Q2_Final.pdf)

<sup>54</sup> [North American Freight Market Insights | C.H. Robinson \(chrobinson.com\)](#)



**Figure B-4: Truck Loadings Outlook**



Stantec has considered this research on truck forecasts in future projections of commercial traffic on the Thruway System.

## B.6 IMPACT ON THRUWAY SYSTEM AND OTHER REGIONAL TOLL FACILITY TRAVEL

Throughout the pandemic, Stantec has been monitoring daily and monthly traffic and revenue data from the Authority. Figure B-5 compares Thruway System monthly trips and toll revenue over the 2019-2021 period. While these declines were most severe during the height of the outbreak, significant improvement has been seen in recent months – traffic in June 2021 was only 2 percent below 2019. Toll revenues in recent months have slightly exceeded 2019, however, considering the January 2021 toll increase, these toll revenues have not reached previously projected levels.

**Figure B-5: Thruway System 2019-2021 Monthly Toll Trips and Revenue Showing COVID-19 Impacts**



\* With the new AETC system, there may now be multiple toll transactions per trip on the Woodbury-Williamsville section of the controlled system. Starting in November 2020 these have been converted to trips for graphing purposes to provide a better comparison to pre-AETC conditions.

Different impacts have been seen on passenger car and commercial vehicle traffic on the Thruway System as well as other regional toll facilities. The following figure shows the monthly change in traffic – when compared to the same month in 2019 – for passenger car and commercial vehicle traffic separately, for both the New York State Thruway Authority and another regional toll facility - the New Jersey Turnpike Authority.

**Figure B-6: Car and Commercial Vehicle Traffic Comparison to 2019 Monthly Data, Thruway System and New Jersey Turnpike Authority**

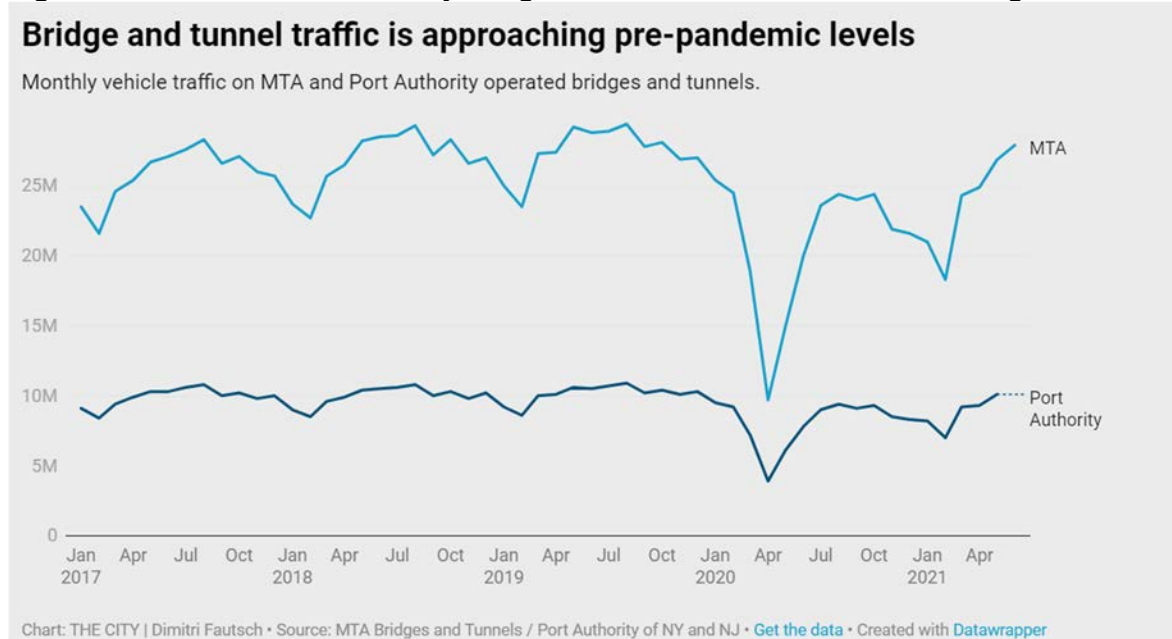


Sources: New York State Thruway Authority; New Jersey Turnpike Toll Revenue and Transaction Comparisons for All Vehicles as accessed from <https://www.njta.com/media/6070/june-2021-turnpike-tr.pdf>

As shown in the figure, COVID-19 impacts were similar on the two turnpike systems, and passenger cars were impacted much more heavily than commercial vehicles. At the height of the pandemic in April 2020, cars were between 60 and 70 percent below April 2019, while truck traffic was down 20 to 30 percent. Car traffic is now close to recovery for both systems, while truck traffic in recent months has been above 2019 levels for both.

Other regional toll authorities have also reported reaching or approaching 2019 traffic levels as of mid-2021. Overall vehicular traffic at the Port Authority's four bridges and two tunnels for the week of June 14-20, 2021 was down only 0.4 percent compared to the pre-COVID June 2019 weekly average.<sup>99</sup> Various media sources have reported that both the Port Authority and MTA Bridges and Tunnels have returned to pre-pandemic levels of toll traffic.

**Figure B-7: MTA and Port Authority Bridge and Tunnel Toll Traffic – 2017 through June 2021**



While regional toll agencies have experienced considerable recovery through June 2021, Stantec anticipates continued COVID-19 impacts to toll traffic and revenue on the Thruway System through the remainder of the forecast period.

<sup>55</sup> <https://njbmagazine.com/njb-news-now/port-authority-bridge-and-tunnel-traffic-approaches-pre-pandemic-volumes/>

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## Funds Description

The Authority's Bond Resolution established the following funds, and the activities of the funds are reported in schedules included in the Authority's financial statements.

**Revenue Fund** –The fund is used to account for all pledged revenues. Pledged Revenue includes, among other things, all tolls, revenues, fees, rents, charges and other income and receipts derived from the operation of the Thruway System.

**Operating Fund**- The fund is used to account for all operating expenses. Operating expenses are for operation, maintenance, repairs, ordinary replacement and ordinary reconstruction of the Thruway System and ordinary acquisition of equipment for the Thruway System.

**Senior Debt Service Fund** - accumulates the amounts required for payment of interest, maturing principal amounts and sinking fund installments on all outstanding.

**Senior Debt Reserve Fund** – Established to retain funds equal to the maximum amount of aggregate debt service for any twelve-month period on all outstanding General Revenue Bonds secured by the Senior Debt Service Reserve Fund for Series J, Series K, Series M, Series N and Series O General Reserve Bonds.

**Reserve Maintenance Fund** – Established to hold funds required to be deposited each year into the Reserve Maintenance Fund. Funds held in the Reserve Maintenance Fund can be disbursed for specific costs relating to the "Facilities," as defined in the bond resolution and certain highway and railroad grade crossings.

**Junior Indebtedness Fund**- Established to hold moneys paid into it from the sale of Junior Indebtedness Obligations (bonds and notes) which are to be used to fund the Facilities Capital Improvement Fund for a portion of the cost of the Authority's New NY Bridge Project as defined in the Junior Indebtedness Bond Resolution and to pay debt service including capitalized interest on the Series 2013A Junior Indebtedness Obligations through December 31, 2017

**Facilities Capital Improvement Fund**- Established to hold funds determined to be necessary or appropriate by the Authority Board to fund project costs of facilities or to set up reserves to fund such costs. The Authority has elected to use this fund to hold certain revenues, debt proceeds, and other monies dedicated to the New NY Bridge.

**Other Authority Projects Operating Fund**- Established pursuant to the General Revenue Bond Resolution, the Authority may, from time to time, disburse or transfer amounts in the Other Authority Projects Operating Fund, free and clear of the lien and pledge created by the Resolution, for the purpose of providing for operating costs of Other Authority Projects, or, upon the determination of the Authority Board, transfer such amounts to the General Reserve Fund. Investment income on amounts in the Other Authority Projects Operating Fund shall be deposited into the Revenue Fund.

**General Reserve Fund** – used to make payments under any agreements with the State of New Jersey or for any other corporate purpose. For budgeting purposes only, the Authority has established a "Supplemental Capital Fund" within the General Reserve Fund that is used to fund short to medium term projects not financed through bond proceeds. The Supplemental Capital Fund is not a legal fund, is not recognized under

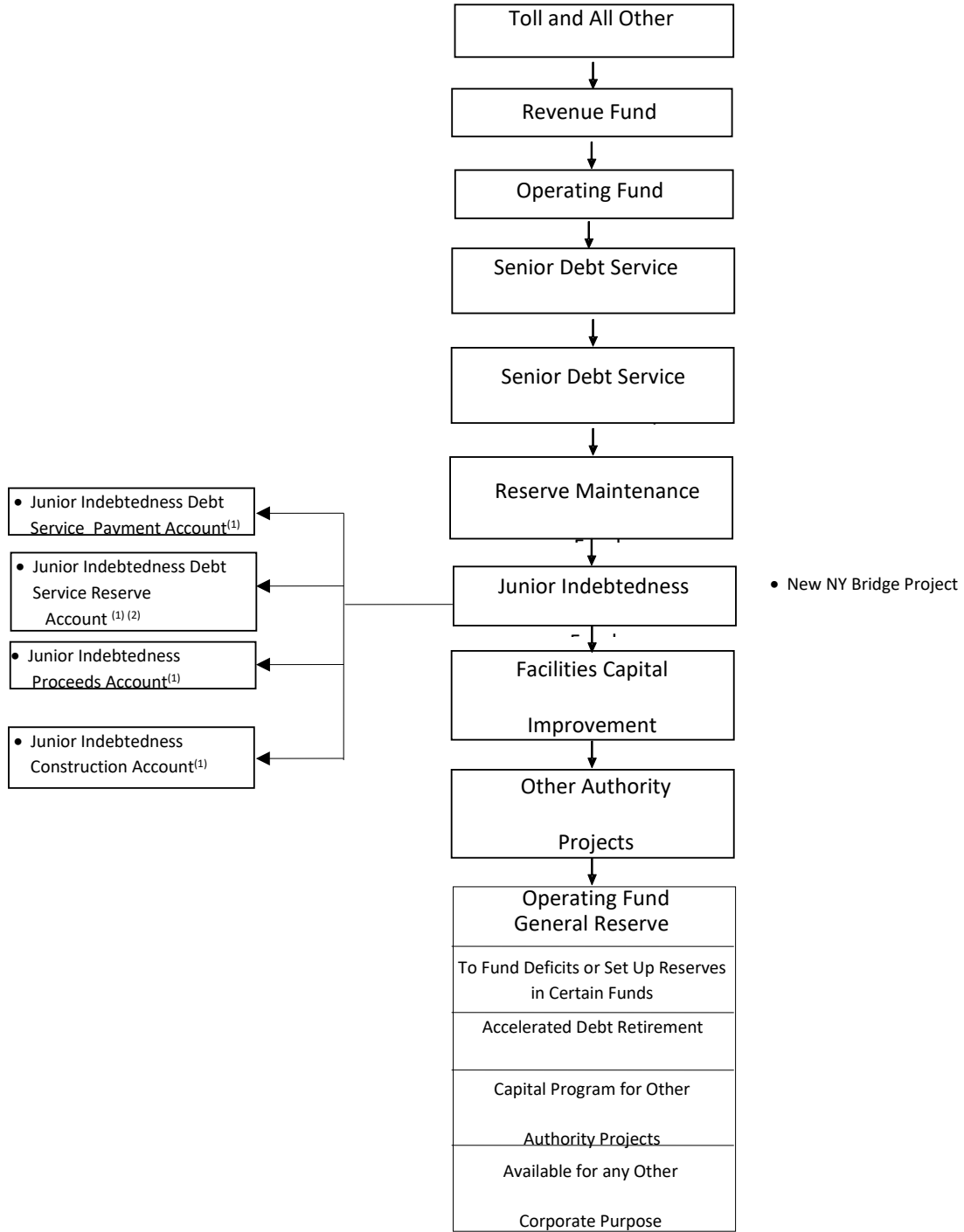
the Bond Resolution, and its activity is reported as General Reserve Fund activity in the Authority's financial statements.

**Rebate Fund-** Moneys on deposit in the Rebate Fund may be applied by the Authority to make payments to the Department of the Treasury of the United States of America at such times and in such amounts as the Authority shall determine to be required by the Code to be rebated to the Department of the Treasury of the United States of America in accordance with the provisions of the Arbitrage and Use of Proceeds Certificate, if any, delivered in connection with each Series of Bonds. Moneys which the Authority determines to be in excess of the amount required to be so rebated shall be deposited to the Revenue Fund.

**Construction Fund-** Established to hold moneys paid into it from the sale of bonds and notes to pay for costs of the "Facilities" and "Other Authority Projects" as defined in the bond resolutions. Any remaining money upon completion or abandonment of such projects shall be transferred to other funds in accordance with the terms outlined in the bond resolutions.

# Flow of Funds Chart

## Senior Resolution and Junior Indebtedness Resolution Flow of Funds



## Net Revenue Requirements

Pursuant to the General Revenue Bond Resolution, the Thruway is empowered at all times, to fix, charge and collect such tolls, fees and charges for the use of the Facilities as are required in order to meet the Net Revenue Requirement for such year. "Net Revenue Requirement" means, with respect to any period of time, an amount equal to the greater of (i) the sum of (A) Aggregate Debt Service, (B) amounts required to make deposits to the Senior Debt Service Reserve Fund, if any, (C) amounts required to make Reserve Maintenance Payments, and (D) amounts required to be deposited in the Junior Indebtedness Fund pursuant to the Supplemental Resolution or other resolution or agreement authorizing outstanding Junior Indebtedness or (ii) 1.20 times the sum of the Aggregate Debt Service for such period; provided, however, that "Aggregate Debt Service" for purposes of calculating the Net Revenue Requirement may be reduced by an amount equal to investment income on the Senior Debt Service Fund and on the Senior Debt Service Reserve Fund to the extent such investment income is required to be retained in or transferred to the Senior Debt Service Fund, as appropriate, pursuant to a Supplemental Resolution, such amount to be calculated at the rate per annum equal to the lesser of (A) the then current yield on five year obligations of the United States Treasury and (B) the actual income to be earned as estimated by an Authorized Officer.

## Basis of Budgeting

Pursuant to the General Revenue Bond Resolution, the Authority shall prepare an Authority Budget on an annual basis, or on such other periodic basis as the Authority Board shall determine, but in no event on a less frequent basis than biennially, which shall include amounts for all anticipated Operating Expenses and reserves therefor, Reserve Maintenance Payments and provision for anticipated deposits into each Fund under this Resolution for the period of such budget. Such Authority Budget may set forth such additional material as the Authority may determine. On or before the first day of each fiscal year or for such applicable period for the Authority Budget as aforesaid, the Authority shall finally adopt the Authority Budget for such period and shall mail such Authority Budget to the Trustee. The Authority may at any time adopt an amended Authority Budget for the remainder of the then current fiscal year or other applicable period. Copies of the Authority Budget and of any amended Authority Budget shall at all times be on file with the Secretary of the Authority, and be available for inspection by the Trustee and by Bondholders. If for any reason the Authority shall not have adopted the Authority Budget before the first day of any fiscal year, the budget for the preceding fiscal year or other applicable period shall be deemed to be in effect for such fiscal year or other applicable period until the Authority Budget for such period is adopted.

## Budgeting Process

Each year the Authority constructs a budget and financial plan that is consistent with its strategic goals. Our strategic plan has long served as the foundation in which staff and the Authority's Board have planned and made decisions on the allocation of important, and often scarce, resources. This plan identifies three principal goals:

- Maintaining high levels of customer service and safety;
- Maintaining infrastructure and deliver the capital program; and
- Enhancing the efficiency and effectiveness of Authority operations.

The Authority pursues an interaction and dynamic budget process that involves input from all levels of the organization. The budget process begins with a bulletin issued by the Chief Financial Officer in February that provides strategic direction and guidelines on how the ensuing year's budget will be constructed. The bulletin is issued to all Department Heads and Division Directors, providing them with timelines, pricing

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assumptions and other guidance that will allow them to begin recommending their budgetary needs for the upcoming year.

Once this information is entered into the Authority's Budget Reporting and Analysis Support System in March or April, discussions begin on these recommended budgets, often involving visits into the field to provide a more hands-on experience to the budget process. These important discussions allow staff to exchange information with employees from all levels of the organization regarding the impacts the budget may have on operational efficiency and effectiveness and the condition of the Authority's extensive infrastructure.

By November, this interactive process results in a balanced, proposed budget for the ensuing year that meets all of the established goals. The proposed budget is then submitted to the public and the Authority Board for their review. Once this review period is completed and all comments have been considered, the budget is updated and presented to the Board for final approval. Upon the Board's approval, the budget becomes official and is placed on the Authority's website ([www.thruway.ny.gov](http://www.thruway.ny.gov)) and distributed to New York State's Authority Budget office, State Legislature and Office of the State Comptroller.

## Budget Assumptions

As the annual budget is being developed, the Authority determines the principal financial and economic assumptions underlying projections for non-toll revenues, concession revenues, interest earnings on Authority investments and other revenues. Toll revenue projections are provided by the Authority's independent traffic consultant (currently Stantec Consulting Services, Inc.) who takes a conservative approach to its projections. Jacobs' toll forecast is based on anticipated toll revenue changes, an analysis of past, current and projected traffic and transaction trends, E-ZPass penetration rates, economic trends and indicators, and experiences of other toll roads and interstate systems.

While revenue assumptions are being defined, the Authority also determines a number of underlying assumptions that impact operational expenses, including:

- Staffing levels, which are strictly controlled under a cost-benefit review process;
- Salary changes and employee benefits based on labor contracts with Unions that represent the employees (Teamsters, CSEA and Management confidential employees);
- Contractual services and equipment purchases needed to maintain the Thruway systems in a state of good repair;
- Estimates of future retirement, health insurance, workers compensation, insurance and other administrative costs;
- Projected fuel and utility market conditions, pricing and usage; and
- Allocations for operational savings achieved from streamlining and other planned initiatives.

## Assessment of Budgetary Risks

There are several budgetary risks associated with developing a budget several months before the beginning of the fiscal year that are determined by variables that could measurably impact revenues and expenses.



On the revenue side, toll collections account for over 90 percent of Thruway revenues, so accuracy of toll revenue projections is critical. The risks associated with toll revenue and concession revenue forecasts are principally focused on traffic and how it is impacted by weather patterns, fuel prices, general economic conditions, changing traveler behaviors, and construction activity along the highway. Other revenues include a very large number of smaller revenue items that collectively make up a very minor portion of Authority revenues. As a result, little budgetary risk is associated with this revenue category.

On the operational side, the risks associated with the operating budget generally include economic changes, such as changes in the cost of fuel and other inputs (such as utilities, steel, cement, and asphalt), inclement weather, and, while rare, legislative mandates that may increase overall costs.

It is important to note that revenues and expenditures are constantly monitored by the Authority and if any material and negative changes from the financial plan are encountered, the Executive Director and Chief Financial Officer will take immediate action to eliminate or reduce discretionary expenditures to maintain a balanced budget and healthy financial condition.

Projecting needs, remedies and costs into a five-year Capital Plan requires estimates of variables including future impacts of traffic, weather, and deterioration rates on a 570 mile, 60 year old highway system. As the Authority's trailblazing progress in asset management continues to increase our ability to better assess these variables, its application to each successive annual budget and five-year plan should significantly reduce the risks of over or under expenditures.

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## Thruway Bond Program

The Authority's authorizing legislation provides for the ability to issue, from time to time, negotiable bonds and notes for any corporate purpose secured by tolls, revenues, and other earned income of the Authority. The Authority has issued General Revenue Bonds and Notes for the purpose of funding a portion of the Authority's Capital Program, and Junior Indebtedness Obligations for the purpose of funding a portion of the New NY Bridge project leading to construction of the Governor Mario M. Cuomo Bridge.

The Authority is currently authorized to issue State Personal Income Tax Revenue Bonds (Transportation) (PIT) to fund expenditures under the Consolidated Local Street and Highway Improvement Program (CHIPs), the Municipal Streets and Highways Program (Marchiselli), the Suburban Highway Improvement Program (SHIPs) and the Multi-Modal Program. These programs provide funds to municipalities and other project sponsors throughout the State for qualifying capital expenditures for highway, bridge, and multi-modal projects. These programs were previously funded by Local Highway and Bridge Service Contract Bonds (CHIPs), for which the Authority is authorized to issue. The Authority has no CHIPs bonds outstanding.

The Authority has also been authorized to issue Highway and Bridge Trust Fund Bonds to reimburse the State for expenditures made or to be made by the State Department of Transportation in conjunction with the State's multi-year highway and bridge capital program.

The Authority has also been authorized to issue State Sales Tax Revenue Bonds for certain Authorized Purposes.

The CHIPs, PIT, Trust Fund and State Sales Tax Revenue Bonds are special limited obligations of the Authority secured by a pledge of certain payments by the State, subject to appropriation by the State Legislature. No Authority revenues or assets are pledged to pay debt service on these bonds.

## Debt Issuance Requirements

In accordance with the Authority's General Revenue Bond Resolution, the amount of bonds to be issued is limited by the following:

- 1) Additional Bonds Test - New Money Purposes: In accordance with Section 204 of the Bond Resolution, in order for the Authority to issue and sell its bonds for new money purposes, the Authority must, among other things, satisfy the following tests:
  - a) the Net Revenues of the Authority (Pledged Revenues minus Operating Expenses) for any period of twelve (12) consecutive calendar months out of the eighteen (18) calendar months next preceding the issuance of such bonds must equal or exceed the Net Revenue Requirement for such twelve (12) month period without regard to the bonds proposed to be issued; and
  - b) the estimated Net Revenues for the first full five (5) calendar years after the financed asset is estimated to be placed in service must equal or exceed the Net Revenue Requirement for each such year and the estimated Net Revenues in the 5<sup>th</sup> such calendar year must equal or exceed the future maximum Aggregate Debt Service in any year after the issuance of the additional bonds.

In addition, all other requirements of the Bond Resolution relating to the issuance of bonds for new money purposes must be satisfied.

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For purposes of the Bond Resolution, the “Net Revenue Requirement” in any year is the greater of:

- i) the sum of the Aggregate Debt Service and Debt Service Reserve payments on all outstanding Authority bonds, the required Maintenance Reserve Payments, and required Junior Indebtedness payments in such year; or
  - ii) 1.20 times the Aggregate Debt Service on all outstanding Authority senior bonds in such year.
- 2) Additional Bonds Test - Refunding: In accordance with Section 205 of the Bond Resolution, in order for the Authority to issue and sell its bonds for refunding purposes, the Authority must, among other things, either:
- a. Demonstrate that the Aggregate Debt Service on all outstanding Authority bonds is not increased in the then current or any future calendar year as a result of the issuance of such refunding bonds, or
  - b. Satisfy both of the tests described in Section 204 of the Bond Resolution, clauses (a) and (b) as shown in the preceding subsection of this policy entitled “Additional Bonds Test – New Money Purposes”.

## Debt Profile

On January 1, 2022, the Thruway has four scheduled Senior General Revenue Bond principal payments totaling \$104,005,000 and two scheduled Junior Indebtedness Obligations principal payments totaling \$1,340,000. After making those principal payments the Thruway will have \$3,552,075,000 par amount of Senior General Revenue Bonds outstanding and \$2,541,075,000 of Junior Indebtedness Obligations. Proceeds generated from the issuance of Senior General Revenue Bonds were and are being used to fund the Thruway’s capital projects relating to construction, rehabilitation and replacement of the roadways, bridges and facilities that make up the Thruway toll system (including the Tappan Zee Bridge through the year 2012). Proceeds generated from the issuance of Junior Indebtedness Obligations have been used solely to fund the New NY Bridge project leading to construction of the Governor Mario M. Cuomo Bridge, a twin-span replacement of the Tappan Zee Bridge.

The outstanding Senior General Revenue Bonds are made up of five series of tax exempt bonds and one series of taxable bonds. All series were issued as serial bonds, and include term bonds for two of the series outstanding. Senior General Revenue Bonds may be issued with maturity dates up to 40 years, and typically contain a 10 year early redemption provision to call certain maturities prior to final maturity for refunding purposes to capture savings. The taxable series of bonds also include a “make whole” redemption provision as well as a 10 year early redemption provision for certain maturities.

The outstanding Junior Indebtedness Obligations are made up of two series of tax exempt bonds, and contain a 10 year early redemption provision to call certain maturities prior to final maturity for refunding purposes to capture savings.

Bond par amount typically differs from proceeds provided for capital expenditures due to the bond issue’s net discount or premium and the funding of issuance costs, capitalized interest (if applicable), debt service reserve account deposits, and, in the case of refunding bond issues, the extent by which the cost of the

cash and investments in the refunding escrow exceeds the principal amount of bonds refunded and defeased. The Authority's current outstanding bonds were issued with a net premium.

The following table lists each outstanding series and its respective final maturity, and the principal scheduled to be outstanding after any principal payments due January 1, 2022. All outstanding bonds were issued as traditional fixed-rate tax-exempt bonds, with principal paid annually on January 1, and interest paid semi-annually on July 1 and January 1, with the exception of the Series M bonds, which were issued as fixed-rate taxable bonds, and the Series 2019B Junior Indebtedness Obligations, in which principal is paid semi-annually on July 1 and January 1 for certain maturities.

The Thruway currently does not have any variable-rate Senior or Junior debt outstanding.

General Revenue Bonds		
Series	Par Amount Outstanding	Longest Outstanding Maturity
Series J	\$ 576,995,000	January 1, 2044
Series K	658,770,000	January 1, 2032
Series L	459,205,000	January 1, 2037
Series M	857,625,000	January 1, 2042
Series N	450,000,000	January 1, 2050
Series O	549,480,000	January 1, 2051
<b>Total</b>	<b>\$ 3,552,075,000</b>	

General Revenue Junior Indebtedness Obligations		
Series	Par Amount Outstanding	Longest Outstanding Maturity
Series 2016A	\$ 849,500,000	January 1, 2056
Series 2019B	1,691,575,000	January 1, 2053
<b>Total</b>	<b>\$ 2,541,075,000</b>	

### **Subordinated Indebtedness**

The COVID-19 pandemic that began in March 2020 dramatically altered the behavior of businesses and people in 2020 and continued to have negative effects on global and local economies through 2021. The adverse impacts throughout the State and the corridor of the New York State Thruway resulted in substantial declines in Thruway passenger traffic in the year 2020.

On March 30, 2020, the Authority's Board adopted a financing resolution (the "Resolution") to authorize the Authority to incur short-term indebtedness to maintain financial flexibility during this period of uncertainty surrounding the COVID-19 pandemic.

The Authority entered into a Revolving Credit Agreement with JP Morgan Chase on June 11, 2020. The Revolving Credit Agreement provides the Authority with a revolving line of credit up to \$125 million, expiring on June 10, 2021. The Authority made a draw of \$50 million against the line on June 11, 2020 leaving an available balance of \$75 million. On August 11, 2021 the Authority paid off the \$50 million balance borrowed, and terminated the credit agreement.

The Authority also entered into a Noteholder’s Agreement with the Royal Bank of Canada (RBC) on October 13, 2020. The Noteholder’s Agreement provides the Authority with the ability to issue Drawdown Notes up to \$100 million, expiring on October 12, 2022. The Authority has not issued any Drawdown Notes to date. Drawdown Notes may be issued on a tax-exempt basis, with variable rate interest calculated based upon a weekly SIFMA index, and a commitment fee on the available balance of 75 basis points.

The following table summarizes the RBC Subordinated Indebtedness Noteholder’s Agreement:

Agreement	Amount	Outstanding	Available	Maturity Date
Royal Bank of Canada – Drawdown Notes	\$100,000,000	\$0	\$100,000,000	October 12, 2022

### **Planned 2022 Debt Issuance**

**Senior Debt Issuance:** The 2022 Budget does not include issuance of General Revenue Bonds in 2022.

**Junior Debt Issuance:** The 2022 Budget includes a planned issuance of \$282.1 million in Junior Indebtedness Obligations in the 2022 Budget.

## MUNICIPAL BOND RATINGS

The Thruway applies for municipal bond ratings from Moody’s Investors Services, Inc. (Moody’s) and Standard & Poor’s Rating Services (S&P). Each rating agency reviews the Thruway’s current fiscal condition, capital financing plan, debt coverage ratios and various other factors to assess the Thruway’s ability to repay its debt obligations. The underlying ratings of the Thruway’s Senior General Revenue Bonds and Junior Indebtedness Bonds are outlined in the following table:

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## General Revenue Bonds and Notes

MOODY'S	S&P
A1 (Stable) uninsured	A (Stable) uninsured
A2 insured (Assured Guaranty Municipal – formerly FSA)	AA insured (Assured Guaranty Municipal – formerly FSA)

## General Revenue Junior Indebtedness Obligations

MOODY'S	S&P
A2 (Stable) uninsured	A- (Stable) uninsured
A2 insured (Assured Guaranty Municipal – formerly FSA)	AA insured (Assured Guaranty Municipal – formerly FSA)