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BOARD MEMBERS



New York State Thruway Authority Board of Directors

Joanne M. Mahoney, Chair, Board of Directors

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 2022

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

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

Ms. Ann Maloney Acting Director NYS Authorities Budget Office P.O. Box 2076 Albany, NY 12220-0076 Honorable Thomas O'Mara Ranking Member NYS Senate Finance Committee Legislative Office Building , Room 711B Albany, NY 12247

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

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, 2023. The overall 2023 Budget represents a total financial commitment of approximately \$1.2 billion. The 2023 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 2022 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. With the strong support of Authority staff and in partnership with Accenture, we have worked to transform and modernize the

way we operate through an undertaking, titled NYS Thruway-Vision Forward. The Thruway conducted a 12-week assessment with more than 600 members of the Thruway providing critical input and feedback into developing organization changes. This ongoing effort will help the Thruway Authority to better align the organizational structure and resource allocation with the realities and customer expectations of the 21st century.

Furthermore, the focus of improving our operations will continue into 2023, reflecting our long-term commitment to keep the Thruway Authority on a sound fiscal footing. The 2023 budget that has been prepared, continues our efforts to provide a balanced financial plan.

The 2023 Budget invests a total of \$412 million to support the capital program of the Thruway Authority. In addition, the 2023 Budget provides a 2023-2027 Capital Program that would provide \$1.9 billion for Thruway Authority capital projects. This includes \$234 million for New NY Bridge project and \$1.7 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,

Matthew J. Driscoll Executive Director



Certification of Assumptions and Method of Estimation for Budget and Financial Plan 2023-2026 in accordance with the Comptroller's Regulation Section 203.9 Certification

Date: December 2022

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 2023 Budget is based on reasonable assumptions and methods of estimation; and the requirements of the OSC regulations have been satisfied.

Matthew A. Howard Chief Financial Officer

THRUWAY ORGANIZATION AND BACKGROUND

The New York State Thruway



Mission

We operate and maintain a reliable, user-fee supported superhighway delivering high levels of safety and service.

Vision Statement- Reason for Being

To operate and maintain an essential transportation corridor that supports and enhances economic activity, by reliably delivering high levels of safety, convenience, and service while modernizing to meet dynamic customer and partner needs in a financially responsible manner.

Guiding Principles- What to focus on to achieve the mission

- <u>Safety</u> Ensure safety and security is at the core of everything we do
- <u>Operational Excellence</u> Deliver reliable, modern, streamlined operations (internal service mindset) and maintain financial self-sufficiency
- <u>Customer Service</u> Meet the needs and continually improve services and the experience for our customers

- <u>Infrastructure Integrity</u> Manage assets to ensure the timely and high-quality implementation of critical projects for the maintenance and improvement of infrastructure
- <u>Continuous Improvement</u> Consistently measure performance and pursue innovative ways of working more effectively and efficiently
- <u>Environmental Stewardship</u> Act in an environmentally sustainable manner in operating and maintaining the Thruway

Operating Principles- How to meet the principles

- <u>Support & Value</u> We treat all employees with respect and dignity understanding they are the foundation of the organization.
- <u>Collaboration</u> We work across departments to drive quality outcomes effectively and efficiently.
- <u>Integrity</u> We act ethically and do the right thing while delivering on our commitments.
- <u>Innovation</u> We pursue bold ideas and leverage 21st Century Technology for new ways of working with and for our customers.
- <u>Diversity & Inclusion</u> We create and sustain an environment in which people from diverse backgrounds and perspectives can grow, develop and succeed.

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>

Expiration of Term

Joanne M. Mahoney	January 1, 2020
Robert L. Megna	January 1, 2017
José Holguín-Veras	December 12, 2018
Stephen M. Saland	January 1, 2023
Heather C. Briccetti	September 14, 2026
(Vacant)	Vacant
(Vacant)	Vacant

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 2021 Thruway customers traveled approximately 7.5 billion vehicle-miles on the highway, averaging more than 20.0 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 2,843 lane miles of roadway. In addition, the Authority has maintenance responsibility for 817 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 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 systems 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 361 million toll transactions occurred on the Thruway in 2021, generating more than \$760 million in toll revenues.

Organization

To administer its responsibilities for the Thruway and other authority projects, the Authority is organized into twelve operating departments and currently supports approximately 1,955 permanent employees.

The departments include: Board and Executive, Center of Excellence, Procurement Services, Revenue Management, 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 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.

As part of an organization-wide effort to develop a strategic direction for the future, the Authority has initiated a project to vastly modernize its operations. In November 2020, the Thruway Authority completed a system-wide conversion to cashless tolling, ending nearly 70 years of cash toll collection. This new model of revenue collection has greatly impacted the Authority and requires a top to bottom review and modernization of operations, business processes, and available technology resources. As part of this modernization, the Authority has engaged Accenture LLP to assess the toll collection function, supporting systems, and processes within all areas of the Authority. This ongoing effort will help the Thruway Authority to better align the organizational structure and resource allocation with the realities and customer expectations of the 21st century.

The Thruway conducted a 12-week assessment with more than 600 members of the Thruway providing critical input and feedback into developing organizational changes. Through the first phase of the Vision Forward project, some key areas were re-organized to better align the goals of the agency and how work is done today. Two new Departments: the Department of Revenue Management – Responsible for tolling and non-tolling revenue collection operations, toll systems quality assurance, as well as exploring new revenue opportunities for the Authority (e.g., Fiber, Electronic Charging) and a Strategic Center of Excellence – Responsible for strategic planning, program management, and continuous improvement were established

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				
Total	570 miles				

Bridges

The Authority has maintenance responsibility for 817 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.

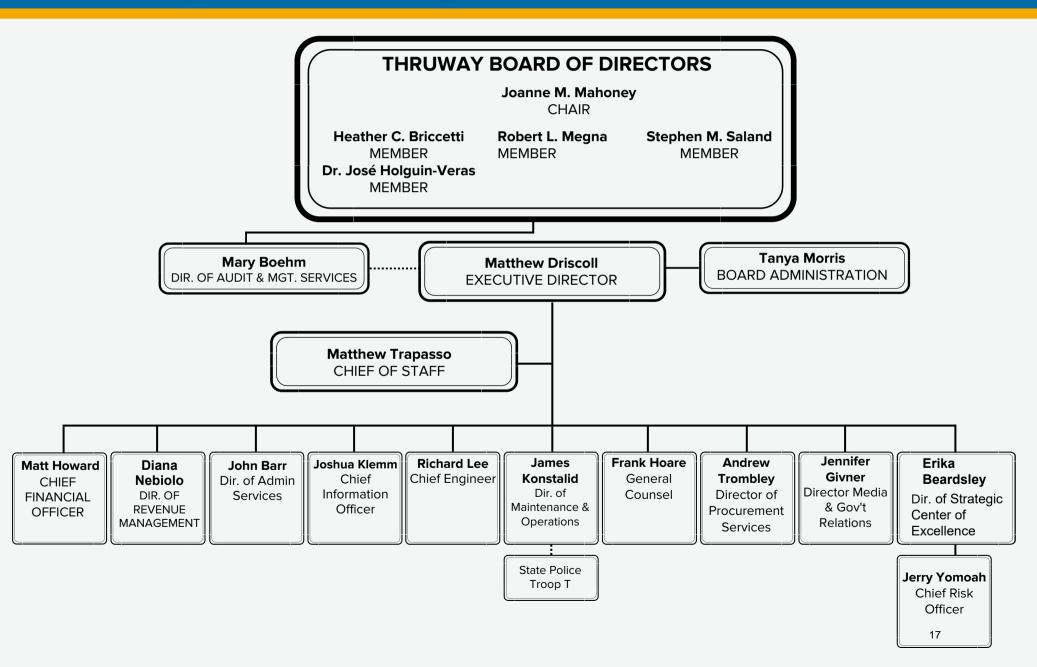
Service Areas are strategically located about every 30 to 40 miles along the Thruway. All gasoline stations at Thruway Service Areas have self-service islands. Upon request, people with disabilities and other travelers who so desire may receive full-service assistance at self-service pumps at self-serve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

NEW YORK STATE THRUWAY AUTHORITY All Department Organization Chart



BUDGET OVERVIEW

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THRUWAY AUTHORITY 2023 BUDGET AT A GLANCE

- **2023 Overall Budget:** The 2023 Overall budget for the Thruway totals \$1.2 billion. This includes \$397.5 million for the operating expenses of the Thruway Authority, \$356 million for debt service, \$68.9 million for reimbursement of costs associated with New York State Police Troop T patrolling the system and \$412.8 million for capital projects across the Thruway system in 2022.
- Traffic and Toll Revenues: The 2023 Budget forecasts total traffic of 366 million transactions, reflecting a reduction of 3 million transactions or 0.9 percent below 2022 levels. This corresponds to a toll revenue forecast of \$800.7 million, reflecting a decrease of \$10 million or 1.2 percent below 2022 levels.
- **2023 Operating Budget:** The 2023 Thruway Authority operating budget totals \$397.5 million (with operating reserves), which is \$17.1 million or 4.5 percent above revised 2022 levels.
- **2023-2027 Capital Program:** The 2023-2027 Capital Program that would provide \$1.9 billion for Thruway Authority capital projects. This includes \$234 million for the remaining costs of the New NY Bridge project and \$1.7 billion for system-wide projects on the Thruway.
- **2023 State Police Troop T Reimbursement:** The 2023 Thruway Authority budget provides \$68.9 million for reimbursement to the State of New York for costs associated with New York State Police Troop T patrolling the system reflecting a \$2.4 million or 3.6 percent above revised 2022 levels.

2022 REVISED BUDGET SUMMARY

The revised 2022 budget forecasts total Thruway revenues of \$898.0 million in 2022. This reflects an increase of \$17.4 million or 2.0% from the original budget that was approved in December 2021. These figures incorporate the toll revenue impacts from better than anticipated commercial traffic, but also adjustments to all other Thruway revenue sources as well (real property, E-ZPass and Tolls by Mail Violations and Fees and various other Sundry Revenues).

Thruway Authority Revenues (in \$ millions)								
	2021	2022	2022	\$	%			
	Actual	Original	Revised	Change	Change			
Tolls	760.27	805.58	810.77	5.19	0.6%			
Concessions	5.74	5.29	5.15	(0.14)	-2.7%			
Interest	0.09	1.00	1.00	-	0.0%			
E-Zpass Violations								
and Fees	12.03	10.00	9.60	(0.40)	-4.0%			
TBM Violations and								
Fees	32.13	50.10	50.80	0.70	1.4%			
Sundry	16.24	8.62	20.69	12.07	140.0%			
Total	826.51	880.59	898.00	17.41	2.0%			

2022 REVISED BUDGET SUMMARY

2022 Revised Budget Summary (in \$ millions)							
	Actual Original Revised \$						
	2021	2022	2022	Change	Change		
Operating Expenses (including Thruway a	ind						
State Police)	410.74	440.23	446.95	6.72	1.5%		
Retained for Working Capital	-	-	-	-	-		
Debt Service	339.55	307.51	305.83	(1.68)	-0.5%		
Capital Program	303.92	397.34	327.77	(69.57)	-17.5%		
Total	1,054.21	1,145.07	1,080.54	(64.53)	-6%		

• The revised 2022 Budget totals \$1.08 billion, reflecting a \$64.5 million or 5.6% reduction from the level approved by the board in December 2021.

• The revised 2022 Budget provides a total of \$380.4 million for operating expenses of the Thruway Authority (including provisions). This represents an increase of \$4.65 million or 1.2 percent above

the originally approved 2022 budget levels. The revised 2022 Budget also provides \$66.53 million for reimbursement to the State Police for the cost of the Troop T patrolling of the system an increase of \$2.06 million or 3.2 percent from the original 2022 budget.

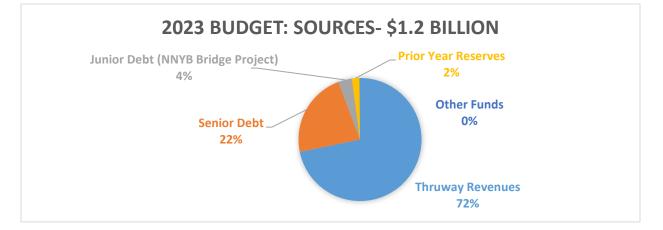
2022 Revised Budget- Revisions						
Operating Budget Revisions						
Description	Budget Revision					
Decrease in Personal Service	(4,809,525)					
Decrease in Personal Services/Benefits allocations based on budgeted capital projects	4,255,149					
Increase related to fiber marketing expense and services related to strategic planning/policy advice	5,875,114					
Increase in fuel costs due to inflationary factors	1,800,000					
Elimination of Federal Aid related to pavement markings will not be received in 2022	1,751,578					
Increase in Bridge Operating Contracts	3,043,768					
Savings due to the ability to capitalize Long-term lease costs	(1,053,105)					
Decrease in Health Insurance estimated cost due to more vacancies	(1,178,000)					
Implementation of automated work zone safety contract	832,638					
Increase in Highway Operating Paving Contracts	601,743					
Increased Snow and Ice Control Costs	550,000					
Increased Electric and Natural Gas Costs	512,400					
Reduced E-Zpass and TBM Administration costs	(8,094,864)					
Auto Supplies- Increased Equipment and Repair Costs	400,000					
Other	169,850					
TOTAL- 2022 Operating Budget Revisions	4,656,746					

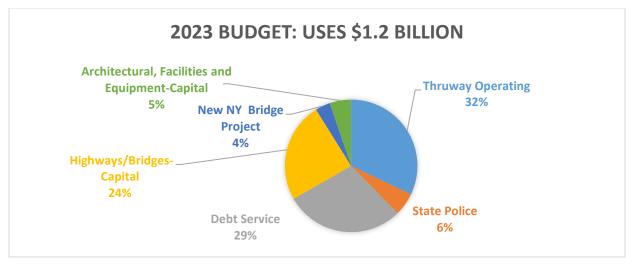
- The revised 2022 Budget provides a total of \$327.7 million to support the capital program of the Thruway Authority. This represents a net decrease of \$69.5 million or 17.5 percent below the originally approved 2022 levels.
- The revised 2022 Budget provides \$20.0 million for the New NY Bridge capital project, a decrease of \$30 million or 60 percent from the original 2022 budget. This decrease is associated with timing differences that resulted from lower actual project spending in the revised 2022 budget.
- The revised 2022 Budget provides \$307.77 million for System-wide Thruway capital project spending, a reduction of \$39.6 million or 11.4 percent from the original 2022 budget. This reduction is comprised of \$34.6 million in Bridge and Highway project bid savings and lower project closeout costs, \$3.6 million in savings in Architectural bid savings and lower project closeout costs and \$1.3 million in decreased ITS contract costs.

2023 THRUWAY AUTHORITY BUDGET

2023 BUDGET SUMMARY

2023 Bu					
	Actual	Revised	Budget	\$	%
	2021	2022	2023	Change	Change
Operating Expenses (including					
Thruway and State Police)	410.74	446.95	466.40	19.46	4.4%
Retained for Working Capital	-	-	-	-	-
Debt Service	339.55	305.83	356.03	50.20	16.4%
Capital Program	303.92	327.77	412.78	85.01	25.9%
Total	1,054.21	1,080.54	1,235.21	154.67	14.3%





- The 2023 Budget provides for total uses of \$1.2 billion, representing a \$154.6 million or 14.3 percent increase from revised 2022 levels.
- The 2023 Budget forecasts total traffic of 366 million transactions, reflecting a reduction of 3 million transactions or 0.9 percent below 2022 levels. This corresponds to a toll revenue forecast of \$800.7 million, reflecting a decrease of \$10.0 million or 1.2 percent below 2022 levels.
- The 2023 Budget provides a total of \$397.5 million for operating expenses of the Thruway Authority (including provisions). This represents an increase of \$17.1 million or 4.5 percent above revised 2022 levels. The 2023 Budget also provides \$68.9 million for reimbursement to the State Police for the cost of the Troop T patrolling of the system.
- The 2023 Budget provides a total of \$412.8 million to support the capital program of the Thruway Authority. This represents an increase of \$85.0 million or 25.9 percent above revised 2022 levels.
- The 2023 Budget provides a 2023-2027 Capital Program that would provide \$1.9 billion for Thruway Authority capital projects. This includes \$234 million for New NY Bridge project and \$1.7 billion for system-wide projects on the Thruway.

Thruway Authority Revenues (in \$ millions)							
	2021	2022	2023	\$	%		
	Actual	Revised	Budget	Change	Change		
Tolls	760.27	810.77	800.74	(10.03)	-1.2%		
Concessions	5.74	5.15	2.75	(2.40)	-46.6%		
Interest	0.09	1.00	2.00	1.00	100.0%		
E-Zpass Violations							
and Fees	12.03	9.60	9.70	0.10	1.0%		
TBM Violations and							
Fees	32.13	50.80	51.40	0.60	1.2%		
Sundry	16.24	20.69	23.02	2.34	11.3%		
Total	826.51	898.00	889.61	(8.40)	-0.9%		

THRUWAY AUTHORITY 2023 REVENUE SUMMARY

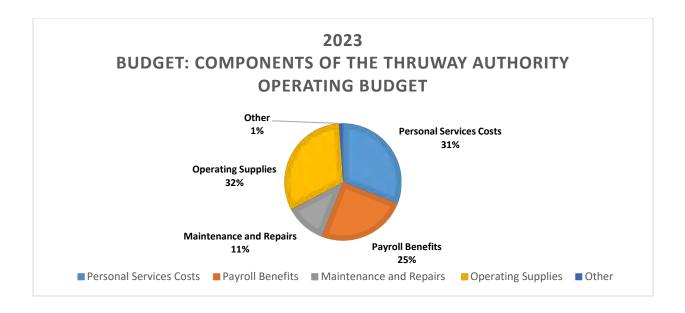
The 2023 Budget forecasts total Thruway Authority revenues of \$889.6 million, a decrease of \$8.4 million or 0.9 percent below revised 2022 levels. This corresponds to a toll revenue forecast of \$800.7 million reflecting a decrease of \$10.0 million or 1.2 percent below revised 2022 levels; concessions revenues of \$2.75 million, E-ZPass and Tolls By Mail Violations and fees of \$61.1 million; sundry revenues of \$23.0 million; and, interest income of \$2 million.

2023 Thruway Authority Operating Budget Summary (in \$ millions)							
	Actual	Revised Budget	2023				
	2021	2022	Budget	\$ Change	% Change		
Departmental							
Operating Expenses	239.45	276.60	296.69	20.09	7.3%		
General Charges	100.32	102.82	99.81	(3.02)	-2.9%		
Operating Reserves (Environmental and							
Legal)	6.50	1.00	1.00	-	0.0%		
Total	346.27	380.42	397.49	17.07	4%		

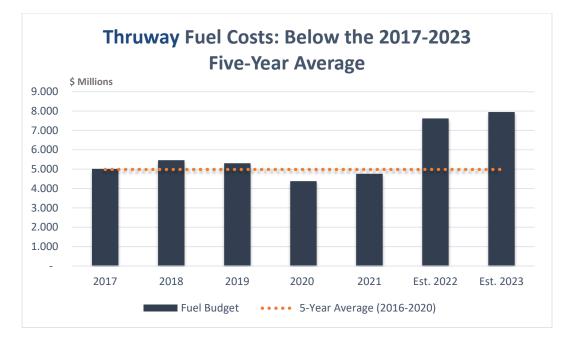
2023 Thruway Authority Operating Budget Summary

 The 2023 Budget provides a total of \$397.5 million (with provisions for legal claims and environmental remediation) to support the operating expenses of the Thruway Authority. This represents an increase of \$17.1 million or 4.5 percent above revised 2022 levels. This includes \$296.7 million for departmental operations (a \$20.1 million or 7.3 percent increase from revised 2022 levels), \$99.8 million for general charges, a decrease of \$3.02 million or 2.9 percent from revised 2022 levels, and \$1 million for operating reserves which reflects no change from the provisions made in the revised 2022 budget.

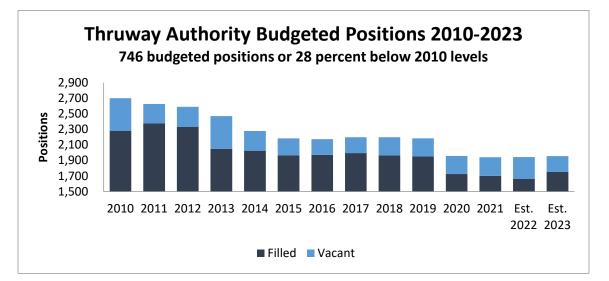
Thruway Authority 2023 Operating Budget Major Components of Annual Change	:
	Amount (\$ millions)
Revised 2022 Operating Budget (excluding State Police)	380.42
Operating Supplies (TBM and EZP Administration) Payroll Benefits (HI, Pensions, Unemployment and Social Security) Personal Services Studies and equipment projects not capitalized Maintenance and Repairs (snow and ice, fuel, bridge & highway) Allocations to Other Funds Provisions for Environmental Remediation and Legal Claims	5.47 4.66 8.37 (0.67) 0.98 (1.74)
2023 Operating Budget (excluding State Police)	397.49
Year to Year Change	17.07
% Change	4.5%

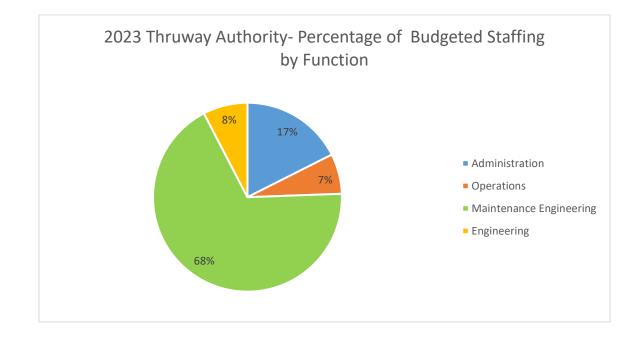


- <u>Major components</u> of the \$17.1 million annual change in the Thruway Authority Operating Budget include the following:
 - An increase in Personal Services costs of \$8.37 million or 6.4 percent from 2022 levels. This reflects additional costs associated with hiring activity, salary increments, step advances and longevity payments.
 - An increase of \$4.66 million for employee benefits or 4.5 percent above 2022 levels. This includes an increase of \$4 million for health insurance costs; a \$264,000 increase in Social Security expenses; a \$400,000 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.
 - A net increase of \$5.4 million in operating supplies. This includes an increase of \$5.9 million or 7.7 percent associated with E-ZPass and Tolls by Mail administrative costs. This increase is offset by roughly \$500,000 in projected lower utility expenses.
 - A \$983,655 or 2.2 percent increase in maintenance and repair costs. Maintenance and repair expenses include \$7.96 million to support fuel expenses which are budgeted at a level significantly higher than the five-year average (the graph below includes the combined Thruway and State Police fuel expenses included in the 2023 Budget).



- The 2023 Budget also includes \$2.96 million for non-capitalized project/equipment costs, reflecting a reduction of \$674,605 from revised 2022 levels.
- Savings of \$1.73 million resulting from increased allocations to capital and other funds based on the level of work included in the 2023 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 no change from the levels provided in the revised 2022 budget.
- The 2023 budget provides for 1,955 budgeted positions. This level is roughly 746 positions or 28 percent lower than the budgeted positions in 2010.





2023 CAPITAL PROGRAM

2023 Budget Capital Program Funding Uses (in \$ millions)							
2021 2022 2022 2023 \$							
	Actual	Original	Revised	Budget	Change	Change	
Highway & Bridge	120.63	270.59	236.01	302.69	66.68	28.3%	
Architectural (Facilities)	4.92	13.52	9.88	13.88	4.00	40.5%	
Equipment & Systems and ITS	157.46	63.21	61.86	51.02	(10.83)	-17.5%	
NYSP Equipment and Facilities	0.11	0.03	0.03	0.19	0.16	530.1%	
Sub Total - Thruway	283.12	347.34	307.77	367.78	60.01	19.5%	
New NY Bridge Project	20.80	50.00	20.00	45.00	25.00	125.0%	
TOTAL	303.92	397.34	327.77	412.78	85.01	25.9%	

- The 2023 Budget provides a total of \$412.8 million to support the capital program of the Thruway Authority. This represents an increase of \$85.01 million or 25.9 percent above Revised 2022 levels.
- The 2023 Budget provides a total of \$367.8 million to support the system-wide capital projects. This represents an increase of \$60.0 million or 19.5 percent above Revised 2022 levels.
- The 2023 Budget incorporates \$45.0 million in capital program funding for the NNYB project in 2023, an increase of \$25.0 million or 125 percent above Revised 2022 levels.

• The 2023 Budget provides a 2023-2027 Capital Program that would provide \$1.9 billion for Thruway Authority capital projects. This includes \$234 million for New NY Bridge project and \$1.7 billion for system-wide projects on the Thruway.

2023 DEBT SERVICE

2023 Budget Debt Service Expenses (in \$ millions)							
2021 2022 2023 \$ 9							
	Actual	Revised	Budget	Change	Change		
Senior Debt Service	241.30	242.28	248.55	6.27	2.6%		
Junior Debt Service	46.70	62.97	107.48	44.51	70.7%		
Subordinate Debt - Line of Credit	51.55	0.58	-	(0.58)	-100.0%		
TOTAL	339.55	305.83	356.03	50.20	16.4%		

• The 2023 Budget provides a total of \$356.03 million to support debt service expenses of the Thruway Authority. This represents an increase of \$50.2 million or 16.4 percent above the revised 2022 levels.

2022 REVISED FINANCIAL PLAN

Actual 2021 vs. Revised 2022 Budget

	Actual	Revised	Amount of
	2021	2022	Change
SOURCES:			
Thruway Revenues	850,711,722	928,003,000	77,291,278
Prior Year Reserve Balances	4,663,754	12,500,000	7,836,246
Senior Debt	190,197,443	139,031,992	(51,165,451)
Junior Debt	6,559,169	0	(6,559,169)
Federal Funds Other Funds	0	0	(1.067.016)
Thruway Stabilization Program Funds	2,076,474 0	1,008,558 0	(1,067,916) 0
- Total Sources	1,054,208,562	1,080,543,550	26,334,988
	1,034,208,302	1,000,343,330	20,334,388
Total Sources - New NY Bridge Project	21,162,846	20,446,291	(716,555)
Total Sources - Net of New NY Bridge Project	1,033,045,716	1,060,097,259	27,051,543
USES:			
Operating Expenses:			
Thruway Operating	339,771,788	379,419,948	39,648,160
State Police Operating	64,467,636	66,526,101	2,058,465
Sub Total	404,239,424	445,946,049	41,706,625
Provisions for Claims, Env Remediation & Cashless Tolling			
Transition	6,500,000	1,000,000	(5,500,000)
Total	410,739,424	446,946,049	36,206,625
Retained for Working Capital	0	0	0
Debt Service:			
Senior Debt	241,304,093	242,276,442	972,349
Junior Debt	46,696,975	62,968,499	16,271,524
Subordinate Debt - Line of Credit	51,549,653	583,333	(50,966,320)
Total	339,550,721	305,828,274	(33,722,447)
Capital Program:			
Thruway Capital - Highways and Bridges	120,633,894	236,006,067	115,372,173
Thruway Capital - New NY Bridge	20,795,802	20,000,000	(795,802)
Thruway Capital - Architectural & Facilities	4,918,256	9,877,962	4,959,706
Thruway Capital - Equipment & Systems/ITS Thruway Capital - SP Equipment/Facilities	157,463,606 106,859	61,855,198 30,000	(95,608,408) (76,859)
Total	303,918,417	327,769,227	23,850,810
	1,054,208,562	1,080,543,550	26,334,988
Total Uses - New NY Bridge Project	21,162,846	20,446,291	(716,555)
Total Uses - Net of New NY Bridge Project	1,033,045,716	1,060,097,259	27,051,543

2022 Revised Financial Plan New York State Thruway Authority (in millions)

2022 Budget - Revenues	
Revised Financial Plan Adjustments:	\$880.6
Toll Revenue	5.2 Increase in passenger and commercial toll revenue due to increased traffic.
Concession Revenue	(0.1) Decreased restaurant revenues
Interest Earnings	0.0 No change
E-Zpass/Tolls By Maill Violations & Fees	0.3 Increase due to increased traffic
Sundry Revenues	12.0 Increase in fiber network fees and real property sales
2022 Revised Budget - Revenues	898.0
2022 Budget - Thruway Operating Expenses	374.8
Revised Financial Plan Adjustments:	
Professional Services	Increase related to fiber marketing expense and services related to strategic 5.9 planning/policy advice
Allocations (Salaries and Benefits)	4.3 Decrease in personal service and fringe benefit allocations due to fewer capital and technology projects
Personal Services	(4.8) Decrease related to salary savings from vacant positions
Fuel	1.8 Increase due to rise in fuel prices
Hiighway and Bridge	3.7 Increase in on-demand bridge repairs and highway repairs
Rentals	Long-term lease costs are now capitalizable due to accounting change related to (1.1) leases
Fed Aid Reimbursement	1.8 Fed aid related to pavement markings will not be received in 2021
Snow and Ice Control	0.6 Increase based on usage
Natural Gas and Electric	0.5 Increase in rates
Special Contracts	0.8 Increase related to implementation of automated work zone safety contract
Health Insurance	(1.2) Based on actual premiums and enrollment
E-ZPass and Tolls By Mail Administration	(8.1) Mainly lower tolls by mail adminstration fees than originally estimated
Miscellaneous	0.4 Miscellaneous adjustments to various accounts
2022 Revised Thruway Operating Budget	379.4

2022 Revised Financial Plan New York State Thruway Authority (in millions)		
2022 Budget - Capital Program	397.3	
Revised Financial Plan Adjustments:		
New NY Bridge Project	(30.0)	
Thruway Capital	(39.5)	
2022 Revised Budget - Capital Program	327.8	
2022 Budget - Capital Program Explanations	397.3	
Revised Financial Plan Adjustments:		
New NY Bridge Project		
Timing Differences	(30.0) 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 (34.6) shifts in project schedules and timing differences.	
Architectural	Bid savings and projects closed out lower than contract value, as well as (3.6) shifts in project schedules and timing differences.	
Equipment and Systems/ITS	Decrease in ITS contrracts as a result of bid savings and projects closed out lower than contract value, as well as shifts in project schedules and timing (1.3) differences.	

2022 Revised Capital Program Budget

327.8

2022 Revised Budget - Consolidated Budget Schedule

Use of Funds	5			S	ource of Funds			
Category	Amount	2022 Thruway Revenues	Prior Year Reserve Balances	Senior Debt	Junior Debt	Federal Funds	Other Funds	Total
Thruway and Canal								
Thruway Operating	379,419,948	379,419,948	0	0	0	0	0	379,419,948
Provision for Claims	500,000	500,000	0	0	0	0	0	500,000
Provision for Environ. Rem.	500,000	500,000	0	0	0	0	0	500,000
Senior Debt Service	242,276,442	242,276,442	0	0	0	0	0	242,276,442
Junior Debt Service	62,968,499	62,968,499	0	0	0	0	0	62,968,499
Capital Program	327,769,227	175,228,677	12,500,000	139,031,992	0	0	1,008,558	327,769,227
Highways/Bridges	236,006,067	96,943,611	0	139,031,992	0	0	30,464	236,006,067
Architectural (Facilities)	9,877,962	8,899,868	0	0	0	0	978,094	9,877,962
Equipment & Systems/ITS	61,855,198	61,855,198	0	0	0	0	0	61,855,198
State Police Equipment/Facilities	30,000	30,000	0	0	0	0	0	30,000
New NY Bridge	20,000,000	7,500,000	12,500,000	0	0	0	0	20,000,000
State Police - Troop T	66,526,101	66,526,101	0	0	0	0	0	66,526,101
Subordinate Debt - Line of Credit	583,333	583,333	0	0	0	0	0	583,333
Grand Total	1,080,543,550	928,003,000	12,500,000	139,031,992	0	0	1,008,558	1,080,543,550



Revised 2022 Budget vs. 2023 Budget				
	2022 Revised	2023 Budget	Change from Revised	
SOURCES:				
Thruway Revenues	928,003,000	889,607,000	(38,396,000)	
Prior Year Reserve Balances	12,500,000	25,000,000	12,500,000	
Senior Debt	139,031,992	274,311,913	135,279,921	
Junior Debt	0	45,000,000	45,000,000	
Federal Funds	0	0	0	
Other Funds	1,008,558	1,291,667	283,109	
Thruway Stabilization Program Funds	0	0	0	
Total Sources	1,080,543,550	1,235,210,580	154,667,030	
Total Sources - New NY Bridge Project	20,446,291	45,129,950	24,683,659	
Total Sources - Net of New NY Bridge Project	1,060,097,259	1,190,080,630	129,983,371	
USES:				
Operating Expenses:				
Thruway Operating	379,419,948	396,494,578	17,074,630	
State Police Operating	66,526,101	68,906,934	2,380,833	
Sub Total	445,946,049	465,401,512	19,455,463	
Provisions for Claims, Env. Remediation & Cashless Tolling Transition	1,000,000	1,000,000	0	
Total	446,946,049	466,401,512	19,455,463	
Retained for Working Capital	0	0	0	
Debt Service:				
Senior Debt	242,276,442	248,550,073	6,273,631	
Junior Debt	62,968,499	107,479,850	44,511,351	
Subordinate Debt - Line of Credit	583,333	0	(583,333)	
JIAN Interest	0	0	0	
Total	305,828,274	356,029,923	50,201,649	
Capital Program:				
Thruway Capital - Highways and Bridges	236,006,067	302,689,125	66,683,058	
Thruway Capital - New NY Bridge	20,000,000	45,000,000	25,000,000	
Thruway Capital - Architectural & Facilities	9,877,962	13,878,816	4,000,854	
Thruway Capital - Equipment & Systems/ITS	61,855,198	51,022,166	(10,833,032)	
Thruway Capital - SP Equipment/Facilities	30,000	189,038	159,038	
Total	327,769,227	412,779,145	85,009,918	
Total Uses	1,080,543,550	1,235,210,580	154,667,030	
Total Uses - New NY Bridge Project	20,446,291	45,129,950	24,683,659	
Total Uses - Net of New NY Bridge Project	1,060,097,259	1,190,080,630	129,983,371	

Toll, Concession & Sundry Revenues

	2021	2022	2023	Change
	Actual	Revised	Budget	from Revised
Toll Revenue				
Passenger	404,456,145	435,141,000	436,111,000	970,000
Commercial	355,813,024	375,629,000	364,626,000	(11,003,000)
Sub Total	760,269,169	810,770,000	800,737,000	(10,033,000)
Concession Revenue				
Gas Stations	2,832,154	2,200,000	2,200,000	-
Restaurants	2,904,667	2,948,000	550,000	(2,398,000)
Sub Total	5,736,821	5,148,000	2,750,000	(2,398,000)
Interest Revenue				
Interest	92,888	1,000,000	2,000,000	1,000,000
Sub Total	92,888	1,000,000	2,000,000	1,000,000
E-ZPass Violations and Fees				
E-ZPass Violations	1,903,344	600,000	700,000	100,000
E-ZPass Airport Fees	248,905	300,000	300,000	-
E-ZPass Admin Fees	2,664,079	2,000,000	2,000,000	-
Tag Lease Fees	7,213,372	6,700,000	6,700,000	-
Sub Total	12,029,700	9,600,000	9,700,000	100,000
Tolls By Mail Fees				
AET Violations and Fees	32,134,647	50,800,000	51,400,000	600,000
Sub Total	32,134,647	50,800,000	51,400,000	600,000
Sundry Revenue				
Special Hauling Permits	2,459,533	2,200,000	2,200,000	-
Permits & Other				
Rental Income	2,929,460	3,000,000	3,000,000	-
Logo Signs	125,071	120,000	120,000	-
Scrap Material Sales	468,431	200,000	200,000	-
Unpaid Tolls	121,179	-	-	-
Emerg.Service Permits	114,585	100,000	100,000	-
Canadian Exch.	(3,859)		F (00,000	-
Real Property Fiber Network Food	- 2002 210	6,065,000 8,600,000	5,600,000	(465,000)
Fiber Network Fees Miscellaneous Revenue	7,922,310 2,105,796	8,600,000 400,000	11,400,000 400,000	2,800,000
Total Permits & Other	13,782,973	18,485,000	20,820,000	2,335,000
Sub Total	16,242,506	20,685,000	23,020,000	2,335,000
Grand Total	826,505,731	898,003,000	889,607,000	(8,396,000)

Departmental Operating Expenses

	2021	2022	2023	Change
	Actual	Revised	Budget	from Revised
	Actual	Revised	Dudget	
Operating Expenses				
Board & Executive	820,731	817,249	1,233,944	416,695
Procurement Services	2,321,323	2,221,744	2,480,002	258,258
Media and Government Relations	528,610	560,626	550,585	(10,041)
Strategic Center of Excellence	0	99,732	863,515	763,783
Legal	2,256,796	2,463,948	2,541,492	77,544
Audit and Management Services	756,786	1,023,580	801,596	(221,984)
Administrative Services	4,802,972	5,218,944	5,935,516	716,572
Information Technology	14,423,062	24,835,326	30,743,527	5,908,201
Engineering	6,447,566	6,380,335	7,023,132	642,797
Maintenance and Operations			· · ·	
Thruway Maintenance	86,789,675	101,323,774	101,399,317	75,543
Equipment & Inventory Management	29,705,239	33,946,906	37,052,451	3,105,545
Traffic Services	9,595,466	11,645,287	13,435,087	1,789,800
Finance and Accounts	6,181,193	6,293,347	6,803,961	510,614
Revenue Management	74,818,366	79,765,305	85,821,613	6,056,308
Sub Total	239,447,785	276,596,103	296,685,738	20,089,635
General Charges	100,324,003	102,823,845	99,808,840	(3,015,005
Sub Total	339,771,788	379,419,948	396,494,578	17,074,630
Operating Reserves				
Reserve for Claims & Indemnities	0	500,000	500,000	0
Reserve for Environmental Remediation	6,500,000	500,000	500,000	0
Sub Total	6,500,000	1,000,000	1,000,000	0
Total Thruway	346,271,788	380,419,948	397,494,578	17,074,630
Other Authority Projects				
State Police				
Operations	63,911,124	64,846,101	66,848,814	2,002,713
Equipment	556,512	1,680,000	2,058,120	378,120
Sub Total	64,467,636	66,526,101	68,906,934	-
500 10(a)	04,407,030	00,520,101	08,906,934	2,380,833
Total Other Authority Projects	64,467,636	66,526,101	68,906,934	2,380,833
Total Thruway and OAP	410,739,424	446,946,049	466,401,512	19,455,463

General Charges					
		2022			
	2021	Revised	2023	Change	
	Actual	Budget	Budget	from Revised	
			200.800		
Payroll Benefits					
, Health Insurance	57,874,286	60,797,000	64,803,000	4,006,00	
Pension Contributions	22,497,560	18,040,000	18,000,000	(40,00	
Social Security Contributions	9,423,742	10,441,000	10,705,000	264,00	
Employee Benefits Fund	5,410,419	5,700,000	6,100,000	400,00	
Workers' Compensation Insurance	7,160,145	7,200,000	7,200,000		
Unemployment Insurance	(1,437,058)	270,000	300,000	30,00	
Survivor's Benefits	159,000	100,000	100,000		
Metropolitan Commuter Transportation Mobility Tax	92,418	95,000	97,000	2,00	
Anticipated Salary Savings	0		(6,543,032)	(6,543,03	
Sub Total	101,180,512	102,643,000	100,761,968	(1,881,03	
Other					
Insurance Premiums and Surety Bonds	3,903,606	4,500,000	4,778,500	278,5	
Professional Services	733,720	4,145,514	1,151,368	(2,994,1	
Rentals	1,040,495	70,000	70,000		
Special Events	34,631	175,000	25,000	(150,0	
Environmental Expense	470,958	450,000	450,000		
Reimbursement to Civil Service	466,911	485,000	485,000		
Provision for Doubtful Accounts	960,000	0	0		
Employee Vacation Leave Expense	64,600	100,000	100,000		
Tuition Assistance Program	82,144	70,000	70,000		
Cash Discount Earned	(96,907)	(100,000)	(100,000)		
Employee Safety Equipment	153,788	150,000	150,000		
Inventory Obsolescence Expense	942,298	200,000	200,000		
All Others	16,248	33,500	33,500		
Sub Total	8,772,492	10,279,014	7,413,368	(2,865,6	
llocations					
Allocations to Other Funds	(9,629,001)	(10,098,169)	(8,366,496)	1,731,6	
quipment and Projects Not Capitalized					
Transportation Studies	0	0	0		
Total General Charges	100,324,003	102,823,845	99,808,840	(3,015,00	

Debt Service					
			2022		
	Year of	2021	Revised	2023	
	Issuance	Actual	Budget	Budget	
			- U	Ŭ	
Debt Service					
Senior Debt					
Series I Bonds	2012	29,380,837	0	0	
Series J Bonds	2014	44,752,929	44,741,700	69,144,700	
Series K Bonds	2014	61,870,317	61,876,138	61,878,938	
Series L (Refunding)	2018	58,411,787	79,147,063	54,737,113	
Series M (Refunding)	2019	26,266,236	26,266,236	44,186,236	
Series N Bonds	2020	18,585,000	18,585,000	18,585,000	
Series O Bonds	2021	2,184,486	13,817,306	4,332,536	
Subtotal Proposed Senior Debt Service		241,451,592	244,433,443	252,864,523	
Less: Interest Earnings	_	147,499	2,157,001	4,314,450	
Net Senior Debt Service - Twy Bonds	_	241,304,093	242,276,442	248,550,073	
Interest Earnings					
Junior Debt					
Series 2013A Bonds	2013	0	0	0	
Series 2016A Bonds	2016	41,192,250	41,182,250	41,172,250	
Series 2019B Bonds	2019	5,541,300	22,408,249	67,551,600	
Subtotal Junior Debt	-	46,733,550	63,590,499	108,723,850	
Less: Interest Earnings		36,575	622,000	1,244,000	
Net Junior Debt Service	-	46,696,975	62,968,499	107,479,850	
Subordinated Indebtedness					
Interest - LoC		620,486	0	0	
Commitment Fee		168,750	0	0	
Principal	-	50,000,000	0	0	
	-	50,789,236	0	0	
Interest - Drawdown Notes		0	0	0	
Commitment Fee		760,417	583,333	0	
Principal	-	0	0	0	
		760,417	583,333	0	

Flow of Funds General Revenue Bond Resolution

	2021	2022	2023	Change
	Actual	Revised	Budget	from Revised
Revenues				
Tolls	760,269,169	810,770,000	800,737,000	(10,033,000)
Concessions	5,736,821	5,148,000	2,750,000	(2,398,000)
Interest	92,888	1,000,000	2,000,000	1,000,000
E-ZPass Violations and Fees	12,029,700	9,600,000	9,700,000	100,000
Tolls By Mail Fees	32,134,647	50,800,000	51,400,000	600,000
Sundry	16,242,506	20,685,000	23,020,000	2,335,000
Sub Total	826,505,731	898,003,000	889,607,000	(8,396,000)
Operating Expenses				
Departmental Operating Expenses	239,447,785	276,596,103	296,685,738	20,089,635
Undistributed Charges	100,324,003	102,823,845	99,808,840	(3,015,005)
Reserve for Claims & Indemnities	0	500,000	500,000	(0,000,000)
Reserve for Environmental Remediation	6,500,000	500,000	500,000	0
Reserve for Cashless Tolling Transition	0	0	0	0
Sub Total	346,271,788	380,419,948	397,494,578	17,074,630
Net Revenues (A)	480,233,943	517,583,052	492,112,422	(25,470,630)
Senior Debt Service (B)				
Senior Debt	241,304,093	242,276,442	248,550,073	6,273,631
Adjust to Cash basis/Retain for Working Capital	24,205,991	30,000,000	0	(30,000,000)
Net Revenue After Debt Service				
and Retentions	263,135,841	305,306,610	243,562,349	(61,744,261)
Reserve Maintenance Provisions				
Equipment and Facilities	45,395,243	71,733,160	39,900,982	(31,832,178)
Highway and Bridge	54,919,475	95,965,517	27,085,545	(68,879,972)
Sub Total	100,314,718	167,698,677	66,986,527	(100,712,150)
			00,000,027	(100)/12/100/
Junior Debt Service (C)				
Junior Debt	46,696,975	62,968,499	107,479,850	44,511,351
Facilities Capital Improvement Provision				
New NY Bridge Project	0	7,500,000	0	(7,500,000)
General Reserve Fund				
State Police	64 E74 405	66,556,101	60.005.073	2 520 074
Other	64,574,495 51,549,653	583,333	69,095,972 0	2,539,871 (583,333)
Sub Total	116,124,148	67,139,434	69,095,972	1,956,538
Balance	0	0	0	0
Senior Debt Service Coverage Ratio (A/B)	1.99	2.14	1.98	
Senior & Junior Debt Service Coverage	4.67	47	1.20	
Ratio (A/(B+C))	1.67	1.7	1.38	

Capital Program Funding Uses				
	2021 Actual	2022 Revised	2023 Budget	
		Neviseu	Buuget	
Thruway				
Highway & Bridge				
Contracts	111,697,697	214,210,459	275,412,315	
Thruway Forces & Materials	8,936,197	21,795,608	27,276,810	
Sub Total	120,633,894	236,006,067	302,689,125	
Architectural (Facilities)				
Facilities	4,918,256	9,877,962	13,878,816	
Sub Total	4,918,256	9,877,962	13,878,816	
Equipment & Systems and ITS				
Equipment & Systems	20,708,505	46,082,312	47,524,225	
Intelligent Transportation Systems	136,755,101	15,772,886	3,497,941	
Sub Total	157,463,606	61,855,198	51,022,166	
State Police Equipment/Facilities				
Equipment & Systems	106,859	30,000	189,038	
Sub Total	106,859	30,000	189,038	
Sub Total - Thruway	283,122,615	307,769,227	367,779,145	
New NY Bridge Project				
<u>New NY Bridge</u>				
Contracts	18,119,931	19,275,455	44,638,000	
Thruway Forces & Materials	2,675,871	724,545	362,000	
Sub Total - New NY Bridge	20,795,802	20,000,000	45,000,000	
GRAND TOTAL	303,918,417	327,769,227	412,779,145	

Capital Program Funding Sources				
	2021 Actual	2022 Revised	2023 Budget	
Thruway				
Federal Funds				
Highway & Bridge	0	0	0	
Sub Total	0	0	0	
Note/Bond Proceeds				
Senior Debt - Thruway and Canal	190,197,443	139,031,992	274,311,913	
Sub Total	190,197,443	139,031,992	274,311,913	
Prior Years Balances/Thruway Revenues				
Reserve Maintenance Fund: Highway & Bridge	0	0	0	
Reserve Maintenance Fund: Equipment	(9,572,879)	0	25,000,000	
General Reserve Fund	106,859	30,000	189,038	
Thruway Revenues	100,314,718	167,698,677	66,986,527	
Sub Total	90,848,698	167,728,677	92,175,565	
Other Funds				
State & Miscellaneous - TWY & Canal	1,132,624	1,008,558	1,291,667	
Equipment Auction Proceeds	943,850	0	0	
Thruway Stabilization Program Funds	0	0	0	
Sub Total	2,076,474	1,008,558	1,291,667	
Sub Total - Thruway and Canal	283,122,615	307,769,227	367,779,145	
New NY Bridge Project				
Federal Funds				
Loan and Grant Proceeds	\$0	\$0	\$0	
Note/Bond Proceeds				
Junior Debt	6,559,169	0	45,000,000	
Sub Total	6,559,169	0	45,000,000	
Prior Years Balances/Thruway Revenues				
Thruway Revenues	14,236,633	20,000,000	0	
Sub Total	14,236,633	20,000,000	0	
Other Funds				
Thruway Stabilization Program Funds		0	0	
Sub Total - New NY Bridge	20,795,802	20,000,000	45,000,000	
GRAND TOTAL	303,918,417	327,769,227	412,779,145	

Actual 2021, Revised 2022 Budget vs. 2023 Budget New NY Bridge

	2021	2022	2023
	Actual	Revised	Budget
SOURCES:			
Thruway Revenues	367,044	7,946,291	129,950
Prior Year Reserve Balances	14,236,633	12,500,000	0
Junior Debt	6,559,169	0	45,000,000
Federal Funds	0	0	0
Thruway Stabilization Program Funds	0	0	0
Total Sources	21,162,846	20,446,291	45,129,950
<u>USES:</u>			
Operating Expenses:			
Thruway Operating	367,044	446,291	129,950
Thruway Capital - Equipment & Systems/ITS:			
Equipment	0	0	0
Thruway Capital - New NY Bridge:			
Thruway Forces & Materials	2,675,871	724,545	362,000
Contracts	18,119,931	19,275,455	44,638,000
Community Benefits Fund	0	0	0
Sub Total	20,795,802	20,000,000	45,000,000
Total Uses	21,162,846	20,446,291	45,129,950

2023 Budget - Sources and Uses of Funds

Use of Fund	ls	Source of Funds						
Category	Amount	2023 Thruway Revenues	Prior Year Reserve Balances	Senior Debt	Junior Debt	Federal Funds	Other Funds	Total
Thruway and Canal								
Thruway Operating	396,494,578	396,494,578	0	0	0	0	0	396,494,578
Provision for Claims	500,000	500,000	0	0	0	0	0	500,000
Provision for Environ. Rem.	500,000	500,000	0	0	0	0	0	500,000
Senior Debt Service	248,550,073	248,550,073	0	0	0	0	0	248,550,073
Junior Debt Service	107,479,850	107,479,850	0	0	0	0	0	107,479,850
Capital Program	412,779,145	67,175,565	25,000,000	274,311,913	45,000,000	0	1,291,667	412,779,145
Highways/Bridges	302,689,125	27,085,545	0	274,311,913	0	0	1,291,667	302,689,125
Architectural (Facilities)	13,878,816	13,878,816	0	0	0	0	0	13,878,816
Equipment & Systems/ITS	51,022,166	26,022,166	25,000,000	0	0	0	0	51,022,166
State Police Equipment/Facilities	189,038	189,038	0	0	0	0	0	189,038
New NY Bridge	45,000,000	0	0	0	45,000,000	0	0	45,000,000
State Police- Troop T	68,906,934	68,906,934	0	0	0	0	0	68,906,934
Grand Total	1,235,210,580	889,607,000	25,000,000	274,311,913	45,000,000	0	1,291,667	1,235,210,580

2023 Operating Budget Summary by Account

Acct Description	2021 Actual	2022 Revised Budget	2023 Budget	Diff between 2022 Revised & 2023 Budget
SALARIES REGULAR	115,607,540	119,476,056	134,423,661	14,947,605
SALARIES TEMPORARY	1,841,566	1,398,950	1,609,592	210,642
SALARIES REIMBURSED FEDERAL	(90,671)	0	0	0
SHIFT DIFFERENTIAL SALARY SAVINGS	548,593 0	457,344 0	593,008 (6,543,032)	135,664 (6,543,032)
SALARY REDISTRIBUTED	(127,299)	(126,000)	(132,300)	(6,300)
OT PAY REGULAR	7,239,441	7,211,125	6,761,589	(449,536)
OT PAY TEMPORARY	42,782	34,122	35,897	1,775
TOLL INCENTIVE PAYMENTS SALARIES REIMBURSED NONFEDERAL	0 (249,749)	0 (76,524)	0 (76,524)	0
EXCESS/BONUS SICK & VAC	2,206,243	2,098,002	2,169,030	71,028
CHECK OUT PAYMENT	31,782	32,000	32,400	400
Total Personal Services	127,050,227	130,505,075	138,873,321	8,368,246
ALLOC TO RESERVE MTCE - EQPT	(3,563,152)	(3,545,829)	(6,609,689)	(3,063,860)
ALLOC TO FAC CAP IMPR FUND	(1,459,260)	(700,851)	(362,000)	338,851
ALLOC TO SP	(575,401)	(615,352)	(580,266)	35,086
	(5,839,404)	(7,106,362)	(7,882,000)	(775,638)
BENE/M&O ALLOC RES MTCE SIGN SHOP LABOR	(2,913,665) (137,720)	(2,217,994) (90,000)	(2,453,473) (90,000)	(235,479) 0
BENEFITS REDISTRIBUTED	(101,928)	(131,095)	(70,195)	60,900
BENEFITS REIMBURSED FEDERAL	(69,384)	0	0	0
BENEFITS REIMBURSED-NON FEDERA	(38,276)	(61,058)	0	61,058
BEN ALLOC TO SP	(467,565)	(557,832)	(424,038)	133,794
BEN ALLOC TO TWY CAPITAL PROJ BEN ALLOC TO FAC CAP IMPR FUND	(4,765,656) (1,190,613)	(6,784,328) (344,362)	(4,886,787) (532,003)	1,897,541 (187,641)
Total Allocations	(21,122,024)	(22,155,063)	(23,890,451)	(1,735,388)
FIBER - CORE SERVICES	2,738,240	2,916,624	3,882,466	965,842
AUTO - GAS, OIL	3,790,323	6,016,000	6,351,805	335,805
AUTO - SUPPLIES AUTO - INSURANCE	5,427,656 0	5,940,345 0	6,540,345 0	600,000 0
AUTO - GENERAL EXP	299,207	390,000	427,207	37,207
REPAIRS DUE TO ACCIDENTS - CONTRACTS	2,031,341	0	0	0
R&D PARTS NON INVENTORY	0	0	5,000	5,000
REPAIRS DUE TO ACCIDENTS MFG SIGNS - NON INVENTORY	1,528,549 111,316	1,691,620 120,000	791,620 110,000	(900,000) (10,000)
SNOW & ICE CONTROL	9,787,464	11,049,990	11,000,000	(49,990)
THRUWAY ROADWAY	1,829,863	1,796,681	1,850,000	53,319
SIGNS - INVENTORY	269,731	284,643	246,000	(38,643)
BRIDGES BRIDGE CONTRACTS OPERATING	295,901 5,253,946	383,731	683,731	300,000
HIGHWAY CONTRACTS OPERATING	2,045,933	12,039,712 2,368,024	10,729,984 3,375,000	(1,309,728) 1,006,976
BUILDINGS - CONTRACTS	147,447	0	-,,	0
BUILDINGS	2,061,325	2,224,546	2,270,000	45,454
BLDG ADMIN HQ	34	600	1,200	600
REIMB FROM NYPA TOLL AND ITS EQPT THRUWAYWIDE	(86,000) 310,096	(1,500) 727,500	0 137,000	1,500 (590,500)
AETC EQUIPMENT	310,0 9 0 0	727,300	548,000	548,000
SCRAP & OBSOLETE	0		0	0
PARTS REPAIRED FOR RET	0		0	0
RETURNABLE CONTAINER REIMB OF MTCE EXP	13,578 (24,254)	28,800	18,800	(10,000) 0
PERISHABLE TOOLS	(24,254) 561,257	(50,000) 707,126	(50,000) 749,447	42,321
MISC MTCE SUPPLIES	493,589	342,684	393,176	50,492
REIMB BY CLAIM	(6,034,092)	(4,830,000)	(4,930,000)	(100,000)
Total Mtce & Repairs	32,852,449	44,147,126	45,130,781	983,655
COMPUTER SUPPLIES	33,633	136,750	148,298	11,548
MTCE & REPAIR TO EQPT	2,865,165	3,427,630	4,037,901	610,271
STATIONARY FORMS	119,185	146,052	147,415	1,363
POSTAGE	98,025	115,250	124,000	8,750
NATURAL GAS	583,406	885,000	689,500	(195,500)

2023 Operating Budget Summary by Account

				Diff between
A set Description	2021 Actual	2022 Revised	2023 Budget	2022 Revised &
Acct Description		Budget	Budget	2023 Budget
ELEPHONE IEATING FUEL	1,461,764 33,314	1,665,800 43,000	1,709,480 35,000	43,680 (8,000
VATER	235,765	259,551	207,551	(52,000
ROPANE	113,939	115,350	65,350	(50,000
LECTRIC	3,316,418	3,566,801	3,295,536	(271,265
DVERTISING	506	1,100	2,700	1,600
RINTING & DUPLICATING	0	42,000	42,000	0
RINTING OUTSIDE	771	1,518	1,018	(500
IRST AID & PERSON SAFETY SUPP	223,746	260,412	259,912	(500
ANITORIAL SUPPLIES	331,046	352,854	341,334	(11,520
MPLOYEE SAFETY EQPT	153,670	150,500	151,000	500
DUES, BOOKS, SUBSCRIPTIONS	1,181,409	2,063,610	1,089,898	(973,712
	82,144	70,000	70,000	0
	72,637	243,698	375,331	131,633
IEDICAL SERVICES IVERTIME MEAL EXPENSE	76,216 180,504	332,200 193,485	226,200 191,190	(106,000 (2,295
COTHES CLEANING	202,921	200,000	203,120	3,120
LOTHING SUPPLIES	647,912	621,218	630,883	9,665
NGINEERING SUPPLIES	1,603	4,333	5,843	1,510
RAFFIC CONTROL SAFETY SUPP	352,447	266,213	290,713	24,500
ENTALS	1,545,759	584,600	677,607	93,007
PECIAL EVENTS	34,631	175,000	25,000	(150,000
NSURANCE PREM & SURETY BONDS	3,903,606	4,500,000	4,778,500	278,500
HOTO SUPPLIES	0	375	375	C
ROMOTION EXPENSE	11,954	27,700	15,200	(12,500
Z-PASS ADMINISTRATION	42,137,864	42,018,263	45,614,520	3,596,257
ROFESSIONAL SERVICES	1,279,835	13,028,799	13,229,153	200,354
MPLOYEE DEVELOPMENT	1,936	38,300	67,700	29,400
REIGHT PARCEL POST	70,502	76,764	76,764	C
REDIT CARD FEES	14,659	30,000	30,000	0
PECIAL CONTRACTS	5,294,766	8,126,325	9,829,404	1,703,079
DEMURRAGE	28,673	21,800	21,800	0
	0	0	0	0
	(96,907)	(100,000)	(100,000)	C
	470,958 40,749	450,000 45,000	450,000 80,000	0 35,000
ERVICE CHARGE EXP PROVISION FOR DOUBTFUL A/R	960,000	45,000	0	000
OLLS BY MAIL ADMINISTRATION	30,836,783	35,553,000	37,951,821	2,398,821
MPLOYEE CLAIM EXP	0	1,000	1,000	2,550,021
ONCESSION UTILITY	1,215	20,000	20,000	C
TANDARD PURCHASE PRICE	0	(2,000)	(2,000)	0
URCHASE VARIANCE	1,159	(4,000)	(4,000)	0
IVENTORY VARIANCE	8,045	2,000	2,000	C
NVENTORY ITEMS REPAIRED	652	(39,000)	(39,000)	0
TORES CLEARING ACCT	8	200	200	C
ROJECTS FROM SAVINGS	0	(24,325)	(83,934)	(59,609
ROMPT PAYMENT INTEREST EXP	1,589	2,500	2,500	0
1&O REIMB FED AID	(1,358,615)	(148,422)	(2,100,000)	(1,951,578
RAVEL EXP REGULAR	71,100	136,421	169,315	32,894
RAVEL EXP CARS	831	637	887	250
EIMB VOLUNTEER FIRE CO	100,046	95,000	105,000	10,000
EIMB TO NYS LAW DEPARTMENT		0	0	0
EIMBURSEMENT TO CIVIL SERVICE	466,911	485,000	485,000	(
IDUCIARY FEES	74,665	74,250	164,250	90,000
ROV RES FOR INVENTORY OBSOL	942,298	200,000	200,000	0
Total Operating Supplies	99,213,818	120,539,512	126,010,235	5,470,723
ENSIONS NYS EMPLOYEES	22,462,000	18,000,000	18,000,000	C
ENSIONS VDCP EMPLOYEES	35,560	40,000	0	(40,000
MPLOYEE BENEFIT FUND	5,410,419	5,700,000	6,100,000	400,000
OCIAL SECURITY	9,423,742	10,441,000	10,705,000	264,000
VORKERS COMPENSATION	7,160,145	7,200,000	7,200,000	0
NEMPLOYMENT INSURANCE	(1,437,058)	270,000	300,000	30,000
	24,155,800	21,897,000	23,303,000	1,406,000
EALTH INSURANCE RETIREES	33,718,486	38,900,000	41,500,000	2,600,000

2023 O	perating	; Budget Summar	y by Acco	unt
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Acct Description	2021 Actual	2022 Revised Budget	2023 Budget	Diff between 2022 Revised & 2023 Budget
SURVIVORS BENEFITS	159,000	100,000	100,000	0
ΜΤΑ ΤΑΧ	92,418	95,000	97,000	2,000
EE VACATION LEAVE	64,600	100,000	100,000	0
Total Payroll Benefits	101,245,114	102,743,000	107,405,000	4,662,000
FACILITIES IMPROV EXP	71,929	1,519,832	906,660	(613,172)
REPL OF OFFICE EQPT	30,828	71,608	136,882	65,274
REPL OF COMPUTER EQPT	70,927	401,374	460,650	59,276
REPL OF HWY & MARINE EQPT	83,520	87,862	123,356	35,494
TOLL & ITS SYS IMPROV	00,010	0/,002	0	0
TECHNOLOGY PROJECTS	110,149	186,500	100,000	(86,500)
SHOP EQPT REPL	23,301	20,332	24,899	4,567
HWY & BRIDGE EXP	182	781,743	180,000	(601,743)
STUDIES	(78)	0	0	(,,,,,,,,,,,,
COMMUNICATION EQPT REPL	73,884	254,900	663,213	408,313
EQUIPMENT ADDITIONAL	0	0	0	0
COMPUTER HARDWARE NEW	7,179	91,539	75,749	(15,790)
COMPUTER SOFTWARE NEW	35,727	136,807	253,905	117,098
MOTORIZED EQPT NEW	0	0	0	0
SHOP EQPT NEW	1,790	26,500	19,138	(7,362)
NON LABOR REIMB NON FED PROJ REL	4,082	0	0	0
OFFICE EQPT NEW	18,784	61,301	21,241	(40,060)
Total Eqpt & Proj not capitalized	532,204	3,640,298	2,965,693	(674,605)
PROVISION FOR ENV REMEDIATION	6,500,000	500,000	500,000	0
CLAIMS & INDEMNITY EXPENSE		500,000	500,000	0
PROVISION FOR CASHLESS TOLLING TRANSITION				0
ROUNDING				0
GRAND TOTAL	346,271,788	380,419,948	397,494,578	17,074,630
Total Operating Budget by Assault	246 274 700	220 410 040	207 404 570	47 074 620
Total Operating Budget by Account	346,271,788	380,419,948	397,494,578	17,074,630

2023 Budgeted Full-Time Employees						
	Ne					
			Change		Net	
			2021-		Change	
Dopartmont	2021	2022	2022	ากาว	2022-2023	
Department	2021	2022	2022	2025	2022-2025	
Board & Executive	48	16	(32)	16	-	
Procurement Services		32	32	32	-	
Media and Government Relations	4	4	-	4	-	
Strategic Center of Excellence		6	6	9	3	
Legal	24	24	-	24	-	
Audit and Management Services	7	7	-	7	-	
Administrative Services	72	67	(5)	69	2	
Information Technology	87	87	-	90	3	
Engineering	155	149	(6)	150	1	
Maintenance and Operations	1,437	1,440	3	1,440	-	
Thruway Maintenance	1,016	1,017	1	1,020	3	
Equipment & Inventory Management	310	311	1	308	(3)	
Traffic Services	111	112	1	112	-	
Finance and Accounts	98	85	(13)	85	-	
Revenue Management	21	29	8	29	-	
Total	1,953	1,946	(7)	1,955	9	

	Budgeted Positions										
	Mainline	I-84 (1)	Canal (2)	Total	Change	Change Since 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)					
2023	1,955	0	0	1,955	9	(1,918)					

(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

2023 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.

Department Organization



Department Budget Summary

BOARD & EXECUTIVE DEPARTMENT BUDGET							
				Å 01	%		
Account Description	2021 Actual	2022 Revised	2023 Budget	\$ Change	Change		
Personal Services	815,805	800,749	1,212,666	411,917	51.4%		
Allocations	-	-	-	-	0.0%		
Maintenance & Repair	-	-	-	-	0.0%		
Operating & Supplies	4,768	14,500	21,278	6,778	46.7%		
Equipment/Projects not Capitalized	158	2,000	-	(2,000)	-		
				;			
Department Total	820,731	817,249	1,233,944	416,695	51.0%		

The 2023 Budget request is \$1.2 million, an increase of \$416,695 or 51.0 percent above the 2022 Revised Budget amount. Total wages and salaries are \$1.2 million and this includes 16 positions, including 7 unsalaried Board members.

Department Budget Highlights

- In 2023, as part of the Vision Forward Initiative, under the direction and support of the Executive Office, the Authority reorganized several departments including moving the Office of Procurement Services from beneath Board and Executive into its own department with the Compliance Unit, Purchasing Management and Capital and Contracts Management. The Information Technology Department, and the Communications and Media Relations Department were also adjusted to have a direct reporting line to the Executive Director.
- The Vision Forward Project also created two new departments, the Center of Excellence and the Department of Revenue Management, with direct reporting lines to the Executive Director.
- Personal Services increased by \$750,510, or 83.4 percent, and reflects projected wages based on current salary actions. Also contributing to this increase is the change in vacancies compared to the anticipated decrease in 2023 vacancies because of the Vision Forward initiative.
- Operating & Supplies increased by \$6,778, or 46.7 percent, mainly due to Travel and Telephone.

2022 Accomplishments

- The Executive Office oversaw, in collaboration with the Authority's consultant partner, the massive task of conducting a top to bottom review of the Authority's business processes with a focus on toll collection and technology. The initiative, called Vision Forward, has begun to transform the Authority in significant and transformative ways.
- Communications have increased across the organization. Several department Heads have written messages to all staff and there are more opportunities for staff to share ideas and feedback. The <u>Intercom newsletter</u> with printed editions are being distributed in maintenance section garages across the system so all staff have better awareness of their colleagues work systemwide.
- The Authority has drafted <u>new Mission and Vision statements along with Guiding and</u> <u>Operating Principles</u>. The mission, vision, guiding and operating principles now appear in conference rooms, screen savers, phone screens and throughout the Thruway to reenforce who we are and that we are all working toward common goals.
- The IT steering committee has been reinvigorated to guide the tools being used and where the investments need to be made. A new "Bring Your Own Device" has been adopted to provide a choice to employees. Hardware and software resources have been reviewed to ensure access for all employees so hardware and software will be acquired and deployed more efficiently.
- A new Capital Planning Process has been adopted to define clear roles and responsibilities, along with revised policies which create a collaborative and

standardized project pipeline process to improve the delivery of our Capital Program. All of this will create a more robust capital program investing in our infrastructure and providing more certainty for staff to plan based on this road map.

- 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. The first three rebuilt locations, Indian Castle, Junius Ponds, and Chittenango are now open and providing customers with the improved travel experience at these locations along the Thruway.

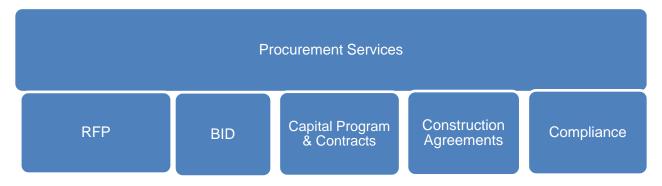
- Continue the process of redeveloping and modernizing the Authority's 27 service areas through public-private partnerships. More locations will be opening throughout 2023, bringing more services and improved amenities to all Thruway customers.
- The Executive Office will continue supporting and guiding the work of Vision Forward. Many initiatives are underway with more longer-term initiatives to be started. In addition, the Thruway will look beyond the Headquarters staff and begin a similar top to bottom review with each of the Divisions to clearly understand how work gets done in each. Continuing the work of Vision Forward and bringing this to the Divisions, we will ensure a true holistic review is conducted. So much of the Thruway's work happens in the Divisions, with the bulk of the workforce located in the Divisions, it is critical for the overall strength and longevity of the Thruway, and the success of the programmatic changes we have implemented in Headquarters, that this effort be extended to the Divisions.

Procurement Services

Department Description

Procurement Services 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 (insuring goods and services are procured at the right time at the right price); and Capital and Contracts Management, (executing and amending construction contracts and engineering agreements), all to support Authority operations and capital investments into the system.

Department Organization



Department Budget Summary

PROCUREMENT SERVICES DEPARTMENT BUDGET							
					%		
Account Description	2021 Actual	2022 Revised	2023 Budget	\$ Change	Change		
Personal Services	2,147,161	2,109,758	2,339,627	229,869	10.9%		
Allocations	-	-	-	-	0.0%		
Maintenance & Repair	-	-	-	-	0.0%		
Operating & Supplies	173,972	108,986	138,375	29,389	27.0%		
Equipment/Projects not Capitalized	190	3,000	2,000	(1,000)	-		
Department Total	2,321,323	2,221,744	2,480,002	258,258	11.6%		

The 2023 Budget request is \$2.5 million, an increase of \$258,258 or 11.6 percent above the fiscal year 2022 Revised Budget amount. Total wages and salaries are \$2.3 million and includes 32 positions.

Department Budget Highlights

- In 2022, as part of the Vision Forward Initiative, the Authority reorganized several departments including moving the Office of Procurement Services and its 32 positions from beneath Board and Executive into its own department with the Compliance Unit, Purchasing Management and Capital and Contracts Management.
- Personal Services increased by \$229,869, or 10.9 percent.
- Operating & Supplies increased by \$29,389, or 27.4 percent, mainly due to Professional Services for auctions.

2022 Accomplishments

- As part of the Vision Forward Initiative, Procurement Services staff led outreach to each Division and Headquarters personnel to improve communication and improve understanding of the various guidelines and rules governing the procurement process
- Implementation of B2g Now software was completed in the Compliance Unit, modernizing reporting on Authority Projects and improving the way contractors interact and report to the Authority
- The Construction Contracts Unit began Livestreaming Bid Openings, providing real time information to Authority staff and bidders, increasing transparency and providing better customer service
- Instituted changes to procurement timelines to ensure priority projects are commenced for just in time delivery
- Created and implemented the small dollar Procurement Unit to better assist customers and increase discretionary spending opportunities to reduce the time to delivery
- Supported the development of the revised Capital Program Playbook to clarify and document the various roles and responsibilities of all stakeholders.

- Modernize and streamline the Authority's Procurement Policies and Procedures
- Implement enhanced Discretionary Spending opportunities to further improve the time to delivery and support the MWBE program
- Streamline the Procurement Process to shorten timeframes from request to delivery
- Implement the Capital Program Playbook and support the delivery of the 2023-2027 Capital program

Office of Media and Government Relations

Department Description

The Media and Government Relations Department offers streamlined intra and inter-agency communications. The office works closely to deliver effective strategic messaging to statewide and municipal elected officials, government entities 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 and execute 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 marketing materials related to E-ZPass, cashless tolling and recruitment including videos and graphics

Government Relations - Roles and Responsibilities

- Coordinate communications with elected officials at the executive, state and local levels
- Work closely with Thruway staff and counsel and develop strategies to support a legislative agenda
- Work with local elected officials and representatives to respond to constituent concerns
- Monitor legislative sessions and committee meetings to identify potential impacts on the Thruway Authority
- Analyze and disseminate legislative proposals for internal awareness
- Plan/coordinate public information/listening sessions for Thruway projects

Department Organization



Department Budget Summary

MEDIA & GOVERNMENT RELATIONS DEPARTMENT BUDGET							
					%		
Account Description	2021 Actual	2022 Revised	2023 Budget	\$ Change	Change		
Personal Services	514,219	525,000	520,260	(4,740)	-0.9%		
Allocations	-	-	-	-	-		
Maintenance & Repair	-	-	-	-	-		
Operating & Supplies	14,391	26,975	27,825	850	3.2%		
Equipment/Projects not Capitalized	-	8,651	2,500	(6,151)	-		
Department Total	528,610	560,626	550,585	(10,041)	-1.8%		

The 2023 Budget request is \$0.6 million, a decrease of \$10,041 or 1.8 percent below the fiscal year 2022 Revised Budget amount. Total wages and salaries are \$520,260 and includes 4 positions.

Department Budget Highlights

• Personal Services decreased by \$4,740, or .9 percent.

2022 Accomplishments

• Successfully issued dozens of press releases and advisories to the media and public to generate positive news coverage

- Launched multimedia marketing campaign targeting drivers in Erie and Monroe counties which account for more than a quarter of all Tolls By Mail bills. The campaign created more than 14.8 million impressions over all mediums including billboards, radio ads, social media, and Google. During the 8-week campaign, more than 6,700 new E-ZPass accounts were opened in Erie and Monroe Counties accounting for 20 percent of all new E-ZPass accounts during that time. The campaign also contributed to more than 1,800 new downloads of the Tolls NY app.
- Effectively communicated with more than 59,000 social media followers on Facebook, Twitter and Instagram
- Successfully managed approximately 400 public inquiries a month
- Updated content and refreshed sections of the Thruway's website to keep the site easy to navigate and relevant for Thruway customers
- Effectively worked with numerous statewide and municipal officials to address their constituent's questions regarding the Thruway System
- Increased transparency on the Thruway's website by expanding content and information available to the public
- Launched dedicated webpage for the Thruway's Service Area Project to rebuild or provide major renovations to all 27 service areas.
- Designed social media marketing materials for recruitment, cashless tolling and E-ZPass billing tips and suggestions
- Designed the State Fair booth and creative materials
- Responded to more than 200 legislative inquires regarding issues such as cashless tolling, road conditions, real property, and Authority policies
- Reviewed more than 800 legislative proposals
- Supported engineering with public information sessions on bridge replacement projects -Warners Road, Beaver Island, Ransom Road
- Led the community engagement effort for the Last Mile (I-95) project
- Collaborated with the engineering department to plan a public information strategy, including project webpage for the North Ave. bridge replacement project in the City of New Rochelle

- Continue to adjust tailor messaging on the Thruway's website and social media accounts to improve the customer experience using our cashless tolling system
- Continue to strategically communicate an effective and uniform message to all media outlets as needed
- Execute the Authority's public outreach strategy for certain capital projects
- Continue to support the outreach and communication with executive, statewide and municipal elected officials and staff
- Continue to monitor, analyze and disseminate legislation that may impact the Authority

Strategic Center of Excellence

Department Description

The Strategic Center of Excellence will lead the development of the long-term strategic plan in conjunction with the capital plan and in coordination with the various departments and divisions of the Thruway Authority. The Strategic Center of Excellence will manage special projects including completion of short-term, medium-term, and long-term initiatives. Coordinate change management activities – communication, training, readiness – for key projects and initiatives with the appropriate stakeholders and change management teams. In addition, the Strategic Center of Excellence will monitor performance indicators to measure impact of initiatives, identify new initiatives, and proactively detect potential risks and issues.

Department Organization

	Center of Excellence	
Continuous Improvement Unit	Strategic Planning Unit	Project Management Unit

Department Budget Summary

STRATEGIC CENTER FOR EXCELLENCE						
					%	
Account Description	2021 Actual	2022 Revised	2023 Budget	\$ Change	Change	
Personal Services	-	99,182	862,365	763,183	769.5%	
Allocations	-	-	-	-	0.0%	
Maintenance & Repair	-	-	-	-	0.0%	
Operating & Supplies	-	550	1,150	600	109.1%	
Equipment/Projects not Capitalized	-	-	-	-	0.0%	
Department Total	-	99,732	863,515	763,783	765.8%	

The 2023 Budget request is \$0.9 million, an increase of \$0.8 million or 765.8 percent above the fiscal year 2022 Revised Budget amount. Total wages and salaries are \$862,365 million and includes 9 positions.

Department Budget Highlights

 In 2022, as part of the Vision Forward Initiative, the Authority reorganized several departments including moving the Office of Strategic Initiative and Analysis from beneath Administrative Services and consolidated it with the new Department of Strategic Center of Excellence. This Department includes 9 positions.

2022 Accomplishments

• The Strategic Center of Excellence was created in September 2022, hiring a director and members of the team.

- Hire and train project management staff to achieve staffing needs
- Collaborate with the executive leadership team to draft a strategic plan to deliver to the Board of Directors in March 2023
- Establish project governance to guide decisions for advancing projects to support the strategic plan
- Work with Departments and Divisions to document processes to aid in training new staff and succession planning
- Manage various approved projects (non-capital) to advance the strategic plan
- Oversee the capital plan playbook to ensure timeliness of capital plan

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						
	2021 Astual			ć Changa	%	
Account Description	2021 Actual	2022 Revised	2023 Budget	\$ Change	Change	
Personal Services Allocations	2,196,671 (47,329)	2,314,350 (20,000)	2,364,968	50,618 20,000	2.2% -100.0%	
Maintenance & Repair	(47,323)	(20,000)	-	-	- 100.070	
Operating & Supplies	107,373	168,598	175,524	6,926	4.1%	
Equipment/Projects not Capitalized	81	1,000	1,000		-	
Department Total	2,256,796	2,463,948	2,541,492	77,544	3.1%	

The 2023 Budget request is \$2.5 million, an increase of \$77,544 or 3.1 percent above the fiscal year 2022 Revised Budget amount. Total wages and salaries were \$2.4 million, and this includes 24 positions.

Department Budget Highlights

- Personal Services increased by \$50,618, or 2.2 percent and includes funding for 24 permanent positions.
- Personal Service Allocations decreased \$20,000, or 100 percent, due to less work on the Governor Mario M. Cuomo Bridge as the project draws closer to completion.

2022 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.
- 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 \$4,471,228.29 and collected \$3,596,653.30 as of July 21, 2022.
- 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 92 FOIL requests received on or before July 21, 2022.
- Responded to 94 subpoenas received from law enforcement as of July 21, 2022.
- Provided ethics guidance and training to ensure that all Thruway Authority employees practice the highest ethical standards.
- Continued to implement the use of DMS to archive legal files electronically.
- Assisted with the Thruway Authority issuance of debt.
- Achieved closings for numerous long outstanding real property matters.
- Drafted legislation allowing for Thruway Authority to accept electronic bidding for construction contracts.

2023 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 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 work with other departments to develop legislation to modernize and create efficiencies for the Thruway Authority.
- 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 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 security and 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	2021 Actual	2022 Revised	2023 Budget	\$ Change	% Change		
Personal Services	752 224	1 014 070	701 146	(222 024)	22 10/		
Allocations	753,224	1,014,970 -	791,146	(223,824) -	-22.1% -		
Maintenance & Repair	-	-	-	-	-		
Operating & Supplies	3,562	8,250	9,450	1,200	14.5%		
Equipment/Projects not Capitalized		360	1,000	640			
Department Total	756,786	1,023,580	801,596	(221,984)	-21.7%		

The 2023 Budget request is \$0.8 Million, an decrease of \$221,984 or 21.7 percent below

the fiscal year 2022 Revised Budget amount. Total wages and salaries are \$791,146 and includes 7 positions.

Department Budget Highlights

• Personal Services decreased by \$223,824, or 22.1 percent, and reflects projected wages based on current salary actions.

2022 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
- Facilitated the Office of the State Comptroller's (OSC) audit of Toll Collections
- Conducted Vendor Responsibility reviews of prospective vendor contractors and exercised required Committee responsibilities as issues were found

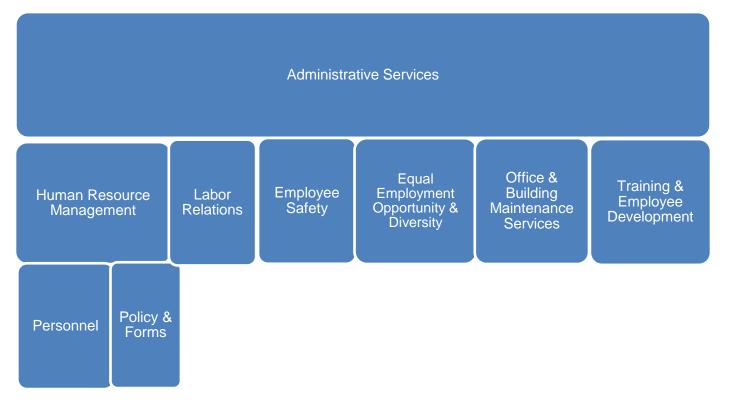
- Hire audit, investigations and clerical staff to achieve minimum staffing needs
- Continue installation of security devices in Thruway Authority properties
- Continue security audits of Travel Plazas
- Continue to implement the Fraud, Waste and Abuse Program at the Thruway Authority
- Continue to implement 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 Procurement Integrity and Vendor Responsibility 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	2021 Actual	2022 Revised	2023 Budget	\$ Change	% Change		
Personal Services	4,225,277	4,138,501	4,894,511	756,010	18.3%		
Allocations	-	-	-	-	-		
Maintenance & Repair	1,083	2,800	4,150	1,350	48.2%		
Operating & Supplies	576,198	1,074,643	1,033,855	(40,788)	-3.8%		
Equipment/Projects not Capitalized	414	3,000	3,000		<u>0.0%</u>		
Department Total	4,802,972	5,218,944	5,935,516	716,572	13.7%		

The 2023 Budget request is \$5.9 million, an increase of \$716,572 or 13.7 percent above the fiscal year 2022 Revised Budget amount. Total wages and salaries are \$4.9 million and includes 69 positions.

Department Budget Highlights

- In 2023, as part of the Vision Forward Initiative, the Authority reorganized several departments including moving the Office of Strategic Initiative and Analysis from beneath Administrative Services and consolidated it with the new Department of Strategic Center of Excellence. In addition, the initiative created three positions in the Department's Training Bureau.
- Personal Services increased by \$756,010, or 18.3 percent and reflects projected wages based on current salaries and vacancies whereas 2023 assumes all 69 positions.
- Operating & Supplies decreased by \$40,788, or 3.8 percent, mainly due to decrease in Medical Services offset by an increase in Employee Development, Janitorial Supplies and Postage.

2022 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 and a daily wellness survey
- Continued to administer OER paid leave to accommodate employees required to quarantine due to COVID-19
- Provided support in response to the COVID-19 pandemic, including administering a weekly COVID-19 testing program for approximately 400 unvaccinated employees, as well as development/issuance of numerous internal publications and safety related documents/guidance
- Performed System-wide safety related site visits/inspections
- Published a Safety Gram on Work Zone Safety for National Work Zone Safety Awareness Week
- Completed occupational health assessments and respirator fit testing through the mobile medical program for more than 940 employees

- Conducted 18 non-technical training courses on 15 course topics for 476 employees from January 1 through June 30, 2022, with an additional 10 course topics planned for the remainder of 2022
- Prepared Thruway Skilled Trades Scholarship Program Guidelines with Maintenance & Operations input to refine and recommence the Skilled Trades Scholarship Program.
- Implemented monthly Diversity celebrations on the Intranet and organized Diversity Day 2022 and ensure recognition of monthly diversity celebrations.
- Organized a celebration of women in March.
- Promote Wellness initiatives, including a 2022 Wellness Fair, 2022 Great Race, Corporate Run and re-establishing noontime programs for EAP.
- Update Authority Illegal Discrimination in the workplace policy.
- Updated the Sexual harassment in the workplace guidance booklet.
- Processed over 100 reasonable accommodations for persons with disabilities to continue working productively.
- Investigated at least 25 complaints of illegal discrimination to ensure the workplace is free from discrimination.
- Participated and lead external outreach of New York States Workforce Diversity and Inclusion Council.
- Participated in the Martin Luther King Remembrance including printing posters for the event in January.

- Continue to monitor State and federal mandates and directives to protect the health of Authority employees in a post COVID pandemic environment, including information related to polio and monkey pox
- Further promote a safe and healthy workplace with an emphasis on injury prevention and enhanced cleaning procedures at Authority facilities
- Establish coordinated training efforts throughout the organization
- Successfully negotiate and sign successor agreements with Teamsters (Unit 1) and CSEA (Unit 2)
- Continue to provide support for the Administrative Headquarters remodeling project
- 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
- Work with IT to enhance use of HRMS tools to streamline HR processes, such as onboarding
- Work with Maintenance & Operations to continue to refine and recommence the Skilled Trades Scholarship Program
- Develop a 2023 recruitment plan to help achieve Diversity & Inclusion goals
- Promote Wellness initiatives, including a 2023 Wellness Fair, 2023 Great Race, Corporate Run and administer noontime programs for EAP.
- Create Diversity Resource Group with managers and supervisors to reinforce Diversity & Inclusion commitments.
- Implement monthly Diversity celebrations on the Intranet and in implementing resource groups.
- Organize Diversity Day 2023 and ensure recognition of monthly diversity celebrations.
- Organize a celebration of women in March.

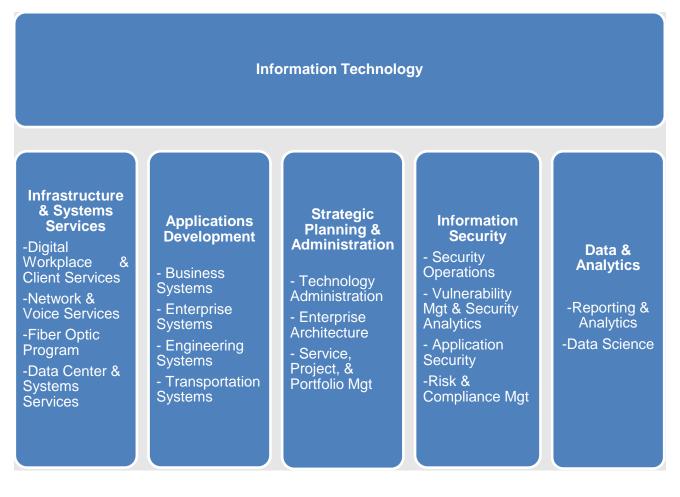
- Participate and lead New York States Workforce Diversity and Inclusion Council
- Submit Annual reports to New York State Department of Civil Service on workforce analysis.
- Participate in Career Fairs throughout New York State for recruitment purposes.
- Enhance training deliverables by creating and offering in-person, webinar and self-paced online training classes
- Reach 100 percent participation for mandatory OER training
- Engage in forms modernization initiative using DocuSign and other forms software to automate workflow and approvals
- Manage organization wide document review
- Transition to new document management system
- Update Authority policies and procedures, as necessary

Information Technology

Department Description

The Information Technology (IT) Department is responsible for managing the Thruway Authority's computing resources and infrastructure including the fiber optic communications network, data centers, cloud computing, Intranet and Internet services, video and telecommunications systems, GIS, intelligent transportation systems, security systems, and the use of all computers, software, and technology hardware as well as the storing, retrieving, and transmission of the electronic data of the Thruway Authority. IT also develops and maintains financial & HR 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, wi-fi, video solutions, and iPad devices. Moreover, IT developed and manages the Thruway Mobile App.

Department Organization



Department Budget Summary

INFORMATION TECHNOLOGY DEPARTMENT BUDGET							
	2021 Actual			ć Chanaa	%		
Account Description	2021 Actual	2022 Revised	2023 Budget	\$ Change	Change		
Personal Services	7,642,867	7,611,235	8,998,114	1,386,879	18.2%		
Allocations	(516,212)	(363,826)	(382,372)	(18,546)	5.1%		
Maintenance & Repair	2,738,743	2,916,974	3,882,466	965,492	33.1%		
Operating & Supplies	4,371,315	13,848,976	16,811,053	2,962,077	21.4%		
Equipment/Projects not Capitalized	186,349	821,967	1,434,266	612,299	74.5%		
Department Total	14,423,062	24,835,326	30,743,527	5,908,201	23.8%		

The 2023 Budget request is \$30.7 million, an increase of \$5,908,201 or 23.8 percent above the fiscal year 2022 Revised Budget amount. Total wages and salaries are \$8.9 million and this includes 90 positions.

Department Budget Highlights

- Personal Services increased by \$1,386,879 or 18.2 percent includes funding for 90 positions. As part of the Vision Forward Initiative, two positions were added related to cyber security.
- Allocations increased by \$18,546, or 5.1 percent relative to anticipated labor hours associated with in-house projects.
- Maintenance & Repairs increased by \$965,492, or 33.1 percent mainly due to Fiber maintenance and repair costs.
- Operating & Supplies increased by \$2,962,077, or 21.4 percent mainly due to an increase in Fiber marketing services, Telephone and Maintenance & Repair to Equipment offset by Cloud Software Subscriptions that were moved to reserve.
- Equipment/Projects not Capitalized increased by \$612,299, or 74.5 percent mainly for communication, computers and new software.

2022 Accomplishments and Goals

- Upgraded 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
- Purchasing, configuring, and deploying roughly 300 laptops
- Purchasing, configuring, and deploying as many printers as we are allowed to purchase
- Changed encryption software from Dell Data Protection Enterprise to Microsoft BitLocker to reduce cost and improve performance and support
- Assumed responsibility and procured new contracts for numerous technology systems on the Governor Mario M. Cuomo Bridge

- Worked on strategy and RFP development for multi-year project to upgrade the Authority's land mobile radio system for compliance with the Governor's mandate for statewide emergency communications interoperability
- Began process to migrate Desktop GIS software to ArcGIS Pro environment
- Upgraded GISWeb server environment to newer version of ArcGIS Enterprise software suite
- Managed IT's 2022 hiring process, administrative, purchasing, and maintenance contract needs, as well as IT's 2023 budget process
- Analyzed changes needed for IT's Record Retention schedules
- Continued enrolling wireless devices into InTune for security and management of the devices (InTune is a Mobile Device Management (MDM) solution enabling increased control of security, app delivery and control, etc.)
- Continued implementation of Microsoft cloud co-management to better secure and manage devices off our network and modernize our imaging process
- Planned for and facilitated a remote workforce which includes BYOD for mobile
- Finalize development of a centralized statewide Computer-Aided Dispatch (CAD) system in partnership with New York State Police, ITS, and DOT
- Complete implementation of Fuel Focus implementation to replace Asset Works
- Provide major enhancements to TMMS preventive maintenance scheduling Complete various legacy application updates replacing outdated database drivers and back-end report engines
- Continued implementation of Finance RPA processes
- Implement the B2Gnow compliance tracking system to track M/WBE, SDVOB and DBE participation in contracts
- Replaced the Contract Management System with Oracle Primavera Unifier to manage our Construction Contracts, Engineering Agreements, and Personal Services Contracts
- Implement the Structural Health Monitoring System for the Governor Mario M Cuomo Bridge
- Developed a new Overhead Sign Structure inspection system, to track and maintain Sign Structure inventory and inspection data
- Convert Traffic Camera Still Images to live video feeds
- Expanded and licenseing use of DocuSign eSignature softwareProvide AETC enhancements to lane systems, backend processing, transaction reconciliation, and automated reports
- Developed an application to assess radio frequencies for licensing (FFAST)
- Enhanced the application for tracking employee tasks and activities (PTRS)
- Enhanced the application for Non-Revenue Contractor Travel (NRCT)
- Enhanced DMV interfaces to accommodate online vehicle registration suspensions
- Supported the situation awareness software
- Supported Desktop Services and System Administrators with system and hardware upgrades
- Supported Lenel secure access installation at Albany HQ
- Supported troubleshooting efforts for bridge aesthetic lighting system
- Developed a solution to seamlessly transition Albany HQ population to Lenel secure access
- Completed video management integration of AETC security cameras
- Deployed interface to allow synchronization of multiple secure access environments
- Integrated cameras from disparate installations into enterprise video environment

- Providing assistance to developers for transitioning from using the Internet Explorer application to using native Edge or Edge in IE Mode (Internet Explorer 11 (IE11) desktop application retires on Windows 10 on June 15, 2022.)
- 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. This will be a multi-year project which includes:
 - Moving operating system patching from System Center Configuration Manager to InTune to facilitate patching of Thruway devices when they are off network to keep them secure. This includes establishing monitoring & remediation procedures for non-compliant devices.
 - Moving Office Suite patching from System Center Configuration Manager to InTune to facilitate patching of Thruway devices when they are off network to keep them secure. This includes establishing monitoring & remediation procedures for non-compliant devices.
 - Moving Microsoft Endpoint Protection from System Center Configuration Manager to InTune to facilitate definition updates of Thruway devices when they are off network to keep them secure. This includes establishing monitoring & remediation procedures for non-compliant devices.
 - o Implement Auto Pilot to replace our current usb drive imaging process.
- Implement Storage Sense to manage disk space on Windows devices
- Developed/enhanced HRMS TableAU HR Views
- Upgraded many legacy in-house applications to the latest supported platforms
- Implemented mobile forms for accident reports and building inspections
- Developed DocuSign API for internal application integration
- Implemented weather radar the incident response dashboard
- Upgraded the enterprise consumer digital signage solution
- Converted Governor Mario M. Cuomo Bridge kiosks to the Authority enterprise solution
- Updated Authority fleet management systems
- Developed a SharePoint Official Publication document repository
- Fiber Optic Regen site security audit
- Established network connectivity to 4 radio towers
- Service area redevelopment fiber and network review and design -ongoing
- Avaya Enterprise CM7 to CM8
- Websense/Triton upgraded
- Data Center remodel and reconfiguration
- Gasboy/Fuel focus network conversion
- Avaya Enterprise Voicemail upgrade
- TSOC-softphones
- EZPass OP call center development
- Data Center core switching network upgrade
- Build out network cellular extender security to resolve VZW issue w/call drops at TT State Police and TT Maint.
- Henrietta phone system replacement
- Build out HA for Avaya Enterprise phone system
- TSOC-network redundancy @ DR (24 TUB)
- Implement Tenable cyber security scanning
- State Police body cam and taser project cabling
- Video Conf. Upgrade

- TDS/VMS 3G to 4G Modem replacement
- Decommission HAR
- Penetration Testing (External)
- Identify and group assets
- Web application scanning
- Tenable test roll-based scanning
- Add additional E911 services
- Convert and build out new DMV connectivity for inspection machines
- Fiber IRU's
- Lower Hudson Valley Transit Link Project-ongoing
- Video & Network integration w/DOT at 60.4 and other sites

- Update IT's Disaster Recovery Plan; table top exercises and testing of recovery procedures
- Deploy High-Availability solutions across systems with the corresponding RPO & RTO and tertiary level redundancy
- Training and deployment of ArcGIS Pro GIS Desktop software
- Further development of Field Mapping interfaces and applications
- Develop dashboard for GIS applications
- Integrate the new statewide CAD system into existing systems
- Initialize multi-year radio system upgrade with third parties
- Move new permitting system into production
- Roll out new check printing solution
- Deploy Application Portfolio Management solution
- Deploy Enterprise Portfolio Management Solution
- Continue 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
- Begin the update and streamlining of IT's Records Retention schedule and elimination of outdated and unnecessary records in accordance with the schedules
- Continue right-size hardware deployments for field staff
- Purchase, configure, and deploy over 400 laptops & docks
- Begin Windows 11 preparations
- Roll out managed printing solutions
- Coordinate move of computer equipment to the new TSOC DR site
- Plan for standardized configuration of computers for the TSOC redesign
- Complete TSOC Renovation
- Deploy Spectrum backup management solution
- Work along with Service Area reconstruction project for fiber moves and installations
- Enhance physical security at selected sites along the corridor
- Provide Radio System project-fiber moves and network installations
- Finish upgrade of the Enterprise Phone system
- Deploy modern video storage solution
- Continue assessing modern work zone safety solutions

- 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
- Enhance Finance Robotic Process Automation
- Enhance and increase automated reports
- Enhance and increase ad hoc reports
- Deploy new ITSM tool
- Modernize Engineering construction, estimating and letting software
- Upgrade right of way pavement management system
- Modernize check printing processes
- Continuing development of replacement permitting system
- Upgrade the situation awareness software
- Modernize the Thruway Mobile App platform
- Modernize the TSOC video wall platform
- Deploy new Change Management and Incident Management Tool
- Deploy new Project Management Tools
- Modernize HRMS solution with employee management lifecycle (interview through offboarding), learning management, benefits management, and more
- Continuing expansion of Fast Field software
- Implementation of new system to track Capital Planning projects and data
- Expansion of Project financial tracking solution
- Expansion of Unifier platform
- Begin Thruway website modernization
- Investigate the retirement of the of old New NY Bridge website
- Re-engineer Travel Plaza Inspection apps
- Re-engineer Traffic Data System app
- Enhance AETC system to support sticker E-ZPASS tags
- Continue to rewrite legacy applications, including: Radio Inventory (RIMS), Injury Reporting
- Implement year-over-year data comparisons for People Counter dashboard
- Modify Employee Search application to use Lenel (secure access system) as source for photos
- Develop notification dashboard for Tarrytown Operations Center staff
- Integrate AETC security cameras into enterprise video environment
- Integrate cameras into PSIM environment
- Migrate to new consolidated enterprise time and attendance solution
- Enhance HRMS W2 process
- WSA-conversion to virtual platform
- Move fiber/network to ORT's as primary
- Additional Avaya Enterprise redundancies (SIP)
- Additional Maint. Section phones system upgrades
- Fiber Optic Regen Security work (Cameras, Secure Access, Perimeter Security)
- AETC-Security with phase 1 sites (pre AETC main build)
- HQ-Remodel-continue
- TSOC-renovation project-continue
- Service Area project- (Fiber & Network)

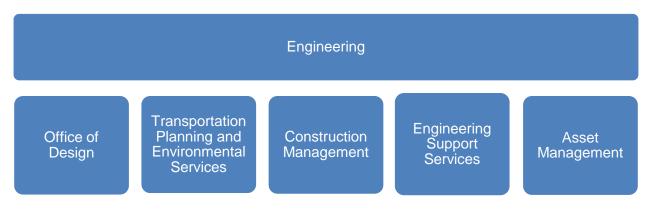
- WLAN-Controller & AP conversion (statewide)
- 988 Crisis Hotline implementation
- Audio recorders (Avaya) test and tie in
- IP Phones-continue replacements (Statewide)
- Implement StealthWatch
- Continue Vision Forward Objectives

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										
				Ć Ob sa sa	%					
Account Description	2021 Actual	2022 Revised	2023 Budget	\$ Change	Change					
Personal Services	12,633,434	12,860,389	14,757,975	1,897,586	14.8%					
Allocations	(7,031,751)	(7,499,561)	(8,882,000)	(1,382,439)	18.4%					
Maintenance & Repair	6,965	5,631	8,581	2,950	52.4%					
Operating & Supplies	827,993	970,876	1,073,336	102,460	10.6%					
Equipment/Projects not Capitalized	10,925	43,000	65,240	22,240	51.7%					
Department Total	6,447,566	6,380,335	7,023,132	642,797	10.1%					

The 2023 Budget request is \$7.0 million, an increase of \$642,797 or 10.1 percent above

the 2022 Revised Budget amount. Total wages and salaries are \$14.7 million, and this includes 150 positions.

Department Budget Highlights

- Personal Services increased by \$1,897,586 or 14.8 percent and includes funding for 150 permanent positions. One position was added to construction management.
- Allocations increased by \$1,382,439 or 18.4 percent, with the assumption that the same percentage of labor would be allocated to capital and reserve.
- Operating & Supplies increased by \$102,460 or 10.6 percent mainly due to an increase in Maintenance & Repair to Equipment, Rentals and Training offset by a decrease in Professional Services.
- Equipment/Projects not capitalized increased \$22,240 or 51.7 percent mainly to replace computer equipment and software.

2022 Accomplishments

- Began work on the \$84,268,426.84 pavement reconstruction of the Thruway between mileposts 284.1 to 289.3 including replacement of the Thruway bridge over CSX railroad and rehabilitation of two bridges.
- Completed work on the \$368,138,708.47 Design Build Cashless Tolling Project. The project converted the ticketed system to all electronic tolling collection and included the installation of 55 gantries, removal of toll barriers/plazas and highway realignment.
- Completed work on the \$140,111,454.25 I-95 (New England Thruway) "Last Mile" Design-Bid-Build Best Value construction contract. The project included the reconstruction of the six-lane highway, replacement of two bridges including I-287 northbound bridge over I-95 and rehabilitation of four bridges.
- Let 36 projects with an approximate Contract Value of \$380,300,000. In addition to 8 bridge replacements, other notable projects include replacement of North Avenue Bridge over I-95, Interchange 9 Intersection improvements at Route 9 and construction of pedestrian/bicycle side path bridge over I-87/I-287, I-95 pavement rehabilitation from mileposts NE 0.0 to NE 4.0, and the North Grand Island bridges steel repairs and seismic retrofit.

- 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.
- Implement the Vision Forward guiding and operating principals by reorganize and realign 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 817 bridges.
- Continue long term pavement strategies by completing pavement studies at various locations.
- Complete the re-decking of the Castleton Bridge.
- Implement a Drone Technology Program, to assist with Bridge Inspection, and Project design and construction activities.

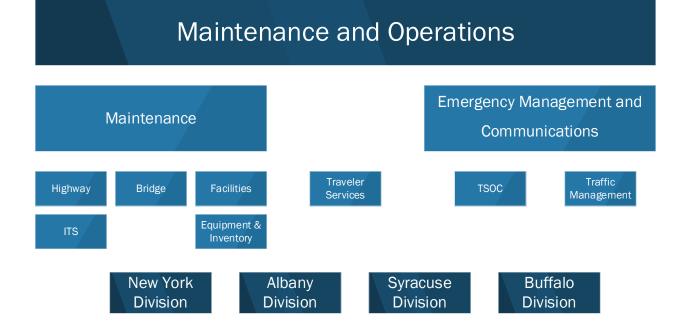
Maintenance and Operations

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, or electronically collecting toll revenue, employees work to ensure safe and reliable travel for patrons and commerce 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 the Travelers' Services program, which manage contracts that operate 27 Service Areas and 3 Welcome Centers throughout the system. In addition, Maintenance and Operations includes the Office of Emergency Management, Communications and Traffic Management. The Emergency Management Office is responsible for the Authority's emergency response and incident management activities; Thruway Statewide Operations Center (TSOC) which is a twenty-four hour a day modified 911 center; and administration of the authorized towing and tandem truck permit programs.

Department Organization



Maintenance Budget Summary

MAINTENANCE BUDGET										
Account Description	2021 Actual	2022 Revised	2023 Budget	\$ Change	% Change					
Account Description		2022 Revised	2025 Buuget	Ş Change	Change					
Personal Services	63,693,835	65,028,407	70,931,239	5,902,832	9.1%					
Allocations	(3,061,257)	(3,089,000)	(5,120,929)	(2,031,929)	65.8%					
Maintenance & Repair	19,963,835	27,897,077	26,894,465	(1,002,612)	-3.6%					
Operating & Supplies	6,002,333	8,963,115	7,449,182	(1,513,933)	-16.9%					
Equipment/Projects not Capitalized	190,929	2,524,175	1,245,360	(1,278,815)	-50.7%					
Department Total	86,789,675	101,323,774	101,399,317	75,543	0.07%					

The 2023 Budget request is \$101.4 million, a decrease of \$75,543 or .07 percent above the fiscal year 2022 Revised Budget amount. Total wages and salaries are \$70.9 million and includes 1,020 positions.

Maintenance Budget Highlights

- Personal Services increased by \$5,902,832, or 9.1 percent, and includes funding for 1,020 positions.
- Personal Service Allocations increased \$2,031,929, or 65.8%, based on planned capital projects.
- Maintenance and Repair decreased \$1,002,612 or 3.6 percent, mainly due to anticipated decreases in accident bridge contract costs, repairs due to accidents and higher accident reimbursements, offset by an increase in highway contracts and in-house bridge repair.
- Operating and Supplies decreased \$1,513,933 or 16.9 percent, mainly attributed to an increase in pavement marking expenses with federal aide offset by a decrease to Special Contracts.
- Equipment & Projects Not Capitalized decreased \$1,278,815, or 50.7%, mainly attributable to a decrease in operating project funding and work.

2022 Accomplishments

- Completed comprehensive program of preventive and corrective maintenance on the bridge, highway, and facility infrastructure
- Upgraded the GPS systems in plow trucks from 3G to 4G. Improved winter operations program with addition of strategic salt storage and operational enhancements.
- Managed 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.
- Trained several employees throughout the state to be certified crane operators.

- Developed Maintenance contracts for specialized systems attached to the Governor Mario M. Cuomo Bridge.
- Completed energy saving heating, ventilating and air conditioning system in Administrative Headquarters. This will reduce energy consumption and provide a cost savings.
- Completed the replacement and upgrade to our fuel dispensing system.
- Started the office renovation project at Administrative Headquarters.

- 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 2 entities allowing for sharing of services during emergencies, deployments or time of critical need.
- Connect Weedsport Maintenance Section into the Weedsport Municipal Sewer System.
- Decommission the Ramapo/Sloatsburg Wastewater Treatment Plant.
- Partner with NYPA building Community Solar sites across our system.
- Expand our electric vehicle charging station sites to all maintenance section locations.

Equipment & Inventory Management Budget Summary

EQUIPMENT & INVENTORY MANAGEMENT BUDGET										
Account Description	2021 Actual	2022 Revised	2023 Budget	\$ Change	% Change					
	2021 Actual		2020 Duuget	çenange	enange					
Personal Services	17,576,335	18,374,634	20,212,902	1,838,268	10.0%					
Allocations	(767,091)	(993,807)	(1,036,654)	(42,847)	4.3%					
Maintenance & Repair	10,249,773	13,372,844	14,383,427	1,010,583	7.6%					
Operating & Supplies	2,536,340	3,038,860	3,324,383	285,523	9.4%					
Equipment/Projects not Capitalized	109,882	154,375	168,393	14,018	9.1%					
Department Total	29,705,239	33,946,906	37,052,451	3,105,545	9.1%					

The 2023 Budget request is \$37.1 million, an increase of \$3,105,545 or 9.1 percent above the fiscal year 2022 Revised Budget amount. Total wages and salaries are \$20.2 million and this includes 308 positions.

Equipment and Inventory Budget Highlights

- Personal Services increased by \$1,838,268, or 10.0 percent, and includes funding for 308 permanent positions.
- Allocations increased by \$42,847 or 4.3 percent, mainly due to anticipated labor hours associated with ITSM capital work.
- Maintenance & Repairs increased by \$1,010,583 or 7.6 percent mainly due to increases in Auto Repairs and Fuel.
- Equipment and Projects Not Capitalized increased \$14,018 or 9.1 percent, mainly due to an increase in highway equipment offset by a decrease in computer replacement and new shop equipment.

2022 Accomplishments

- Electric Vehicles Purchased an addition six Chevrolet Bolts. These vehicles will be deployed to all four Divisions and Headquarters.
- Completed factory authorized International Truck Diamond Logic Builder workshop at all Division locations.
- Added special use battery powered UTV for rescue/ambulance service for use by local EMT's to minimize the response time to medical emergencies on the Shared Use Path (SUP) of the Governor Mario M. Cuomo Bridge.
- The Thruway has upgraded the automated fuel system that allows fueling of other state agency vehicles in declared emergencies.
- Replaced all 3G modems used to communicate with ITS devices.
- ITSM continued CCTV and camera lowering device replacements in the Buffalo and New York Divisions.
- Updated Security Awareness Training for all ITSM employees,

- Electric vehicle charging Complete the installation of six additional Level 2 charging stations at Headquarters and Divisions.
- Upgrade Light and Medium Duty GPS program to 4G technology.
- Complete the certification of a New York State Department of Motor Vehicle remote office.
- Coordinate with SUNY Cobleskill expanded hydraulic and electrical training for technicians. The 4-day course will educate technicians in hydraulic and electrical theory.
- ITSM to complete CCTV and camera lowering device replacements in the Buffalo Division, while continuing New York Division replacements.
- Working with the contractor, ITSM will retrofit/install the first color VMS in the Albany and New York Divisions.

Emergency Management, Traffic & Communications Budget Summary

EMERGENCY MANAGEMENT, TRAFFIC & COMMUNICATIONS BUDGET										
Account Description	2021 Actual	2022 Revised	2023 Budget	\$ Change	% Change					
				+ enemge						
Personal Services	7,530,564	8,071,100	8,838,410	767,310	9.5%					
Allocations	(3,125)	-	-	-	-					
Maintenance & Repair	2,324	3,300	7,692	4,392	133.1%					
Operating & Supplies	2,061,255	3,544,187	4,565,585	1,021,398	28.8%					
Equipment/Projects not Capitalized	4,448	26,700	23,400	(3,300)	-12.4%					
Department Total	9,595,466	11,645,287	13,435,087	1,789,800	15.4%					

The 2023 Budget request is \$13.4 million, an increase of \$1,789,800 or 15.4 percent above the fiscal year 2022 Revised Budget amount. Total wages and salaries are \$8.8 million, and this

includes 112 positions.

Emergency Management, Traffic and Communications Budget Highlights

- Personal Services increased by \$767,310, or 9.5 percent, and includes funding for 112 permanent positions.
- Operating & Supplies increased by \$1,021,398 or 28.8 percent, mainly due special contracts related to work zone safety contract.

2022 Accomplishments

- 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
- Updated Continuity of Operations plan.
- Updated the Thruway Authority's Emergency Management Operations Protocol (EMOP) document.
- Implemented an Automated Work Zone Speed Enforcement (AWZSE) program aimed to increase safety in work zones by fining drivers that exceed the posted speed limit within work zone boundaries.
- 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 additional meetings with first responder partners to discuss access and response to incidents on the Governor Mario M. Cuomo Bridge and Shared Use Path (SUP).
- Integrated Traffic Operations with Emergency Management and Communications.

- Repurposed the Exit 24 Toll Utility Building into an updated Disaster Recovery Site for TSOC.
- Construction began at 10 Service Areas as part of the Service Area modernization project.
- Updated Service Area inspections to account for change in services due to the new lease agreement and impacts due to COVID-19.

- Continue to streamline response to incidents on the new Governor Mario M. Cuomo Bridge with all involved responders.
- 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 and Headquarters Emergency Operations Center that will upgrade the capabilities for incident management, traffic management and dispatching services.
- Continue construction at select Service Areas. Ensure smooth transition of the 11 Service Area locations currently operated by McDonald's to Applegreen.
- Continue to train and work with the two new Service Area Representatives on food and fuel contract enforcement.
- Increase efficiencies within Traffic Management by processing forms electronically.
- Increase AWZSE presence in work zones by increasing the number of active work zone enforcement details from 4 units to 10 daily.
- Increase (post COVID-19) in person training/meetings with Emergency Responders/companies that provide emergency services to patrons on the Thruway system.
- Continue training first responder partners utilizing a modified Highway Safety Training and the Traffic Incident Management System (TIMS) program.
- Work with Divisions to conduct tabletop and functional drills.
- Initiate multi-year statewide radio upgrade and maintenance project.

Finance and Accounts

Department Description

The Finance Department is responsible for the managing and reporting on Thruway Authority's financial matters. This includes receiving, reconciling and accounting for all Authority revenues and establishing and maintaining a budget and implements appropriate controls on the approval of expenses. The Department ensures compliance with all 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 are 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										
	2024 A -t			ć Okana za	%					
Account Description	2021 Actual	2022 Revised	2023 Budget	\$ Change	Change					
Personal Services	6,020,375	6,023,220	6,442,460	419,240	7.0%					
Allocations	(10,453)	(2,200)	(12,000)	(9,800)	445.5%					
Maintenance & Repair	-	-	-	-	-					
Operating & Supplies	147,604	226,157	353,968	127,811	56.5%					
Equipment/Projects not Capitalized	23,667	46,170	19,533	(26,637)	-57.7%					
Department Total	6,181,193	6,293,347	6,803,961	510,614	8.1%					

The 2023 Budget request is \$6.8 million, an increase of \$510,614 or 8.1 percent above the 2022 Revised Budget amount. Total wages and salaries are \$6.4 million, and this includes 85 permanent positions.

Department Budget Highlights

- Personal Services increased by \$419,240, or 7.0 percent, and includes funding for 85 permanent positions. As part of the Vision Forward Initiative 6 positions were moved to the Department of Revenue Management.
- Operating & Supplies increased by \$127,811, or 56.5 percent, mainly due to Fiduciary Fees, Special Contracts and Cloud Software Subscriptions.
- Equipment/Projects not capitalized decreased \$26,637 or 57.7 percent mainly to computer software.

2022 Accomplishments

- Completed the issuance of \$2.9 billion New York Thruway Authority, State Personal Income Tax Revenue Bonds, including roughly \$732 million in Green Bonds, which represents the first such issuance of Green Bonds in the history of the Thruway Authority.
- Executed a plan recommended by the Thruway Vision Forward reorganization plan to establish a new Office of Revenue Accounting designed to consolidate the revenue accounting and reporting functions within a single office.
- Implemented the use of the Visual Lease software platform to support the consolidation of the accounting of Authority lease activities.
- Administered the transition of the Authority Purchasing Card program to its new provider (JP Morgan Chase) consistent with the provisions of a recently award State contract for these services.
- Developed and published the monthly financial reports, which can be found on the Thruway Authority's website

- Successfully execute the New York State Thruway Authority, General Revenue Bonds, Series P issuance in support of the Authority Capital Program.
- Continue to monitor and respond to the revenue impacts associated with COVID-19 and broader economic effects on the regional and national economy.
- Continuously improve the annual plan process for clarity and more transparency
- Implement the conversion of Authority check printing activities to a service provided within the general banking services contract that the Authority currently maintains with JP Morgan Chase.
- 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.

Revenue Management

Department Description

The Department of Revenue Management is responsible for the overall operations and health of revenue collection, in all areas including: electronic tolling, the tolls by mail program and toll systems quality assurance. Revenue Management prides itself on exceptional customer service, employs proven violation enforcement initiatives and facilitates proactive quality control measures to provide critical service and support to the Authority.



Department Budget Summary

REVENUE MANAGEMENT										
	2021 Actual		2022 Dudget	ć Changa	%					
Account Description	2021 Actual	2022 Revised	2023 Budget	\$ Change	Change					
Personal Services	1,300,459	1,533,580	2,249,710	716,130	46.7%					
Allocations	-	-	-	-	0.0%					
Maintenance & Repair	(18)	-	-	-	0.0%					
Operating & Supplies	73,516,845	78,225,825	83,571,903	5,346,078	6.8%					
Equipment/Projects not Capitalized	1,080	5,900	-	(5,900)	-100.0%					
Department Total	74,818,366	79,765,305	85,821,613	6,056,308	7.6%					

The 2023 Budget request is \$85.8 million, an increase of \$6,056,308 or 7.6 percent above the 2022 Revised Budget amount. Total wages and salaries are \$2.2 million, and this includes 29 permanent positions.

Department Budget Highlights

- In 2022, as part of the Vision Forward Initiative, the Authority reorganized several departments including moving the Toll Collections from beneath Operations into the Department of Revenue Management. This Department consists of 29 positions with 22 from Toll Collections, one position moved from Board & Executive and 6 positions from Finance and Accounts.
- Personal Services increased by \$716,130, or 46.7 percent, and reflects projected wages based on current salary actions and the change in vacancies compared to anticipated 2023 vacancies.
- Operating & Supplies increased \$5,346,078, or 6.8 percent, mainly due to increased costs associated with E-ZPass Administration and Tolls By Mail Administration.

2022 Accomplishments

- Restarted the NY DMV Registration Suspension Program.
- Executed 3 major multi-million dollar contracts to support the transformation of the best in class E-ZPass Customer Service Center.
- Implemented Verizon Contact Center at the E-ZPass Service Center to allow customers to receive a call back from E-ZPass.
- Developed methods for 3rd party applications (Amazon Alexis, Google Voice, chat bots) to enhance the E-ZPass customer experience.
- Reduced the Authority's exposure to E-ZPass fraudulent activity by implementing and monitoring enhanced On-the-Go retailer compliance efforts.
- Implemented a solution to allow E-ZPass and Tolls by Mail customers to make cash payments at retail locations across the State.
- Worked with New York Department of Motor Vehicles to update over 1.3 Million plates or E-ZPass customers accounts.
- Implemented Covid Relief Settlement Program resulting in collection of over \$1.2 Million.
- Transitioned CAPS Commercial Account Program to Department of Revenue.

- Execute reciprocal agreements with other states in support of violation enforcement.
- Begin Massachusetts Registration Hold program..
- Increase early-detection efforts to combat E-ZPass On-the-Go and other types of E-ZPass fraud.
- Adjust Department staffing levels to provide service levels that support Vision Forward Mission Statement.
- Implement automated processes for rental/leasing companies to perform Transfer of Responsibility.
- Develop pilot program with State Police to focus on E-ZPass violators/DMV suspensions.



Long-Term Financial Plan Per the Thruway Authority General Revenue Bond Resolution (millions)										
	ACTUAL 2021	Revised Rev. Budget 2022	Proposed 2023	Estimated 2024	Estimated 2025	Estimated 2026				
Toll Revenue Other Revenues Additional Revenue Need Total Revenue Target	760.3 66.2 826.5	810.8 87.2 898.0	800.7 88.9 889.6	811.7 84.2 2.8 898.7	825.6 84.6 85.6 995.9	832.9 84.5 117.7 1,035.1				
Thruway Operating Expenses Reserve for Claims and Indemnities, Environmental Remediation & Cashless Tolling Transition Net Revenue (A)	339.8 6.5 480.2	379.4 1.0 517.6	396.5 1.0 492.1	404.4 1.0 493.2	412.5 1.0 582.4	420.8 1.0 613.4				
Current Senior Debt Service Outstanding Proposed Senior Bonds and refunding Less Interest Earnings on Sr. Debt Srvc Res Funds Net Senior Debt Service (B)	241.5 0.0 (0.1) 241.3	244.4 0.0 (2.2) 242.3	252.9 0.0 (4.3) 248.6	261.6 0.0 (5.0) 256.7	283.6 29.3 (5.0) 307.8	284.3 45.6 (5.2) 324.7				
Net Revenue after Senior Debt Service Adjust to Cash basis/Retain for Working Capital	238.9 24.2	275.3 30.0	243.6 0.0	236.6	274.5	288.6				
Reserve Maintenance Deposit Total Junior Debt Service Proposed Junior Bonds	100.3 46.7 0.0	167.7 63.6 0.0	67.0 108.7 0.0	57.4 110.5 0.0	79.1 112.4 12.9	85.7 114.2 17.2				
Less Interest Earnings on Jr. Debt Srvc Res Funds	(0.0) 46.7 0.0	(0.6) 63.0 7.5	(1.2) 107.5 0.0	(1.8) 108.7 0.0	(1.8) 123.5 0.0	(1.8) 129.6 0.0				
General Reserve Fund Provision - State Police and JIAN int. – Balance	116.1	67.1	69.1	70.5	71.9	73.3				
Senior Debt Service Coverage Ratio (A/B) (1) Senior & Junior Debt Service Coverage Ratio (A/(B+C))	1.99	2.14 1.70	1.98	1.92	1.89	1.89				

	Schedule of Senior Debt Service for The Thruway Capital Program (millions)										
Series	Principal Balance 1/1/23 or when issued	Year of Issuance	2022	2023	2024	2025	2026				
Series J	560.1	2014	44.7	69.1	82.3	104.1	104.1				
Series K	629.4	2014	61.9	61.9	48.8	48.8	48.8				
Series L (Refunding)	402.0	2018	79.1	54.7	54.7	36.2	36.2				
Debt Refunding (Series M)	857.6	2019	26.3	44.2	49.0	54.4	55.2				
Series N	450.0	2020	18.6	18.6	18.6	18.6	18.6				
Series O	540.1	2021	13.8	4.3	8.3	21.5	21.5				
Subtotal : Current D	Debt Service		244.4	252.9	261.6	283.6	284.3				
Series P (Proposed)	369.7	2023	0.0	0.0	0.0	29.3	29.3				
Series Q (Proposed)	225.4	2025	0.0	0.0	0.0	0.0	16.4				
Series R (Proposed)	328.2	2026	0.0	0.0	0.0	0.0	0.0				
Summary			2022	2023	2024	2025	2026				
Total Annual Senior Del	bt Service		244.4	252.9	261.6	312.8	329.9				
Annual Change in Senio	or Debt Service as a %	of Revenues	-2.0%	1.2%	0.7%	3.0%	2.8%				
Cumulative Senior Debt Service as a % of Revenues			27.2%	28.4%	29.1%	31.4%	31.9%				
Outstanding Senior Deb	ot at End of Year		3,439.1	3,312.6	3,545.2	3,618.5	3,787.2				

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 1/1/23 or when issued	Year of Issuance	2022	2023	2024	2025	2026			
Series 2016 A	849.3	2016	41.2	41.2	42.9	44.8	46.6			
TIFIA 2019 B	1,628.0	2019	18.5	63.7	63.7	63.7	63.7			
Series 2019 B (New)	62.5	2019	3.9	3.9	3.9	3.9	3.9			
Series 2022 A (Proposed)	309.2	2022	0.0	0.0	0.0	12.9	17.2			

Summary	2022	2023	2024	2025	2026
Total Annual Junior Debt Service	63.6	108.7	110.5	125.3	131.4
Annual Change in Junior Debt Service as a % of Revenues	1.4%	5.1%	0.1%	0.1%	0.4%
Cumulative Junior Debt Service as a % of Revenues	7.1%	12.2%	12.3%	12.3%	12.7%
Outstanding Junior Debt at End of Year	2,539.7	2,847.4	2,844.2	2,838.9	2,831.5

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

2023 Budget - Capital Program Sources and Uses (millions)

			2023 - 2027 Capital Program					
	2021	2022 Revised	2023	2024	2025	2026	2027	2023-27 Total
Thruway:								
Highways	54.2	172.2	193.6	175.9	158.8	169.6	164.2	862.1
Bridges	66.4	63.8	109.0	114.6	133.9	109.4	107.4	574.3
Facilities	4.9	9.9	13.9	12.2	8.0	11.1	12.0	57.1
Equipment	20.8	46.1	47.7	34.8	34.8	35.5	36.2	189.1
Cashless Tolling	136.4	12.8	0.0	0.0	0.0	0.0	0.0	0.0
Intelligent Transportation Systems	0.3	3.0	3.5	2.0	1.4	2.2	6.8	15.8
Sub Total - Thruway	283.1	307.8	367.8	339.5	336.9	327.7	326.5	1,698.4
New NY Bridge Project: New NY Bridge	20.8	20.0	45.0	189.1	0.0	0.0	0.0	234.1
Sub Total - New NY Bridge Project	20.8	20.0	45.0	189.1	0.0	0.0	0.0	234.1
Grand Total	303.9	327.8	412.8	528.6	336.9	327.7	326.5	1,932.5

			2023 - 2027 Capital Program					
	2021	2022 Revised	2023	2024	2025	2026	2027	2023-27 Total
Thruway:								
Senior Debt	190.2	139.0	274.3	279.9	255.0	240.1	236.6	1,285.9
Reserve Maintenance Fund	90.7	167.7	92.0	57.4	79.1	85.7	89.9	404.1
General Reserve Funds	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.2
Federal, State and Other Funds	2.1	1.0	1.3	2.2	2.8	1.9	0.0	8.3
Thruway Stabilization Program Funds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sub Total - Thruway and Canal	283.1	307.8	367.8	339.5	336.9	327.7	326.5	1,698.4
New NY Bridge Project:								
Junior Debt	6.6	0.0	45.0	189.1	0.0	0.0	0.0	234.1
Facilities Capital Improvement Fund	14.2	20.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sub Total - New NY Bridge Project	20.8	20.0	45.0	189.1	0.0	0.0	0.0	234.1
Grand Total	303.9	327.8	412.8	528.6	336.9	327.7	326.5	1,932.5

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, develop a draft of Program and re-evaluate the current Program based on conditions, finances, emergencies, regulatory requirements, etc.
- In July 2022, as part of the New York State Thruway Authority- Vision Forward review, a Capital Planning Playbook was developed that lays out the steps of the proposed Capital Project Planning Process. The playbook codifies all aspects of the process, provides clarity on the process overall as well as the individual steps. The Playbook serves as a reference to all parties involved in the Capital Project Planning Process, explaining who is responsible for each step, when the step is meant to take place, and the expected outcomes.
- The Capital Planning Playbook will be used regularly throughout the year to guide planning for the Capital Program and ensure that the priorities of all relevant NYS Thruway departments are taken into consideration. This work also lays out key performance indicators (KPIs) for each relevant department.

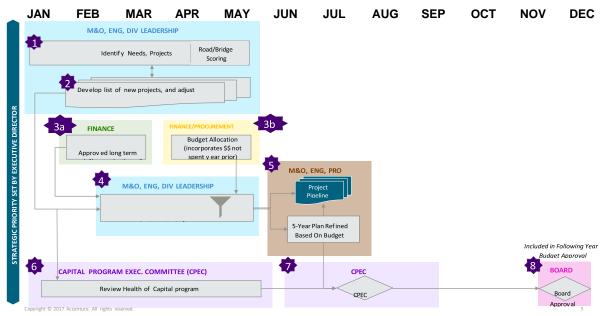
Tasks and Timeline:

Each year, projects that meet the Capital Projects criteria are identified, prioritized, and are submitted for approval within the Capital Project Plan. During this process, the organizational strategic goals and mission, safety, needs for the upkeep of infrastructure and resource planning are taken into consideration.

While the following Capital Project Planning Process Flow provides the organization with a structure in the development of the 5-year Capital Program, considerations of budgeting and other variables are considered each year. This Process will aid every step of creating a prioritized plan that fits within the projections of available funding.

The Capital Planning Process Flow that was established as part of the Vision Forward process includes the following activities: Identify Needs and Projects; Develop Project List; Funding Allocation, including financial and procurement considerations; Project List Refinement; finalizing the Project Pipeline; Reviewing the overall Health of Capital Program; receiving Capital Program Executive Committee (CPEC) Approvals; and finally, receiving all necessary Board Approvals to execute the 5-year plan

Capital Planning Process



Capital Project Planning Process Flow

1. Identify Needs and Projects (January-June)

<u>Description</u>: During this stage, Asset Management (AM), Engineering and Division Highway and Bridge Engineers gather information on existing assets and infrastructure and compile their needs to be prioritized for the division's Capital Project Planning. To better identify the needs, the Division Engineers review road and bridge scorings, inspection reports and consult AM to better understand the priorities. Maintenance & Operations (M&O) along with Technical Support Services will be consulted to ensure all needs are recorded and understood.

<u>*Timeline*</u>: This stage takes place during the first two quarters of the calendar year, but if there is an addition or change in the division needs or priorities, they are communicated to the CPEC for further consideration throughout the calendar year.

2. Develop Project List (January-June)

<u>Description</u>: Once the Division needs have been collected, they are combined with legislative, regulatory, and in consideration at times with Occupational Safety and Health Administration (OSHA), community, federal, state, local government needs and the list of existing projects from the 5-year plan to address a broader needs collection. At this stage the organizational strategic objectives and performance goals will be taken into consideration in project selection and prioritization. The project priorities will be discussed between Asset Management, Engineering, Division highway and bridge Engineer, Division Director, the Director and M&O, and considering the organizational needs and goals.

<u>*Timeline*</u>: Stage 2 takes place during the first and some portions of the second quarter of the calendar year and once it is completed each division will communicate it's needs to the CPEC for review.

3. Funding Allocation (Mid-January-March)

A. Finance

<u>Description</u>: During this stage the Finance department will consult the Executive Director of NYSTA and CPEC on the next five years cash flow projections and communicate the approved projected cash flow to the CPEC, Chief of Engineering and Divisions. The cash flow projections will help the M&O, Engineering and Division Directors refine the proposed project list based on the priorities and known risks.

Timeline: This step takes place in the first quarter of the calendar year.

B. Finance/Procurement (March-April)

<u>Description</u>: During the second quarter of the calendar year, the Finance and Procurement departments will communicate the budget allocations, including the unused funds from the previous year, to the CPEC, Chief of Engineering and Divisions to support additional refinement of the proposed project lists.

Timeline: This step takes place in the second quarter of the calendar year.

4. Project List Refinement (February-June)

<u>Description</u>: Using the Risk Assessment information, Asset Management data, cash flow and budget allocation information, the CPEC, Chief of Engineering and Divisions will score projects using a standard prioritization framework and adjust the project list accordingly to meet the organization and Division needs and priorities. During this stage, availability of resources, project scope and execution duration, risk, safety, regulatory and other key parameters are taken into consideration.

Timeline: This stage is completed by the end of the second quarter of the fiscal year.

5. Project Pipeline (June-August)

<u>Description</u>: The Project Pipeline includes all the projects, within the 5-year plan, that were not selected for inclusion in year 1 or 2 of the plan and now are distributed through years 3 to 5. They consist of, but not limited to, the existing projects within the 5-year plan, new needs communicated from the Divisions or any newly communicated regulatory and OSHA policies.

The entire 5-year plan projects (year 1,2 and the Pipeline) are categorized and prioritized within each planned year and if organizational or division needs and priorities are changed, the Pipeline priorities are adjusted accordingly and communicated to all key stakeholders.

The Engineering department is responsible for identifying and proposing the next projects that are feasible to be progressed from the Project Pipeline. During the Pipeline assessment, the Engineering department will take the organizational priorities, division priorities, the amount of available funds and availability of resources into consideration.

<u>*Timeline:*</u> The process to identify the project Pipeline will happen during the June-August timeframe, as a part of the Capital Project Planning Process.

6. Review Health of Capital Program (January-June)

<u>Description</u>: The CPEC will be engaged in decision making and monitoring the identified division and organizational needs and will review the refined project lists and proposed project Pipeline.

<u>Timeline</u>: The monitoring of the Capital Project Plans will take place during the first and second quarter of the year.

7. CPEC Approvals (June-September)

Description: CPEC review of the proposed project lists for the upcoming fiscal year and the 5-year plan will take place in the first two quarters of the calendar year.

<u>*Timeline:*</u> Once the plan is finalized, it is consulted with the Division Directors for further feedback and is approved in the 3rd quarter by the CPEC and is ready to be presented to the board.

8. Board Approval (November-December)

<u>Description / Timeline</u>: Board approval of the Capital Project Plan is scheduled for the fourth quarter of the fiscal year. Once the board approved the proposed project list, all effected stakeholders are informed.

NYS THRUWAY AUTHORITY Proposed 2023-2027 Capital Program Letting List as of 10/28/2022 New York Division Projects

LETTI YEAR	NG QTR.	ITEM NO.	MILEPOST	PROJECT DESCRIPTION	ESTIMATED CONSTRUCTION CONTRACT VALUE
2023	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
	1	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
	1	B872.1	NY Div.	New York Division: On-Demand Repair Contract - 2023-2024	\$3,000,000
	1	1112.1	NY Div.	Replacement of ITS Equipment in New York Division	\$4,000,000
	4	B776.2	MP: 29.54	NY Division: Bridge Preservation for MP 29.54 - Thruway over Suffren-Mt. Ivy Route 202	\$4,500,000
	4	A750.1	MP: 45.20	Harriman Maintenance Section and Toll Building (Exit 16): Connect to Municipal Water, Sewer and Gas	\$1,600,000
				2023 Total	\$36,300,000
2024	1	B776.1	MP: 23.53	NY Division: Bridge Preservation for MP 23.53 - Garden State Parkway Connector over Thruway	\$3,500,000
	1	H161.1	MP: 46.00	North of Harriman Toll Barrier to Newburgh (Exit 17): Pavement Resurfacing	\$28,000,000
	1	B797.1	MP: 600.17	I-95 (New England Thruway) Bridge Maintenance Cleaning for Steel Preservation - 2024	\$700,000
	1	B378.1	NY Div.	MP: 47.04 Rehabilitation of Thruway Bridge over County Route 19	\$2,000,000
	2	H355.1	MP: 600.00	I-95, New England Thruway MP 604.0 to MP 608.8: Highway Rehabilitation 2024-2025	\$35,000,000
	3	B884.1	MP: 47.58	Pine Hill Road Bridge over Thruway: Replacement	\$8,000,000
	4	B762.1	MP: 60.95	Meadow Hill Road Bridge over Thruway - Replacement	\$7,000,000
	4	B229.1	NY Div.	New York Division - On-Demand Repair Contract - 2025-2026	\$3,000,000
				2024 Total	\$87,200,000
2025	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
	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	I-95 (New England Thruway) Viaduct, Railroad Span (New Rochelle): Rehabilitation	\$4,000,000
	1	B2223.1	MP: 607.64	Chatsworth Avenue Bridge (MP 607.64) over I-95 (New England Thruway): Rehabilitation	\$2,500,000
	1	B700.1	MP: 607.72	Larchmont Station Plaza: Substructure Repairs I-287 (MP 11.00) to Governor Mario M. Cuomo Bridge Toll Barrier (MP 13.0): Pavement	\$2,000,000
	2	H138.1	MP: 11.30	Resurfacing	\$7,000,000
	4	B635.1	MP: 16.56	New York Division: Paint 5 Bridges with Poor Paint Condition Ratings	\$5,300,000
	4	B799.1	MP: 25.52	Thruway Bridges over Abandoned RR (South of Airmont Road): Rehabilitations	\$3,000,000
	4	H148.1	MP: 600.00	I-95, New England Thruway: Highway Improvements 2026-2027	\$6,000,000
	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 north of White Plains (Exit 18B) to Rye (Exit 20): Pavement Resurfacing	\$30,000,000
				2025 Total	\$76,000,000

New York Division Projects

LETTI	NG			-	ESTIMATED CONSTRUCTION
YEAR	QTR.	ITEM NO.	MILEPOST	PROJECT DESCRIPTION	CONTRACT VALUE
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	B800.1	MP: 600.17	I-95 (New England Thruway) Bridge Maintenance Cleaning for Steel Preservation - 2026	\$700,000
	4	B872.6	NY Div.	New York Division - On-Demand Repair Contract - 2027-2028	\$3,000,000
	4	H240.1	NY Div.	MP 72.5 to 76.5 Pavement Reconstruction 2027 -2028	\$50,000,000
				2026 Total	\$86,500,000
2027	1	B228.1	MP: 74.17	MP 74.17 Raising and Rehabilitation of Brookside Rd. Over Thruway	\$2,000,000
	1	H25.1	NY Div.	New York Division: Various Culvert Rehabilitations/Replacements - 2026	\$5,000,000
	4	H370.1	MP: 68.00	North of Newburgh (Exit 17, MP 68.0) to south of New Paltz (Exit 18, MP 72.5): Pavement Resurfacing	\$11,000,000
	4	A2016.1	MP: 607.00	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	B525.1	NY Div.	MP 600.17 I-95 (New England Thruway) Bridge Maintenance Cleaning for Steel Preservation	\$800,000
	4	H445.1	NY Div.	Pavement Reconstruction from MP 16.2 to 24.0	\$50,000,000
				2027 Total	\$74,000,000
				2023-2027 New York Total	\$360,000,000
				Albany Division Projects	
2023	1	H1138.2	MP: 93.80	North of Kingston to south of Saugerties: Safety Upgrades	\$3,000,000
	1	B773.1	MP: 111.13	Albany Division: Bridge Preservation for Various Bridges - 2023	\$4,000,000
	1	A368.3	MP: 141.92	MP 141.92: Administrative Headquarters - TSOC and State Police - Renovations	\$3,000,000
	3	B346.1	MP: 112.57	Leeds-Old Kings Highway Bridge over Thruway: Replacement	\$7,500,000
	4	B975.1	MP: 81.72	Thruway Bridge over Wallkill River: Rehabilitation	\$15,000,000
	4	H435.1	MP: 100.80	South of Saugerties (MP 100.80) to south of Catskill (MP 109.30): Pavement Resurfacing	\$15,500,000
				2023 Total	\$48,000,000

Albany Division Projects

2024	QTR.	ITEM NO.			CONSTRUCTION
2024			MILEPOST	PROJECT DESCRIPTION	CONTRACT VALUE
	1	H140.1	MP: 154.40	West of Schenectady / I-890 (Exit 25, MP 154.30) to west of Schenectady / Scotia (Exit 26, MP 161.3): Pavement Resurfacing	\$21,000,000
	1	B221.1	MP: 165.10	Scour Repairs at Various Bridges (MP 165.10, 171.31, 174.71, 179.76 & 185.93)	\$3,000,000
	1	B998.1	MP: 178.38	MP 178.38 Rehabilitation of Mainline Bridge over Rte. 5S	\$2,500,000
	3	B787.1	MP: 103.16	MP 103.16: Malden Road - Replacement	\$6,500,000
	3	B994.1	ALB Div.	MP 113.89 - Rehabilitation of Interchange 21 (Catskill) Bridge over Thruway	\$2,500,000
	4	B872.2	ALB Div.	Albany Division: On-Demand Repair Contract - 2025-2026	\$3,000,000
				2024 Total	\$38,500,000
2025	3	B786.1	MP: 801.08	MP 801.08: Castleton Bridge - Rehabilitation	\$30,000,000
	1	B995.1	MP: 125.45	MP 125.45 Rehabilitation of Mainline Bridge over CSX Railroad	\$5,500,000
	1	B997.1	MP: 158.54	MP 158.54 Rehabilitation of Rte. 7 Bridge over Thruway	\$1,000,000
				2025 Total	\$36,500,000
2026	1	H357.1	MP: 76.50	North of New Paltz (Exit 18, MP 76.5) to south of Kingston (Exit 19, MP 86.8): Pavement Resurfacing	\$19,000,000
	1	A828.2	MP: 91.40	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-	\$3,500,000
	1	A171.1	MP: 103.00	Malden Service Area - Rehabilitate/Replace Wastewater Treatment Plant	\$1,500,000
	1	B792.1	MP: 122.21	Bridge Rehabilitations at MP 122.21 and 134.61:Coxsackie-Greenville Road (Route 81) and Rive	\$3,000,000
	3	A360.1	MP: 141.90	Albany Maintenance Facility - Replace Metal Building	\$3,000,000
	4	B872.3	ALB Div.	Albany Division On-Demand Contract 2027 - 2028	\$3,000,000
	4	H359.1	ALB Div.	Albany Division: Various Culvert Rehabilitations/Replacements - 2027	\$5,000,000
				2026 Total	\$38,450,000

Albany Division Projects

LETTI YEAR		ITEM NO.	MILEPOST	PROJECT DESCRIPTION	ESTIMATED CONSTRUCTION CONTRACT VALUE
2027	1	B629.1	MP: 128.08	Thruway Bridge over Hannacroix Creek - Rehabilitation	\$3,000,000
2021	1	B789.1	MP: 177.86	MP 177. 86: Schoharie Creek Bridge - Rehabilitations (Deck & Joints)	\$1,500,000
	1	H558.1	MP: 817.90	Berkshire Thruway, Canaan Toll Barrier to Massachusetts State Line: Pavement Resurfacing	\$11,000,000
	1	A299.2	ALB Div.	Construct Sandblast Booth in Albany Division	\$750,000
	4	H559.1	MP: 148.20	Northway (Exit 24) to west of Schenectady (Exit 25): Pavement Restoration	\$16,500,000
	4	H362.1	MP: 801.60	MP 801.6 to MP 805.7 (Berkshire Spur): Pavement Resurfacing	\$7,500,000
	4	B804.1	ALB Div.	Albany Division: Bridge Preservation/Rehabilitation for Various Bridges - 2026	\$5,000,000
	4	B882.2	ALB Div.	Albany Division: On-Demand Repair Contract - 2027-2028	\$3,000,000
	4	H360.1	ALB Div.	West of Rotterdam (Exit 26, MP 161.3) to East of Amsterdam (Exit 27, MP 170.0): Pavement Resurfacing	\$15,000,000
				2027 Total	\$63,250,000
				2023-2027 Albany Total	\$224,700,000
				Syracuse Division Projects	
2023	1	A172.1	MP: 304.20	Weedsport Maintenance Section - Renovations to Section Maintenance Building and Roof Replacement	\$1,250,000
	1	A865.4	MP: 310.00	Port Byron Service Area - Replace Waterline	\$1,100,000
	2	B742.1	MP: 219.91	Thruway Bridge Over Mohawk Street (Route 28): Replacement	\$16,200,000
	3	B801.1	MP: 274.48	MP 274.48: Shepps Corners Road - Replacement	\$7,000,000
	4	B754.1	MP: 313.82	Rehabilitation of MP 313.82: MP 313.83 and MP 320.41	\$3,000,000
	4	B778.3	SYR Div.	Syracuse Division: On-Demand Repair Contract - 2024-2025	\$3,000,000
				2023 Total	\$31,550,000
2024	1	B222.1	MP: 227.40	Mainline Bridge Rehabs (MP 227.40 & 227.41) over Sterling Creek EB & WB	\$4,500,000
	1	A354.1	MP: 252.71	Verona Maintenance - Construct Municipal Sewer / Water Connections	\$750,000
	1	H557.1	MP: 347.10	Canandaigua (Exit 44, MP 347.1) to Rochester (Exit 45, MP 351.4): Pavement Rehabilitation	\$25,000,000
	1	H563.1	SYR Div.	Syracuse Division Pavement Repairs at Various Locations 2023-2024	\$5,000,000
	3	B499.1	MP: 238.22	Thruway Bridge over Oriskany Boulevard (Route 69): Replacement	\$12,000,000
	3	B802.1	MP: 280.31	MP 280.31: Town Line Road over Thruway - Replacement	\$11,000,000
	4	A354.2	MP: 304.20	Weedsport Maintenance - Construct Municipal Sewer Connection	\$1,500,000
	4	A865.5	SYR Div.	MP 266.0 Chittenango Service Area - Rehab/ Replacement Waste Water Treatment Plant	\$1,500,000
				2024 Total	\$61,250,000

Syracuse Division Projects

LETTI YEAR		ITEM NO.	MILEPOST	PROJECT DESCRIPTION	ESTIMATED CONSTRUCTION CONTRACT VALUE
2025	1	A865.1	MP: 210.00	IMP 210 Iroquois and Indian Castle Service Area - Rehabilitate/Replace Wastewater Treatment Plant	\$1,500,000
	1	B223.1	MP: 233.27	Rehabilitation of North Genesee St. Bridge at MP 233.27 (away bridge)	\$1,500,000
	1	B573.1	MP: 261.73	MP 261.73: North Peterboro Street (Route 13) Bridge over Thruway - Replacement	\$6,000,000
	1	B754.2	MP: 276.58	MP 276.58: Collamer Interchange 34A Bridge over Thruway - Rehabilitation	\$1,000,000
	1	A864.1	MP: 340.20	Manchester Maintenance Section: Addition and Roof Replacememts	\$1,500,000
	2	A865.6	SYR Div.	MP 337.0 Clifton Springs Service Area - Rehabilitation/Replace Waste Water Treatment Plant	\$1,500,000
	3	A173.1	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
	3	A348.1	MP: 278.90	Tarbell Road Maintenance Building (M3341) - Reconfigure/Refurbish	\$8,500,000
	3	A299.3	SYR Div.	Construct Sandblast Booth in Syracuse Division East of Fulton (Exit 39, MP 289.3) to west of Weedsport (Exit 40, MP 304.5): Concrete	\$750,000 \$60,000,000
	4	H372.1	MP: 289.30	Pavement Restoration	\$1,500,000
	4	A865.2	MP: 310.00	MP 310 Port Byron - Rehabilitate/Replace Wastewater Treatment Plant	\$3,000,000
	4	B197.1	SYR Div.	Syracuse Division: On-Demand Repair Contract - 2026-2027 2025 Total 2025 Total	\$93,500,000
2026	1	B553.1	MP: 210.62	Thruway Westbound Bridge over Little Falls Interchange (Exit 29A): Rehabilitation	\$3,000,000
	1	B786.2	SYR Div.	Syracuse Division On-Demand Contract 2027 - 2028	\$4,000,000
	3	B498.1	MP: 310.98	Thruway Bridge over Crane Brook: Replacement	\$12,000,000
	3	B697.1	MP: 327.54	Thruway Bridge over Canandiagua Outlet - Replacement	\$15,000,000
	4	A373.1	MP: 219.70	Herkimer Section Maintenance - Building Renovations	\$750,000
				2026 Total	\$34,750,000
2027	1	B196.1	MP: 197.93	Bridge Preservation/Rehabilitation for Various Bridges	\$4,000,000
	1	B679.2	MP: 285.67	Syracuse Division: Bridge Painting at Various Locations	\$4,000,000
	1	H562.1	MP: 337.50	East of Manchester (MP 337.5) to Canandaigua (Exit 44, MP 347.1): Pavement Resurfacing	\$11,500,000
	3	B559.1	MP: 282.62	Thruway over Bear Trap Creek Bridge - Replacement	\$8,000,000
	4	H163.1	MP: 253.00	West of Verona (Exit 33) to west of Canastota (Exit 34A): Pavement Resurfacing	\$18,000,000
	4	H428.1	MP: 313.80	West of Weedsport (MP 313.8) to Waterloo (Exit 41, MP 320.7): Pavement Resurfacing	\$13,000,000
	4	B980.2	SYR Div.	Syracuse Division: On-Demand Repair Contract - 2026-2027	\$3,000,000
	4	H374.1	SYR Div.	Syracuse Division: Various Culvert Rehabilitations/Replacements - 2027	\$5,000,000
				2027 Total	\$66,500,000
				2023-2027 Syracuse Total	\$287,550,000

				Buffalo Division Projects	
LETT YEAR		ITEM NO.	MILEPOST	PROJECT DESCRIPTION	ESTIMATED CONSTRUCTION CONTRACT VALUE
2023	1	A228.1	BUF Div.	MP 909.1: Niagara Section pumphouse upgrade	\$750,000
	1	B773.2	BUF Div.	Buffalo Division: Bridge Preservation for Various Bridges - 2023	\$4,000,000
	1	B872.4	BUF Div.	Buffalo Division: On-Demand Repair Contract - 2023-2024	\$3,000,000
	1	H20.2	BUF Div.	Buffalo Division: Various Culvert Rehabilitations/Replacements - 2023	\$1,750,000
	4	H152.1	MP: 900.70	I-190, MP 900.7 - MP 904.2 (South end of Viaduct): Pavement Rehabilitation	\$40,000,000
				2023 Total	\$49,500,000
2024	1	H366.1	MP: 438.50	West of Hamburg (Exit 57, MP 438.50) to east of Eden-Angola (Exit 57A, MP 443.60) (WB) and east Angola (Exit 57A, MP 443.6) to east of Silver Creek (Exit 58, MP 451.5): Microsurfacing	\$5,000,000
	1	B679.1	MP: 447.78	Buffalo Division: Bridge Painting at Various Locations	\$4,000,000
	1	B779.1	MP: 914.35	South and North Grand Island Bridges: Maintenance Cleaning for Steel Preservation - 2024	\$800,000
	4	B227.1	BUF Div.	Buffalo Division: On-Demand Repair Contract - 2025-2026	\$3,000,000
				2024 Total	\$12,800,000
2025	1	B784.1	MP: 908.75	Thruway Bridge over Scajaquada Creek - Retaining Wall Stabilization	\$5,500,000
	3	B724.1	MP: 362.44	MP 362.44: West Henrietta Interchange Bridge over Thruway - Replacement	\$9,000,000
	4	B871.1	MP: 914.35	MP 914.99 and 914.35 - Steel Repairs and Seismic Upgrades of the South Grand Island Bridges	\$23,500,000
				2025 Total	\$38,000,000
2026	1	H152.2	MP: 425.90	I-90, West of Williams St. (Exit 52A, MP 425.9) to west of West Seneca (Exit 54, MP 427.7) and I-190 (Niagara Section), I-90, MP 900.0 to MP 900.7: Pavement Resurfacing	\$14,000,000
	1	B796.1	MP: 914.35	South and North Grand Island Bridges: Maintenance Cleaning for Steel Preservation - 2026	\$800,000
	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	B872.5	BUF Div.	Buffalo Division: On-Demand Repair Contract - 2027-2028	\$3,000,000
				2026 Total	\$25,800,000

					ESTIMATED
LETT YEAR		ITEM NO.	MILEPOST	PROJECT DESCRIPTION	CONSTRUCTION CONTRACT VALUE
	αn.		WILLF 031		CONTRACT VALUE
2027	1	H144.1	MP: 419.40	East of Williamsville Toll Barrier (MP 419.4) to west of Buffalo-Williams Street (Exit 52A, MP 425.9): Pavement Resurfacing	\$38,000,000
	1	B225.1	MP: 423.63	Rehabilitation of CSX Railroad over Thruway at MP 423.63	\$1,000,000
	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	\$450,000
	1	l117.1	BUF Div.	Replacement of ITS Equipment in Buffalo Division	\$3,000,000
	1	l118.1	BUF Div.	Buffalo Division: Transmit/Que-N-Warning - Upgrade / Replace	\$2,000,000
	1	l119.1	BUF Div.	Buffalo Division: Power and Fiber to ADDCO Signs	\$3,000,000
	3	B904.1	MP: 366.42	Thruway Bridge over Scottsville Road: Replacement	\$10,000,000
	3	B713.1	MP: 434.85	South Park Ave. (Route 62) Bridge over Thruway - Replacement	\$10,000,000
	3	B908.1	MP: 917.27	MP 917.27: Whitehaven Road Bridge over I-190 Thruway - Replacement	\$8,500,000
	4	H142.1	MP: 351.40	Victor (Exit45) to Henrietta (Exit46): Pavement Rehabilition East of Depew (Exit 49, MP 416.90) to east of Niagara Falls (Exit 50, MP 419.40): Pavement	\$18,500,000 \$6,000,000
	4	H438.1	MP: 416.90	Resurfacing	
	4	A352.1	MP: 423.19	Walden Avenue: Replace Metal Buildings and Construct Vehicle Wash Bay	\$6,000,000
	4	B226.1	MP: 424.21	Rehabilitation of Mainline Bridge over Norfolk Southern Railroad at MP 424.21	\$5,000,000
	4	H145.1	MP: 430.60	Lackawanna Toll Barrier (MP 430.6) to west of Hamburg (Exit 57, MP 438.5): Pavement Resurfacing	\$14,000,000
	4	B986.1	MP: 454.47	Thruway over Cattaraugus Creek Bridge Rehabilitation	\$8,000,000
	4	B521.1	MP: 901.06	Weiss Street Bridge over Thruway - Removal	\$1,000,000
	4	B641.1	MP: 920.35	North Grand Island Southbound and Northbound Bridges - Select Painting	\$20,000,000
	4	B888.2	BUF Div.	Buffalo Division: On-Demand Repair Contract - 2027-2028	\$3,000,000
	4	H446.1	BUF Div.	MP 467.0 to 483.0 -Pavement Rehabilitation	\$25,000,000
				2027 Total	\$183,200,000
				2023-2027 Buffalo Total	\$309,300,000

Buffalo Division Projects

Statewide Projects

LETT YEAR		ITEM NO.	MILEPOST	PROJECT DESCRIPTION	ESTIMATED CONSTRUCTION CONTRACT VALUE
2023	1	A175.1	TWY wide	Radio System Upgrade Project - Engineering Analysis and Link Upgrade	\$2,000,000
	4	H750.5	TWY wide	Statewide: Pavement Safety Striping - 2024	\$4,000,000
				2023 Total	\$6,000,000
2024	1	H376.1	TWY wide	Statewide: Wetland Mitigation Site Repairs	\$1,000,000
	1	H377.1	TWY wide	Statewide: Permanent Stormwater Infrastructure Repairs	\$2,000,000
	4	H378.1	TWY wide	Statewide: Pavement Safety Striping - 2025	\$4,000,000
	4	1116.1	TWY wide	Replacement of ITS Equipment Statewide	\$3,000,000
				2024 Total	\$10,000,000
2025	4	H379.1	TWY wide	Statewide: Pavement Safety Striping - 2026	\$4,000,000
				2025 Total	\$4,000,000
2026	4	H380.1	TWY wide	Statewide: Pavement Safety Striping - 2027	\$4,000,000
				2026 Total	\$4,000,000
2027	4	H245.1	TWY wide	Statewide: Various Culvert Rehabilitations/Replacements 2027 -2028	\$5,000,000
	4	H246.1	TWY wide	Statewide: Pavement Safety Striping - 2027	\$4,000,000
				2027 Total	\$9,000,000
				2023-2027 Statewide Total	\$33,000,000
				Thruway Project Totals by Division	
				2023-2027 New York Division Total:	\$360,000,000
				2023-2027 Albany Division Total:	\$224,700,000
				2023-2027 Syracuse Division Total:	\$287,550,000
				2023-2027 Buffalo Division Total:	\$309,300,000
				2023-2027 Statewide Total:	\$33,000,000
				2023-2027 Thruway Authority Total:	\$1,214,550,000
				Thruway Project Totals by Year	
				2023 Total:	\$171,350,000
				2024 Total:	\$209,750,000
				2025 Total:	\$248,000,000
				2026 Total:	\$189,500,000
				2027 Total:	\$395,950,000
				2023-2027 Thruway Authority Total:	\$1,214,550,000

APPENDIX

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То:	Karen Osborn, New York State Thruway Authority	From:	Suzanne Seegmuller
Subject:	Budget Forecast		
Date:	September 30, 2022		

Reference: NYS Thruway Authority 2023 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 2021 and 2022 toll modifications, 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 another \$0.50 increase in January 2022. Truck 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 in a month), and a new resident plan has kept 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 fee per billing statement.
- In addition, all *E-ZPass* transactions that are processed as image tolls (processed from license plate images) 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 ("COVID-19") 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 and Appendix B.

Traffic and revenue forecasts have been prepared for 2022 – 2026 taking into account the recent conversion of the full system to AETC, the 2021 and 2022 toll increases, COVID-19 recovery and socioeconomic factors (discussed in Appendix A). Note that no further toll modifications are included in the forecasts.

Recent History of Monthly Traffic and Revenue Including 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 toll transactions and revenue over the 2019-2022 period. While these declines were most severe during the height of the outbreak, significant improvement was seen over the summer and fall of 2021 where transactions often exceeded 2019 levels. Over the winter of 2021-2022, however, with the spread of the Omicron variant, traffic experienced a notable decline below 2019 levels, followed by near-recovery in April through June 2022.

Toll revenue began to exceed 2019 levels starting around May 2021; however, higher revenues were anticipated due to the January 1, 2021 systemwide and January 1, 2022 Governor Mario M. Cuomo Bridge toll increases.

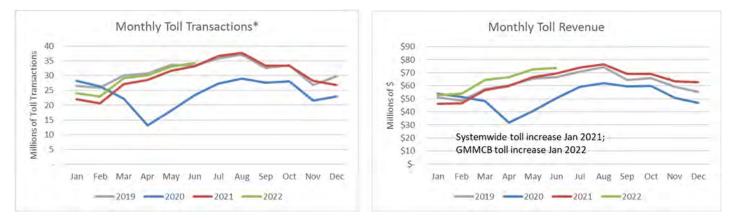


Figure 1: Monthly Toll Transactions and Revenue, 2019-2022

* With the new AETC system, there may now be multiple toll transactions per trip on the Woodbury-Williamsville section, while there was previously only one transaction per trip. From January 2019 through November 2020 these trips were converted to "new system transactions" for graphing purposes to provide a better comparison to pre-AETC conditions.

Stantec compared actual monthly toll revenues to what is referred to as the "Pro Forma forecast" – Stantec's traffic and revenue forecast prior to COVID-19 – in order to identify monthly COVID-19 impacts since the start of the pandemic. Figure 2 shows the monthly difference between COVID-impacted (actual) and Pro Forma toll revenue on the Thruway System, split by passenger cars and commercial vehicles. While car toll revenue has been under the Pro Forma forecast every month since the pandemic began, after an initial decline the commercial vehicle revenue has been above the Pro Forma almost every month since September 2020, reaching as high as 16 percent above the Pro Forma monthly projection. From June 2021 through May 2022, total toll revenues have averaged almost 1 percent above the Pro Forma projection. While this is a good sign of COVID-19 recovery, most of the revenue increases can be attributed to especially high truck volumes; a phenomenon that has been seen nationwide (see Appendix B.4).

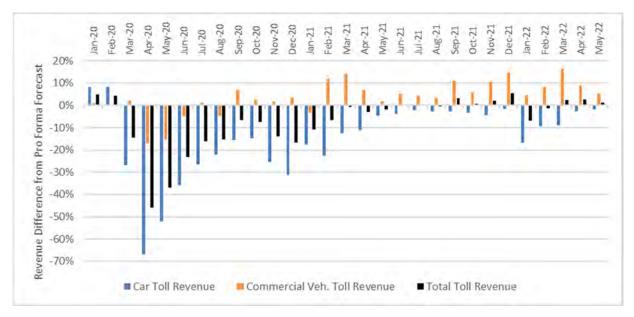


Figure 2: Thruway System COVID-19 Impacts* on 2020-2022 Monthly Toll Revenue

*Compared to Pro Forma forecast

Traffic and Revenue Forecasts

Table 1 includes a history of tolled transactions on the various elements of the Thruway System going back to 2012. "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-2007 recession 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 impacts traffic began in March 2020, leading to a significant decline in toll transactions that year. Note that commercial traffic was impacted much less than passenger car traffic. In 2021 there was a systemwide toll increase and passenger car traffic continued its recovery from COVID impacts, reaching closer to pre-COVID levels, while commercial traffic exceeded pre-COVID levels. This increase was mainly due to the sharp increase in e-commerce and disruptions to supply chains that resulted from the pandemic. It is important to note that due to the November 2020 AETC conversion, traffic appears to have more than doubled 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 trip was recorded as one toll transaction, and with AETC there may now be multiple toll transactions per controlled system trip.

Table 1 also presents Stantec's forecast of traffic from 2022 through 2026 considering the economic information and expectations regarding COVID-19 recovery as discussed within this memorandum and Appendices. These forecasts are based on the following assumptions.

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- Traffic from the first six months of 2022 indicates further COVID-19 recovery in passenger car traffic this year over 2021, while we expect commercial vehicle traffic to slightly decline (controlled system), remain flat (Cuomo Bridge), or increase (other barriers) for the full year.
- Economic indicators show that we may be in a recession. However, according to economic forecasters, any recession is expected to be relatively mild. It has been seen that mild recent recessions such as the ones in 1991 and 2001 did not reduce the Thruway System traffic but did result in lower-than-normal growth rates. Therefore, we are forecasting no increase in passenger car traffic in 2023.
- We expect recovery in passenger car traffic both from an economic downturn and any remaining COVID-19 impacts to occur in 2024 and 2025, followed by low-to-moderate growth thereafter.
- There are also indications that e-commerce is declining from its recent highs, and supply chain issues will eventually resolve. Therefore, we are forecasting that commercial traffic will decline through 2023 and 2024, reaching its post-COVID "new normal" in 2025, with low-to-moderate annual growth in the years that follow.

	Passenger Cars			Comm	ercial Veh	icles		
Year	Controlled System	TZB/ Cuomo Br.	Other Barriers	Controlled System	TZB/ Cuomo Br.	Other Barriers	Total	Growth
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 ¹	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 ²	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 ³	108.7 ⁴	19.2	56.0	20.5 ⁴	2.4	8.6	215.5	4
2021 ⁵	208.2 ⁴	24.0	67.3	47.1 ⁴	2.7	9.9	359.2	4
2022 ⁶	214.9	25.1	69.2	46.9	2.7	10.4	369.2	2.8%
2023	214.9	25.1	69.2	44.2	2.6	9.8	365.9	-0.9%
2024	224.6	25.8	70.7	42.6	2.6	9.6	375.8	2.7%
2025	230.7	26.3	71.7	42.7	2.6	9.6	383.7	2.1%
2026	232.9	26.6	72.1	42.9	2.7	9.7	386.8	0.8%

Table 1: The Thruway System's Actual and Forecasted Tolled Transactions (millions)

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

¹ AETC began at the Governor Mario M. Cuomo Bridge (formerly Tappan Zee Bridge Barrier) April 23, 2016. ² 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.

³ COVID-19 impacts began in March 2020

⁴ 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.

⁵ Toll modification on January 1, 2021 (system-wide); first full year of systemwide AETC

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

Table 2 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. With AETC there is the inability to bill or collect revenue from some TBM customers due to factors such as bad license plate images, inability to find customer mailing addresses through their state's department of motor vehicles, or customers not paying the invoice. In January 2017, the *E-ZPass* discount for customers with non-NY *E-ZPass* was discontinued leading to toll revenue growth for 2017 (3.3 percent) that was noticeably higher than the traffic growth (0.9 percent) shown previously in Table 1. 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 that year. 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 primarily 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

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loss. With the conversion of the controlled system to AETC in mid-November 2020, there were additional losses due to some uncollectable TBM revenues along with the lag between the time a trip is made and the toll is collected. These impacts continued into 2021, the first full year of AETC on the controlled system. With the January 2021 systemwide toll increase and traffic growth related to COVID recovery, however, the 2021 forecasted toll revenue reached \$760.3 million - more than \$20 million higher than the pre-COVID 2019 annual toll revenue.

Table 2 also presents the gross toll revenue forecasts for the Thruway System from 2022 through 2026. Like toll traffic, toll revenue is expected to experience further recovery from COVID-19 impacts by the end of 2022. There is additional growth in toll revenue in 2022 on the Governor Mario M. Cuomo Bridge due to the January 1, 2022 toll increase on the bridge. We have forecasted total 2022 toll revenues to be 6.6 percent above 2021. That is followed by a loss of 1.2 percent in 2023 due to a projected economic downturn and anticipated reductions from the current high levels of commercial traffic. 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 enacted 2022 toll increase at the Governor Mario M. Cuomo Bridge.

	Pas	senger Car	'S	С	ommercial	Vehicles			
Year	Controlled System	TZB/ Cuomo Br.	Other Barriers	Controlled System	TZB/ Cuomo Br.	Other Barriers	CV Disc	Total	Growth
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 ¹	245.2	103.4	84.0	227.6	38.2	36.4	(26.6)	708.3	2.4%
2017 ²	251.6	103.4	84.1	233.3	47.8	38.7	(27.4)	731.5	3.3%
2018 ³	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 ⁴⁵	177.2	80.6	59.9	240.8	48.2	37.7	(29.0)	615.3	-16.8%
2021 ⁶	215.7	112.8	76.0	261.9	77.2	46.5	(29.9)	760.3	23.6%
2022 ⁷	228.0	127.4	79.7	264.5	95.5	47.5	(32.0)	810.8	6.6%
2023	228.1	128.1	80.0	259.0	91.7	44.8	(30.9)	800.7	-1.2%
2024	238.8	130.9	82.4	257.1	89.6	43.4	(30.5)	811.7	1.4%
2025	245.4	134.0	84.1	258.8	90.3	43.8	(30.7)	825.6	1.7%
2026	247.7	136.3	84.7	260.2	90.8	44.2	(31.0)	832.9	0.9%

Table 2: The Thruway System's Actual and Forecasted Toll Revenues (millions)

Notes: Totals may not add due to rounding.

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

² Removal of discounts for vehicles with out-of-state E-ZPass began on January 1, 2017.

³ 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.

⁴ AETC began at all controlled system toll locations on November 14, 2020

⁵ COVID-19 impacts began in March 2020

⁶ Toll modification on January 1, 2021 system-wide; first full year of systemwide AETC

⁷ Toll modification on January 1, 2022 Gov. Mario M. Cuomo Bridge only

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Fee Revenues

Violation and late fee revenues are collected from TBM customers who do not pay their toll invoices on time. Violation fees are also 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 fees charged on the Thruway System:

- On January 20, 2016, an enforcement measure was enacted whereby drivers of New York State
 registered vehicles who have unpaid toll violations on five separate days over an 18-month period
 would have their registration suspended. In 2017 this was changed to three violations over a fiveyear period. This enforcement measure was applied to all 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 resulting 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 also 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. While this resumed later in 2021, it only includes violations incurred in 2021.
- As part of the conversion to systemwide cashless tolling, the Authority temporarily suspended mailing of violation notices beginning February 2021; mailing of violation notices resumed in the summer of 2021.

In 2016, the first year with AETC on the Governor Mario M. Cuomo Bridge, \$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 (., 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 the end of 2018 all barriers had been converted to cashless toll collection.

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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 and then 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 fee revenue 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 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 and collected \$6.2 million in billing fees that year. TBM late fees and TBM violations increased to \$2.6 million and \$23.3 million, respectively, in 2021. The actual numbers show a decline in systemwide E-ZPass violation revenues (to \$1.9 million in 2021) as more facilities were converted to AETC. This is because these revenues include both *E-ZPass* and cash customer violations, and by 2021 there were no longer any cash customers on the system.

Table 3 provides actual and forecasted 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. Based on five months of fee collection data this year, a total of \$51.4 million in annual violation and late fee revenues is projected for 2022. As it has now been more than a full year since systemwide AETC conversion, further changes in fee or violation charges are not anticipated, and future growth in TBM traffic is expected to be small. Therefore, we project that total fee and violation revenue will remain between \$52 and \$53 million per year over the 2023-2026 forecast period.

Year	<i>E-ZPass</i> Violations ¹	TBM Violations ²	TBM Late Fees	TBM Billing Fees	TOTAL
2016 ³	\$5.3	\$2.2	\$0.3		\$7.8
2017 ³	7.7	14.6	1.0		23.3
2018 ^{3 4}	10.6	10.6	0.9		22.1
2019 ³	9.6	14.2	1.4		25.2
2020 ³⁵⁶	8.3	14.3	1.1		23.7
2021 ³⁷	1.9	23.3	2.6	\$6.2	34.0
2022 ⁸	0.6	37.3	3.9	9.6	51.4
2023	0.7	37.2	4.5	9.7	52.1
2024	0.7	37.3	4.6	9.8	52.4
2025	0.8	37.7	4.6	9.9	52.9
2026	0.8	37.6	4.6	9.8	52.7

Table 3: Violation, Late Fee, and Billing Fee Revenue Forecast (in millions)

¹ Includes both E-ZPass and cash customer violations; since the completion of the controlled system conversion to AETC in late 2020, there have been no cash customers. The E-ZPass violation fee increased from \$25 in 2016 to \$50 on January 1, 2017.

² AETC violation fee increased from \$25 in 2016 to \$50 on January 1, 2017 and to \$100 on January 17, 2017 at the Gov. Mario M. Cuomo Bridge. This was reduced back to \$50 on May 15, 2018. In 2021, after the controlled system was converted to AETC, the \$50 violation changed from per transaction to per bill.

³ Actual

⁴ An amnesty program ran from January 22, 2018 through February 26, 2018 waiving violation fees for customers who paid outstanding tolls. AETC began at the Grand Island Bridges on March 30, 2018, Harriman Barrier on September 28, 2018, Yonkers Barrier on November 19, 2018, and Spring Valley and New Rochelle Barriers on December 20, 2018. ⁵ COVID-19 impacts began in March 2020

⁶ The controlled system began operating with AETC in mid-November 2020.

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

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

Comparison to Previous Budget Forecast

Table 4 and Table 5 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 2021.

Actual total toll transactions for 2021 were slightly lower than previously forecasted (about 1 percent), though 2021 truck transactions were slightly higher than forecasted. Based on actual data, updated estimates of traffic recovery from COVID-19, and socioeconomic considerations, toll transactions for each year of the current forecast are about 1 to 4 percent lower than the previous forecast.

		Current	Forecast		Previou	is Foreca	ast (2022	Difference Between		
	Car	Truck	Total	Annual	Car	Truck	Total	Annual	Current & Fore	
Year	Traffic	Traffic	Traffic	Growth	Traffic	Traffic	Traffic	Growth	Amount	%
2021	299.5	59.8	359.2		304.1	59.0	363.1		-3.9	-1%
2022	309.2	60.0	369.2	2.8%	320.7	56.4	377.1	3.9%	-7.9	-2%
2023	309.2	56.7	365.9	-0.9%	325.2	54.5	379.7	0.7%	-13.8	-4%
2024	321.0	54.7	375.8	2.7%	328.1	54.8	382.9	0.8%	-7.1	-2%
2025	328.7	55.0	383.7	2.1%	330.9	55.0	385.9	0.8%	-2.2	-1%
2026	331.6	55.3	386.8	0.8%						

Table 4: Forecasted Annual Toll Transactions Compared to Previous Forecast (in millions)

Note: Numbers may not add due to rounding.

As shown in Table 5, actual toll plus fee revenue in 2021 was about 1 percent above the previous forecast. Because of changes to the fee structure (the \$50 violation fee was charged per transaction in 2020; this changed to \$50 per violation notice in 2021) and transition to a new collection agent, less fee revenue was collected than previously forecasted for 2021, though the higher-than-expected toll revenue more than made up for that loss. Nearly half a year of toll and fee revenue data indicates that 2022 total revenues are likely to be about 1 percent above the previous forecast. In all, future total toll plus fee revenues are projected to be between 1 percent higher and 1 percent lower per year than previously forecasted. A small impact from a potential 2023 recession was built into our latest forecast which was not included in the previous projections.

Table 5: Forecasted Annual Total Revenue Compared to Previous Forecast	t (in millions)
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		Current	Forecast		Previo	ous Forecas	Difference Between			
Year	Toll	Fee	Total				Annual		R Previous ecast	
Tear	Revenue	Revenue	Revenue	Growth	Revenue	Revenue	Revenue	Growth	Amount	%
2021	\$760.3	\$34.0	\$794.3		\$750.8	\$36.7	\$787.5		6.8	1%
2022	810.8	51.4	862.2	8.5%	805.6	51.9	857.5	8.9%	4.7	1%
2023	800.7	52.1	852.8	-1.1%	807.7	50.2	857.9	0.0%	-5.1	-1%
2024	811.7	52.4	864.1	1.3%	816.3	49.3	865.6	0.9%	-1.5	0%
2025	825.6	52.9	878.5	1.7%	823.9	48.6	872.5	0.8%	6.0	1%
2026	832.9	52.7	885.7	0.8%						

Note: Numbers may not add due to rounding.

Limits and Disclaimers

It is Stantec's opinion that the traffic and toll revenue estimates made for the Authority for their budget forecasting and provided herein 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.

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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.

Currently, the economic outlook is uncertain, but certainly less positive than a year ago. Rising gas prices and inflation have lowered consumer confidence. There has been a decline in real GDP over the past two consecutive quarters, which has generally been the indicator of a recession; however, unlike previous recessionary periods, unemployment remains low. Economists generally see an increased risk of recession, while also noting continued signs of economic strength. The Federal Reserve Bank's Open Market Committee's statement in late July summarizes the current outlook as follows: "Recent indicators of spending and production have softened. Nonetheless, job gains have been robust in recent months, and the unemployment rate has remained low. Inflation remains elevated, reflecting supply and demand imbalances related to the pandemic, higher food and energy prices, and broader price pressures. Additionally, Russia's war against Ukraine is causing tremendous human and economic hardship. The war and related events are creating additional upward pressure on inflation and are weighing on global economic activity."¹

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 1.5 percent in 2022 and by 0.7 percent in 2023.²

Any forecast of toll traffic and revenues will, out of necessity, recognize the significant variations that can and do occur in the national, regional, and local economies as well as 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 influence that occurred and how traffic on the Authority's facilities reacted to those trends. In addition, Stantec has been monitoring the impact of the COVID-19 pandemic which had major impacts beginning in 2020 and continues to have long-term implications for economic and traffic growth. Historical information on COVID-19 and its impacts on travel are 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 generally been found between car traffic growth and GDP growth. Figure A-1 shows the real *annual* GDP from 1980 through the end of 2021. From 2000 through 2019, the year before the COVID-19 pandemic struck, real GDP in the United States increased at an average annual rate of 2.0

¹ Federal Reserve Bank Board of Governors, Press Release, July 27, 2022 as accessed August 3, 2022 at <u>https://www.federalreserve.gov/monetarypolicy/files/monetary20220727a1.pdf</u>

² Blue Chip Economic Indicators, "Top Analysts' Forecasts of the U.S. Economic Outlook for the Year Ahead", Wolters and Kluwer Law & Business, August 12, 2022

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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 lowest point, 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 2016,³ then increased at annual rates of 2.4 percent in 2017, 2.9 percent in 2018, and 2.1 percent in 2019.⁴ The fourth quarter 2019 real GDP was estimated at over \$19 trillion before the economic downturn in the first half of 2020 as a result of COVID-19⁵ which reduced GDP by 3.4 percent from 2019. GDP rebounded in 2021, growing by almost six percent over 2020.⁶ Note that gray shaded areas on the figures in this section represent U.S. recessions according to the Federal Reserve Bank of St Louis.

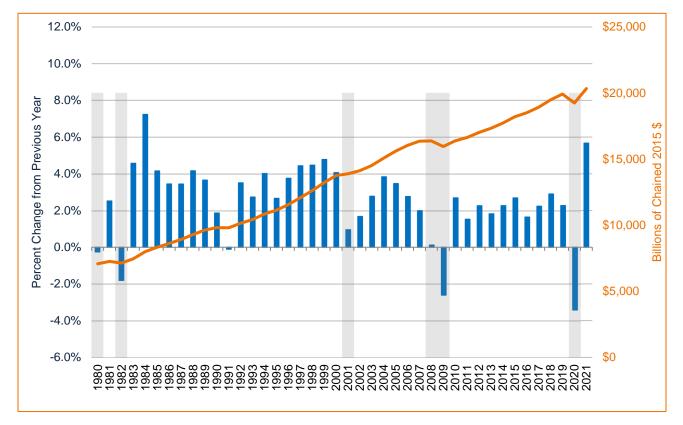


Figure A-1: Real Gross Domestic Product (GDP), Historical Annual, 1980 –2021

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.

³ U.S. Bureau of Economic Analysis, Real Gross Domestic Product [A191RL1A225NBEA], retrieved on March 14, 2019 from FRED, Federal Reserve Bank of St. Louis; <u>https://fred.stlouisfed.org/series/A191RL1A225NBEA</u>

⁴ Bureau of Economic Analysis, News Release, "Gross Domestic Product, Second Quarter 2021 (Advance Estimate), July 29, 2021

⁵ Ibid.

⁶ Annual 2021 GDP data were obtained from the World Bank, as accessed July 14, 2022 at <u>https://data.worldbank.org/indicator/NY.GDP.MKTP.KD?locations=US</u>

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As shown in Figure A-2, real GDP *decreased* for two consecutive quarters in the first half of 2020 but recovered thereafter with positive growth rates for six consecutive quarters through the end of 2021. However, real GDP *decreased* at an annual rate of 1.6 percent in the first quarter of 2022⁷ and by 0.9 percent in the second quarter.⁸

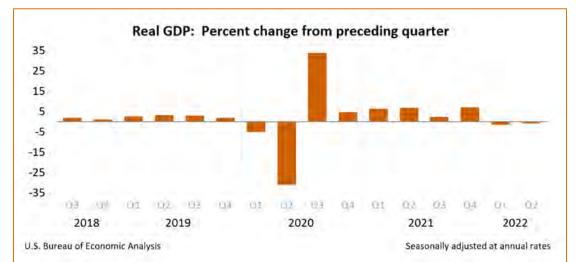


Figure A-2: Quarterly Changes in Real Gross Domestic Product (GDP)- 2018-2nd Quarter 2022

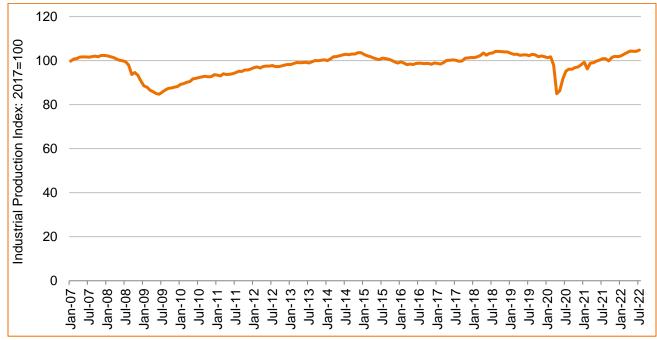
A.1.2 Industrial Production Index

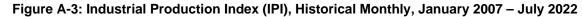
Stantec has tracked the traffic volumes on the Thruway and other toll facilities throughout the Northeastern U.S. for over a decade and has found that growth in commercial vehicle traffic generally correlates to growth in the IPI. The IPI is a measure of real output in the manufacturing, mining, electric 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 the COVID-19 pandemic. From the summer of 2020 through the summer of 2022, the IPI recovered gradually. By April 2022 IPI had exceeded the pre-COVID high seen in the fall of 2018.

⁷ U.S. Bureau of Economic Analysis News Release, June 29, 2022. As accessed 7-13-2022 at https://www.bea.gov/sites/default/files/2022-06/gdp1q22_3rd.pdf

⁸ U.S. Bureau of Economic Analysis News Release, July 28, 2022. As accessed 7-28-2022 at https://www.bea.gov/news/2022/gross-domestic-product-second-quarter-2022-advance-estimate





Source: Board of Governors of the Federal Reserve System (U.S.), Industrial Production: Total Index [INDPRO], retrieved from FRED, Federal Reserve Bank of St. Louis; <u>https://fred.stlouisfed.org/series/INDPRO</u> August 16, 2022.

A.1.3 Return of Inflation

A very recent noteworthy trend is the return of inflation. On July 13, 2022, the Bureau of Labor Statistics reported that inflation rose 9.1 percent in June 2022 over June 2021, marking the fastest year-over-year rate in over forty years (since November 1981). Removing food and energy prices from the equation to calculate the core consumer price index reduced this figure to 5.9 percent.

Although inflation may have peaked, Stantec will continue monitoring it. Short term and longer-term forecasts for inflation are included in Sections A.2.4 and A.3.3.

A.1.4 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 May 2022. 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

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internet era, communication technologies that can substitute for in-person interaction,⁹ and a rising preference for compact, mixed-use neighborhoods which reduce the need for driving.¹⁰ More immediately, the pace of recovery from COVID-19 may significantly affect trends in VMT; among the factors at play are the extent of a long-term or permanent shift to more work from home and preference for private auto travel over mass transit (which an IBTTA presentation described as a "social distancing gap" soon after the pandemic began¹¹).

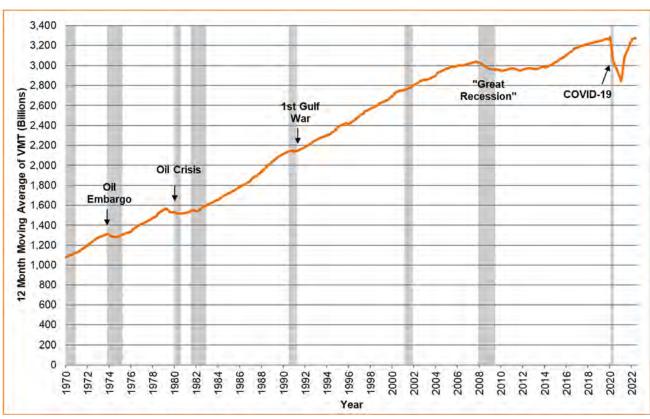


Figure A-4: Vehicle Miles Traveled (VMT) – National, Historical 12-month Moving Average, 1970 – June 2022

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 U.S. 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, reaching its lowest point in April 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, with further improvement in June 2020. By May 2021 national VMT was just 1.9 percent below May 2019's VMT, though the Northeast lagged behind this at 7.9 percent below May 2019's VMT. Both

⁹ "Vehicle Miles Traveled: Another Look at Our Evolving Behavior", Jill Mislinski, March 17, 2017.

¹⁰ State Smart Transportation Initiative News, "<u>Per capita VMT drops for ninth straight year; DOTs taking notice</u>," Chris Cahill, February 24, 2014.

¹¹ Keeping Pace: The Financial Effects of a New Travel & Commuting Landscape on Toll Agencies, IBTTA Webinar, July 9, 2020

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national and Northeast VMT improved significantly in June 2021, likely as a result of vaccinations, lifting of COVID restrictions in many areas, and pent-up demand for summer travel; national VMT was 2.0 percent *above* and the Northeast states' VMT was only 0.3 percent below June 2019 VMT. Looking at recent months, VMT in May 2022 showed some improvement from last May; however, in the Northeast, seasonality appears to be a factor in the pandemic recovery, as May 2022 VMT was 5.9 percent below May 2019. It is also interesting to note that June 2022 VMT was slightly lower than the previous June, both nationwide and in the Northeast, perhaps due to some shift from summertime car travel to air travel now that almost all pandemic-related air travel restrictions have been removed. June 2022 national VMT was 0.3 percent above June 2019 and VMT in the Northeast was 0.8 percent below June 2019.¹²

Location	March 2020 vs. March 2019	April 2020 vs. April 2019	May 2020 vs. May 2019	June 2020 vs. June 2019	May 2021 vs. May 2019	June 2021 vs. June 2019	May 2022 vs. May 2019	June 2022 vs. June 2019
Northeast states	-21.7%	-47.3%	-34.5%	-20.7%	-7.9%	-0.3%	-5.9%	-0.8%
U.S. overall	-16.8%	-38.7%	-23.7%	-11.0%	-1.9%	2.0%	-0.5%	0.3%

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

Note: Data is not seasonally adjusted.

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

A.1.5 National Vehicle Miles Traveled (VMT) vs. Gas Prices (Fuel Costs)

A number of factors may have caused the recent changes in VMT. 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-2022. 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 2020-2021 sharp decline followed by increases in both VMT and real gas prices, however, are related to COVID-19 and its associated changes in economic activity. The Russian invasion of Ukraine in early 2022 caused oil and gas prices to soar. Recent data, however, indicates that the peak in gas prices occurred in mid-June 2022 and as of August 1, 2022 had dropped by nearly 90 cents a gallon, the fastest price drop seen in over a decade.13

¹² FHWA Traffic Volume Trends, <u>https://www.fhwa.dot.gov/policyinformation/travel_monitoring/tvt.cfm</u>

¹³ https://www.gasbuddy.com/go/gas-prices-fall-for-7th-straight-week-heading-for-3-99-national-average

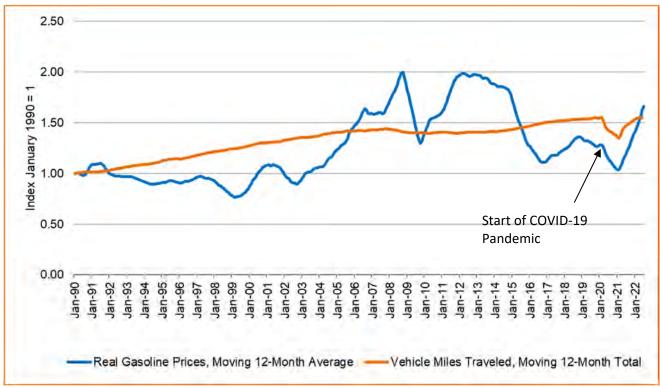


Figure A-5: National Vehicle Miles Traveled (VMT) vs. Real Gas Prices, Historical 12-month Moving Average, Indexed to January 1990, 1990 – June 2022

Source: U.S. Department of Energy, Energy Information Administration's Short Term Energy Outlook (August 2022) and U.S. Department of Transportation, Federal Highway Administration

A.1.6 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. While there was also a notable reduction in VMT during this recession, there otherwise was no distinct correlation between VMT and unemployment. For example, VMT was nearly flat for about four years after the Great Recession, while unemployment dropped by around 40 percent, and unemployment continued to decline in 2018 and 2019 while VMT saw almost no growth. Over the decade that followed the Great Recession, total employment slowly recovered and eclipsed its pre-recession peak, reaching 156.9 million persons in February 2019.¹⁴ The national unemployment rate had stayed at or below 4 percent from March 2018 through March 2020. In the early months of the COVID-19 pandemic, unemployment peaked at 14.7 percent nationally and 16.5 percent in New York State. As shown in Figure A-6 the New York State unemployment rate has closely tracked national trends, except for immediately after the 2007-2009 recession when the state recovered more quickly than the U.S, and every month since April 2020. Soon after the onset

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

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of COVID-19, state unemployment was notably higher than the national rate, however, state unemployment has continued to drop sharply and in recent months has begun to approach the national rate.

Since the early months of the COVID-19 pandemic, national and state unemployment rates first fell sharply and have generally flattened in recent months as shown in Figure A-6. In June 2022, the national unemployment rate was 3.6 percent with New York State at 4.4 percent. Though New York State unemployment numbers are not yet available for July 2022, national unemployment dropped to 3.5 percent. New York City and New York State unemployment rates in selected months are compared to national data in Table A-2.

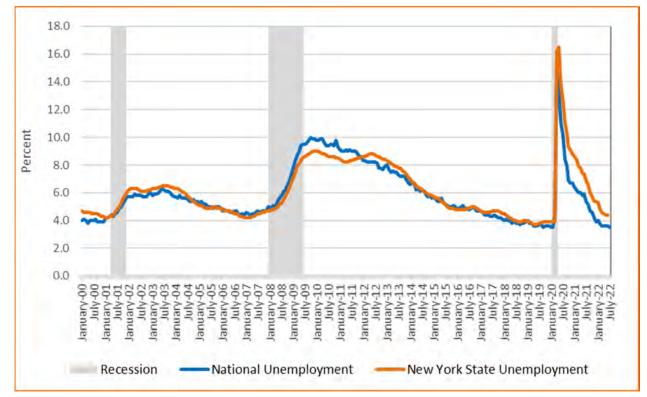


Figure A-6: Civilian Unemployment Rate, National vs. New York State, Historical Monthly, Seasonally Adjusted, January 2000 – June/July 2022

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

Location	Pre-Pandemic	Early Pandemic		Rec	overy Mont	hs
	Apr-19	Apr-20	May-20	May-21	May-22	Jun-22
United States	3.7	14.8	13.3	5.8	3.6	3.6
New York State (NYS)	3.8	16.2	15.7	7.8	4.4	4.4
New York City (NYC)	3.9	14.3	21.0	10.3	6.1	6.2

Source: U.S. Department of Labor, Bureau of Labor Statistics, accessed on August 17, 2022 at <u>https://www.bls.gov/regions/new-york-new-jersey/data/xq-tables/ro2xglausnyc.htm</u>

A.2 SHORT-TERM ECONOMIC FORECASTS

Following the sharp contraction in early 2020 due to the COVID-19 pandemic and subsequent recovery, financial and economic analysts had generally expected the U.S. economy to continue growing but at a much slower rate in the near-term future. However, many now expect a recession may be developing. The latest report on projections from more than 50 financial institutions and professional forecasting firms puts the probability of recession in 2022 at 40 percent, rising to 53 percent in 2023.¹⁵ Other observers say there is a 50 percent chance of a recession over the next year.¹⁶ Still others point out that if there is a recession, it will be different from previous ones in that unemployment may remain low even as the economy contracts. As a point of information, the official arbiters of recession, an independent committee of academic economists, define a recession as a significant decline in economic activity that is spread throughout the economy.¹⁷ This determination has not yet been made, and in the meantime, there is much debate over the near-term economic outlook. Recent surveys of consumer sentiment show the one-year economic outlook being at the lowest point since 2009 in the midst of the Great Recession.¹⁸

A recent *New York Times* Opinion article noted that despite conflicting data, "the picture appears consistent with a 'soft landing' — a slowdown that falls short of a full-on recession, or involves a mild recession at worst, together with stabilizing inflation."¹⁹ More recently and in the same week that data were released showing a second straight quarter decline in GDP, the *New York Times* reports that "economists agree that the risks of a recession are rising."²⁰ The same article notes, however, several signs of a strong economy - low unemployment, robust job growth, growth in domestic income even as GDP fell, relatively high aggregate levels of household savings, and relatively low aggregate levels of debt.

A.2.1 Gross Domestic Product

The most recent (August 2022) consensus forecast, derived from projections from more than 50 financial institutions and professional forecasting firms, is that real GDP will increase by 1.5 percent in 2022 and by 0.7 percent in 2023.²¹ Figure A-7 presents real GDP Forecasts by six different forecasting groups for the short-term timeframe through 2023. In the 2024 through 2028 timeframe, the consensus forecast is for real GDP to continue to grow by an average of 2.0 percent annually.²²

¹⁵ "Blue Chip Economic Indicators: "Top Analysts' Forecasts of the U.S. Economic Outlook for the Year Ahead", Wolters and Kluwer Law & Business, August 12, 2022.

¹⁶ <u>https://today.ftrintel.com/enemy-no-1-inflation-0</u>

¹⁷ "Economic signs are monitored for indications the U.S. may be headed for a recession, National Public Radio, Morning Edition, July 7, 2022

¹⁸ University of Michigan Surveys of Consumers, as accessed on August 2, 2022 at <u>http://www.sca.isr.umich.edu/</u>

¹⁹ "The Humbug Economy," Paul Krugman, New York Times Opinion, July 12, 2022

 ²⁰ "Is Recession Starting Us Down? Already Upon Us? Here's Why It's Hard to Say," The New York Times, July 26, 2022.
 ²¹ "Blue Chip Economic Indicators: "Top Analysts' Forecasts of the U.S. Economic Outlook for the Year Ahead", Wolters and Kluwer Law & Business, August 12, 2022.

²² Blue Chip Economic Indicators: "Top Analysts' Forecasts of the U.S. Economic Outlook for the Year Ahead", Wolters and Kluwer Law & Business, March 11, 2022.

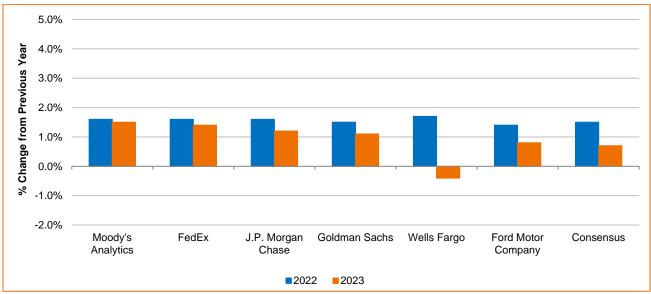


Figure A-7: Real Gross Domestic Product (GDP), Short-term Forecasts for 2022 and 2023

Source: Blue Chip Economic Indicators: "Top Analysts' Forecasts of the U.S. Economic Outlook for the Year Ahead", Wolters and Kluwer Law & Business, August 12, 2022.

Other forecasts indicate faster or slower growth. The Congressional Budget Office (CBO) projects a 3.1 percent rate of growth in real GDP in 2022, with slower growth thereafter. CBO projects that the annual growth of real GDP will average 1.6 percent from 2023 to 2026.²³ The Federal Reserve Bank projects 1.7 percent growth in real GDP in 2022 and 2023, increasing to 1.9 percent growth in 2024. For the longer term beyond 2024, the median real GDP growth rate forecast across Federal Reserve Bank Board members and presidents is 1.8 percent.²⁴

A.2.2 Industrial Production Index

Based on consensus forecasts developed by financial institutions and industry analysts, the IPI is forecasted to increase by 4.3 percent in 2022 and by 1.0 percent in 2023.²⁵ Figure A-8 presents IPI forecasts by six different forecasting groups for this year and next. *Blue Chip* consensus forecasts for the 2024-2028 timeframe, published in March 2022, projected the IPI to grow by 2.0 percent annually, the same rate as real GDP growth.²⁶

²³ <u>https://www.cbo.gov/system/files?file=2022-05/57950-Outlook.pdf</u> page 27

²⁴ Summary of Economic Projections, Federal Reserve Bank Open Market Committee, released June 15, 2022 as accessed July 13, 2022 at https://www.federalreserve.gov/monetarypolicy/files/fomcprojtabl20220615.pdf

²⁵ Blue Chip Economic Indicators: "Top Analysts' Forecasts of the U.S. Economic Outlook for the Year Ahead", Wolters and Kluwer Law & Business, August 12, 2022.

²⁶ Blue Chip Economic Indicators: "Top Analysts' Forecasts of the U.S. Economic Outlook for the Year Ahead", Wolters and Kluwer Law & Business, March 11, 2022.

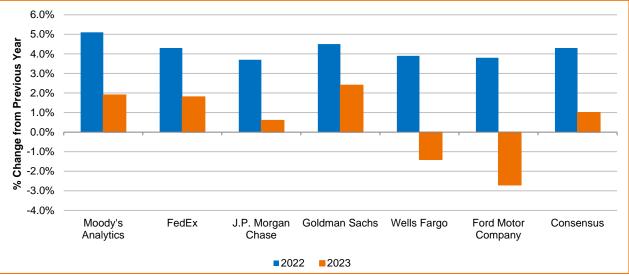


Figure A-8: Industrial Production Index (IPI), Short-term Forecasts for 2022 and 2023

Source: Blue Chip Economic Indicators: "Top Analysts' Forecasts of the U.S. Economic Outlook for the Year Ahead", Wolters and Kluwer Law & Business August 12, 2022.

A.2.3 Fuel Cost Trends and Fleet Changes

Figure A-9 presents historical and projected gasoline and crude prices from the U.S. Energy Information Administration (EIA). In 2019, prices averaged \$2.60 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 \$2.20 a gallon in the second half of 2020 but increased to \$2.76 a gallon over the first half of 2021.²⁷ Energy experts attributed those increased prices largely to OPEC cuts in oil production as global energy demand decreased during the COVID-19 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 2021 and impacts from Hurricane Ida on several U.S. Gulf Coast refineries. More recently, retail gas prices have escalated sharply to almost \$5 a gallon due, in part, to Russia's war on Ukraine. Prices have declined since the June 2022 peak. The outlook is for prices to continue to fall slightly, averaging close to \$4 per gallon for the second half of 2022, and falling further through 2023.

It is important to note that average fuel economy increased by 32 percent between 2004 and 2020.28

²⁷ "Short-Term Energy Outlook," U.S. Energy Information Administration, August 2022

²⁸ Executive Summary, EPA Automotive Trends Report: Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975, U.S. Environmental Protection Agency, , November 2021, page ES-2 as accessed on July 14, 2022 at https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1013L5Z.pdf

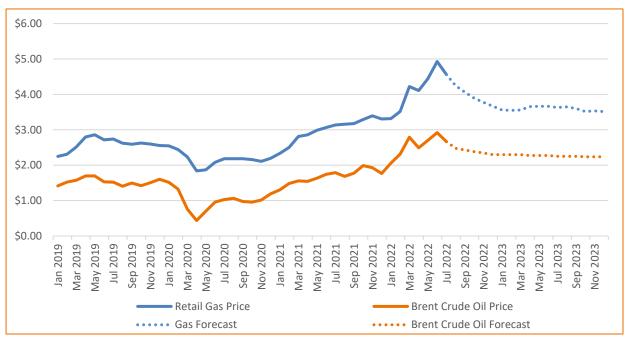


Figure A-9: Nominal U.S. Gasoline and Brent Crude Oil Prices, Historical and Short-term Forecasts, 2019 – 2023

Source: U.S. Department of Energy, U.S Energy Information Administration, Short-Term Energy Outlook, July 2022

This forecast for falling 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 125 percent more to 62 percent less than current forecasts for December 2023.²⁹ 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.

²⁹ Short-Term Energy Outlook U.S. Energy Information Administration, August 2022

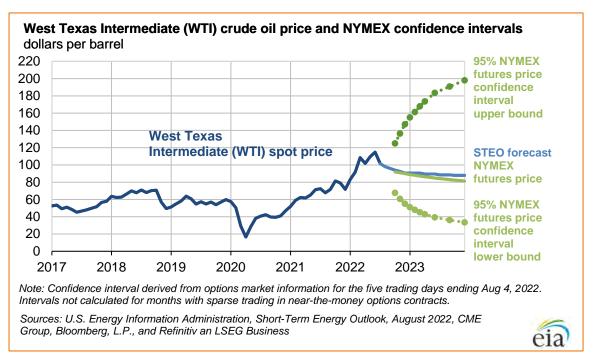


Figure A-10: Crude Oil Prices, Historical and Short-term Forecasts, with Confidence Intervals,

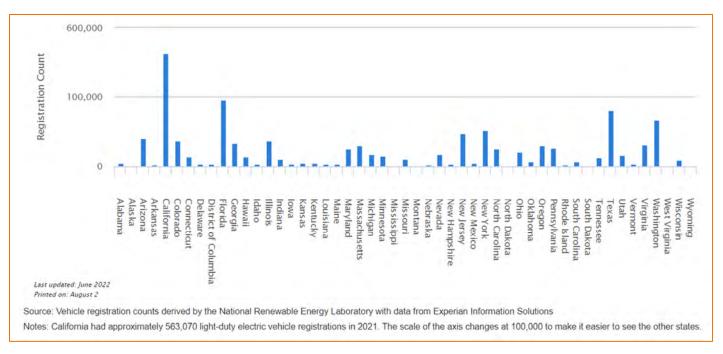
2017 – 2023

Although fuel costs will remain a significant factor to monitor, it should be noted that the electric vehicle share of the U.S. fleet is continuing to grow. The most recent EPA report indicates that electric vehicles, plug-in hybrid vehicles (PHEVs), and fuel cell vehicles were projected to grow to four percent of all new vehicles in the 2021 model year. Hybrids (not including PHEVs) are also projected to grow significantly in model year 2021, to nine percent of all vehicles produced.³⁰ Given that modern cars last a period of 16 years on average, it will take some time for electric vehicles to become a significant share of the automotive fleet. Reuters notes that less than one percent of the 250 million cars, SUVs, and light-duty trucks currently on the road in the United States are electric. However, depending on local adoption rates, purchase prices, and incentives, some automotive analysts project that electric vehicles could increase to 45 percent of new car sales by 2035 which means that about half the cars on the road could be electric by 2050.³¹

States vary widely in their adoption of electric vehicles. Figure A-11 shows electric vehicle registrations by state as of December 2021.

³⁰ Executive Summary, EPA Automotive Trends Report: Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975, U.S. Environmental Protection Agency, , November 2021, page ES-8 as accessed on July 20, 2022 at https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1013L5Z.pdf

³¹ IHS Markit, as cited in "The long road to electric cars," Reuters, February 7, 2022.Inl





In New York, electric vehicles represent a lower share of vehicles on the road than nationally, estimated at about 0.6 percent as of March 2022.³² Nevertheless, it is expected that a declining share of the nation's and state's automotive fleets will be affected by changes in fuel costs in the future.

A.2.4 Inflation

While inflation in the cost of fuel has an obvious potential effect on traffic levels, inflation in other goods and services is also important to consider in terms of potential short-term impacts in discouraging travel. A survey performed in May 2022,³³ before the traditional summer vacation period, found the following:

• More than half of respondents said they are likely to take fewer leisure trips (57 percent) and shorter trips (54 percent) due to current gas prices, while 44 percent are likely to postpone trips. Thirty-three percent of respondents said they are likely to cancel with no plans to reschedule, and 82 percent of those surveyed said gas prices will have at least some impact on their travel destinations.

³² Misdary, Rosemary (March 14, 2022). <u>"Electric car ownership remains novelty in NYC as infrastructure is slow to come online"</u>. *Gothamist*.

³³ Auto Rental News, June 8, 2022 as accessed July 18, 2022 at https://www.autorentalnews.com/news.com

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- 90 percent said gas prices are a consideration in deciding whether to travel in the next three months (50 percent: major consideration, 23 percent: moderate consideration, 17 percent: slight consideration, 10 percent: not a consideration).
- 90 percent said inflation is a consideration in deciding whether to travel in the next three months (39 percent: major consideration, 31 percent: moderate consideration, 20 percent: slight consideration, 10 percent: not a consideration).
- As a comparison, only 78 percent said that COVID-19 infection rates are a consideration in deciding whether to travel this summer (33 percent: major consideration, 23 percent: moderate consideration, 22 percent: slight consideration, 22 percent: not a consideration).

Inflation reached its highest levels in four decades by June 2022, but numerous sources forecast a return to the two to three percent range by 2023 as shown in Table A-3.

Forecast Source	2022 PCE Inflation	2023 PCE Inflation	2024 PCE Inflation
Federal Reserve Bank Open Market Committee Median PCE Inflation, June 15, 2022	5.2%	2.6%	2.2%
Congressional Budget Office PCE Price Index, May 2022 (Change Year to Year)	5.1%	2.7%	2.2%
Blue Chip Consensus, August 12, 2022 (through 2023); March 11, 2022 (2024)	6.2%	3.3%	2.2%

Table A-3: Personal Consumption Expenditures (PCE) Inflation Forecasts

Forecasted increases in the Consumer Price Index are slightly higher as shown in Table A-4 though they are still forecasted to stabilize just above two percent beyond 2023.

Forecast Source	2022 Change in Consumer Price Index	2023 Change in Consumer Price Index	2024 Change in Consumer Price Index
Congressional Budget Office, May 2022 (Change Year to Year)	6.1%	3.1%	2.4%
Blue Chip Consensus, August 12, 2022 (through 2023); March 11, 2022 (2024)	8.1%	3.8%	2.3%

Surveys of consumer expectations generally mirror the economic experts. As an example, Table A-5 shows findings from the University of Michigan's monthly Survey of Consumers.

Month of Survey	Expected Change in Inflation Rate Next Year	Expected Change in Inflation Rate Over the Next 5 Years
January 2022	4.9%	3.1%
February 2022	4.9%	3.0%
March 2022	5.4%	3.0%
April 2022	5.4%	3.0%
May 2022	5.3%	3.0%
June 2022	5.3%	3.1%
July 2022	5.2%	2.9%

Table A-5: Consumer Expectations on Inflation Survey Results

Source: Surveys of Consumers, University of Michigan, as accessed on August 1, 2022 at http://www.sca.isr.umich.edu/

The Federal Reserve Bank of New York's most recent Survey of Consumer Expectations, released in July 2022, similarly shows an increase in short-term inflation expectations but a decline in medium- and longer-term expectations.³⁴

A.2.5 Unemployment Rate

Based on consensus forecasts developed by financial institutions and industry analysts, the national unemployment rate is projected to average 3.8 percent over the 2024 through 2028 time period.³⁵ In the shorter term, CBO forecasts that unemployment will average 3.7 percent for 2022. CBO forecasts unemployment will improve slightly in 2023 to an average of 3.6 percent; average 3.8 percent in 2024 and average 4.1 percent between 2025 and 2026.³⁶ A recession typically means an increase in the unemployment rate, as seen in the 12 recessions since World War II, when economic output shrank and unemployment rose.³⁷ However the retirement of baby boomers from the workforce, relatively high corporate profits, and large number of unfilled jobs are expected to keep unemployment levels at historic lows even in a contracting economy.³⁸

A.3 LONG-TERM ECONOMIC FORECASTS

A.3.1 Gross Domestic Product and Industrial Production Index

In the longer-term 2029-2033 timeframe, the consensus forecast developed by financial institutions and industry analysts on March 11, 2022 was for real GDP to continue to grow by 1.9 percent annually and for the Industrial Production index to continue to grow by 2.0 percent annually.³⁹

³⁴ Federal Reserve Bank of New York, Press Release, July 11, 2022 as accessed on August 1, 2022 at https://www.newyorkfed.org/

³⁵ Blue Chip Economic Indicators: "Top Analysts' Forecasts of the U.S. Economic Outlook for the Year Ahead", Wolters and Kluwer Law & Business, March 11, 2022.

³⁶ <u>https://www.cbo.gov/system/files?file=2022-05/57950-Outlook.pdf</u>, Table 2-1, page 23 8

³⁷ "If the U.S. Is in a Recession, It's a Very Strange One," The Wall Street Journal, July 4, 2022

³⁸ "Why a 2022 Recession Would be Unlike Any Other- Will This 'Jobful Downturn' Turn Into a Recession Without Job Loss" The Wall Street Journal Explains, July 14, 2022

³⁹ Blue Chip Economic Indicators: "Top Analysts' Forecasts of the U.S. Economic Outlook for the Year Ahead", Wolters and Kluwer Law & Business, March 11, 2022.

A.3.2 Vehicle Miles Traveled (VMT)

The Federal Highway Administration's two most recent forecasts of VMT growth in a baseline economic growth scenario are shown in Table A-6.⁴⁰ Growth in vehicle mileage for single unit and combination trucks is forecast to be at a higher rate than light duty vehicles. Note that the forecast completed in May of 2021 assumed relatively stable real fuel prices throughout the forecast period while the July 2022 forecast noted that "Gasoline prices are expected to rise sharply during the initial portion of the forecast reflecting growing demand coming out of the COVID-19 pandemic, supply constraints and geopolitical events, before moderating to an average of \$2.20 per gallon (in 2012\$) by the mid-2030s and remaining relatively constant out to 2049."⁴¹

Vehicle Class	2021 30 Year Forecast (2019-2049 compound annual growth rate)	2022 30 Year Forecast (2019-2049 compound annual growth rate)
Light-Duty Vehicles	0.6%	0.5%
Single-Unit Trucks	2.3%	2.4%
Combination Trucks	1.6%	1.5%
TOTAL	0.7%	0.7%

Table A-6: FHWA Long-Term Growth Forecasts of National Vehicle Miles Traveled (VMT)

Source: Office of Highway Policy Information U.S. DOT, Federal Highway Administration, May 2021 and July 2022

The 2022 forecast from the Energy Information Administration (EIA) also projects a differential between light duty vehicles and trucks for the 2021 through 2050 timeframe with somewhat different projected rates of growth relative to the FHWA forecasts over a slightly different horizon for all three vehicle categories:⁴²

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

A.3.3 Inflation

Numerous sources expect inflation to return to the decades-long level of two percent as shown in Table A-7.

 ⁴⁰ "FHWA Forecasts of Vehicle Miles Traveled (VMT): Spring 2021," Office of Highway Policy Information, May 2021, as accessed previously on July 11, 2022 at https://www.fhwa.dot.gov/policyinformation/tables/vmt/vmt_forecast_sum.cfm and FHWA Forecasts of Vehicle Miles Traveled (VMT): Spring 2022," Office of Highway Policy Information, July 2022, as accessed on August 8, 2022 at https://www.fhwa.dot.gov/policyinformation/tables/vmt/vmt_forecast_sum.cfm
 ⁴¹ FHWA Forecasts of Vehicle Miles Traveled (VMT): Spring 2022," Office of Highway Policy Information, July 2022, as accessed on August 8, 2022 at https://www.fhwa.dot.gov/policyinformation/tables/vmt/vmt_forecast_sum.cfm
 ⁴² https://www.eia.gov/outlooks/aeo/data/browser/#/?id=7-AEO2022&cases=ref2022&sourcekey=0

Forecast Source	Longer Range Personal Consumption Expenditures Inflation
Federal Reserve Bank Open Market Committee Median PCE Inflation, June 15, 2022	2.0% (unspecified years)
Congressional Budget Office PCE Price Index, May 2022 (Change Year to Year)	2.0% (2025-2026) 2.0% (2027-2032)
Blue Chip Consensus, March 11, 2022	2.1% (2024-2028) 2.1% (2029-2033)

Table A-7: Long-Term Inflation Forecasts

A.3.4 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 (May 2022) 10-year economic projections, the CBO has forecasted that the unemployment rate will average 4.5 percent in the 2027 through 2032 time period.⁴³

Based on consensus forecasts developed by financial institutions and industry analysts, the unemployment rate is projected to average 4.0 percent over the 2029 through 2033 timeframe⁴⁴, slightly lower than the 4.5 percent rate forecasted by the CBO for the 2027 through 2032 timeframe.

A.3.5 Conclusion

The most recent economic data suggest a definite slowing of momentum in economic recovery, heightened concerns over inflation, continued volatility in the stock market, a possible recession, and ongoing uncertainty over the longer-term impacts of COVID-19 and global developments. 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.

⁴³ <u>https://www.cbo.gov/system/files?file=2022-05/57950-Outlook.pdf</u>

Table 2-1, page 23

⁴⁴ Blue Chip Economic Indicators: "Top Analysts' Forecasts of the U.S. Economic Outlook for the Year Ahead", Wolters and Kluwer Law & Business, March 11, 2022

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, restrictions and suggested behaviors meant to reduce the spread and severity of the disease; economic repercussions (discussed more fully in Appendix A); and long-term behavioral changes that have occurred as a large share of the population shifted to working from home, with many continuing to work from home more often than before the pandemic. This section highlights the impacts of the COVID-19 pandemic as background information for evaluating the Thruway traffic and revenue forecasts.

B.1 INFECTION WAVES AND VACCINES

Trends in New York State COVID-19 cases from March 2020 through July 2022 are shown in Figure B-1. 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. However, New York State and much of the U.S. experienced a second wave of COVID-19 infections beginning in November 2020 and lasting into that winter, which temporarily brought back some of the closures and restrictions implemented at the beginning of the pandemic. This was followed by a significant reduction in the spread of the virus in the spring of 2021 as COVID-19 vaccines began to be widely distributed. The Delta variant of COVID-19 caused another wave of infections in Summer 2021. However, with a significant amount of the population now vaccinated, the number of hospitalizations and deaths increased more modestly compared to previous waves of the virus. Winter 2021/2022 brought the Omicron wave of infections. This COVID-19 variant seemed to be the most contagious variant thus far, causing a sudden extremely sharp increase in infections followed by a precipitous drop towards the end of the winter. Traffic throughout the northeast was heavily impacted by this December 2021/January 2022 spike in infections with the Omicron variant because of the sheer number of people calling out sick because they were infected with or exposed to COVID-19, plus fear of exposure and winter weather which led people who had returned to the office to temporarily switch back to remote work. Omicron's impact on Thruway System toll transactions in the winter of 2021/2022 is shown later in this Appendix, in Figure B-9 on page 40.



Figure B-1: NY State COVID-19 Positivity 7-Day Average

Source: https://coronavirus.health.ny.gov/positive-tests-over-time-region-and-county

B.2 REMOTE AND HYBRID WORKING

During the early days of the COVID-19 pandemic, a large share of the population shifted to working from home. As the severity of the disease declined and restrictions were lifted, more and more of these employees have been returning to the office. However, many companies continue to allow remote or hybrid working (i.e., some days working from home and some days in the office). This practice has been evolving to long-term behavioral changes, approaching a new normal, as employers and employees have maximized the ability to work remotely, avoiding the time and expense of commuting to the office, and have in some cases allowed companies to reduce office space.

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 the following:

- Results from a survey of major employers by the Partnership for New York City released in May 2022 found that only 38 percent of Manhattan office employees were physically in the office on an average weekday, with only 8 percent physically in the office 5 days a week. However, 49 percent were expected back on an average weekday by September 2022.⁴⁵
- As the pandemic is brought under control, New Yorkers have begun to embrace working, socializing, learning, congregating, and traveling together once again. However, it is apparent that remote work

⁴⁵ https://pfnyc.org/wp-content/uploads/2022/05/Return-of-Office-Survey-Results-May-2022.pdf

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will play a greater role in the future than it has before, with 78 percent of employers indicating that a hybrid work environment will be the predominant office policy in a post-pandemic environment.⁴⁶

- As reported in the July 2022 Bridge and Tunnels Committee Meeting, April 2022 transactions were only 0.1 percent below the same month pre-pandemic in 2019.⁴⁷
- It is notable that severe weather, quarantines, or other situations that would have previously prevented an employee from being in the physical office no longer causes a missed day of work. The work from home technology and infrastructure that was set up throughout the beginning of the pandemic now eliminates such situations.

https://cite.rpi.edu/index.php/training-and-outreach/

B.3 COVID-19 IMPACT ON HOME RELOCATION AND TOURISM

The Hudson Valley region, which accounts for almost half of Thruway System toll revenue, has become a very popular destination for home purchases and tourism - multiple articles in *The New York Times* and *New York Post* have referred to it as the "New Hamptons." As of Spring 2022, real estate agencies in Hudson Valley region reported the second consecutive highest earning year. It is notable that a large portion of the real estate customer base comes from New York City. Due to the influx of new homeowners and visitors, hospitality and service-related businesses have also been expanding. Additionally, many second homeowners are now adding their properties into the rental pool, and as a result, vacancy has dropped significantly.⁴⁸

Though home sales increased significantly during the pandemic, this does not necessarily mean population growth. A study by Hudson Valley Pattern for Progress states that during the 2019-2020 timeframe which included the early part of the pandemic there was a net gain of more than 33,000 people in the Hudson Valley region from New York City, as working from home became a normal practice and city families craved more space. However, the Hudson Valley overall gained only a net additional 600 or so in population, as others have migrated out of the region⁴⁹.

Considering all this, Stantec believes these developments do not necessarily warrant adjustments to the traffic and revenue forecast for Thruway facilities. Travel demand will be largely unaffected as new residents are more likely to be remote workers than new commuters to local businesses. In addition, while there was notable growth in car traffic due to leisure travel in the spring/summer of 2021, much of this may be attributed to pent-up demand for travel at the time. Now that there are few, if any, COVID-related restrictions on air travel, there has likely been some shift to flying over driving for vacations. As an example, in June of 2021 there were 23.5 thousand flights that passed through NYC's JFK airport; in June of 2022 this had increased to 42.7 thousand flights, which is also higher than the 38 thousand flights passing through JFK pre-pandemic, in June of 2019.⁵⁰

⁴⁶ Ibid.

⁴⁷ https://new.mta.info/document/91566

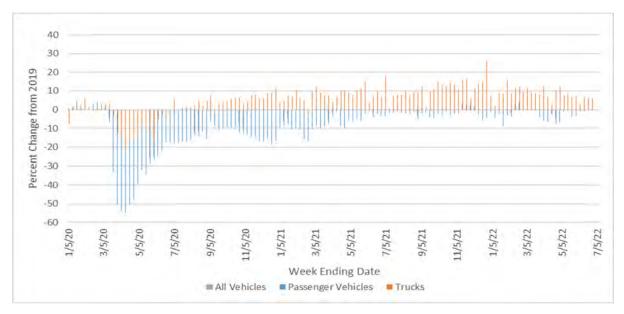
⁴⁸ https://upstatehouse.com/hudson-valley-real-estate-market-entering-spring-2022/

⁴⁹ "Moving In, Moving Out," Hudson Valley Pattern for Progress, July 2022.

⁵⁰ https://jfkairport.net/statistics

B.4 COVID-19 IMPACT ON TRUCK TRAFFIC

Truck traffic has rebounded from COVID-19 more strongly than passenger car traffic. At the national level, Figure B-2 shows that as of late June 2022, in the 104 weeks since truck traffic began to recover in mid-2020 after COVID-related shutdowns, there were only four weeks that truck traffic was equal to or just under the same week in 2019; 100 weeks were *above* the same week in 2019. This is in stark contrast to 93 weeks of passenger vehicle VMT being equal or below the same week in 2019 for passenger vehicles (only 11 weeks were above 2019 levels).⁵¹





Source: U.S. DOT, Office of Highway Policy Information, Special Monthly Reporting, Weekly Traffic Volume Data, Interstate Travel for Weeks 22, 23, 24 and 25 as accessed August 16, 2022 at https://www.fhwa.dot.gov/policyinformation/weeklyreports/travel/interstate_travel_2022_weeks_22-25.pdf

At least some of the higher truck traffic growth reflects the increase in e-commerce, a trend which was accelerated during the pandemic with COVID-19 closures and working remotely leading to more goods being ordered online versus purchased in brick-and-mortar stores. More recently, the dollar volume and share of

⁵¹ Special Monthly Reporting, Weekly Traffic Volume Data Interstate Travel for Weeks 23, 24, 25, and 26 Office of Highway Policy Information, as accessed August 16, 2022 at *https://www.fhwa.dot.gov/policyinformation/weeklyreports/travel/interstate_travel_2022_weeks_22-25.pdf*

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retail sales represented by e-commerce have fallen from their pandemic peaks. Figure B-3 and Figure B-4 depict these developments.

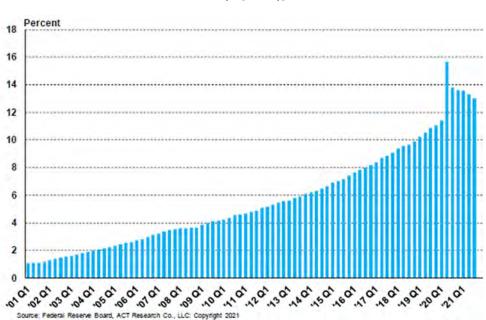
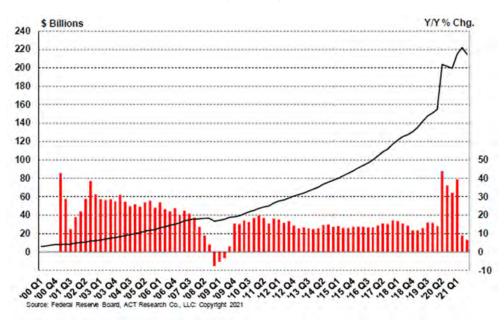


Figure B-3: E-Commerce as a Percentage of Retail Sales Excluding Food Service Q1'01 – Q3'21

Figure B-4: E-Commerce Retail Sales Billions of Dollars - SAAR Q1'00 – Q3'21



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Figure B-5 depicts changes in truck traffic over the same month in 2019 both nationally and on Thruway facilities, showing that Thruway truck traffic has generally grown by more than for the U.S. as a whole since mid-2021.

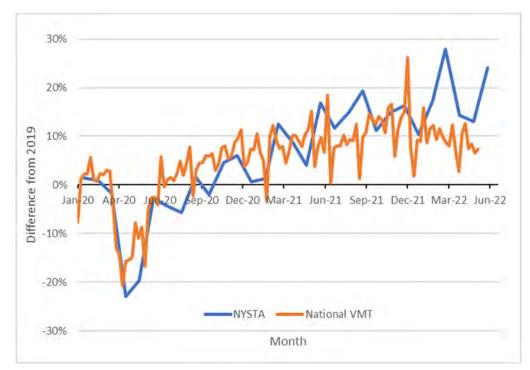


Figure B-5: Commercial Vehicle Volume Difference from 2019

The reasons for this differential are unclear but may reflect, in part, a shift from more congested West Coast ports. Yahoo Finance recently reported that the Port Authority of New York and New Jersey [is] "handling right now 33% more containers [sic] than in pre-pandemic 2019 in the same period," experiencing "an 11.5% growth in imports through May of 2022 with an estimated 6.5% of that originally intended to be shipped to the West Coast." The Port Authority noted that with the massive back-ups at the Ports of Los Angeles and Long Beach, California, "Retailers [sic] decided that they would rather just get it here [the East Coast] and then just truck it, or rail it to the final destination, wherever it may be and that could end up, will end up being faster and sometimes cheaper than just sending everything to the same port on the same coast," ⁵²

Another possible factor is that New York (downstate at least) is more heavily dependent on trucks. In Appendix H to New York Metropolitan Transportation Council's Regional Transportation Plan adopted on September 9, 2021, it notes that trucks are responsible for moving more than 92 percent of domestic tonnage in its planning area. American Trucking Association's May 2022 report indicates trucking represents 72.5% of tonnage carried by all modes of domestic freight transportation. Thus, it is logical that increased shipments for multiple reasons (including strong consumer demand, substitution of goods for services, and inventory rebuilding) would drive relatively greater truck traffic growth as compared to other regions.

⁵² <u>https://finance.yahoo.com/news/supply-chain-importers-are-opting-for-east-coast-ports-191303286.html</u>

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Cass Transportation is one index that tracks shipment volumes. Cass represents the largest U.S. payer of freight bills and covers a broad range of industries and all transport modes. The most recent available report from Cass, covering shipments from January 2010 through July 2022, is included in Figure B-6, clearly showing the quick recovery from the pandemic dip in shipments in 2020. Cass notes that freight demand has flattened out this year due to higher inflation and significant substitution from goods back to services.⁵³

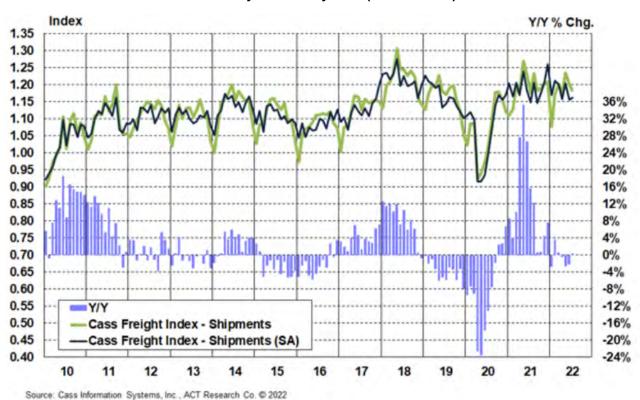
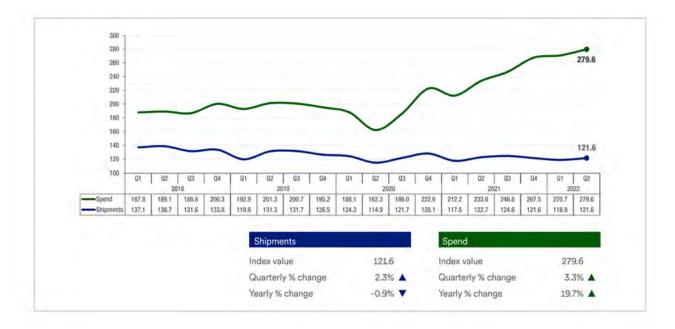


Figure B-6: Cass Freight Index® - Shipments January 2010 – July 2022 (01'1990=1.00)

U.S. Bank publishes a quarterly freight index representing truckload and less-than-truckload shipments. The shipments index is more relevant to truck traffic volumes, while the spend index reflects such cost factors as constraints in drivers and increased diesel fuel prices. Figure B-7 shows these indices from 2018 through second quarter 2022, with the most recent quarter showing a 2.3 percent gain in shipments over the first quarter but a slight decline compared to a year earlier.

⁵³ Cass Transportation Index Report, July 2022, as accessed August 16, 2022 at https://www.cassinfo.com/freight-audit-payment/cass-transportation-indexes/july-2022





Source: U.S. Bank Freight Payment Index, Q2 2022, as accessed August 16, 2022 at <u>https://www.usbank.com/dam/documents/pdf/corporate-and-commercial-banking/industry-expertise/transportation/freight-payment-index/04-0170-04_Freight-Index-2022-Q2.pdf</u>

U.S. Bank's second quarter 2022 report noted that "both the Northeast (7.3%) and Midwest (6.8%) regions not only posted volume gains, but they saw their largest increases in three years. This is reflective of solid manufacturing output in the second quarter, which remains one of the best performing sectors of the current economy. Based on data from the Federal Reserve, factory output increased about 5% in the second quarter compared with a year earlier."⁵⁴

Based on research from various of sources and organizations, the near-term outlook is for slower growth in truck traffic. Figure B-8 shows that by 2023, there may even be a decline in freight volumes.

⁵⁴ U.S. Bank Freight Payment Index, as accessed August 8, 2022 at

https://www.usbank.com/dam/documents/pdf/corporate-and-commercial-banking/industry-expertise/transportation/freight-payment-index/04-0170-04_Freight-Index-2022-Q2.pdf

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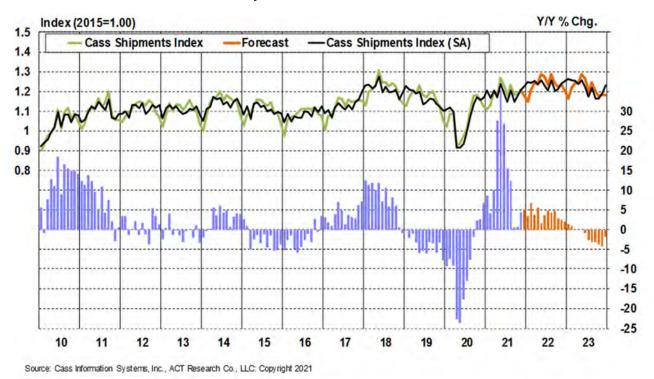


Figure B-8: Cass Shipments Index® January 2000 – December 2023 Forecast

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

B.5 IMPACT ON THRUWAY SYSTEM AND OTHER REGIONAL TOLL FACILITY TRAVEL

Throughout the COVID-19 pandemic, Stantec has been monitoring daily and monthly traffic and revenue data from the Authority. Figure B-9 compares Thruway System monthly trips and toll revenue over the 2019-2022 period. While the declines were most severe during the height of the outbreak in 2020, by spring 2021, concurrent with widespread COVID-19 vaccination, traffic recovery picked up reaching pre-pandemic levels by the summer and fall of 2021. Throughout the winter of 2021-2022, the period that included the spread of the Omicron variant, traffic experienced a notable decline below 2019 levels, followed by quick near-recovery in April through June 2022.

Toll revenue began to exceed 2019 levels starting around May 2021; however, these higher revenues were anticipated due to scheduled toll increases beginning January 1, 2021 systemwide and January 1, 2022 at the Cuomo Bridge.

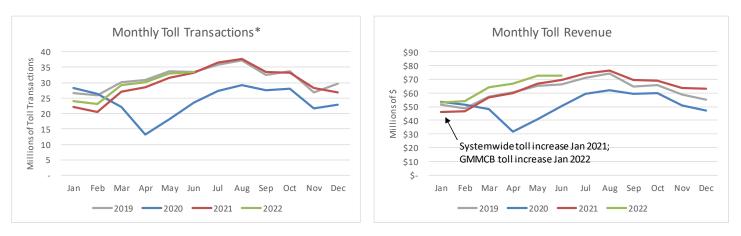


Figure B-9: Thruway System 2019-2022 Monthly Toll Transactions and Revenue Showing COVID-19 Impacts

* With the new AETC system, there may now be multiple toll transactions per trip on the Woodbury-Williamsville section, while there was previously only one transaction per trip. From January 2019 through November 2020 these trips were converted to "new system transactions" for graphing purposes to provide a better comparison to pre-AETC conditions.

Different pandemic-related 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 (NJTA).

As shown in the Figure B-10, the two turnpike systems exhibited similar COVID-19 impacts, with passenger cars 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 only about 5 percent below 2019 levels for both systems, while truck traffic over the past year has been well above 2019 levels for both.

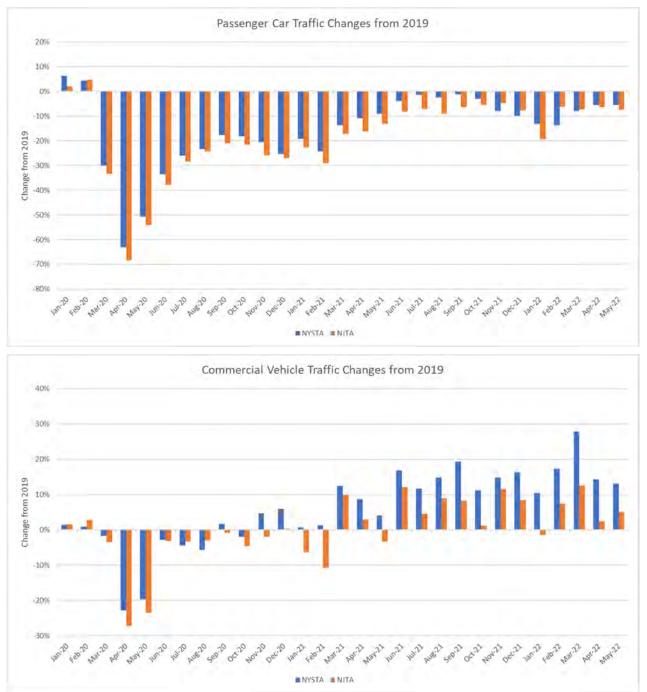
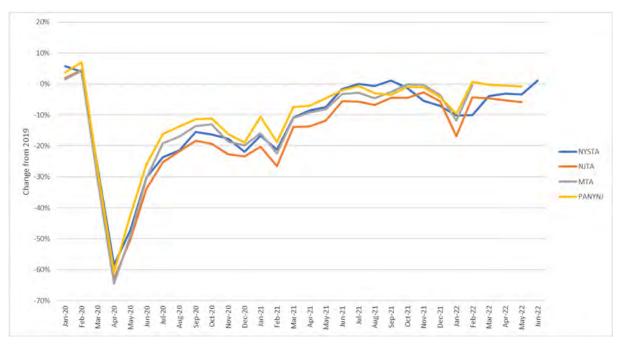


Figure B-10: Passenger Car and Commercial Vehicle Traffic Comparison to 2019 Monthly Data, Thruway System and New Jersey Turnpike Authority

Sources: New York State Thruway Authority, with mainline toll transactions converted to trips; New Jersey Turnpike Toll Revenue and Transaction Comparisons for All Vehicles as accessed from https://www.njta.com/media/6786/may-2022-turnpike-tr.pdf

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As of mid- 2021, similar to traffic on the NYSTA facilities, other regional toll authorities also reported approaching or reaching 2019 traffic levels. As shown in Figure B-11, pandemic-related traffic reductions and recovery for NYSTA, NJTA, Metropolitan Transportation Agency (MTA), Port Authority of New York and New Jersey (PANYNJ) have followed a similar pattern.





While regional toll agencies have experienced considerable recovery through June 2022, Stantec believes that the uncertainty surrounding the economy makes it difficult to assume traffic will see further growth in 2023. After 2023, however, Stantec is forecasting traffic growth towards the new normal. Currently, passenger cars have nearly recovered to pre-pandemic levels, while trucks still remain quite a bit higher. Stantec anticipates that the economy and resolution of supply chain issues will bring truck volumes back down again in the coming years.

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.

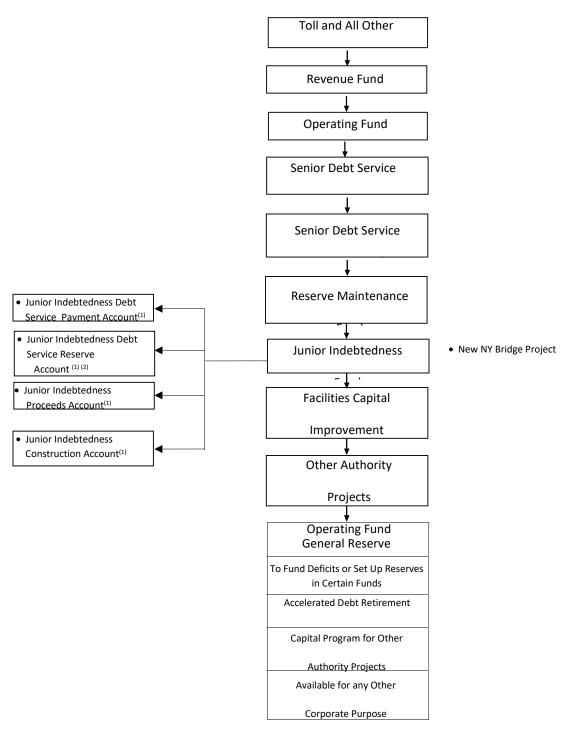
General Reserve Fund – used to make payments under any agreements with the State of New York or for any other corporate purpose. For budgeting purposes only, the Authority has established a "Supplemental Capital Fund" within the General Reserve Fund that is used to fund short to medium term projects 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 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 shall be deemed to be in effect for such

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

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) 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 indicator's, 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.

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 5th 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.

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 Reserve Maintenance 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, 2023, the Thruway has four scheduled Senior General Revenue Bond principal payments totaling \$112,970,000 and two scheduled Junior Indebtedness Obligations principal payments totaling \$1,390,000. After making those principal payments the Thruway will have \$3,439,105,000 par amount of Senior General Revenue Bonds outstanding and \$2,539,685,000 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. Both series of Obligations were issued as serial bonds and include term bonds.

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, 2023. 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, except for 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				
		Longest		
	Par Amount	Outstanding		
<u>Series</u>	Outstanding	Maturity		
Series J	\$ 560,055,000	January 1, 2044		
Series K	629,375,000	January 1, 2032		
Series L	401,960,000	January 1, 2037		
Series M	857,625,000	January 1, 2042		
Series N	450,000,000	January 1, 2050		
Series O	540,090,000	January 1, 2051		
Total	\$ 3,439,105,000			

General Revenue Junior Indebtedness Obligations				
	Par Amount	Longest		
	Par Amount	Outstanding		
<u>Series</u>	Outstanding	Maturity		
Series 2016A	\$ 849,250,000	January 1, 2056		
Series 2019B	1,690,435,000	<u>January 1, 2053</u>		
Total	\$ 2,539,685,000			

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 provided 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 provided the Authority with the ability to issue Drawdown Notes up to \$100 million, expiring on October 12, 2022. The Authority did not issue any Drawdown Notes over the term of the agreement that concluded on October 12, 2022.

Planned 2023 Debt Issuance

Senior Debt Issuance: The 2023 Budget includes the issuance of\$369.7 million in General Revenue Series P Bonds in late 2023.

Junior Debt Issuance: The 2023 Budget includes a planned issuance of \$309.2 million in Junior Indebtedness Obligations in 2023.

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:

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)