

# New Jersey Turnpike Authority



## ANNUAL BUDGET 2021

**Prepared by the Finance Department  
Donna Manuelli, Chief Financial Officer**

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## Transmittal Letter



## New Jersey Turnpike Authority

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RONALD GRAVINO, Commissioner  
JOHN D. MINELLA, Commissioner  
RAPHAEL SALERMO, Commissioner  
JOHN M. KELLER, Executive Director

October 27, 2020

To: The Board of Commissioners of the New Jersey Turnpike Authority:

We are pleased to submit for your review the New Jersey Turnpike Authority's (the Authority's) 2021 Annual Budget. The Authority's Turnpike Revenue Bond Resolution, Section 710, requires the Board of Commissioners to adopt, on or before January 15<sup>th</sup> of each fiscal year, an Annual Budget for that year, and promptly file the Annual Budget with the Trustee for inspection by the bondholders. The Annual Budget must include, at a minimum, appropriations for all anticipated Operating Expenses and Reserves therefor, and provisions for Maintenance Reserve Payments and Special Project Reserve Payments. The Annual Budget may set forth such additional material as the Authority may determine and shall contain a certificate of the Consulting Engineer approving such Annual Budget.

The 2021 Annual Budget has been prepared consistent with the Authority's Strategic Plan and its mission. This mission is to prudently manage the finances and operations of the New Jersey Turnpike Authority to provide its customers with a safe, efficient, innovative, and resilient toll road system which facilitates mobility in New Jersey and the Northeast United States of America. Fulfilling this mission was complicated in 2020 by the impacts of the COVID-19 pandemic on the Authority's revenues, operations, and employees, and these impacts are expected to continue in 2021 and beyond. The Authority has responded to these notable impacts both prudently and responsibly while continuing its capital investment plans, as will be demonstrated in the 2021 Annual Budget. As you are aware, in 2020 the Authority approved its 2020 Long-Range Capital Plan and implemented the first toll rate increase in nearly eight years to provide a funding stream for the capital projects included in the plan. The 2021 Annual Budget includes nearly \$1 billion in capital project spending, funding necessary state of good repair, safety and capacity enhancement projects. Also, the 2021 Annual Budget includes net revenues sufficient to cover over \$900 million of debt service payments in 2021 on both existing debt and the potential issuance of new money bonds. Included in the 2021 Annual Budget are interest costs on assumed new money borrowings of \$500 million for the 2019 Capital Improvement Program and \$500 million for the 2021-2025 Capital Improvement Program.

Since the adoption of the Strategic Plan, the Authority has been developing additional strategic goals and looking to create greater workforce and roadway efficiencies to support the Strategic Plan. One of those strategies produced is the merger of the Maintenance, Operations and Patron Services Departments. This merger results in a model that is common through dozens of state transportation agencies nationwide. The 2021 Annual Budget reflects this merger, as the new Operations Department includes both the Traffic Division and Maintenance Division. Also included in the 2021 Annual Budget is the implementation of several leading practice recommendations, including the establishment of a rolling five-year capital program and lowering of certain asset capitalization thresholds. The 2021 Annual Budget holds authorized positions at the 2020 level of 2,125, while providing increased funding for COVID-19 safety measures.

The 2021 Annual Budget provides for the necessary personnel and expenditures to operate and maintain the New Jersey Turnpike and Garden State Parkway, two of the nation's busiest and safest toll roads. In addition, the 2021 Annual Budget provides bond covenant coverage exceeding that required by the Turnpike Revenue Bond Resolution and the Authority's Financial Management Principles and Guidelines, as well as meets all contractual payment obligations.

John M. Keller  
Executive Director

Donna Manuelli  
Chief Financial Officer

Website address <http://www.njta.com>

## Distinguished Budget Presentation Award



GOVERNMENT FINANCE OFFICERS ASSOCIATION

*Distinguished  
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PRESENTED TO

**New Jersey Turnpike Authority****New Jersey**

For the Fiscal Year Beginning

**January 1, 2020**

Executive Director

The Government Finance Officers Association of the United States and Canada (GFOA) presented a Distinguished Budget Presentation Award to **New Jersey Turnpike Authority, New Jersey**, for its Annual Budget for the fiscal year beginning **January 1, 2020**. In order to receive this award, a governmental unit must publish a budget document that meets program criteria as a policy document, as a financial plan, as an operations guide, and as a communications device.

This award is valid for a period of one year only. We believe our current budget continues to conform to program requirements, and we are submitting it to GFOA to determine its eligibility for another award.

## Vision Statement

To be the premier toll road agency in the United States of America

## Mission Statement

To prudently manage the finances and operations of the New Jersey Turnpike Authority to provide our customers with a safe, efficient, innovative, and resilient toll road system, which facilitates mobility in New Jersey and the Northeast United States of America.

## Core Values

The Authority's core values are a commitment to:



Exit 125 on the Garden State Parkway looking North Bound



Figure 1: Exit 125 on the Garden State Parkway looking North Bound

## Background

The New Jersey Turnpike Authority (the “Authority”) is a body corporate and politic of the State of New Jersey (the “State”) organized and existing by virtue of the New Jersey Turnpike Act of 1948, constituting Chapter 454 of the Laws of New Jersey of 1948, as amended and supplemented (the “Act”). Pursuant to the Act, the Authority has owned and operated the New Jersey Turnpike (the “Turnpike”) since the time the Turnpike opened for traffic in 1951. In July 2003, the New Jersey Highway Authority (the “Highway Authority”) was abolished and the Authority assumed all of the powers, rights, obligations, assets, debts, liabilities and statutory responsibilities and duties of the Highway Authority, including the ownership and operation of the Garden State Parkway (the “Parkway”). As a result, the assets and liabilities of the Authority and the Highway Authority and the ongoing operations, expenses and revenues of the Turnpike and the Parkway are now combined under the ownership and operation of the Authority.

### The Turnpike

The Turnpike is a limited access toll road that serves as part of the I-95 corridor linking the major economic centers of the East Coast. Its connections to a major seaport in Newark and Elizabeth and an international airport in Newark make it an important route for both commercial and passenger vehicles. It also serves New Jersey commuters traveling to and from the major metropolitan areas surrounding Philadelphia and New York City and other employment centers in the State. The Turnpike was the first toll road in New Jersey and the third in the nation when it opened in 1951.

At the time the Turnpike opened in 1951, it was 118 miles in length and today consists of 148 center lane miles. The center lane miles have grown over the years with the addition of the Newark Bay Hudson County Extension (1956), the Pearl Harbor Memorial Turnpike Extension (1956), the Western Spur (1970) and the I-95 Extension (1992). The mainline connects to the George Washington Bridge in the north, and the Delaware Memorial Bridge in the south. To the east it connects with the Lincoln and Holland Tunnels and the Outerbridge Crossing, and to the west with the Delaware River Turnpike Bridge. Originally four lanes for its full length, the Turnpike is now as wide as 14 lanes in some areas.

### The Parkway

The Parkway opened to traffic in 1954. Originally 168 miles in length, today the Parkway is a 173-mile limited access toll road with connections in the south to Route 9 near Cape May, New Jersey, and in the north to the New York State Thruway at the New York-New Jersey border near Spring Valley, New York. The Parkway interchanges are numbered according to their distance from the southern terminus.

The northern section of the Parkway serves the metropolitan suburban areas in Bergen, Union, Essex, and Passaic Counties near Newark and New York City. In addition to being heavily used by commuters, the location of many businesses and industrial complexes in or near the Parkway corridor has resulted in significant local business traffic. The Parkway also is the principal highway route between metropolitan Newark-New York City and the New Jersey seashore. Heavy trucks are not allowed on the Parkway north of Interchange 105. The Parkway is now as wide as 15 lanes in some areas.

## Financial Policies Summary

The Authority has adopted four key financial policies that serve as the groundwork for how the Authority issues debt, makes investments, and manages its finances. Below is a brief description of these four policies. The policies were developed by staff in consultation with the Authority's Financial Advisors and approved by the Board of Commissioners. All financial policies are reviewed by the Authority's Chief Financial Officer no less than every two years. Any changes to the document will be presented to the Authority's Board of Commissioners for approval. The full versions of these policies are included in [Appendix C](#) of this document.

### Financial Management Principals and Guidelines

The Financial Management Principles and Guidelines are intended to serve as a management tool to enable the Authority to communicate the Authority's commitment to a sound financial decision-making process and affirm to investors and the credit rating agencies management's commitment to the long term financial viability of the Authority and repayment of its bonds. The Financial Management Principles and Guidelines are also intended to serve as guidance for management of the Authority with respect to:

- (i) the issuance and management of Authority debt in appropriate amounts and types with the goals of achieving the lowest possible costs of capital within prudent risk parameters and ensuring ongoing access to the capital markets; and
- (ii) compliance by the Authority with all provisions of its enabling legislation relating to bonds, notes or other obligations of the Authority, as well as all provisions of the Turnpike Revenue Bond Resolution.

Since inception, the policy has set targets for total debt service coverage, total requirements coverage, and the minimum General Reserve Fund balance. The debt service coverage target is 1.40 times, while the total requirements coverage target is 1.20 times, both above the levels required by the Authority's Turnpike Revenue Bond Resolution. Notably, in January 2017, the Authority's Board of Commissioners approved an amendment to the Financial Management Principles and Guidelines. This amendment increased the minimum General Reserve Fund target from \$100 million as follows:

- \$125 million as of 12/31/17
- \$150 million as of 12/31/18
- \$175 million as of 12/31/19
- 10% of that year's budgeted annual revenue for 12/31/20 and each year thereafter.

### Debt Management Policy

The Debt Management Policy is intended to serve as a management tool to enable the Authority to identify circumstances and transactions under which the Authority can issue and manage its bonds, notes and other obligations in the most efficient manner and provide for the full and timely repayment thereof. The policy is also intended to serve as guidance for management of the Authority with respect to:

- (i) the issuance and incurrence of Authority debt in appropriate amounts and types with the goals of achieving the lowest possible costs of capital within prudent risk parameters and ensuring ongoing access to the capital markets;
- (ii) compliance by the Authority with all provisions of its enabling legislation relating to bonds, notes or other obligations of the Authority, as well as all provisions of the Turnpike Revenue Bond Resolution (as hereinafter defined);
- (iii) preservation of financial flexibility to maintain appropriate resources and funding capacity for present and future capital needs;

(iv) management of interest rate risk exposure to promote the appropriate diversification within the debt portfolio to balance risk and liquidity and promote and maintain an acceptable balance between interest rate risk and the long-term cost of capital; and

(v) securing of highly qualified professional services firms to assist with debt issuance in an open and competitive process.

### Interest Rate Swap Management Plan

The Interest Rate Swap Management Plan sets forth the manner of execution of interest rate swaps and related agreements, provides for security and payment provisions, and sets forth certain other provisions related to interest rate swap agreements between the Authority and qualified swap counterparties. The Interest Rate Swap Management Plan also outlines procedures to be followed to ensure compliance with all applicable federal and state laws.

### Investment Policy

The purpose of the Investment Policy is to define guidelines and operational factors governing the investment of all funds held by the Authority or its bond trustees. The Investment Policy is intended to show compliance with all provisions of the Authority's enabling legislation relating to the investment of funds of the Authority, as well as provisions of the Turnpike Revenue Bond Resolution.



## Financial Plan

### Financial Plan Key Highlights

The Authority's current financial plan includes projected revenues, expenses, deposits to reserve funds and financial covenant calculations through December 31, 2025. Key highlights of the plan are as follows:

#### Revenue

- Toll revenue is projected by the Authority's traffic engineering consultant, CDM Smith. CDM Smith provided a New Jersey Turnpike System Draw Down Letter in October 2020, which includes projected Toll revenue for 2021 – 2025. The draw down letter is based on a 2018 forecast study and accounts for three conditions which were unforeseen in 2018 – a toll rate increase that went into effect on September 13, 2020, annual indexed toll rate increases beginning on 1/1/22, and the impact of the COVID-19 pandemic. The October 2020 projections show a net impact of the increase in toll revenue from the toll rate increase and the potential reduction in traffic due to the continued travel, commuting and economic impacts of the pandemic at reduced levels each year through 2025 as pandemic transaction declines are recovered. Considering these factors, the system-wide toll revenue is expected to increase on average 6% per year over the forecast period due to the annual indexed toll increases and the gradual recovery of traffic impacted by the pandemic
- E-ZPass Fees are projected to increase by about 2.0% per year based on historical growth
- Federal Subsidy for Series 2009F and 2010 Bonds (Build America Bonds) is projected to remain constant at current levels, which represents about 33% of the interest payable on the bonds
- Concession revenue will be impacted by the closure and rebuilding of the Service Areas through 2025 assuming the adjoining Service Areas do not pick up the volumes lost during the closures. Also assumes a reduction in service area sales volumes due to lower traffic volumes from COVID-19 lingering impacts on travel
- Other Revenue (Investment, Miscellaneous, Arts Center) is projected to decline by approximately \$2.8 million in 2021 as compared to 2020 estimated actual results. Investment income is projected to decline due to lower than expected short-term interest rates. Miscellaneous revenue is projected to slightly increase primarily due to annual CPI increases. Arts Center revenue is slightly increasing due to an increase in naming rights payments, and amortization of pre-paid rents. After 2021, Other Revenue is increasing by 2% per year

#### Operating Expenses

- Operating Expenses are projected to increase by 3.9% from 2020 to 2021, primarily driven by increased credit card fees and money counting charges as well as additional COVID-19 expenses for cleaning and equipment. The increase also includes higher pension costs due to increasing contribution rates and covered payroll, and increased benefit costs due to medical inflation and usage. Operating expenses are projected to increase by 2.5% thereafter

#### Net Debt Service

- Projected Net Debt Service includes the expected new money borrowing of \$500 million in late 2020 to fund the 2019 CIP with assumed interest costs of about 5.8%, and a new money issuance in 2021 of \$500 million to fund the 2021- 2025 CIP. Debt service also reflects the savings from the fixed rate bond refunding completed in 2020. Thereafter, net debt service is projected to increase based on additional new money bond issuances to fund the 2021-2025 Capital Improvement Program derived from the 2020 Long-Range Capital Plan approved in May 2020

#### Maintenance Reserve Fund and the Special Project Reserve Fund

- Deposits to both the Maintenance Reserve Fund and the Special Project Reserve Fund are projected by the Authority's General Consulting Engineer, HNTB, as contained in their Consulting Engineer's



Report from October 2020. Deposits are expected to increase approximately by 24% in 2021, by 19% in 2022, and 5% thereafter

#### State Payments

- Includes payments under the Transportation Trust Fund Agreement, Feeder Road Maintenance Agreement, and the State Transportation Projects Funding Agreement (2016-2021), all between the Authority and the State of New Jersey, with all payments subordinate to debt service payments to bondholders. The existing State Transportation Projects Funding Agreement will end on 6/30/2021. Projections assume an anticipated successor State Transportation Projects Funding Agreement will be entered into effective 7/1/21 with an annual payment of \$375 million

The Authority's Financial Plan through 2025 projects the Authority to be in compliance with its General Bond Resolution Financial covenants, which require debt service coverage of at least 1.20 times and total requirements coverage of at least 1.0 times. In addition, the Authority is projected to be in compliance with its Board approved policies that target debt service coverage of at least 1.40 times, total requirements coverage of 1.20 times, and a minimum unencumbered General Reserve Fund balance of 10% of total annual revenue as of December 31, 2020 and each year thereafter (\$215 million as of December 31, 2021).

New Jersey Turnpike Authority Financial Plan									
	Fiscal Year Ending 12/31 (In Thousands)	Actual 2019	Estimated/Actuals 2020	Budget 2021	Projected 2022	Projected 2023	Projected 2024	Projected 2025	
Turnpike Tolls Parkway Tolls E-ZPass Fees Federal Subsidy for Series 2009 F and Series 2010 A Bonds Concession Revenue Other Revenue Total Revenues Operating Expenses Total Revenues Available for Debt Service	\$	1,176,476 435,792 80,329 76,725 33,104 59,580	1,029,206 380,453 85,232 77,765 31,549 35,699	1,414,971 505,770 84,500 77,010 31,000 36,217	1,524,507 533,546 86,190 77,010 33,000 35,686	1,611,284 559,728 87,914 77,010 36,000 36,399	1,706,871 588,559 89,672 77,010 38,000 37,127	1,798,581 615,668 91,466 77,010 38,760 37,870	
	\$	1,862,006	1,639,904	2,149,468	2,289,939	2,408,335	2,537,239	2,659,355	
		(530,935)	(558,971)	(622,324)	(637,882)	(653,829)	(670,175)	(686,929)	
	\$	1,331,071	1,080,933	1,527,144	1,652,057	1,754,506	1,867,064	1,972,425	
	Future Debt Issuance Existing Debt Service Proposed Debt Service on \$500M in 2020 and 2021, \$750M in 2021 & \$1B 2023 onwards Net Debt Service	\$	-	500,000	500,000	750,000	1,000,000	1,000,000	1,000,000
			(824,281)	(659,401)	(862,957)	(861,480)	(864,409)	(902,279)	(910,055)
			-	(4,817)	(57,800)	(101,150)	(158,950)	(216,750)	(274,550)
		\$	(824,281)	(664,218)	(920,757)	(962,630)	(1,023,359)	(1,119,029)	(1,184,605)
	Total Revenues Available After Debt Service Payments to Charges Fund Cash Flow Available for Reserves Maintenance Reserve Fund Special Project Reserve Fund Net Revenues Available for General Reserve Fund TTF Payments Feeder/Road Maintenance Agreement Existing State Transportation Funding Agreement Anticipated Amounts for Additional State Transfers General Reserve Spending Transfer to Construction Fund Account - Net Net Annual General Reserve Fund Increase (Decrease) Ending General Reserve Fund Balance Net Revenues to Debt Service Coverage Ratio Net Revenues to Debt Service and Reserves Coverage Ratio	\$	506,790	416,715	606,387	689,427	731,147	748,035	787,820
		\$	506,790	416,715	606,387	689,427	731,147	748,035	787,820
\$		(131,468)	(134,097)	(160,000)	(200,000)	(210,000)	(220,000)	(230,000)	
		(41,300)	(41,300)	(50,000)	(50,000)	(51,500)	(53,045)	(54,636)	
\$		334,022	241,318	396,387	439,427	469,647	474,990	503,184	
\$		(22,000)	(22,000)	(22,000)	(22,000)	(22,000)	(22,000)	(22,000)	
		(3,500)	(2,500)	(2,500)	(2,500)	(2,500)	(2,500)	(2,500)	
		(154,000)	(135,250)	(77,000)	-	-	-	-	
		-	-	(187,500)	(375,000)	(375,000)	(375,000)	(375,000)	
		(103,732)	(67,242)	(53,345)	(53,345)	(53,345)	(53,345)	(53,345)	
	(25,000)	(114,829)	(53,496)	(31,283)	(30,800)	(30,035)	(29,000)		
\$	25,790	(100,503)	546	(44,701)	(13,998)	(7,890)	21,339		
Net Revenues to Debt Service Net Revenues to Debt Service and Reserves Coverage Ratio Net Revenues to Debt Service and Reserves Coverage Ratio	\$	440,129	339,626	340,172	295,471	281,473	273,583	294,922	
		1.61	1.63	1.66	1.72	1.71	1.67	1.67	
		1.34	1.29	1.35	1.36	1.37	1.34	1.34	
	(1)Includes \$129 million annual payments through 6/30/2021 and potential \$6.25 million and \$12.5 million payment towards the debt service on Portal North Bridge Project for 2020 and 2021 respectively								

(2)Anticipates \$375 million annual payments are made from 7/1/2021 forward including \$25 million payment towards debt service on Portal North Bridge Project for 2020 and 2021 respectively

(1) Includes \$129 million annual payments through 6/30/2021 and potential \$6.25 million and \$12.5 million payment towards the debt service on Portal North Bridge Project for 2020 and 2021 respectively  
 (2) Anticipates \$375 million annual payments are made from 7/1/2021 forward including \$25 million payment towards debt service on Portal North Bridge Project

Figure 2: NJTA Financial Plan

## The Strategic Plan

The Authority adopted its first 10-year Strategic Plan (2020-2029) in 2019. The Strategic Plan, through its incorporation of the Authority's vision, mission, and core values, provides clear direction and measurable goals for the next 10 years. The Authority is working to measure, monitor and report its performance as compared to the key goals on a quarterly basis.

The Strategic Plan includes performance measures for the key goals of the Authority as listed below:

### Safety

Safety is one of the core values of New Jersey Turnpike Authority and is a critical component of the mission statement. Ensuring safety for both customers and the Authority workforce is a focus of every project and initiative undertaken by the agency.

Performance Measures have been established in each of these areas:

- Crashes and Fatalities
- Toll Collection Personnel Incidents
- Maintenance and Contractor Personnel Incidents
- Service Area and Park & Ride Safety

### Financial Strength

Maintaining a strong financial position to fund operations, maintenance, and capital improvements adequately and efficiently supports the Authority's mission and vision for providing transportation services to the region.

Performance Measures have been established in each of these areas:

- Credit Strength
- Cost Effective Operations
- Capital Funding Approach
- Reserve Funding
- Debt Capacity

### Mobility

Customer satisfaction is a key best practice for any business, including the Authority. Maintaining and improving mobility for current and future customers on both the Turnpike and Parkway is critical to the organization's future success.

Performance Measures have been established in each of these areas:

- Vehicle Throughput
- Traffic Balancing
- Emerging Tolling and Vehicle Technologies
- Multi-Modal Connectivity through Regional Coordination

## State of Good Repair

Maintaining a state of good repair can increase the useful life of Authority's assets, resulting in cost savings over time and is vital in keeping traffic moving well. State of good repair cuts across all goals of the Authority's Strategic Plan.

Performance Measures have been established in each of these areas:

- Pavement Condition
- Pavement Markings
- Barrier and Guardrail
- Signage
- Lighting
- Drainage Systems
- Bridges
- Maintenance Equipment
- Facilities
- Technology
- Asset Management and Project Management

## People

The future success of the Authority depends on its ability to continue to serve and satisfy customers, which requires the agency to hire and retain a high-quality workforce. Qualified, motivated individuals across all levels of the organization are key to continued success which includes recruiting, motivating and retaining employees.

Performance Measures have been established in each of these areas:

- Customer Satisfaction
- Understanding Future Staffing Needs
- Retention of High-Quality Staff
- Succession Planning
- Attracting and Hiring Qualified Talent

## New Jersey Turnpike Authority 2020 Accomplishments and 2021 Goals

The goals and achievements are based on the five Authority goals included in the Strategic Plan. The Strategic Plan outlines the performance measures that the Authority adheres to.

The summary below highlights major accomplishments in 2020 and goals for 2021 per selective Strategic Plan performance criteria as follows:

### Safety

#### 2020 Accomplishments

- Over the first seven months of 2020, total crash rate per 100 MVM on the Turnpike decreased to 604 from 786 in same period of 2019
- Over the first seven months of 2020, total crash rate per 100 MVM on the Parkway decreased to 838 from 1,023 in same period of 2019
- Troop D of the NJSP completed 33 Click it or Ticket and 24 U-Text, U-Drive details year to date, 87 Drive Sober or get Pulled Over details and 26 Over the Limit Under Arrest details. Troop D also conducted 18 enforcement details in the annual I-95 to Save Lives campaign

**Selected Performance Measure:** Crashes per million vehicle miles traveled

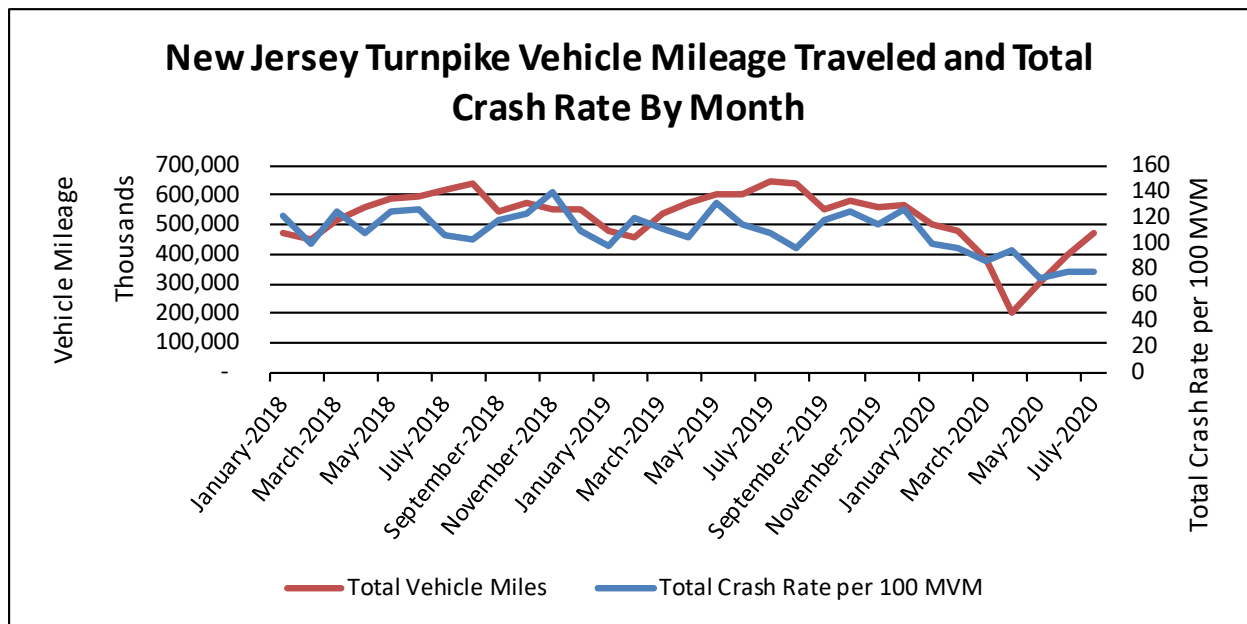


Figure 3: Vehicle Mileage Traveled and Total Crash Rate by Month (Turnpike)

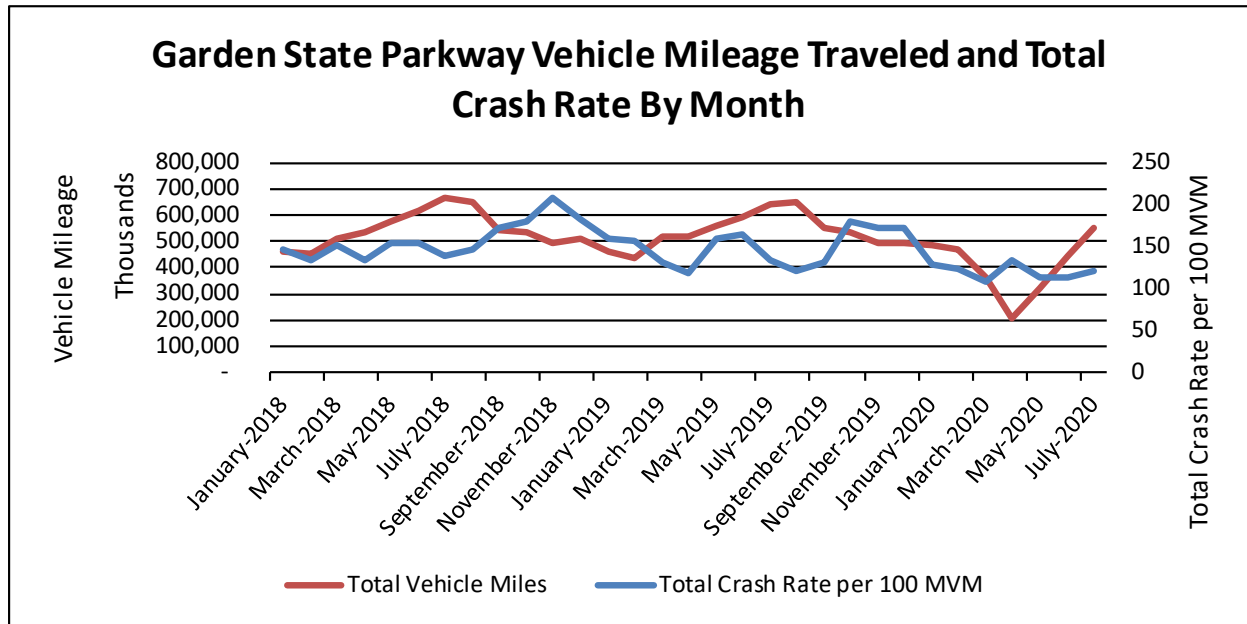


Figure 4: Vehicle Mileage Traveled and Total Crash Rate by Month (Parkway)

**Selected Performance Measure:** Injury and property-damage-only crashes by month

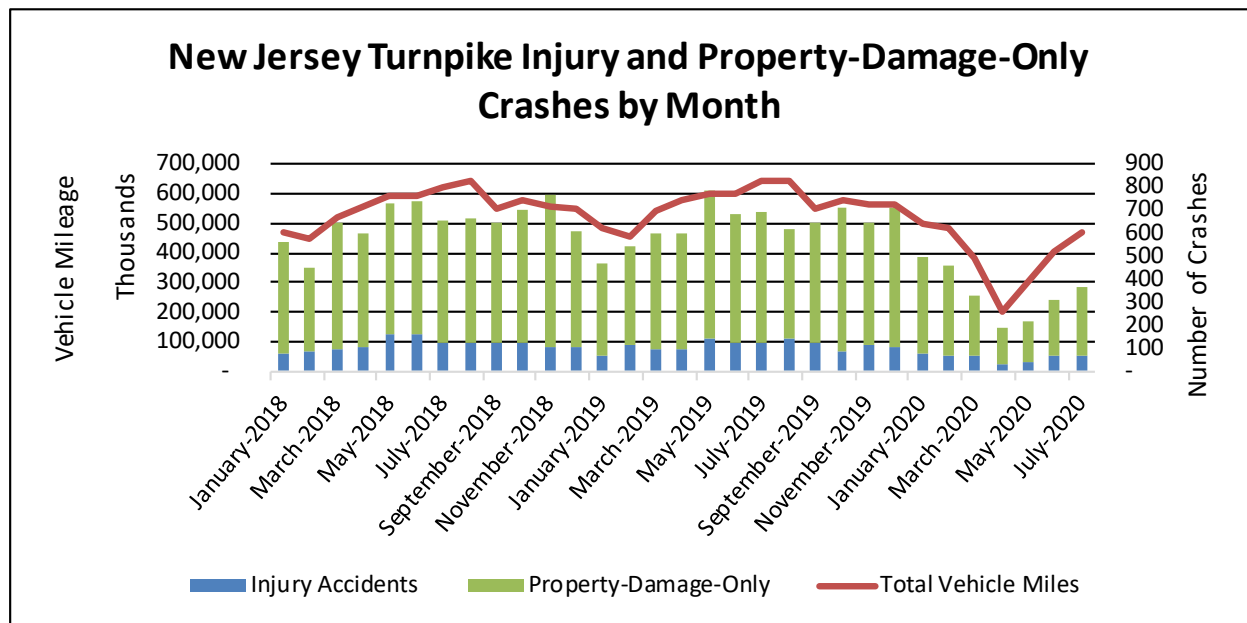


Figure 5: Injury and Property-Damage-Only Crashes by Month (Turnpike)

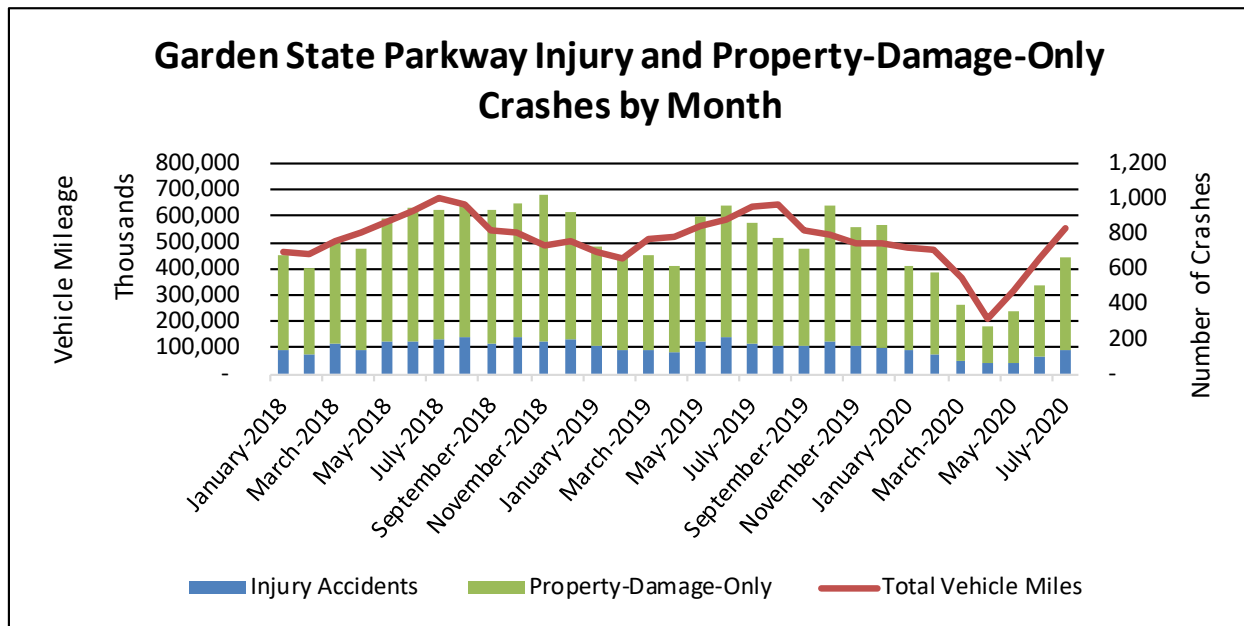


Figure 6: Injury and Property-Damage-Only Crashes by Month (Parkway)

#### 2021 Goals

- Focus on maintaining a state of good repair on the roadways, roadside safety design, and technologies to provide the best conditions for safe travel
- Improve and maintain public outreach
- Reduce the response times of emergency vehicles, as well as incident clearing time
- Continue to monitor the Authority's Employee Safety Program
- Implement new emergency response resources such as helipads and access gate points in Bergen, Burlington, Cape May, Gloucester and Ocean Counties
- Install new Reference Location signing in Gloucester, Salem and Union counties assist in reducing emergency response times
- Troop D of the NJSP to participate in the "Click-It-or-Ticket", "Drive Sober or Get Pulled Over", and "U-Text, U-Drive, U-Lose" national campaigns and the "I-95 Drive to Save Lives" multi-state enforcement initiative



## Financial Strength

### 2020 Accomplishments

- Fitch has affirmed 'A' rating and maintains the positive outlook on April 2, 2020
- On April 1, 2020 the Authority issued \$33,875,000 of the Series 2020A bonds to fully refunded Series 2015B Bonds in order to meet the mandatory tender date on the refunded bonds to avoid interest escalations
- On June 22, 2020 the Authority issued \$188,165,000 of Series 2020B and Series 2020C bonds to partially refund Series 2012B, 2013A, 2014C, 2015A, 2015C, 2015D, and 2017C Bonds. This resulted in significant cash flow savings by restructuring principal payments. S&P assigned an A+ rating to the Series 2020C bonds
- Established measuring and reporting on the strategic plan goals
- Despite traffic and revenue losses due to the global pandemic, met all bond covenants and continued funding the construction projects
- The Board approved the \$24 Billion 2020 Long-Range Capital Plan and toll rate increase effective September 13, 2020. The toll rate increase includes annual toll rate indexing beginning January 1, 2022

**Selected Performance Measure:** The Turnpike Authority's credit rating comparisons by Moody's, S&P, and Fitch

New Jersey Turnpike Authority Bond Ratings		
Credit Rating Agency	2019 Bond Ratings	2020 Bond Ratings
Moody's Investors Services Inc	A2 (Stable Outlook)	A2 (Stable Outlook)
S&P Global Ratings	A+ (Stable Outlook)	A+ (Negative Outlook)
Fitch Ratings	A (Positive Outlook)	A (Positive outlook)

Moody's Investors Services Inc	S&P Global Ratings	Fitch Ratings		
Aaa	AAA	AAA	Investment Grade	Minimal Credit Risk
Aa1	AA+	AA+		Very Low Credit Risk
Aa2	AA	AA		
Aa3	AA-	AA-		
A1	A+	A+		Low Credit Risk
A2	A	A		
A3	A-	A-		
Baa1	BBB+	BBB+		Moderate Credit Risk
Baa2	BBB	BBB		
Baa3	BBB-	BBB-		

**Figure 7: Turnpike Authority's Credit Rating**

The New Jersey Turnpike Authority's investment grade bond ratings demonstrate a strong capacity to meet the Authority's financial obligations and represents a relatively low risk to investors.

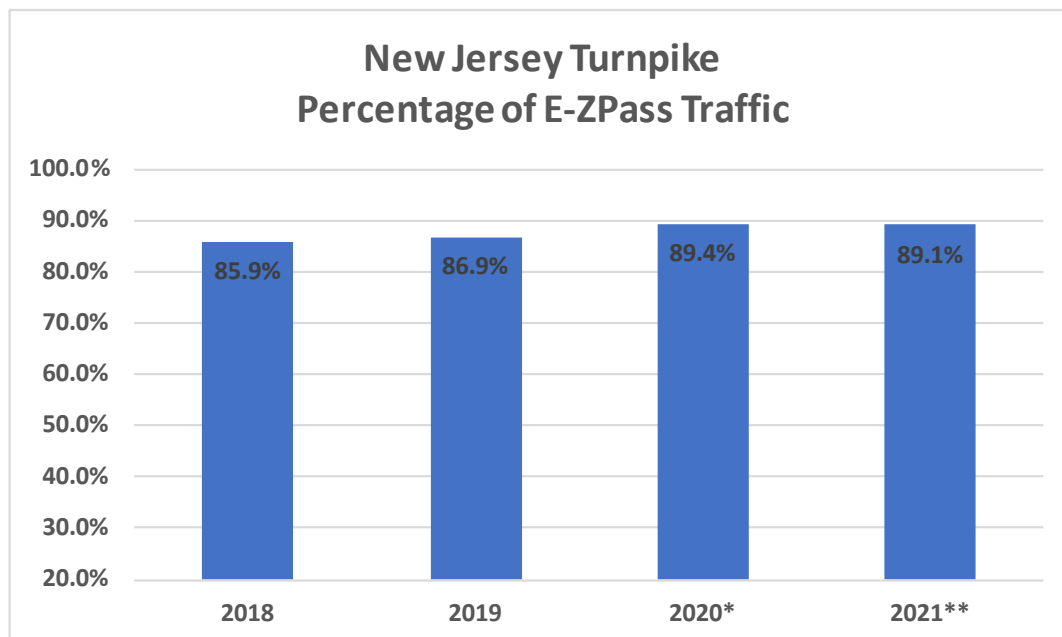
**2021 Goals**

- As of December 31, 2021, have minimum general reserve balance equal to 10% of the 2021 budgeted revenue. The 2021 revenue budget is \$2.15 billion. Therefore, the minimum general reserve balance should be at least \$215 million
- Establish funding for Other-Post Employment Benefits (OPEB) Trust
- Improve bond ratings to provide the lowest cost of capital
- Issue \$500 million of new money bonds in 2021 to fund the 2021-2025 CIP, which is developed from the 2020 Long-Range Capital Plan approved in May 2020

**Mobility****2020 Accomplishments**

- Completed SafeTrip NJ mobile app enhancements, the next generation motorist aide tool, improving overall customer service communication
- Began installation of next generation Hybrid Changeable Messaging Signs (HCMS)
- Deployed the NJTA Weather Operations System (NWOS) to support winter snow operations for the maximization of routing protocols for winter-weather emergencies
- Deployed enhancement features to the Traffic Permitting and Lane Closure application
- Completed activation of twenty-six (26) Variable Message Signs (VMS) across both roadways
- Began extensive improvements at Interchanges 16E/18E installing Express E-ZPass on the SNE/NSE Roadways. This will ease congestion for trucks heading on Route 95 North towards Routes 46, 80, GWB etc. This project will be completed in 2021
- Installation of High-Speed E-ZPass lanes at Interchange 6 and the New Gretna Toll Plaza

**Selected Performance Measure:** Annual Turnpike Percentage of E-ZPass Traffic



\*Through September 30, 2020

\*\*Projected Traffic is based on the CDM Smith Toll Revenue Forecast study dated October 6, 2020

**Figure 8: Percentage of E-ZPass Traffic (2018-2021)**

### 2021 Goals

- Continue to develop, plan, and increase capacity among roadway interchanges to allow for a more efficient traffic flow
- Implement the replacement system for OpenREACH to maintain essential regional transportation communications
- Continue to explore enhancement and feasibility to expand installation and configuration of Dedicated Short-Range Communications (DSRC) and Cellular Vehicle-to-Everything (C-V2X) radios for Vehicle-to-Infrastructure (V2I) communications across both roadways
- Continue installation and deployment of HCMS
- Continue to deploy enhancement features to the Traffic Permitting and Lane Closure application
- Gather and document requirements for the next generation Advance Traffic Management Platform

### State of Good Repair

#### 2020 Accomplishments

- Improved the overall condition of the mainline pavement on the Turnpike and Parkway placing over 400,000 tons of asphalt on both roadways
- Continued implementation and award of contracts in the 2019 CIP
- Began the implementation of the first Phase of the 2021-2025 CIP by issuing supplements to current design Orders of Professional Services to accelerate the design and award of contracts to repair the highest priority bridges and culverts
- Completed the planning and programming phase for the Maintenance Division Lighting Management Program (LMP)
- Advertised the first contract for the Maintenance Division's Drainage Management Program (DMP)

**Selected Performance Measure:** Budgeted resurfacing lane miles increased from 2019 to 2020 by 44.8% and decreased from 2020 to 2021 of 34.5 %. Despite the negative economic impact due to COVID-19 the Authority, as always, is committed to keeping their roadways in a state of good repair for patron's safety. Resurfacing miles are determined based upon established re-paving cycle targets established by the Engineering Department.

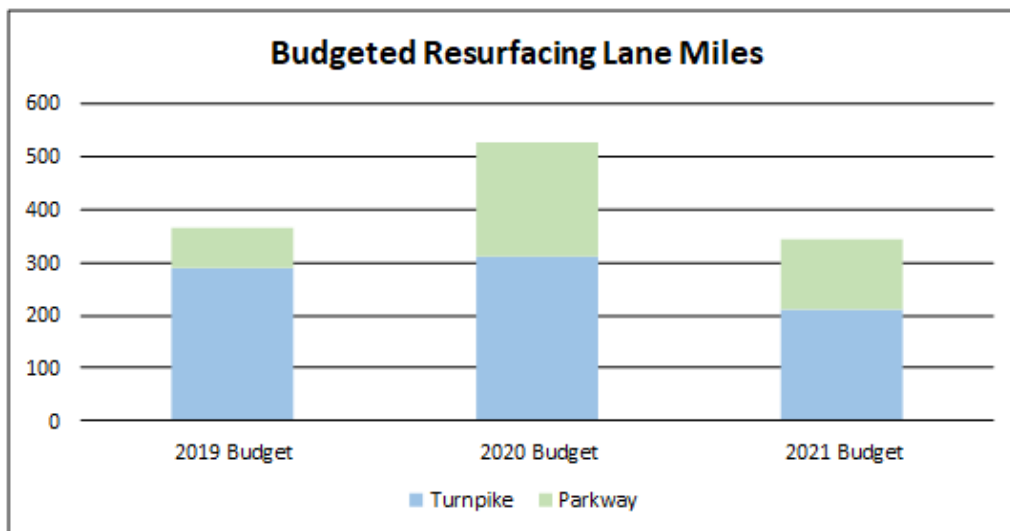


Figure 9: Budgeted Resurfacing Lane Miles

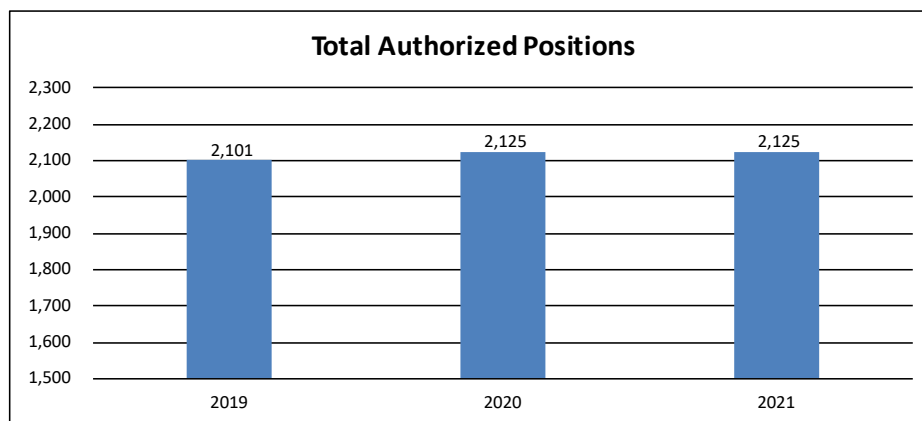
**2021 Goals**

- Maintain and continue to improve the condition of the mainline pavement on the Turnpike and Parkway
- Develop, prioritize and finalize the 2021-2025 CIP
- Continue design and award of contracts for the 2021-2025 CIP
- Continue restoration of roadway illumination levels
- Continue Toll facilities upgrades
- Participate and assist with the Implementation of an Authority-wide Capital Project Management System (CPMS)

**People****2020 Accomplishments**

- Continued to monitor Equal Pay Act compliance, in conjunction with General Counsel, initiating corrective actions when appropriate to ensure meeting the 2018 EPA requirements
- Began implementing a feature rich, digital recruitment platform and onboarding process. These modules will serve as the foundation for the next generation Human Capital Management System (HCM)
- Increased training options for employees and enhanced delivery of training via e-learning
- Hired a deferred compensation independent consultant
- Implemented new Toll Collection training procedures to comply with social distancing and safety

**Selected Performance Measure:** Budgeted positions shows a slight upward trend with a modest 1.14% increase from 2019 to 2020, and no increase for 2021.



**Figure 10: Budgeted Positions Totals**

**2021 Goals**

- Provide on-site personal instruction on proper employee conduct standards and the effective avoidance of offending co-worker sensibilities through improper or insensitive conduct
- Complete the Authority employee handbook
- Implement the new occupational health provider contract for the Authority
- Continue to update the Authority policy book to ensure adherence to the latest state and federal regulations and laws
- Continue to offer various training modules to employees and supervisory staff of the Authority to further the professional and technical development of the workforce
- Update the Customer Service video for new collectors training

## Key Financial Metrics

### Toll Revenue as % of Operating Revenue

This ratio is calculated by dividing the Authority's toll revenue by operating revenue. The ratio remains consistent over the period which indicates that the primary component of the Authority's operating revenue continues to be toll revenue. There is an increase in the 2021 percentage due to the 2020 toll rate increase which increases toll revenue and the anticipated continued impacts of COVID-19 on concession revenue and interest income which reduces other revenue

Toll Revenue As % Of Operating Revenue			
(\$ In Thousands)	2019 Actual	2020 Budget	2021 Budget
Toll Revenue	\$ 1,612,268	1,633,298	1,920,741
Operating Revenue	1,741,818	1,760,695	2,048,217
<b>Toll Revenue As % Of Operating Revenue</b>	<b>92.56%</b>	<b>92.76%</b>	<b>93.78%</b>

Figure 11: Toll Revenue as % of Operating Revenue

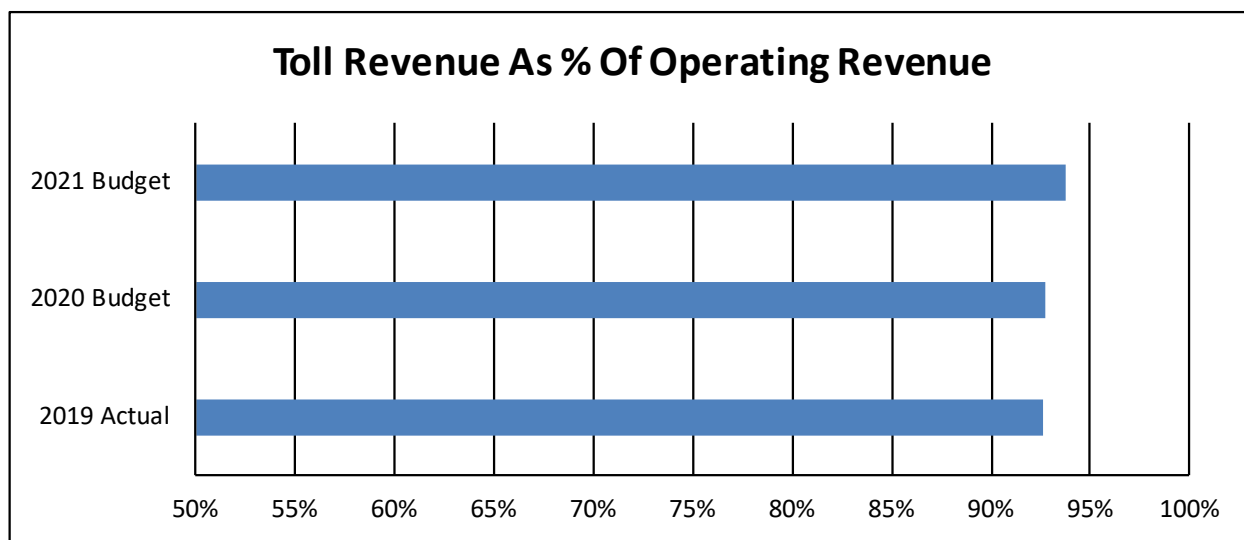


Figure 12: Toll Revenue as % of Operating Revenue Graph

## Operating Margin Ratio

This ratio is calculated by dividing the budgeted operating income by the budgeted operating revenue. This ratio demonstrates the Authority's operating efficiency and capacity to pay for its operating expenses. The ratio is budgeted to increase slightly in 2021 as compared to 2020.

<b>Operating Margin Ratio</b>			
<i>(\$ In Thousands)</i>	<b>2019 Actual</b>	<b>2020 Budget</b>	<b>2021 Budget</b>
Operating Revenue	\$ 1,741,818	1,760,695	2,048,217
Operating Expenses- Revenue Fund	(530,935)	(598,971)	(622,324)
<b>Operating Income</b>	<b>\$ 1,210,883</b>	<b>1,161,724</b>	<b>1,425,893</b>
<b>Operating Margin Ratio</b>	<b>0.70</b>	<b>0.66</b>	<b>0.70</b>

Figure 13: Operating Margin Ratio

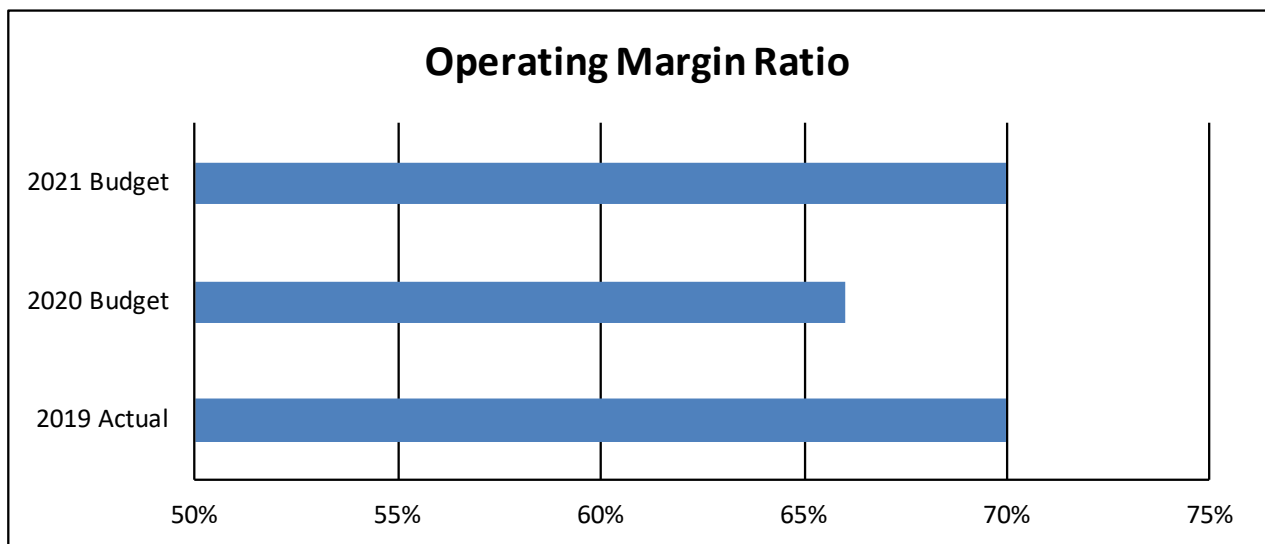


Figure 14: Operating Margin Ratio Graph

## Cost Recovery Ratio

This ratio is calculated by dividing the operating revenue by the total operating expenses. This ratio is a key indicator of the financial performance of the Authority. The Authority's ratio exceeds 100% which demonstrates that the Authority's operating revenue exceeds its operating expenses, providing funds to cover debt service and other requirements.

<b>Cost Recovery Ratio</b>			
<i>(\$ In Thousands)</i>	<b>2019 Actual</b>	<b>2020 Budget</b>	<b>2021 Budget</b>
Operating Revenue	\$ 1,741,818	1,760,695	2,048,217
Operating Expenses - Revenue Fund	(530,935)	(598,971)	(622,324)
<b>Cost Recovery Ratio</b>	<b>3.28</b>	<b>2.94</b>	<b>3.29</b>

Figure 15: Cost Recovery Ratio

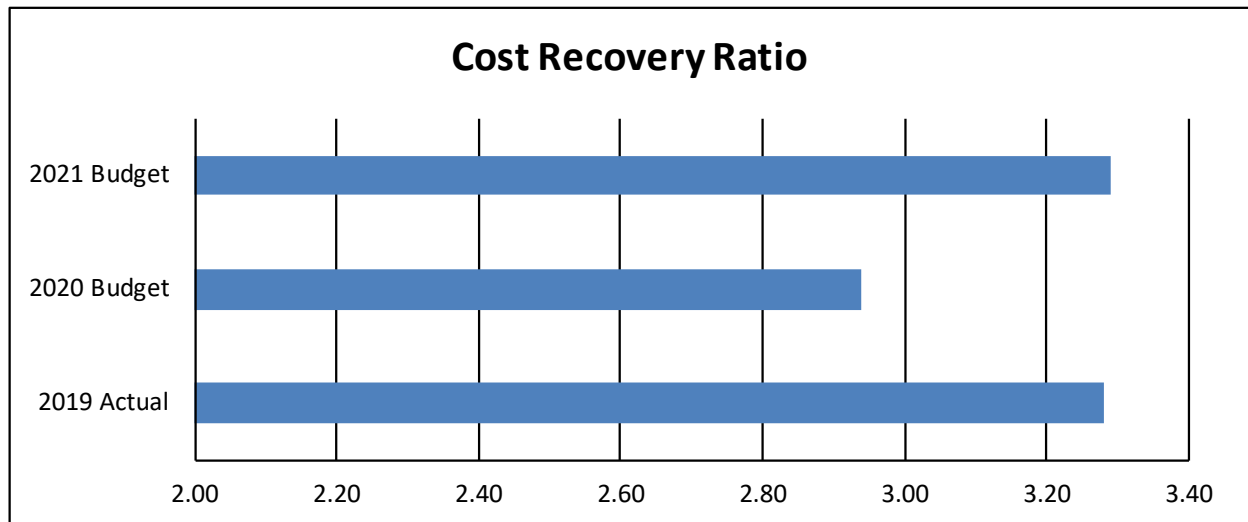


Figure 16: Cost Recovery Ratio Graph



### Average Toll/Transaction – Turnpike

This ratio is calculated by dividing the toll revenue generated by the total number of toll transactions on the Turnpike. The average toll per transaction is budgeted to increase in 2021 due to the 36% toll rate increase effective September 13, 2020.

<b>Average Toll Per Transaction - Turnpike</b>			
<i>(\$ In Thousands)</i>	<b>2019 Actual</b>	<b>2020 Budget</b>	<b>2021 Budget</b>
Toll Revenue - Turnpike	\$ 1,176,476	1,192,889	1,414,971
Toll Transactions - Turnpike	267,772	265,837	232,947
<b>Average Toll Per Transaction - Turnpike</b>	<b>\$ 4.39</b>	<b>4.49</b>	<b>6.07</b>

Figure 17: Average Toll/ Transaction- Turnpike

### Average Toll/Transaction – Parkway

This ratio is calculated by dividing the toll revenue generated divided by the total number of toll transactions on the Parkway. The average toll per transaction is budgeted to increase in 2021 due to the 27% toll rate increase effective September 13, 2020.

<b>Average Toll Per Transaction - Parkway</b>			
<i>(\$ In Thousands)</i>	<b>2019 Actual</b>	<b>2020 Budget</b>	<b>2021 Budget</b>
Toll Revenue - Parkway	\$ 435,792	440,409	505,770
Toll Transactions - Parkway	386,750	389,421	355,877
<b>Average Toll Per Transaction - Parkway</b>	<b>\$ 1.13</b>	<b>1.13</b>	<b>1.42</b>

Figure 18: Average Toll/ Transaction- Parkway

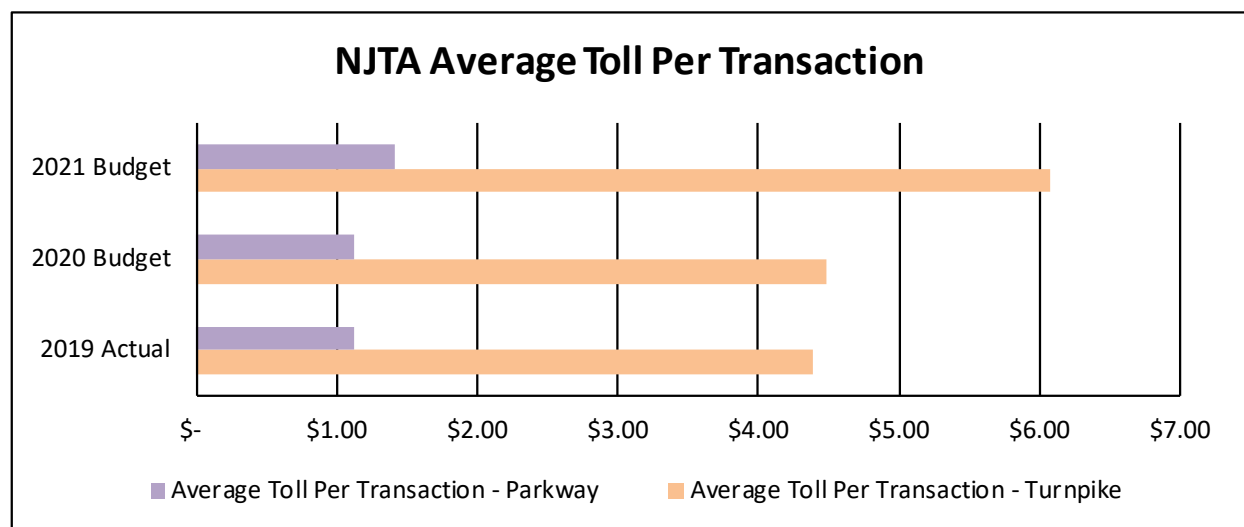


Figure 19: Average Toll/ Transaction- Turnpike/Parkway Graph

## Toll Revenue/Lane Mile

This ratio shows the toll revenue generated per lane mile for both roadways. This can be used to analyze the operating expenses per lane mile and the operating revenue per lane mile. Toll revenue per lane mile will increase with a toll rate increase and an increase in traffic, assuming there are no additional lane miles. The toll revenue per lane mile is budgeted to increase in 2021 due to the toll rate increase on September 13, 2020.

<b>Toll Revenue Per Lane Mile</b>			
<i>(\$ In Thousands)</i>	<b>2019 Actual</b>	<b>2020 Budget</b>	<b>2021 Budget</b>
Toll Revenue - Turnpike	\$ 1,176,476	1,192,889	1,414,971
Toll Revenue - Parkway	435,792	440,409	505,770
<b>Toll Revenue - Authority</b>	<b>1,612,268</b>	<b>1,633,298</b>	<b>1,920,741</b>
Lane Miles - Turnpike	2,427	2,427	2,427
Lane Miles - Parkway	2,050	2,050	2,050
<b>Lane Miles - Authority</b>	<b>4,477</b>	<b>4,477</b>	<b>4,477</b>
Revenue per Lane Mile - Turnpike	485	492	583
Revenue per Lane Mile - Parkway	213	215	247
<b>Revenue per Lane Mile - Authority</b>	<b>\$ 360</b>	<b>365</b>	<b>429</b>

Figure 20: Toll Revenue/Lane Mile

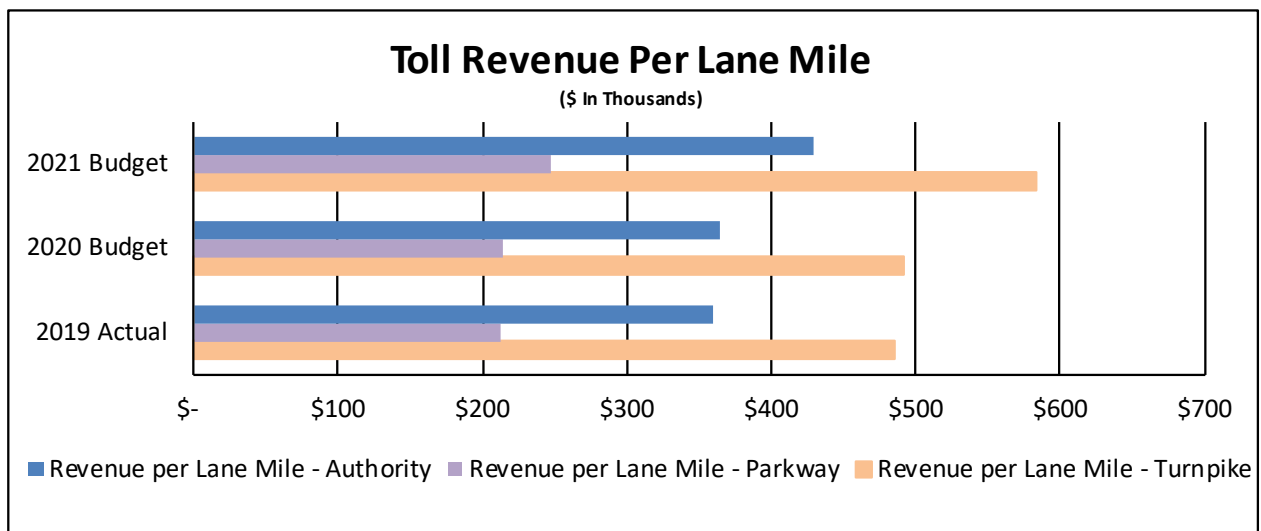


Figure 21: Toll Revenue/Lane Mile Graph

## Operating Cost/Lane Mile

This ratio indicates the operating expenses incurred per lane mile on both the roadways. This ratio can be used in comparison with the toll revenue per lane mile to analyze the Authority's spending efficiency. The 2020 and 2021 Budget assumes full spending of the snow budget, funding all vacancies, and anticipated wage increases for all union contracts. There is only a slight increase in operating costs per lane mile budgeted in 2021. The increase in toll revenue per lane mile far exceeds the slight increase shown below.

Operating Cost Per Lane Mile			
<i>(\$ In Thousands)</i>	2019 Actual	2020 Budget	2021 Budget
Operating Expenses - Revenue Fund	\$ 530,935	598,971	622,324
Lane Miles - Authority	4,477	4,477	4,477
<b>Operating Cost Per Lane Mile - Authority</b>	<b>\$ 119</b>	<b>134</b>	<b>139</b>

Figure 22: Operating Cost/Lane Mile

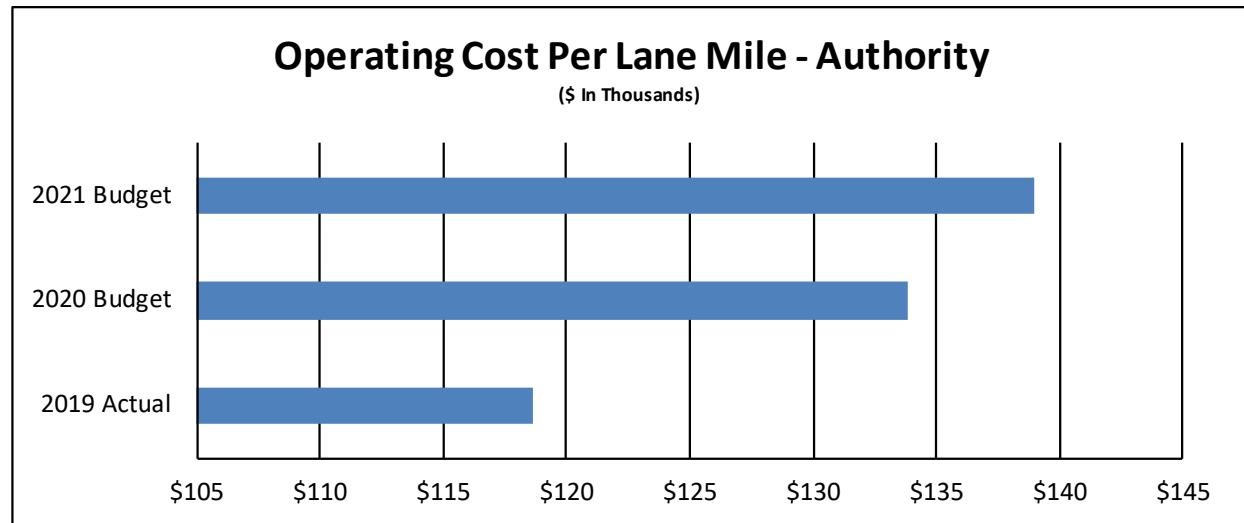


Figure 23: Operating Cost per Lane Mile

## Debt/Lane Mile

This ratio shows the Authority's bond indebtedness per lane mile as of 12/31 each year. Debt per lane mile is expected to increase in 2021, as the Authority issues more bonds to fund its 2021-2025 CIP. Even though debt per lane mile will increase, the Authority's toll revenue will also increase, providing a strong repayment source for the additional debt needed to fund capital needs.

<b>Debt per Lane Mile</b>			
<i>(\$ In Thousands)</i>	<b>2019 Actual</b>	<b>2020 Budget</b>	<b>2021 Budget</b>
Bond Indebtedness, net	\$ 11,553,106	11,447,223	12,159,510
Lane Miles - Authority	4,477	4,477	4,477
<b>Debt per Lane Mile - Authority</b>	<b>\$ 2,581</b>	<b>2,557</b>	<b>2,716</b>

Figure 24: Debt/Lane Mile

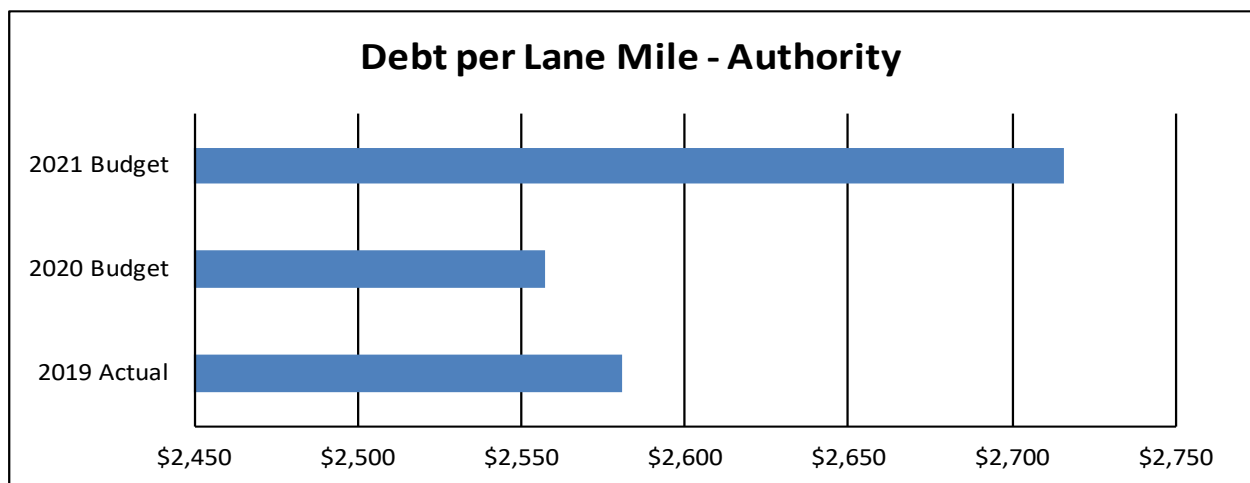


Figure 25: Debt/Lane Mile Graph

## Executive Summary

The Authority operates two well-established highways, one of which serves as a critical link along the I-95/Northeast Corridor and both of which allow for north-south travel in New Jersey. The roads serve a densely populated and extremely wealthy region. Most of the traffic is non-discretionary and the demand for the roads has proven to be inelastic.

In July 2003, the New Jersey Turnpike Authority and New Jersey Highway Authority were consolidated. Combining two major agencies -- each of which was operating a premier toll road, the New Jersey Turnpike and the Garden State Parkway -- into a single agency was no small order. But more than seventeen years later, the singular agency continues to be recognized as a first-class agency among peer public agencies in the transportation and tolling industries. The Authority is consistently ranked at the top of toll road agencies in the United States for vehicle miles traveled and revenue.

During 2020 the Authority, much like other transportation agencies throughout the United States, has experienced unprecedented impacts from the COVID-19 pandemic on its traffic and revenue. The Authority's prudent financial and operational planning has allowed it to continue to meet all its financial obligations. The 2021 Annual Budget has been developed consistent with the Authority's Strategic Plan, the 2020 Long-Range Capital Plan, and the 2020 toll rate increases which were designed to provide a stable funding source for capital needs. The 2021 Annual Budget also addresses state of good repair needs, and safety for both customers and employees. The Authority is able to meet its funding needs and obligations in 2021, despite the continued negative impacts of the pandemic. On a budget to budget basis, traffic is expected to decline by 10.1% and toll revenue is forecasted to increase in 2021 compared to the 2020 budget by about 17.6%. Traffic is declining budget to budget as the 2020 budget did not include COVID-19 impacts, while toll revenue is increasing due primarily to the full year impact of the toll rate increase. However, when compared to 2020 estimated actual results, traffic is expected to increase by 14% over 2020 levels, as the reduction in traffic experienced in 2020 from the COVID-19 pandemic is expected to partially return in 2021. Toll revenue is forecasted to increase over 2020 estimated actual amounts by 36% due in part to the increase in traffic but also due to the full year impacts of the toll rate increase that went into effect on September 13, 2020. The 2021 toll revenue budget is based upon projections contained in an updated Traffic and Revenue Forecast by CDM Smith dated October 2020. While toll revenue is expected to increase overall by 36% over 2020 levels, the increase would have been even higher if not for the assumption of continued COVID-19 impacts on travel, commuting and the economy. In 2021, COVID-19 related impacts are expected to reduce revenue by about 10%, compared to an expected reduction of 21% from COVID-19 in 2020. Stated differently, toll revenue would have been projected to increase by 46% in 2021, if not for the lingering impacts of COVID-19 on 2021 traffic volumes.

The Operating Expense budget is increasing by 3.9%, which includes increases in credit card and money counting fees directly related to the toll increase, and additional COVID-19 related costs primarily for cleaning and supplies. When excluding these unusual items, the Operating Expense Budget is increasing by 2.4%, which is lower than the 2020 increase. Additionally, when excluding pension and health benefit increases, the 2021 Operating Expense Budget is increasing by only 1.4%. Authorized positions are being held flat with 2020 budgeted levels.

Most notably, the 2021 Annual Budget includes nearly \$1 billion for capital spending. This includes spending on both existing capital programs and on the new 2021-2025 Capital Improvement Program (CIP), which is derived from the 2020 Long-Range Capital Plan. The 2021 Annual Budget provides sufficient revenue and bond proceeds to meet capital spending needs. Finally, the 2021 Annual Budget projects debt service coverage of 1.66%, which is above both Bond Resolution covenants and Financial Policy targets.

A summary of the 2021 Annual Budget is as follows:

<b>Revenue</b>			
<i>(\$ In Thousands)</i>	<b>2019 Actual</b>	<b>2020 Budget</b>	<b>2021 Budget</b>
Toll Revenue	\$ 1,612,268	1,633,298	1,920,741
Other Revenue	249,738	231,645	228,727
<b>Total</b>	<b>\$ 1,862,006</b>	<b>1,864,943</b>	<b>2,149,468</b>

Figure 26: Annual Budget Revenue Summary (2019-2021)

#### SIGNIFICANT REVENUE HIGHLIGHTS:

- Toll Revenue on the New Jersey Turnpike is expected to increase 18.6% compared to the 2020 budget and on the Garden State Parkway by 14.8% primarily reflecting the toll rate increase that went into effect on September 13, 2020. In 2020, year-to-date toll revenue is below budget due the impact of the COVID-19 pandemic and when adjusting for estimated actual results, the 2021 budget represents a 36% increase in toll revenue.
- CDM Smith's October 2020 Traffic and Revenue Forecast reduced the prior toll revenue forecast by about \$400 million between 2021 and 2025, due to the lingering impacts of the pandemic on travel, commuting and the economy. The forecast is based on unemployment rates remaining above 4% until 2023, economists' predictions of gradual but protracted growth, and employee's preference for partial telecommuting. The updated forecast now projects a total reduction in traffic and revenue in 2021 from the pandemic of about 10%, compared to the prior estimate of about 6%.
- All other revenue sources in total are down about \$3 million, or less than 2%, compared to the 2020 Budget, due mainly to interest income which is lower based on declining short-term interest rates.

<b>Expenses</b>			
<i>(\$ In Thousands)</i>	<b>2019 Actual</b>	<b>2020 Budget</b>	<b>2021 Budget</b>
Operating Expenses	\$ 530,935	598,971	622,324
Debt Service	824,281	842,699	920,757
General Reserve	308,232	415,531	395,841

<b>Capital Budget</b>			
<i>(\$ In Thousands)</i>	<b>2019 Actual</b>	<b>2020 Spending Budget</b>	<b>2021 Spending Budget</b>
Maintenance Reserve Fund	\$ 121,421	195,850	185,292
Special Project Reserve Fund	40,340	73,079	73,912
Supplemental Capital Fund	85,236	143,936	73,380
Passaic River Bridges Rehabilitation	11,979	26,865	

<b>Capital Improvement Program</b>			
<i>(\$ In Thousands)</i>	<b>Budget</b>	<b>Spent/Committed</b>	<b>% Complete</b>
2021-2025 Capital Improvement Program	\$ 4,513,600	38,255	1%
2019 Capital Improvement Program	672,857	445,473	66%
2008 \$7 Billion Capital Improvement Program	7,000,000	6,913,993	99%

Figure 27: Annual Budget Spending Summary (2019-2021)

**SIGNIFICANT SPENDING HIGHLIGHTS/CHALLENGES**

- The 2021 Operating Expense Budget is \$622.3 million, which includes two unusual items totaling about \$8.9 million.
  - Additional funds are needed to cover increased toll collection costs due to higher fees for money counting and credit card processing related to higher dollar volumes due to the recent toll rate increase.
  - Additional funds are also needed to support COVID-19 related expenses for extra cleaning and supplies in anticipation of the pandemic continuing into 2021.
- The 2021 Operating Expense budget also includes provisions for higher pension and health benefit expenses and state police costs, while authorized positions are held flat with 2020 levels. Without the unusual increases, the 2021 Operating Expense budget is only increasing by about 2.4% compared to the 2020 budget. This increase is lower than the 2020 Operating Expense Budget increase of 2.8%. When excluding pension and health benefit increases, the increase in the 2021 budget is only 1.4%.
- The 2021 Operating Expense Budget provides \$38.1 million for snow and severe weather costs, which represents the budget level that has been maintained for the past six years. The number and severity of weather events is unpredictable and could put pressure on the Operating Expense Budget. In addition, the budget includes assumptions on pension payments, health benefit costs and E-ZPass transaction and credit card processing fees, all of which are highly variable. Changes from the current budget assumptions in any of these areas could put pressure on the 2021 Operating Expense Budget.
- The 2021 Debt Service Budget is increasing by about \$78 million to \$921 million, or about 9.3%, as compared to the 2020 Debt Service Budget. Debt service is increasing primarily due to full year of interest on an assumed new money issuance in late 2020 of \$500 million for the 2019 CIP, and an additional \$500 million issuance in 2021 to fund the 2021 – 2025 CIP which is part of the 2020 Long-Range Capital Plan. By the end of 2021, the Authority is expected to have about \$11.8 billion of debt outstanding. Debt Service requirements currently equal 43% of 2021 total budgeted revenue.
- The 2021 General Reserve Fund Budget includes funding for extraordinary weather events, contractual state payments, and transfers for revenue funded capital projects that are part of the Supplemental Capital Program in the Construction Fund. The 2021 budget anticipates a successor State Transportation Projects Funding Agreement to be effective when the current agreement expires on June 30, 2021.
- Both the Operating Expense Budget and the Capital Spending Budgets reflect the adoption of several leading practice recommendations concerning asset capitalization thresholds and adoption of rolling 5-year spending budgets. These recommendations serve to strengthen the Authority's planning, budgeting and financial reporting.
- The Capital Spending Program Budget totals over \$5.2 billion between 2021 – 2025, or an average of just over \$1 billion per year. This spending is about 30% from revenue, and 70% from bond proceeds. The Capital Spending Program Budget includes the revenue funded programs in the Maintenance Reserve Fund, the Special Project Reserve Fund, and the Supplemental Capital Program. It also includes the newly authorized 2021-2025 CIP, which is derived from the 2020 Long-Range Capital Plan, the 2019 CIP, and the 2008 \$7 Billion CIP. These programs include projects which maintain a state of good repair, improve safety and provide capacity enhancements.



## REVENUE BUDGET

Total revenue in 2021 is budgeted at \$2,149.5 million, a 15.3% increase in comparison to the 2020 budgeted revenues, primarily due to the full-year impact of the toll rate increase on 9/13/2020 partially offset by the continued COVID-19 traffic and revenue losses

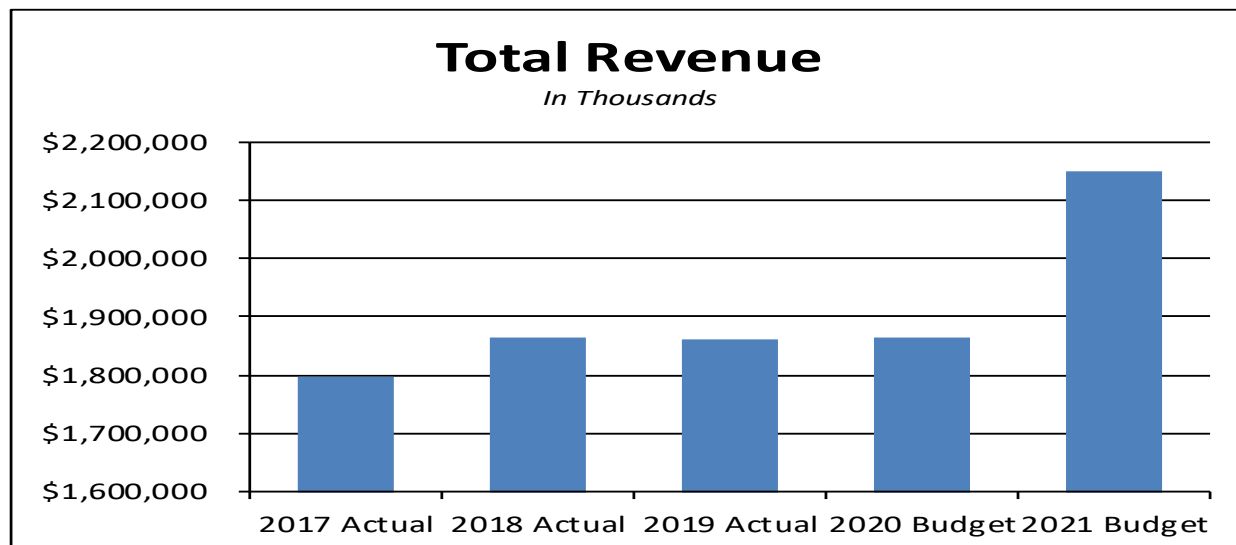


Figure 28: Total Annual Revenue (2016-2021)

Toll revenue comprises 89.4% of total revenue. Toll revenue in 2021 is budgeted at \$1.9 billion, which represents an increase of 17.6% compared to the 2020 Budget. Turnpike toll revenue is expected to increase 18.6% and Parkway toll revenue is expected to increase by 14.8% due to the impact of the toll rate increase on September 13, 2020. Traffic and revenue forecasts used for the 2021 Budget are contained in the October 6, 2020 toll revenue forecast by CDM Smith, the Authority's Traffic Engineering Consultant. It should be noted that the Authority is below its 2020 toll revenue budget through September 2020 due to the ongoing effects of the COVID-19 pandemic.

## OPERATING EXPENSE BUDGET

The 2021 Operating Expense Budget of \$622.3 million is increasing by \$23.4 million, or 3.9%, compared to the 2020 Operating Expense Budget. Key cost factors in the 2021 Operating Expense Budget are as follows:

- Increased toll collection costs of \$6.7 million due to higher fees for money counting and credit card processing related to greater dollar volumes due to the recent toll rate increase
- Increased pension costs of \$3.6 million based on the new experience study by the State PERS, new mortality tables, change in interest rate assumptions, and an increase in covered payroll from the 2018 retroactive salary increases
- COVID-19 related expenses are budgeted at \$2.2 million for extra overtime costs, cleaning services, and PPE supplies in anticipation of the pandemic continuing into 2021
- Increased health benefit costs of \$2.3 million based on medical inflation and usage, an increase in workers' comp insurance premiums, and an increase in Medicare reimbursement rates

- Increased Other Professional Services of \$1.3 million due to \$9.5 million for bridge inspection and pavement management being moved from Special Projects to the Operating Expense Budget. This is partially offset by \$8.2 million in vehicle purchases being moved into Special Projects
- Increased NJ E-ZPass costs of \$1.5 million due to variable costs related to violation processing and E-ZPass tag swap expenses
- Increased state police costs of \$1.5 million based on contractual salary increases
- Increased legal expenses of \$1.3 million as a result of collection counsel expenses for E-ZPass civil litigation, costs for ongoing litigation, and the legal expenses for land acquisition

The proposed 2021 Operating Expense Budget is increasing by \$23.4 million, driven by the above key cost factors. This increase is slightly offset by reductions in equipment costs as vehicle purchases over \$20k will now be capitalized and paid through the Special Project Reserve Fund, and savings on salaries due to the reduction of part-time toll collectors and elimination of all Parkway seasonal and temporary toll collectors.

The Operating Expense Budget increase of 3.9% for 2021 falls below the average annual increase of 4.2%. The category with the highest increase over 2020 is maintenance of infrastructure, mainly due to an increase in spending that relates to keeping both roadways in a state of good repair. Maintenance of infrastructure is followed by Toll Collection, which is driven by increased banking services due to an increase in credit card fees resulting from the toll increase that went into effect on September 13, 2020.

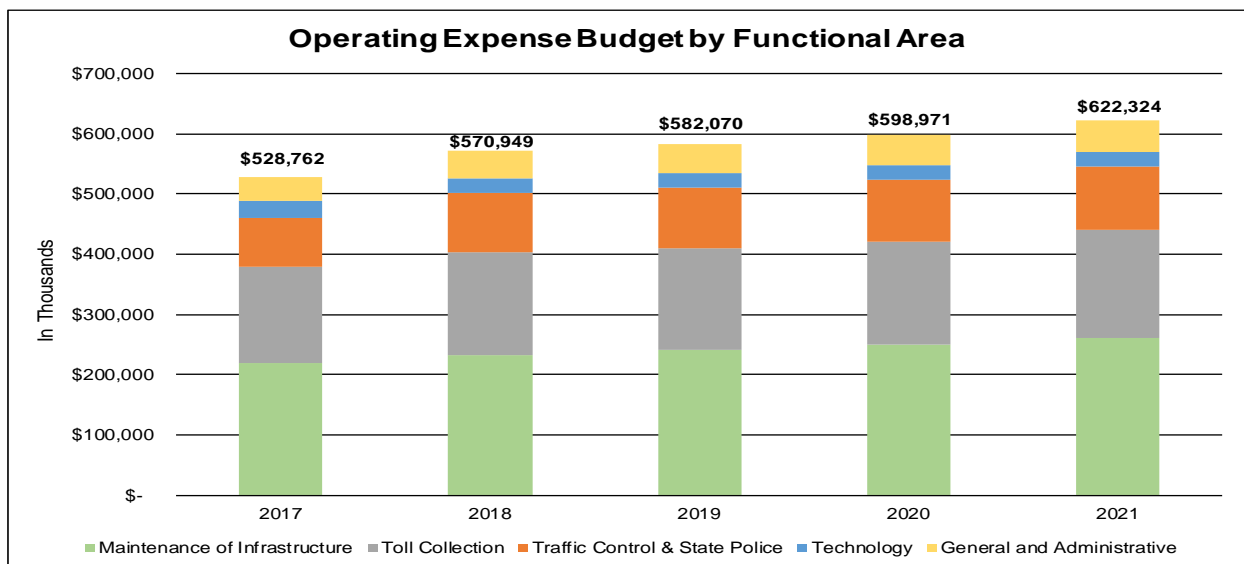


Figure 29: Operating Expense Budget by Functional Area

Authorized positions in 2021 are unchanged from 2020, which are 350 positions lower than in 2007. Since the low in 2014, the Authority has added 121 positions primarily due to the need to add maintenance personnel to handle the increased roadway capacity created by the 2008 \$7 Billion CIP widening projects.

Authorized positions since 2007 are shown below:

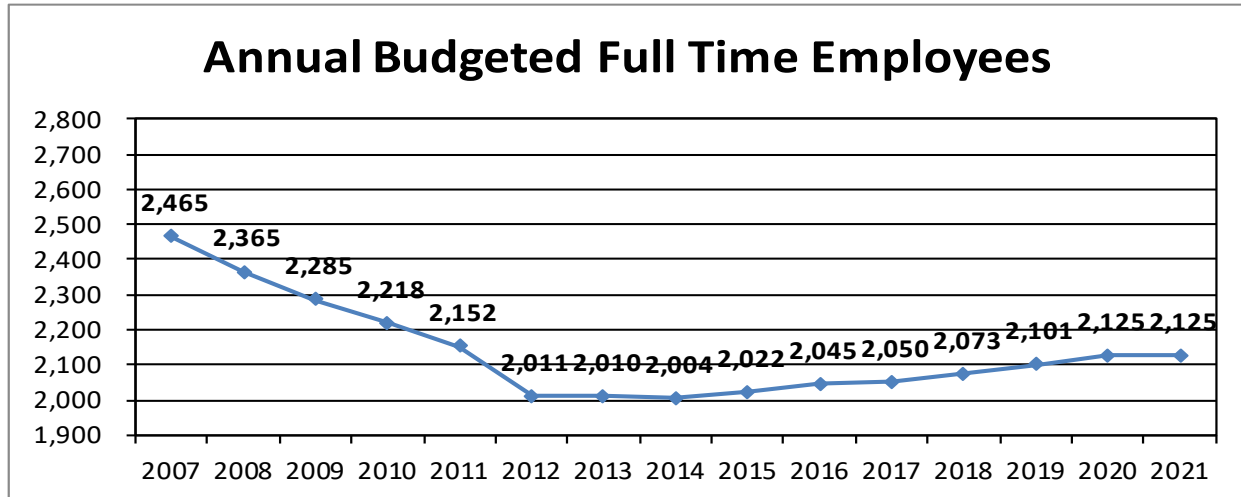


Figure 30: Authorized Positions (2007-2021)

Snow and severe weather costs are budgeted based upon the highest amount either budgeted or actual over the previous five years. The snow and severe weather budget is remaining at the same level in 2021 as 2020, based upon the high spending levels of 2014 and 2015. In fact, the levels budgeted in 2021 have been the same for the past six years.

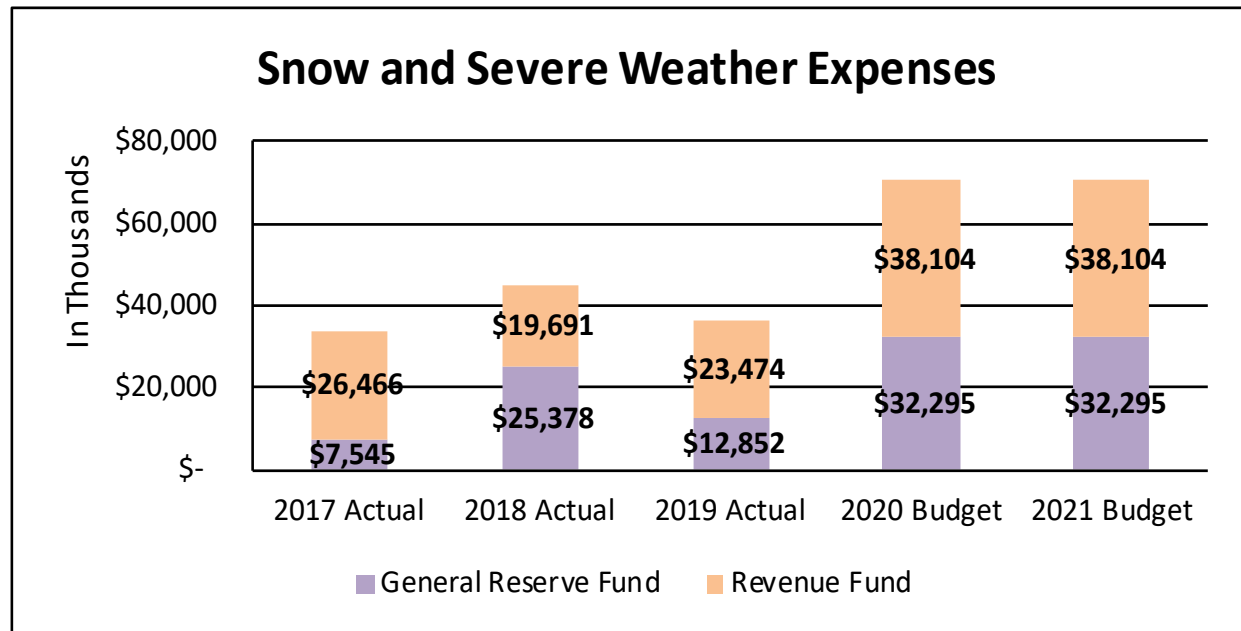
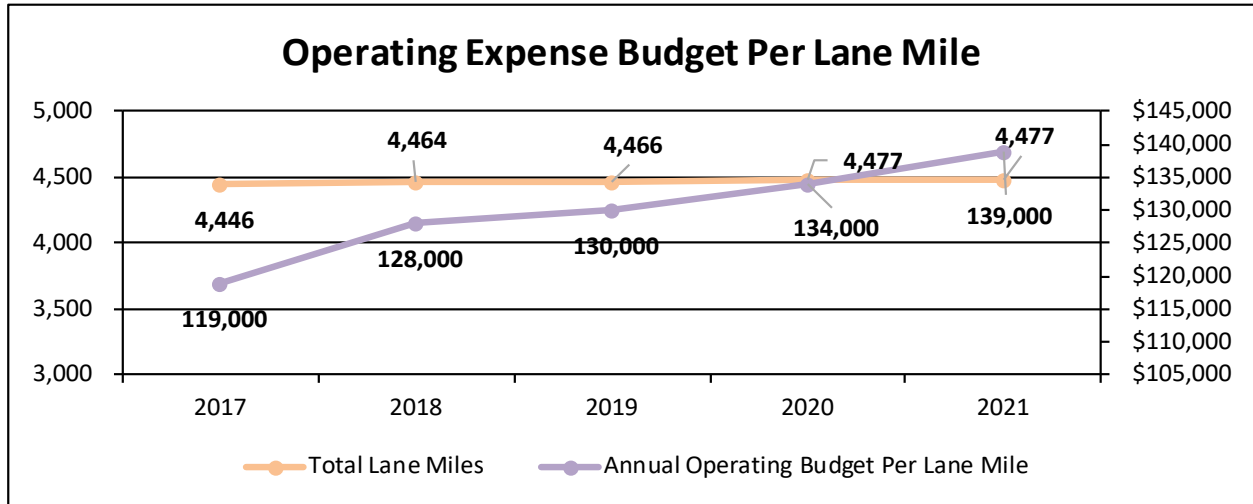


Figure 31: Snow and Severe Weather Expenses (2016-2021)

As mentioned, the Authority has increased roadway capacity in the past few years. The chart below indicates that the Authority continues to maintain safe and efficient roadways while controlling operating expense growth. Before inclusion of toll plaza lane miles in the calculation in 2017, the Authority's operating cost per lane mile was essentially flat between 2012 and 2016 at around \$145,000. With the added toll plaza lane miles, 2020 and 2021 costs are essentially flat at around \$139,000 per lane mile, but still lower than 2016.



\*2017 forward include toll plaza lane miles

**Figure 32: Total Lane Miles and Operating Budget per Lane Mile (2017-2021)**

## **DEBT SERVICE BUDGET**

Total Debt Service in 2021 is budgeted at \$920.8 million, which is about a \$78 million increase from the 2020 Debt Service Budget, mainly due to an increase in interest expense. The budget provides for a full year of interest payments on the assumed new money issuance in late 2020 of \$500 million for the 2019 CIP and a new money issuance in 2021 of \$500 million to fund the 2021-2025 Capital Improvement Program. Principal payments on existing bonds are also increasing by about \$30 million. By the end of 2021, the Authority is expected to have \$11.8 billion of debt outstanding. Debt Service equals 43% of the total budgeted revenue in 2021 and represents the single largest spending component of the 2021 Annual Budget.

## **GENERAL RESERVE FUND**

The total 2021 Budget for the General Reserve Fund is \$396 million, which is a decrease of \$20 million from the 2020 Budget. The 2021 General Reserve Fund Budget includes \$32 million for state of emergency events, and \$15 million in reserves for Other Post-Employment Benefits (OPEB). The 2021 Budget includes both existing payments on the State Transportation Projects Funding Agreement through its expiration on 6/30/21 as well as \$187.5 million (6 months of an annual \$375 million) for the anticipated new State Transportation Agreement to begin on 7/1/21.

In addition to the above spending, the 2020 General Reserve Fund Budget includes \$54 million in net transfers to the Construction Fund to cover the 2021 budgeted spending plans for the 2021 Supplemental Capital Program and internal costs allocated to bond funded capital projects.

## **CAPITAL BUDGET (REVENUE FUNDED)**

The 2021 Capital Budget includes the Maintenance Reserve Fund, the Special Projects Reserve Fund, and the Supplemental Capital Program. The Capital Budget primarily supports the spending for the maintenance of both the roadways and bridges, scheduled fleet augmentation, several multi-year capital program projects such as pavement repairs, service area improvements and repairs, replacement of toll collection equipment, etc. The work in the Maintenance Reserve Fund and Special Projects Reserve Fund is funded from the Authority's revenue after paying for the operating expenses and debt service. These two funds are separate funds established by the Authority's Bond Resolution. The work in the Supplemental Capital Program is funded by the transfers from the General Reserve Fund. This program is a separate account in the Construction Fund. The Construction Fund is established by the Authority's Bond Resolution.

### **1. MAINTENANCE RESERVE FUND BUDGET**

The 2021 Maintenance Reserve Fund Budget primarily supports spending for the maintenance and resurfacing of roadway and bridges on the Turnpike and Parkway. These projects have a combined budgeted spending plan for 2021 of \$185.3 million, and a rolling 5-year budgeted spending plan of about \$1 billion. The budgeted spending plan for 2021 is decreasing by about 5% compared to 2020, and includes funding primarily for Bridge Construction, Preservation & Security, and Pavement Resurfacing. Completion of the Concrete Barrier projects will be accelerated and included in the 2021-2025 CIP.

### **2. SPECIAL PROJECT RESERVE FUND BUDGET**

The 2021 Special Project Reserve Fund Budget has a budgeted 2021 spending plan of about \$73.9 million and a rolling 5-year spending plan of about \$275 million. The budgeted spending plan for 2021 is flat as compared to 2020. The 2021 Special Project Reserve Fund Project Budget provides spending for the Authority's scheduled major fleet augmentation, which is the Authority's existing scheduled fleet replacement program, as well as funds for Facilities, among

other necessary projects. The decrease in Maintenance of Infrastructure is primarily due to the leading practice recommendation changes, as is the increase in Fleet.

### **3. SUPPLEMENTAL CAPITAL PROGRAM PROJECT BUDGET (CONSTRUCTION FUND – REVENUE FUNDED)**

The 2021 Supplemental Capital Program Budget has a 2021 spending plan budget of \$73.4 million and a rolling 5-year spending plan of about \$201 million. The budgeted spending plan for 2021 is decreasing by about 49% compared to 2020. This budget includes funding to continue 2020 projects and provides about \$100 million for new projects over the 5-year period between 2021 and 2025. The 2021 Supplemental Capital Program Project Budget includes funding to continue several necessary multi-year projects including the replacement of the toll collection equipment on both roadways, additional roadway pavement resurfacing and improvements to the Garden State Arts Center.

### **CAPITAL IMPROVEMENT PROGRAMS (CONSTRUCTION FUND – BOND FUNDED)**

The 2021 Construction Fund Budget includes the bond funded programs within the Construction Fund. The Construction Fund currently includes the 2021-2025 Capital Improvement Program, which was derived from the 2020 Long-Range Capital Plan approved in May 2020, the 2019 Capital Improvement Program, approved in April 2019 and the 2008 \$7 Billion Capital Improvement Program approved in October 2008. These programs are funded through bond proceeds derived from the issuance of Turnpike Revenue Bonds.

#### **1. 2021-2025 CAPITAL IMPROVEMENT PROGRAM**

The 2020 Long-Range Capital Plan was approved by the Board of Commissioners in May 2020. The 2021-2025 Capital Improvement Program was developed from that plan and focuses on maintaining the existing infrastructure in a state of good repair, and targets capacity improvements in critical areas where congestion is already an issue. These projects have a combined budgeted spending plan in 2021 of \$227.4 million, and a rolling 5-year budgeted spending plan of \$2.8 billion.

#### **2. 2019 CAPITAL IMPROVEMENT PROGRAM**

This program was approved by the Board of Commissioners in April 2019 and includes capital improvement projects focusing on bridge deck improvements, shoulder widening and replacement of hybrid changeable message signs. The 2021 budgeted spending plan for the 2019 CIP is \$268.1 million and a rolling 5-year spend of \$606.3 million. The 2021 spending is about \$157.1 million more than the \$111.0 budgeted for 2020 representing an increase of 141.5%. The increase is due in part to increased spending on projects originally approved in 2019, as well the addition of the remaining Passaic River Bridge Rehabilitation Program projects and the Service Area Improvement (outside the curb line) Project, all being added to the 2019 CIP this year. These projects were previously in revenue funded programs.

#### **3. 2008 \$7 BILLION CAPITAL IMPROVEMENT PROGRAM**

This 10-year program was approved by the Board of Commissioners in October 2008. In September 2018, this program was amended to extend the end date to begin new projects to December 31, 2020. The 2021 spending budget is \$146.0 million, and a rolling 5-year spend plan of \$290.3 million. The 2021 budgeted spend plan is decreasing by about 24.6% from the 2020 budgeted spending of \$193.7 million, representing the winding down of this CIP as all projects have begun and many are completed or nearing completion. The 2008 \$7 billion Capital Improvement Program includes projects focused on roadway widening, bridge construction and improvements, roadway improvements, interchange improvements and facilities improvements.

**SUMMARY**

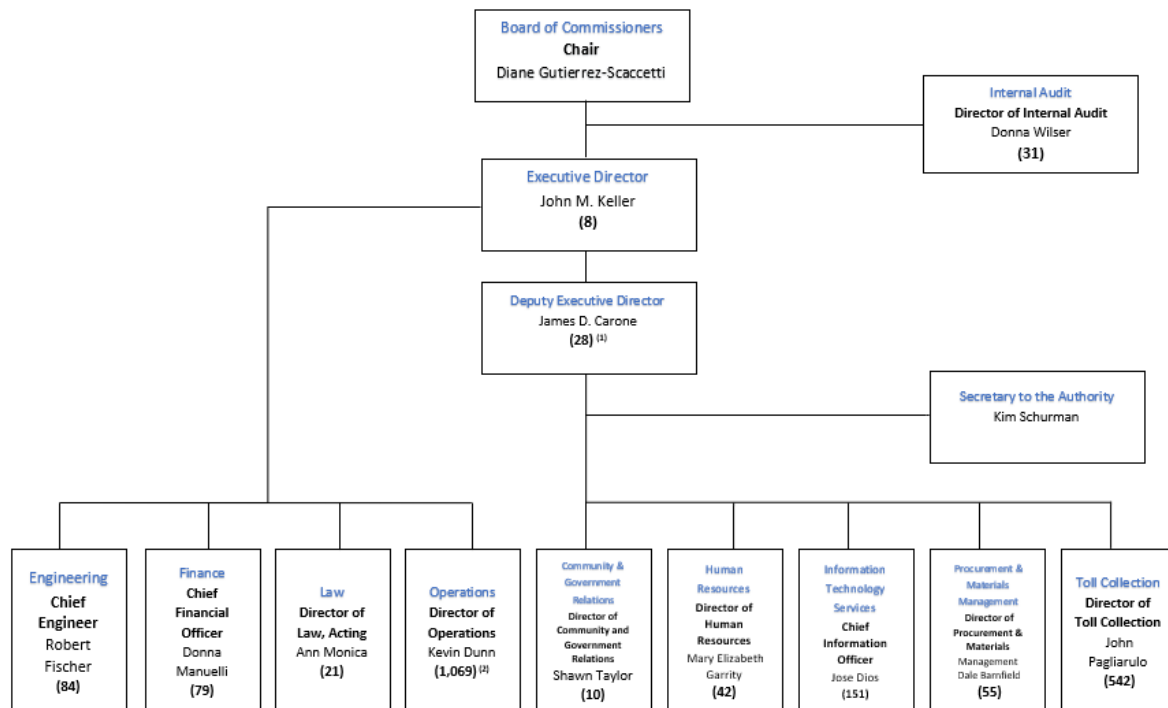
The 2021 Annual Budget provides the necessary funds to operate and maintain the additional capacity created by the Turnpike and Parkway widening projects. In addition, funds are provided to meet all debt service obligations to bondholders and all contractual payment obligations. The 2021 Annual Budget indicates that the Authority will exceed all required debt coverage covenants contained in its Bond Resolution, as well as exceed all targets established in its Guidelines, including maintaining a minimum general reserve balance of 10% of the 2021 budgeted revenue (\$215 million).

## Leadership

Member	Position
Diane Gutierrez-Scaccetti	Chair
Ulises E. Diaz	Vice Chair
Michael R. Dupont	Treasurer
Raymond M. Pocino	Commissioner
Ronald Gravino	Commissioner
John D. Minella	Commissioner
Raphael Salermo	Commissioner

Figure 33: Leadership Chart

## Organization Chart



- Departmental full-time employee count is shown in parenthesis
- In addition to the above authorized positions, there are 5 contingency positions budgeted

- (1) The 28 full-time employees in the State Police Department report directly to the DED. This department is not shown in the above organization chart
- (2) Operations includes the Maintenance Division (982) and the Traffic Division (87)

Figure 34: Organization Chart



## Fund Structure

### Description of Funds

For financial statement purposes, the Authority's activities are accounted for using the flow of economic resources measurement focus and the accrual basis of accounting. All assets, liabilities, net position, revenues and expenses are accounted for as an enterprise fund with revenue recorded when earned and expenses recorded at the time liabilities are incurred. NCGAS 1 defines the purpose of enterprise funds as, "to account for operations (a) that are financed and operated in a manner similar to private business enterprises – where the intent of the governing body is that the costs (expenses, including depreciation) of providing goods or services to the general public on a continuing basis be financed or recovered primarily through users charges; or (b) where the governing body has decided that periodic determination of revenues earned, expenses incurred, and/or net income is appropriate for capital maintenance, public policy, management control, accountability, or other purposes."

In addition, 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** – is the general operating fund of the Authority. The fund is used to account for all pledged revenues and operating expenses. Pledged Revenue includes, among other things, all tolls, revenues, fees, rents, charges and other income and receipts derived from the operation of the Turnpike System. Operating expenses are for operation, maintenance, repairs, ordinary replacement and ordinary reconstruction of the Turnpike System and ordinary acquisition of equipment for the Turnpike System.

**Debt Service Fund** - accumulates the amounts required for payment of interest, maturing principal amounts and sinking fund installments on all outstanding bonds and for amounts due and payable under Interest Rate Swap Agreements.

**Debt Reserve Fund** – holds an amount equal to the greatest amount of interest accruing on all outstanding bonds in any calendar year.

**Charges Fund** – used to pay fees for any variable rate bond liquidity agreement, remarketing fees and tender agent fees (currently not used).

**Maintenance Reserve Fund** – used to pay for the cost of major resurfacing, replacement or reconstruction of the Turnpike System and major or extraordinary repairs, renewals or replacements of the Turnpike System necessary to restore or prevent physical damage to the Turnpike System, for the safe and efficient operation of the Turnpike System or to prevent loss of Pledged Revenues.

**Special Project Reserve Fund** – used to pay for any major resurfacing, renewals or replacements of the Turnpike System and for studies, surveys, estimates and investigations.

**General Reserve Fund** – used to make payments under any agreements with the State of New Jersey or for any other corporate purpose.

**Construction Fund** – used to fund the cost of construction of any Project as defined under the Bond Resolution. The Projects may be funded through bond proceeds or from transfers from the General Reserve Fund.

[Flow of Funds table referenced on page 192](#)

## Revenue Requirement

The Revenue Requirement under section 713(b) of the Bond Resolution states that in each calendar year Net Revenue shall at least equal the Net Revenue Requirement for such year. Under Section 101 of the Bond Resolution, Net Revenue is defined as "... for any calendar year or other period of time, the Pledged Revenue during such year or period less the amounts of the Operating Expenses for such year or period." The Net Revenue Requirement is defined as, "an amount equal to the greater of:

- (i) The Sum of the Aggregate Debt Service, Maintenance Reserve Payments, Special Project Reserve Payments, and payments, if any, to the Charges Fund for such period; or
- (ii) 1.20 times the Aggregate Debt Service for such period (excluding, for purposes of clause (ii) only, any payment due and payable by the Authority under a Qualified Swap upon an early termination thereof)"

On or before December 1 in each year, the Authority will review its financial condition in order to estimate whether the Net Revenue for such year and for the next succeeding year will be sufficient to comply with the toll covenant. The required calculations are shown below.

<b>Net Revenue Requirement</b>			
<i>(\$ In Thousands)</i>	<b>2019 Actual</b>	<b>2020 Est/Act</b>	<b>2021 Budget</b>
(i) Revenue	\$ 1,862,006	1,639,904	2,149,468
Operating Expenses	(530,935)	(558,971)	(622,324)
<b>Net Revenue</b>	<b>1,331,071</b>	<b>1,080,933</b>	<b>1,527,144</b>
Debt Service Requirements	(824,281)	(664,218)	(920,757)
Maintenance Reserve Payments	(131,468)	(134,097)	(160,000)
Special Project Reserve Payments	(41,300)	(41,300)	(50,000)
<b>Total Requirements</b>	<b>\$ (997,049)</b>	<b>(839,615)</b>	<b>(1,130,757)</b>
<b>Excess Revenue</b>	<b>\$ 334,022</b>	<b>241,318</b>	<b>396,387</b>
(ii) Net Revenue	\$ 1,331,071	1,080,933	1,527,144
1.2X Debt Service	(989,137)	(797,062)	(1,104,908)
<b>Excess Revenue at 1.2X Debt Service</b>	<b>\$ 341,934</b>	<b>283,871</b>	<b>422,236</b>
<b>Debt Service Coverage</b>	<b>1.61</b>	<b>1.63</b>	<b>1.66</b>

Figure 35: Net Revenue Requirement (2019-2021)

Based on the above review, Net Revenue for 2020 and 2021 will be sufficient to meet the Net Revenue Requirement.

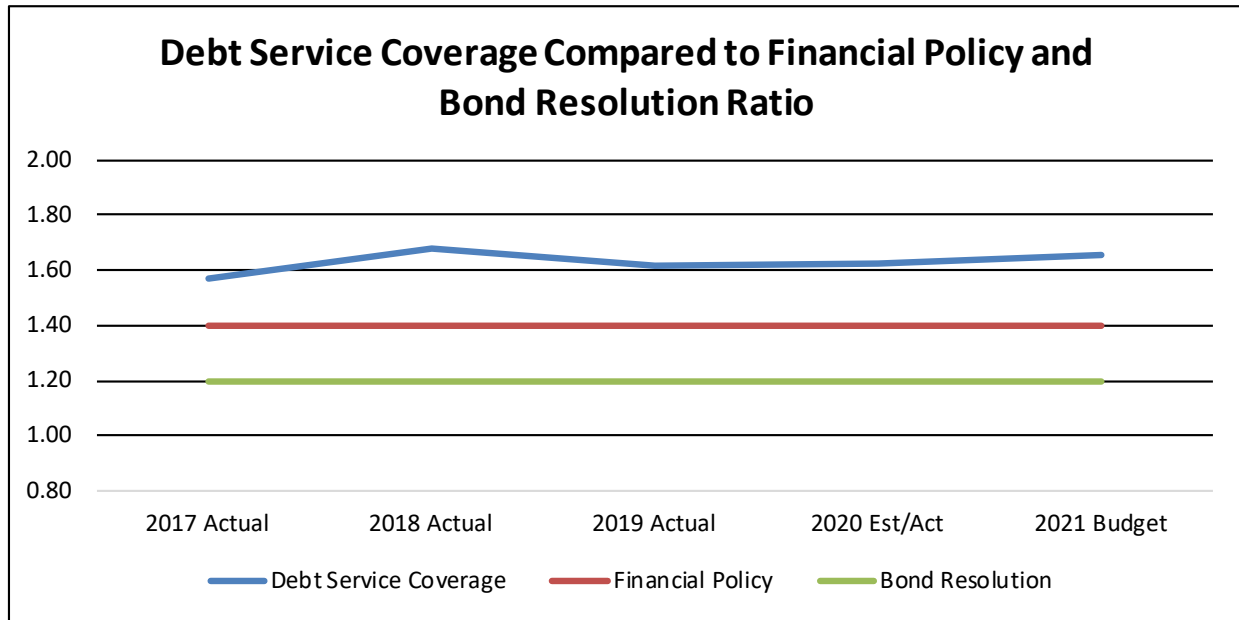


Figure 36: Debt Service Coverage Ratio Chart (2019-2021)

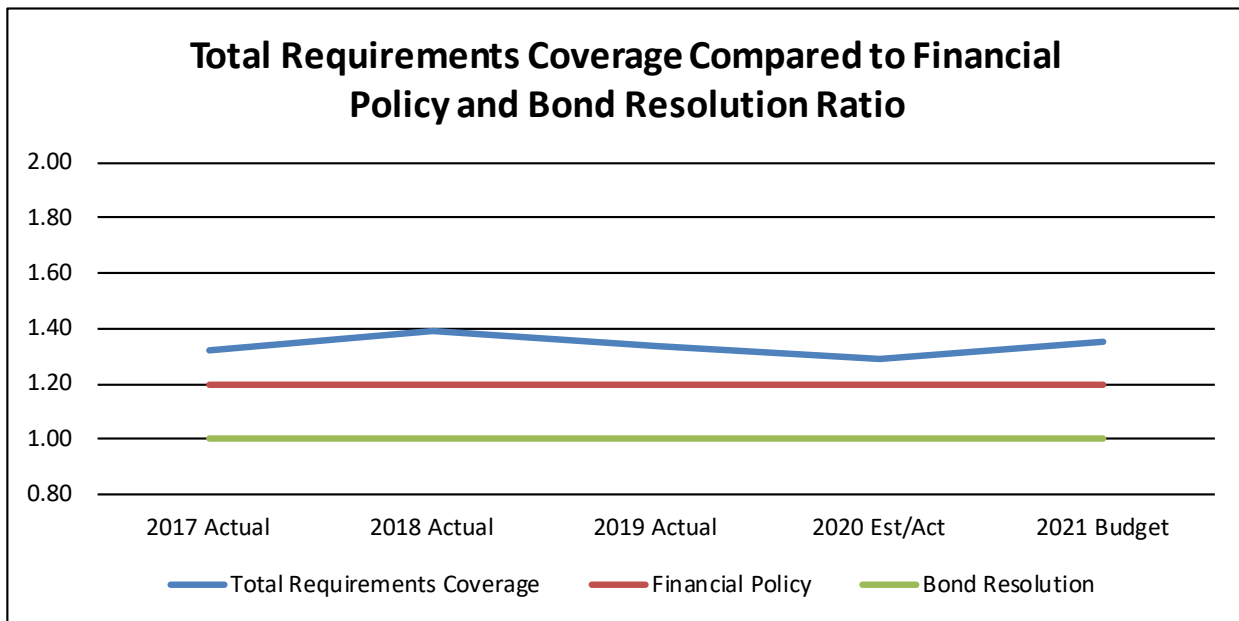


Figure 37: Total Requirements Ratio Chart (2019-2021)

## Basis of Budgeting

The Authority's Annual Budget is prepared on the accrual basis of accounting; accordingly, revenues are recognized in the accounting period they are earned and become measurable and expenses are recognized in the accounting period in which the liability is incurred. This is consistent with the Authority's audited year-end financial statements, with the exception of the following non-cash items which are not budgeted:

- Depreciation and Amortization
- Accretion
- Change in Fair Market Value of Investments
- GASB 53 Interest Rate Swap Adjustments
- OPEB Annual Required Contribution (except for current pay retiree benefits and reserves for OPEB which are budgeted)
- GASB 48 Pollution Remediation Liability Reserve

The Authority's Annual Budget provides the basis for expenditures during the year. The Authority operates on a calendar-year basis. No fewer than 40 days before the end of the year, the Authority must submit a Preliminary Budget of operating expenses and reserves to the Trustee as required by the Bond Resolution. The budget is subject to the Trustee's examination, and the Authority is required to comply with all reasonable requests from the Trustee for classifications and clarifications. The Bond Resolution also specifies that each Annual Budget must include funding for operating expenses and reserves and provisions for deposits to the Maintenance Reserve Fund and the Special Project Reserve Fund. The Preliminary Budget and the Annual Budget may provide additional information, as the Authority may determine, and each shall contain a certificate of the Consulting Engineer approving the Preliminary Budget and the Annual Budget, as the case may be. In addition to the information required by the Bond Resolution, the Authority's Annual Budget also includes its Revenue, Debt Service, Debt Reserve, and General Reserve budgets as well as the Capital Program Spending Budget. The Capital Program Spending Budget includes all revenue funded and bond funded capital projects and is presented on a rolling 5-year basis for the first time in 2021.

The Annual Budget must be adopted by the Commissioners of the Authority by January 15th of each fiscal year and made a part of the Authority's minutes. In the event that the Authority does not adopt an Annual Budget by January 15th of the fiscal year or the Governor vetoes the adopted budget, the preceding year's budget remains in effect until such adoption and approval. The minutes of all meetings are subject to a 10-day review and veto period by the Governor of the State of New Jersey prior to final approval. The adoption and approval of the Annual Budget does not in itself authorize any specific expenditure. Specific expenditures must be submitted, adopted and approved consistent with the Authority's By-Laws and must be consistent with the statutory, contractual and other commitments of the Authority, including agreements with the holders of its obligations, including bonds. Adoption and approval of the Annual Budget does not limit or preclude the Authority from submitting an amended budget to the Commissioners for adoption. Copies of the Annual Budget and all amendments must be filed promptly with the Trustee. If at any time the Annual Budget and amendments thereto exceed the Preliminary Budget by 10% or more, the Authority must file a detailed report with the Trustee, stating specifically the reason for the increase, and hold a public hearing thereon.

Although the Authority is restricted from expending funds in excess of the Annual Budget allocation for operating expenses (other than through amendment to the Annual Budget), the Authority may allocate additional funds for operating expenses if such funds are obtained from sources other than Pledged Revenues.

According to the Authority's capitalization policy, the cost to construct, acquire or replace an existing asset (or otherwise prolong the useful life of an existing asset) is capitalized. The capitalization threshold, effective January 1, 2021 is \$20,000 and includes equipment valued over \$20,000 or any purchase related to a capital project whose project value exceeds \$20,000. Based on this policy, there are no capitalized assets included in the 2021 Operating Expense Budget, Debt Service Fund, Debt Reserve Fund, and the General Reserve Fund budgets. The Maintenance Reserve Fund, Special Project Reserve Fund, and Construction Fund (including both revenue and bond funded

accounts) contain capitalized projects and may contain some expense projects. The budget for these funds groups projects into expense projects (if applicable) and capitalized projects in accordance with the Authority's capitalization policy.

As previously noted, the Authority's financial statements are presented as an enterprise fund with the activity of the Bond Resolution Funds shown on schedules to the financial statements. The Authority's Annual Budget is prepared based upon the Bond Resolution Funds. A schedule is added in [Appendix B](#) of this book to include the non-cash items such as depreciation and amortization to match with the Authority's financial statements. Over the past several years the Authority has implemented several GASB pronouncements which has resulted in non-cash accounting entries to follow the Generally Accepted Accounting Principles (GAAP). This schedule presents an estimated non-cash impact of these GASB implementations on the 2021 Budget.

In addition to the Annual Budget required by the Bond Resolution, NJSA 27:23-3.2 requires the Authority to submit, before the close of each of its fiscal years, a complete and detailed report of its operating and capital construction budget. The report must include receipts and disbursements or revenue and expense, for the prior fiscal year and estimated amounts for the current and succeeding fiscal year.

## Budget Procedure

The Annual Budget process begins in June of each year with a review of the Authority's financial projections, current results compared to budget, and a preliminary estimated budget for the next calendar year. The review is completed by the Authority's Chief Financial Officer, Deputy Executive Director and the Executive Director. Based on this review, as well as the Authority's strategic directives, financial policies and bond covenants, overall and specific departmental guidelines for the upcoming budget year are established. The Finance Department, through its Chief Financial Officer, communicates the budget guidelines to each department, as well as a call for capital projects. Departments must submit a detailed operating budget with spending justification, departmental organization, accomplishments for the current year, and goals for the next year. Departments must also submit all capital project requests, including total costs by year and justifications for each project. Based on these requests, a detailed preliminary operating and capital budget is prepared by the Finance Department, and approved by the Deputy Executive Director, the Executive Director, and the Authority's General Engineering Consultant. The budgets are then reviewed with the Authority's Commissioners at committee meetings. Once approved by the board committees, the Annual Budget is presented to the full Board of Commissioners in public session for adoption at the October Board of Commissioners meeting.

A summary of the 2021 Annual Budget calendar is as follows:

Action	Date
Executive Budget Planning Meeting	6/8/2020
2021 Annual Budget Preparation Kickoff	6/8/2020
Distribution of Capital Budget Documents to Departments for New Revenue Funded Projects	Week of 6/8/2020
Distribution of Operating Budget Documents to Departments	Week of 6/8/2020
Distribution of Capital Budget Documents for New Construction Fund Projects	Week of 6/8/2020
Response from Departments for New Revenue Funded Projects	7/10/2020
Response from Departments for Operating Budget	7/10/2020
Response from Departments for Capital Budget Documents for New Construction Fund Projects	7/10/2020
Individual Department Budget Meetings with Finance Department	Week of 7/13/2020
Distribution of Capital Budget Documents to Departments for Existing Revenue Funded Projects	Week of 7/20/2020
Distribution of Capital Budget Documents for Existing Construction Fund Projects	Week of 7/20/2020
Operating Budget Request Review with Individual Departments, Finance and Executive	Week of 8/10/2020
Response from Departments for Existing Revenue Funded Projects	8/14/2020
Response from Departments for Existing Construction Fund Projects	8/14/2020
Capital Budget Departmental Review with Finance	Week of 8/17/2020
Capital Budget Request Inter-Department Review with Departments, Finance and Executive	Week of 8/17/2020
Capital Budget Finalization Meeting	Week of 9/7/2020
Operating Budget Finalization Meeting	Week of 9/21/2020
Executive Budget Final Review Meeting	Week of 9/28/2020
Budget Presentation at Board Committee Meeting	10/13/2020
Budget Approved at Meeting of Board of Commissioners	10/27/2020
Governor's 10-day veto period expires without Governor exercising said power	11/12/2020

Figure 38: 2021 Annual Budget Calendar

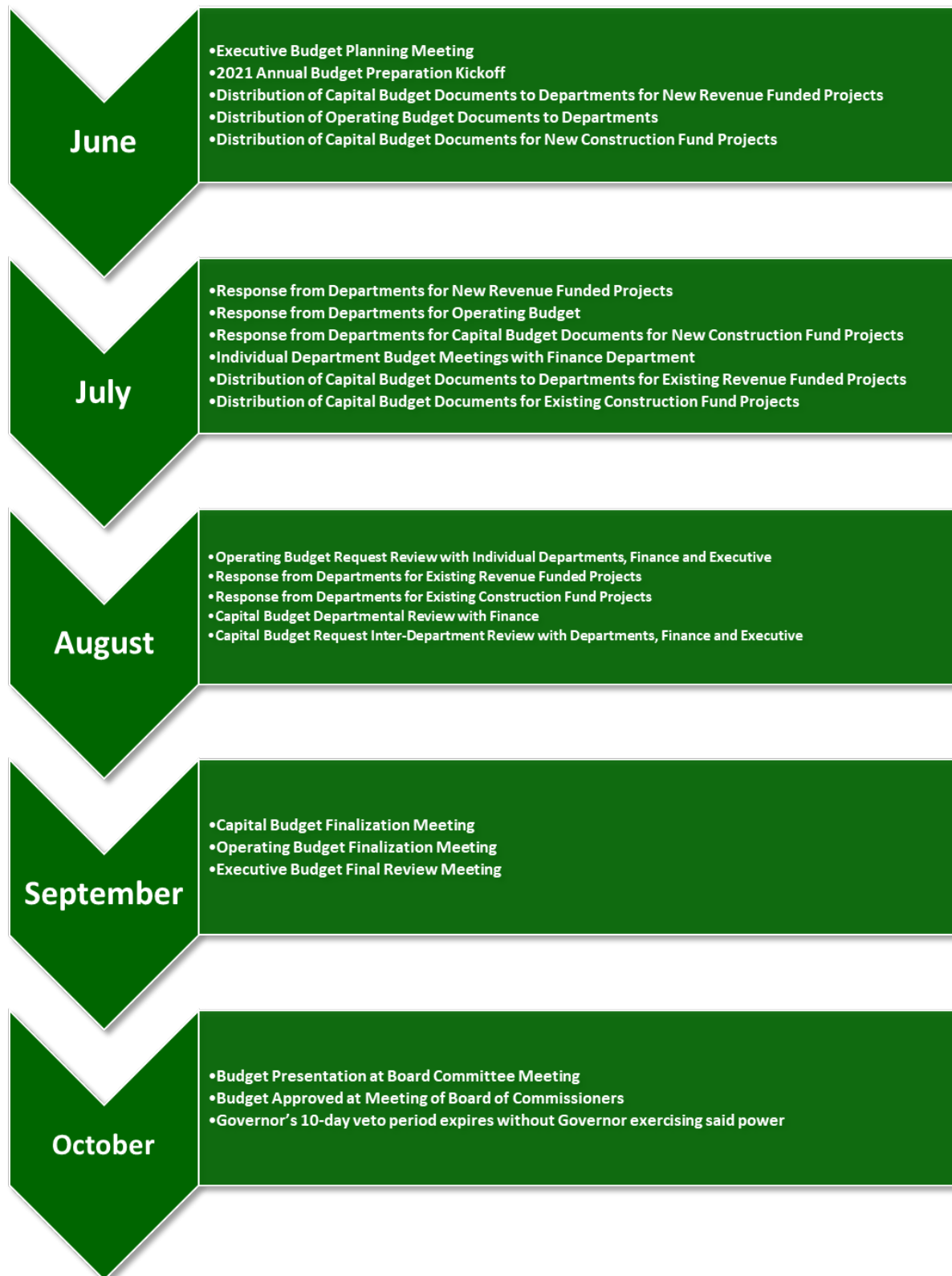


Figure 39: Budget Procedure Flow

## Summary of Major Revenues and Expenses

### Sources of Revenue

Sources of Revenue					
(\$ In Thousands)	2019 Actual	2020 Budget	2021 Budget	\$ Change from 2020 Budget	% Change from 2020 Budget
Turnpike Toll Revenue	\$ 1,176,476	1,192,889	1,414,971	222,082	18.6%
Parkway Toll Revenue	435,792	440,409	505,770	65,361	14.8%
Other Operating Revenue	129,550	127,397	127,476	79	0.1%
Non-Operating Revenue	120,187	104,248	101,251	(2,997)	-2.9%
<b>Total Revenue</b>	<b>\$ 1,862,006</b>	<b>1,864,943</b>	<b>2,149,468</b>	<b>284,525</b>	<b>15.3%</b>

Figure 40: Sources of Revenue (2019-2021)

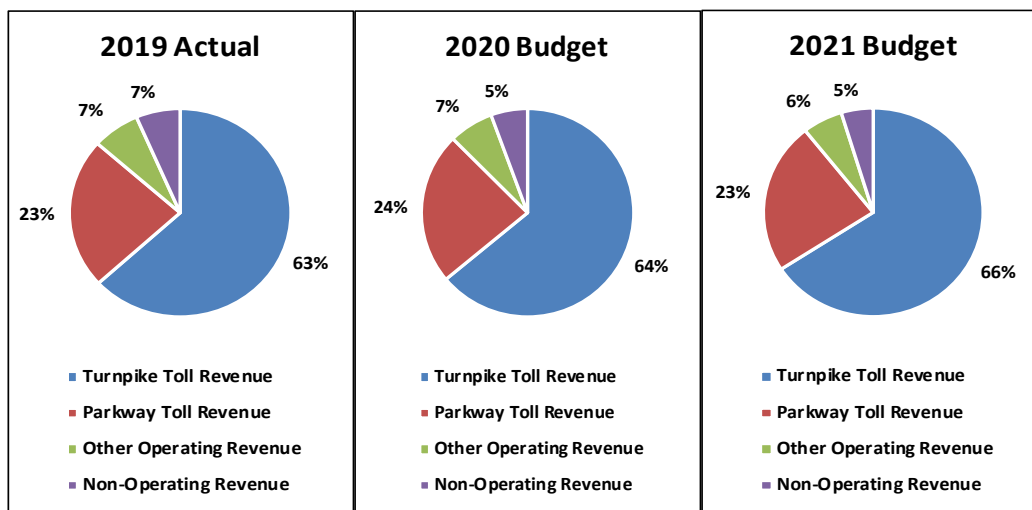


Figure 41: Sources of Revenue Percentages (2019-2021)

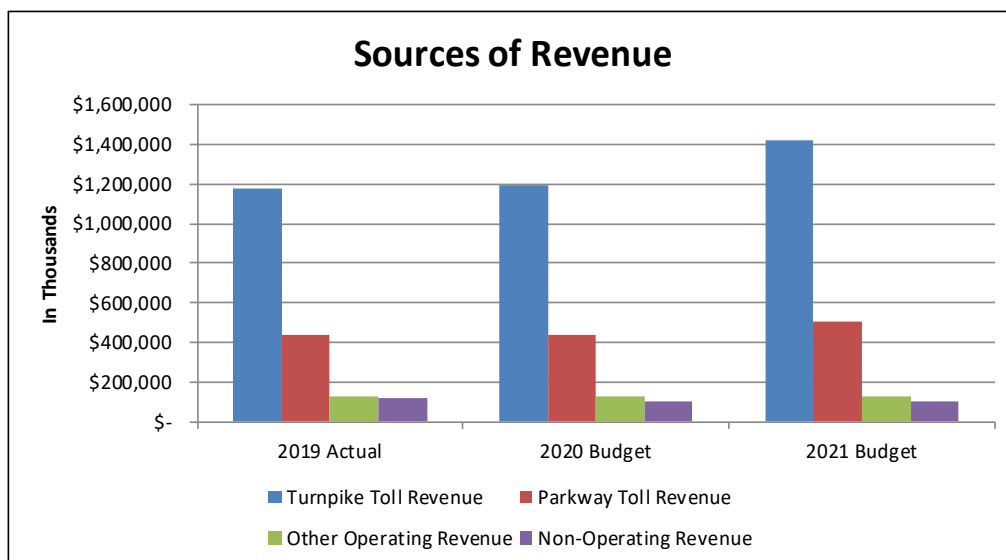


Figure 42: Sources of Revenue Graph (2019-2021)



## Allocation of Revenue

Allocation of Revenue					
(\$ In Thousands)	2019 Actual	2020 Budget	2021 Budget	\$ Change from 2020 Budget	% Change from 2020 Budget
Operating Expenses	\$ 530,937	598,971	622,324	23,353	3.9%
Debt Service	824,281	842,699	920,757	78,058	9.3%
Maintenance Reserve Fund	131,468	134,097	160,000	25,903	19.3%
Special Project Reserve Fund	41,300	41,300	50,000	8,700	21.1%
General Reserve Fund	334,019	247,876	396,387	148,511	59.9%
<b>Total Allocation of Revenue</b>	<b>\$ 1,862,006</b>	<b>1,864,943</b>	<b>2,149,468</b>	<b>284,525</b>	<b>15.3%</b>

Figure 43: Allocation of Revenue (2019-2021)

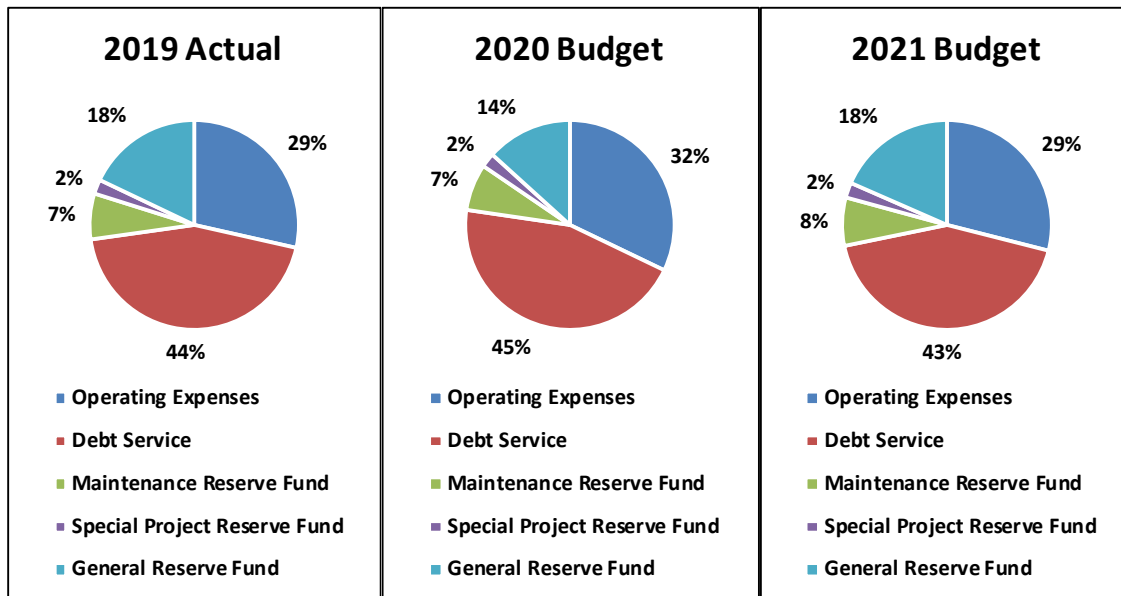


Figure 44: Allocation of Revenue Percentages (2019-2021)

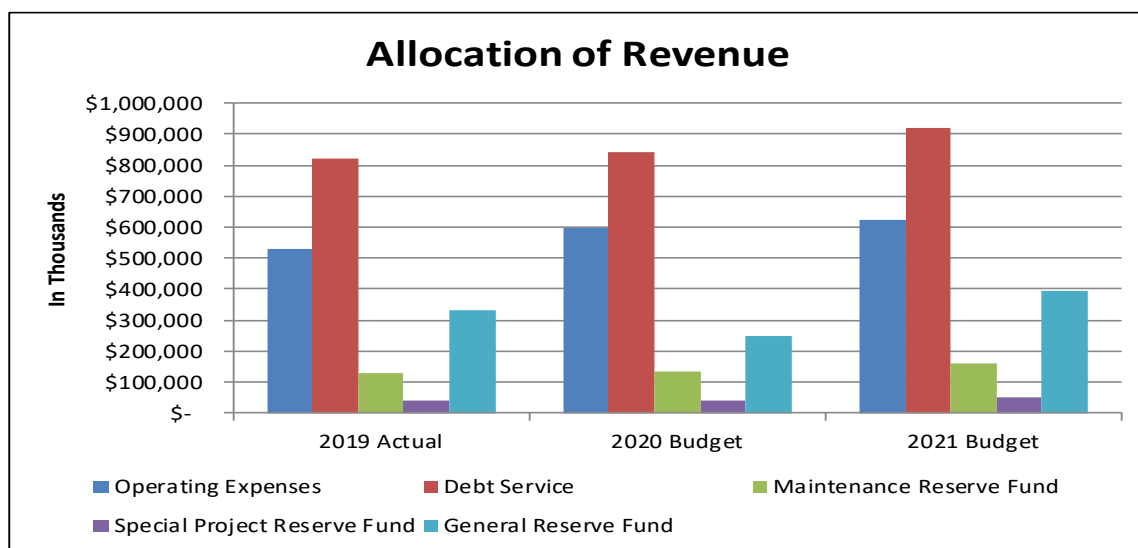


Figure 45: Allocation of Revenue Graph (2019-2021)

## Revenue

### 2021 Revenue Budget

Revenue Budget					
(\$ In Thousands)	2019 Actual	2020 Budget	2021 Budget	\$ Change from 2020 Budget	% Change from 2020 Budget
Turnpike Toll Revenue	\$ 1,176,476	1,192,889	1,414,971	222,082	18.6%
Parkway Toll Revenue	435,792	440,409	505,770	65,361	14.8%
E-ZPass Fees	80,329	80,050	84,500	4,450	5.6%
Concession Revenue	33,104	35,557	31,000	(4,557)	-12.8%
Miscellaneous Revenue	16,117	11,790	11,976	186	1.6%
<b>Total Operating Revenue</b>	<b>\$ 1,741,818</b>	<b>1,760,695</b>	<b>2,048,217</b>	<b>287,522</b>	<b>16.3%</b>
Federal Subsidy for Build America Bonds	76,725	76,847	77,010	163	0.2%
Federal and State reimbursements	1,006	-	-	-	-
Interest Income	37,766	24,000	20,000	(4,000)	-16.7%
Arts Center Revenues	4,690	3,401	4,241	840	24.7%
<b>Total Non-Operating Revenue</b>	<b>\$ 120,187</b>	<b>104,248</b>	<b>101,251</b>	<b>(2,997)</b>	<b>-2.9%</b>
<b>Total Revenues</b>	<b>\$ 1,862,006</b>	<b>1,864,943</b>	<b>2,149,468</b>	<b>284,525</b>	<b>15.3%</b>

Figure 46: Revenue Budget (2019-2021)

#### Key Assumptions:

- Toll Revenue is expected to increase by 18.6% on the New Jersey Turnpike and by 14.8% on the Garden State Parkway in 2021 as compared to the 2020 Budget. The increases are due to the full year impact of the toll rate increase on September 13, 2020 which is partially offset by the continuing impacts of the COVID-19 Pandemic on traffic and revenue. The 2021 toll revenue budget was derived from a report done by the Authority's traffic engineering consultant in October 2020. To date in 2020, toll revenue is below budget due to the impacts of the COVID-19 pandemic. Toll revenue is expected to increase by 37% on the New Jersey Turnpike and 33% on the Garden State Parkway in 2021 as compared to 2020 estimated/actuals
- E-ZPass fees are expected to increase due to the increase in violations and number of E-ZPass accounts. To date in 2020, actual E-ZPass fees are above budget
- Concession revenue is expected to decrease in part due to a reduction in the revenue share from the diesel fuel gross profit margin and ongoing effects of COVID-19. To date in 2020, concession revenue is under budget
- Interest Income is expected to decrease in 2021. The 2021 budget assumes a decrease in interest rates as well as lower invested balances compared to 2020 actuals. 2020 actuals are expected to be under budget
- Miscellaneous revenue is projected to slightly increase primarily due to annual CPI increases
- Arts Center Revenue is projected to increase due to an increase in the naming rights payments and an increase in recognition of pre-paid rent

Revenue Fund Balance					
(\$ In Thousands)	2019 Actuals	2020 Est/Act	2021 Budget	2020 to 2021 \$ Change	2020 to 2021 % Change
Beginning Balance	\$ 52,876	52,877	52,877	-	-
Revenues	1,862,006	1,639,904	2,149,468	509,564	31.1%
Expenses	(530,937)	(558,971)	(622,324)	(63,353)	11.3%
Transfers to Funds	(1,331,068)	(1,080,933)	(1,527,144)	(446,211)	41.3%
<b>Ending Balance</b>	<b>\$ 52,877</b>	<b>52,877</b>	<b>52,877</b>	<b>-</b>	<b>-</b>

Figure 47: Revenue Fund Balance (2019-2021)

## Toll Statistics

### Toll Transactions by Vehicle Type and Roadway

<b>Toll Transactions by Vehicle Type and Roadway</b>					
<i>(In Thousands)</i>	2017 Actual	2018 Actual	2019 Actual	2020 Budget*	2021 Budget**
Passenger	227,979	230,497	233,454	230,260	202,088
Commercial (1)	32,686	34,251	34,318	35,577	30,859
<b>New Jersey Turnpike Total</b>	<b>260,665</b>	<b>264,748</b>	<b>267,772</b>	<b>265,837</b>	<b>232,947</b>
<b>Garden State Parkway (2)</b>	<b>392,895</b>	<b>389,791</b>	<b>386,750</b>	<b>389,421</b>	<b>355,877</b>
<b>Total Authority Toll Transactions</b>	<b>653,560</b>	<b>654,539</b>	<b>654,522</b>	<b>655,258</b>	<b>588,824</b>

<b>Toll Transactions Growth Rate</b>					
	2017 Actual	2018 Actual	2019 Actual	2020 Budget*	2021 Budget**
Passenger	1.9%	1.1%	1.3%	-1.4%	-12.2%
Commercial (1)	2.6%	4.8%	0.2%	3.7%	-13.3%
<b>New Jersey Turnpike Total</b>	<b>2.0%</b>	<b>1.6%</b>	<b>1.1%</b>	<b>-0.7%</b>	<b>-12.4%</b>
<b>Garden State Parkway (2)</b>	<b>0.8%</b>	<b>-0.8%</b>	<b>-0.8%</b>	<b>0.7%</b>	<b>-8.6%</b>
<b>Total Authority Toll Transactions</b>	<b>1.3%</b>	<b>0.1%</b>	<b>0.0%</b>	<b>0.1%</b>	<b>-10.1%</b>

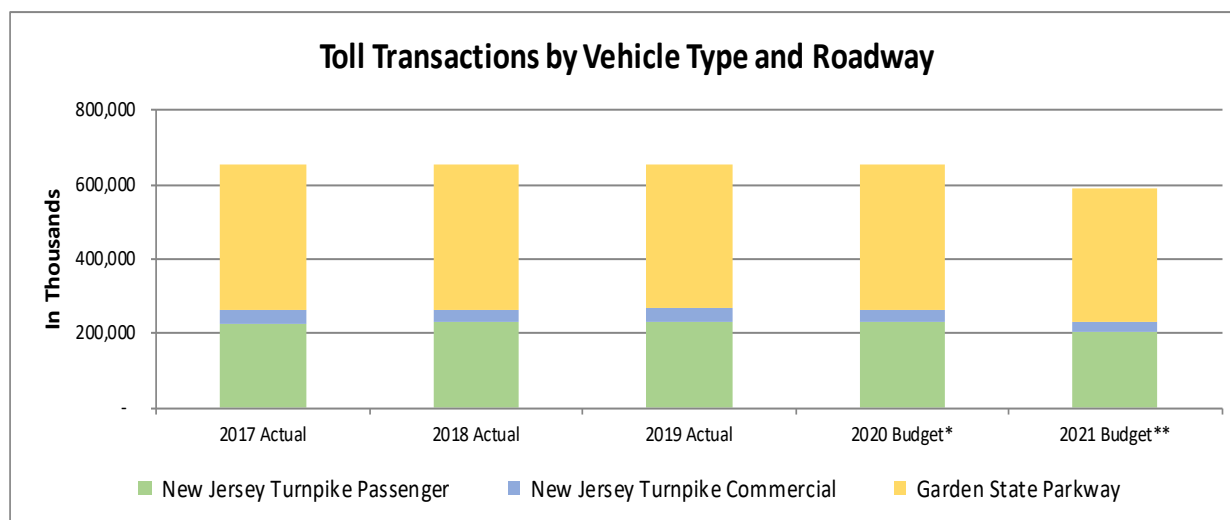
(1) Commercial vehicles include buses

(2) Commercial vehicles (including buses) are not shown separately as they account for less than 4% of total

\*Projected Traffic is based on the CDM Smith Toll Revenue Forecast study dated September 27, 2018

\*\*Projected traffic is based on the October 6, 2020 CDM Smith Draw Down Letter updating the September 27, 2018 Toll Revenue Forecast

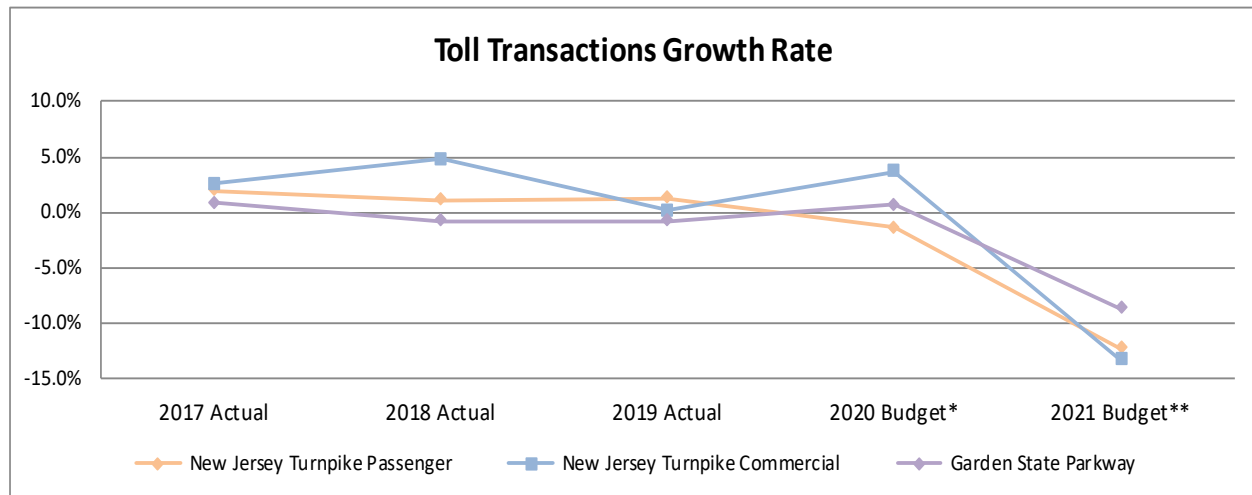
Figure 48: Toll Transactions by Vehicle Type and Roadway (2017-2021)



\*Projected Traffic is based on the CDM Smith Toll Revenue Forecast study dated September 27, 2018

\*\*Projected traffic is based on the October 6, 2020 CDM Smith Draw Down Letter updating the September 27, 2018 Toll Revenue Forecast

Figure 49: Total Toll Transactions (2017-2021)



\*Projected Traffic is based on the CDM Smith Toll Revenue Forecast study dated September 27, 2018

\*\*Projected traffic is based on the October 6, 2020 CDM Smith Draw Down Letter updating the September 27, 2018 Toll Revenue Forecast

**Figure 50: Toll Transactions Percent Change (2017-2021)**

It should be noted that the 2020 Budget for toll transactions shown in the above charts has not been adjusted for the decline in toll transactions experienced in 2020 from the COVID-19 impacts. When comparing the 2021 budget to 2020 estimated/actual, toll transactions are projected to increase in 2021. Please refer to Figures 54, 55, and 56.

#### Toll Revenue by Vehicle Type and Roadway

<b>Toll Revenue by Vehicle Type and Roadway</b>					
<i>(\$ In Thousands)</i>	2017 Actual	2018 Actual	2019 Actual	2020 Budget*	2021 Budget**
Passenger	\$ 780,182	808,960	816,271	808,837	963,304
Commercial (1)	371,557	370,364	360,205	384,052	451,667
<b>New Jersey Turnpike Total</b>	<b>1,151,739</b>	<b>1,179,324</b>	<b>1,176,476</b>	<b>1,192,889</b>	<b>1,414,971</b>
<b>Garden State Parkway (2)</b>	<b>428,157</b>	<b>433,002</b>	<b>435,792</b>	<b>440,409</b>	<b>505,770</b>
<b>Total Authority Toll Revenue</b>	<b>\$ 1,579,896</b>	<b>1,612,326</b>	<b>1,612,268</b>	<b>1,633,298</b>	<b>1,920,741</b>

<b>Toll Revenue Growth Rate</b>					
	2017 Actual	2018 Actual	2019 Actual	2020 Budget*	2021 Budget**
Passenger	0.5%	3.7%	0.9%	-0.9%	19.1%
Commercial (1)	0.5%	3.7%	0.9%	6.6%	17.6%
<b>Commercial (1)</b>	<b>0.9%</b>	<b>-0.3%</b>	<b>-2.7%</b>	<b>1.4%</b>	<b>18.6%</b>
<b>Garden State Parkway (2)</b>	<b>0.5%</b>	<b>1.1%</b>	<b>0.6%</b>	<b>1.1%</b>	<b>14.8%</b>
<b>Total Authority Toll Revenue</b>	<b>0.6%</b>	<b>2.1%</b>	<b>0.0%</b>	<b>1.3%</b>	<b>17.6%</b>

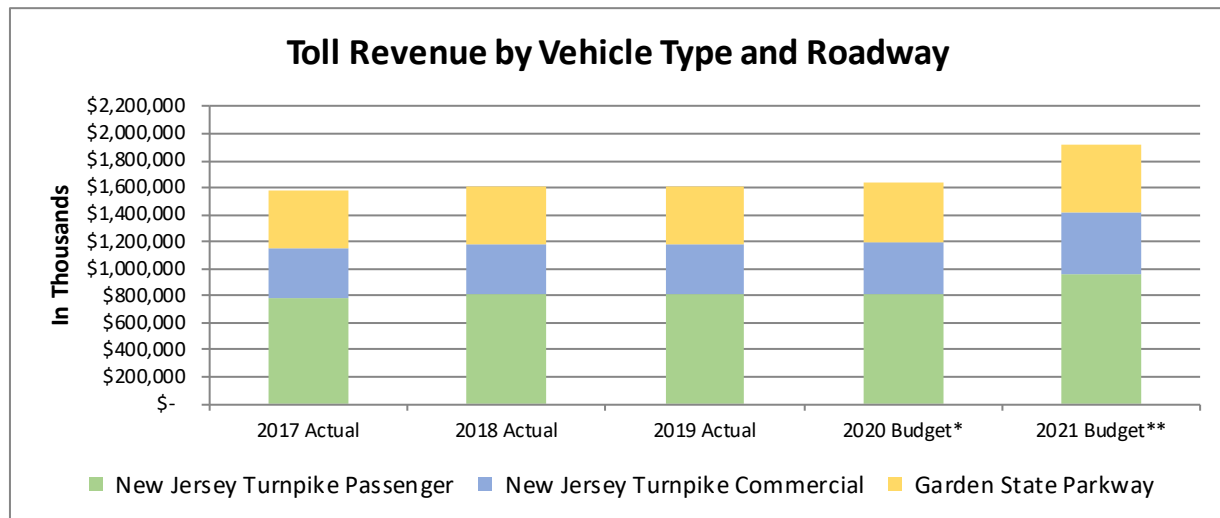
(1) Commercial vehicles include buses

(2) Commercial vehicles (including buses) are not shown separately as they account for less than 4% of total

\*Projected revenue is based on the CDM Smith Toll Revenue Forecast study dated September 27, 2018

\*\*Projected revenue is based on the October 6, 2020 CDM Smith Draw Down Letter updating the September 27, 2018 Toll Revenue Forecast

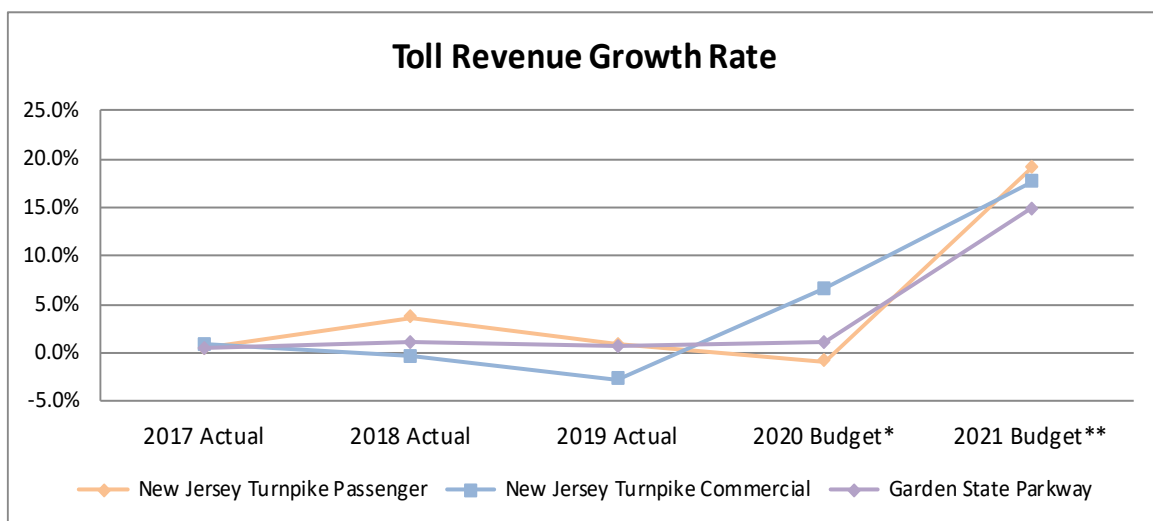
**Figure 51: Toll Revenue by Vehicle Type and Roadway (2017-2021)**



\*Projected revenue is based on the CDM Smith Toll Revenue Forecast study dated September 27, 2018

\*\*Projected revenue is based on the October 6, 2020 CDM Smith Draw Down Letter updating the September 27, 2018 Toll Revenue Forecast

Figure 52: Total Toll Revenue (2017-2021)



\*Projected revenue is based on the CDM Smith Toll Revenue Forecast study dated September 27, 2018

\*\*Projected revenue is based on the October 6, 2020 CDM Smith Draw Down Letter updating the September 27, 2018 Toll Revenue Forecast

Figure 53: Toll Revenue Percent Change (2017-2021)

The COVID-19 pandemic caused unprecedented reductions in toll transactions in 2020, which were not budgeted. Because of this, the 2021 budget to 2020 budget comparisons in the previous charts do not necessarily present an accurate reflection of the underlying toll transaction and revenue growth rates that are assumed in the 2021 budget. The following charts depict the toll transaction and toll revenue growth rates as compared to the 2020 estimated actuals:

## Toll Transactions by Vehicle Type and Roadway

Toll Transactions by Vehicle Type and Roadway					
(in Thousands)	2017 Actuals	2018 Actuals	2019 Actuals	2020 Est/Act*	2021 Budget*
Passenger	227,979	230,497	233,454	169,834	202,088
Commercial (1)	32,686	34,251	34,318	31,391	30,859
<b>New Jersey Turnpike Total</b>	<b>260,665</b>	<b>264,748</b>	<b>267,772</b>	<b>201,225</b>	<b>232,947</b>
<b>Garden State Parkway (2)</b>	<b>392,895</b>	<b>389,791</b>	<b>386,750</b>	<b>314,685</b>	<b>355,877</b>
<b>Total Authority Toll Revenue</b>	<b>653,560</b>	<b>654,539</b>	<b>654,522</b>	<b>515,910</b>	<b>588,824</b>

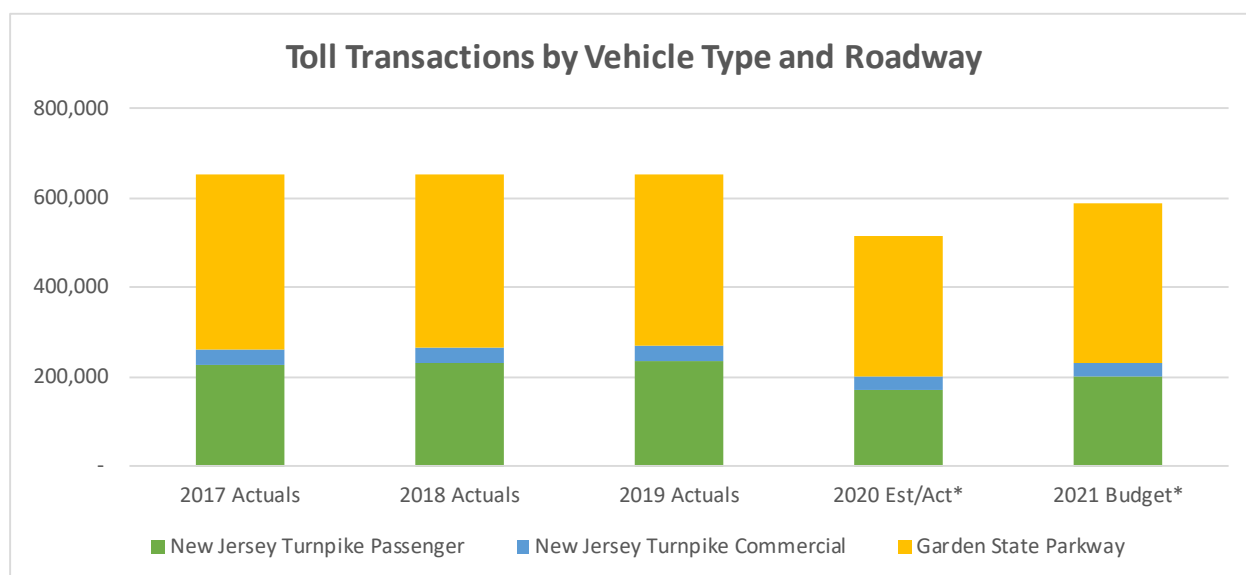
Toll Transactions Growth Rate					
	2017 Actual	2018 Actual	2019 Actual	2020 Est/Act*	2021 Budget*
Passenger	2%	1%	1%	-27%	19%
Commercial (1)	3%	5%	0%	-9%	-2%
<b>New Jersey Turnpike Total</b>	<b>2%</b>	<b>2%</b>	<b>1%</b>	<b>-25%</b>	<b>16%</b>
<b>Garden State Parkway (2)</b>	<b>1%</b>	<b>-1%</b>	<b>-1%</b>	<b>-19%</b>	<b>13%</b>
<b>Total Authority Toll Transactions</b>	<b>1%</b>	<b>0%</b>	<b>0%</b>	<b>-21%</b>	<b>14%</b>

(1) Commercial vehicles include buses

(2) Commercial vehicles (including buses) are not shown separately as they account for less than 4% of total

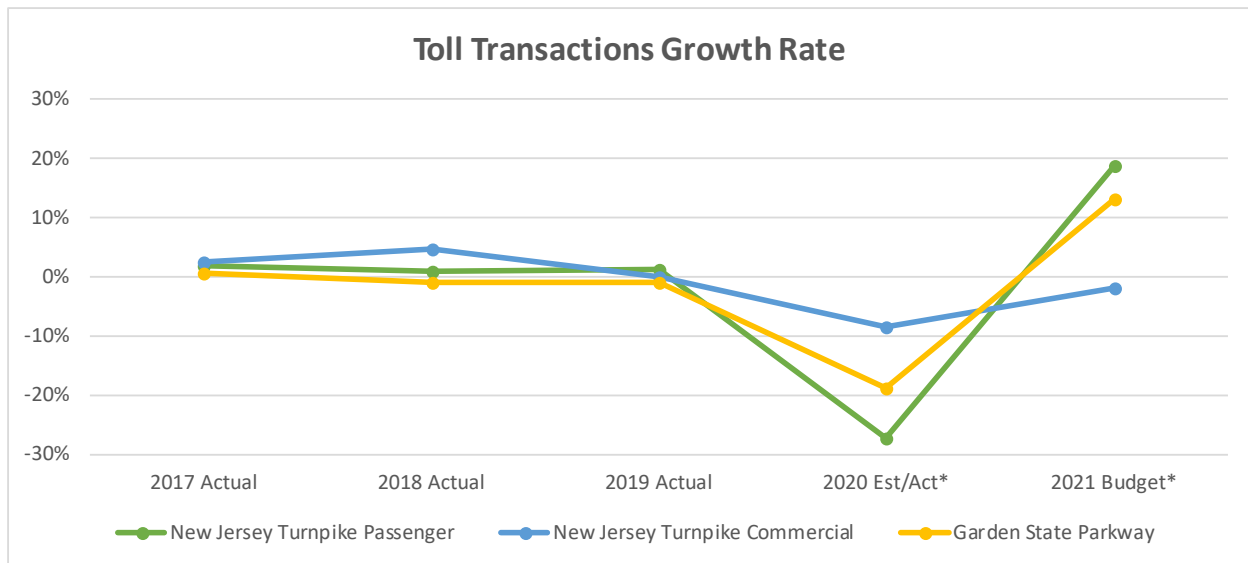
\*Projected traffic is based on the CDM Smith Toll Revenue Forecast study dated October 6, 2020

Figure 54: Toll Transactions by Vehicle Type and Roadway (2017-2021)



\*Projected traffic is based on the CDM Smith Toll Revenue Forecast study dated October 6, 2020

Figure 55: Total Toll Transactions (2017-2021)



\*Projected traffic is based on the CDM Smith Toll Revenue Forecast study dated October 6, 2020

**Figure 56: Toll Transactions Percent Change (2017-2021)**

When comparing the 2021 budgeted toll transactions to the 2020 estimated/actual toll transactions, the graphs above show that toll transactions are expected to significantly increase in 2021, as the impacts of COVID-19 on travel will be much less in 2021. Toll transactions, although increasing in 2021, are still expected to remain below 2019 levels.

## Toll Revenue by Vehicle Type and Roadway

Toll Revenue by Vehicle Type and Roadway					
(in Thousands)	2017 Actuals	2018 Actuals	2019 Actuals	2020 Est/Act*	2021 Budget*
Passenger	\$ 780,182	808,960	816,271	655,604	963,304
Commercial (1)	371,557	370,364	360,205	373,602	451,667
<b>New Jersey Turnpike Total</b>	<b>\$ 1,151,739</b>	<b>1,179,324</b>	<b>1,176,476</b>	<b>1,029,206</b>	<b>1,414,971</b>
<b>Garden State Parkway (2)</b>	<b>\$ 428,157</b>	<b>433,002</b>	<b>435,792</b>	<b>380,453</b>	<b>505,770</b>
<b>Total Authority Toll Revenue</b>	<b>\$ 1,579,896</b>	<b>1,612,326</b>	<b>1,612,268</b>	<b>1,409,659</b>	<b>1,920,741</b>

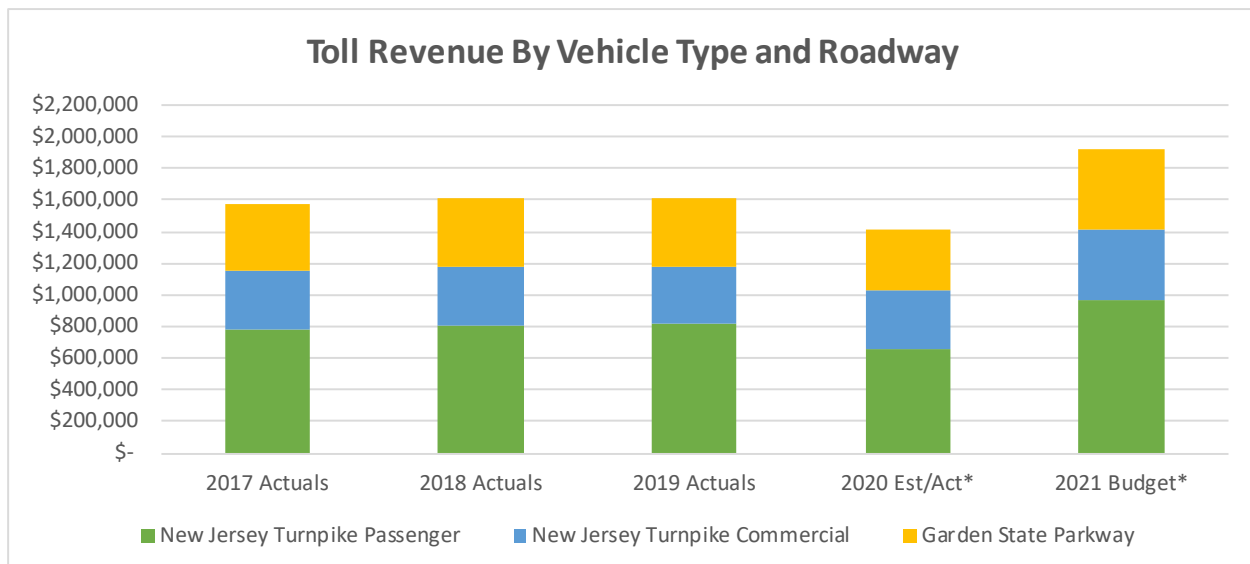
Toll Revenue Growth Rate					
	2017 Actual	2018 Actual	2019 Actual	2020 Est/Act*	2021 Budget*
Passenger	0.5%	3.7%	0.9%	-19.7%	46.9%
Commercial (1)	0.9%	-0.3%	-2.7%	3.7%	20.9%
<b>New Jersey Turnpike Total</b>	<b>0.6%</b>	<b>2.4%</b>	<b>-0.2%</b>	<b>-12.5%</b>	<b>37.5%</b>
<b>Garden State Parkway (2)</b>	<b>0.5%</b>	<b>1.1%</b>	<b>0.6%</b>	<b>-12.7%</b>	<b>32.9%</b>
<b>Total Authority Toll Revenue</b>	<b>0.6%</b>	<b>2.1%</b>	<b>0.0%</b>	<b>-12.6%</b>	<b>36.3%</b>

(1) Commercial vehicles include buses

(2) Commercial vehicles (including buses) are not shown separately as they account for less than 4% of total

\*Projected revenue is based on the CDM Smith Toll Revenue Forecast study dated October 6, 2020

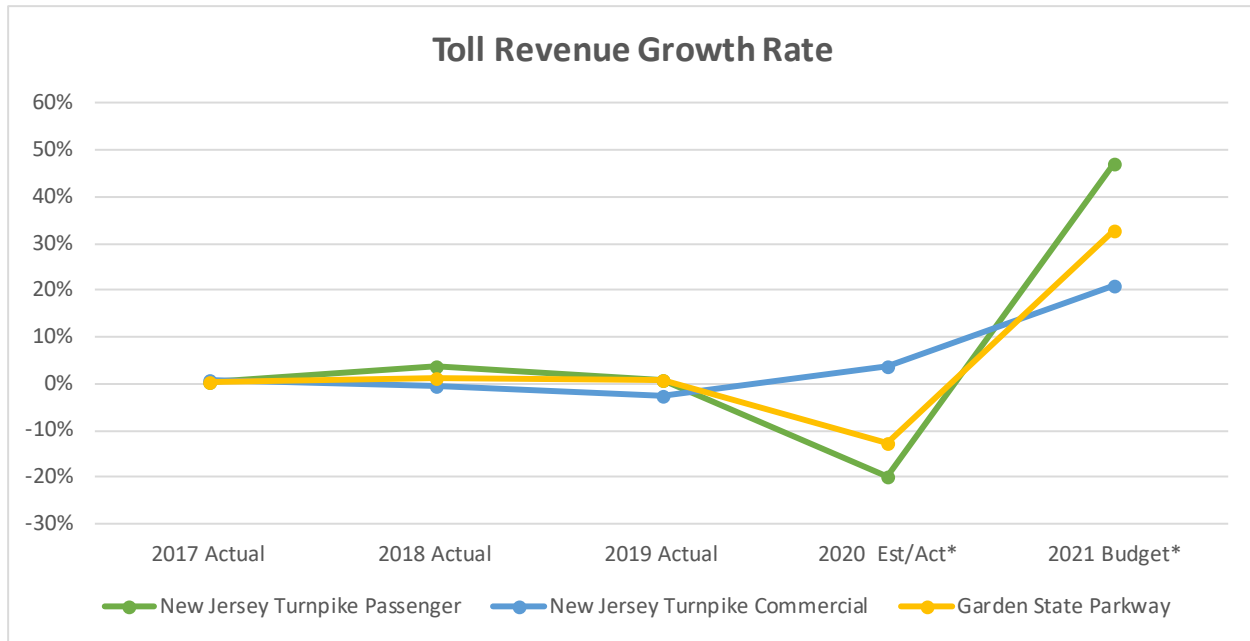
Figure 57: Toll Revenue by Vehicle Type and Roadway (2017-2021)



\*Projected revenue is based on the CDM Smith Toll Revenue Forecast study dated October 6, 2020

Figure 58: Total Toll Revenue (2017-2021)





\*Projected revenue is based on the CDM Smith Toll Revenue Forecast study dated October 6, 2020

**Figure 59: Toll Revenue Percent Change (2017-2021)**

Toll revenue is expected to increase significantly in the 2021 Budget when compared to 2020 estimated/actual results. The increase is due both to the toll rate increase, which was effective September 13, 2020, as well as the improvement in toll transactions from the lessening impacts of COVID-19 on travel.

## 2021 Operating Expense Budget

Operating Expense Budget by Functional Area					
<i>(\$ In Thousands)</i>	2019 Actuals	2020 Budget	2021 Budget	\$ Change from 2020 Budget	% Change from 2020 Budget
Maintenance	\$ 205,215	240,163	238,716	(1,447)	-0.6%
Engineering	10,292	10,413	22,224	11,811	113.4%
<b>Total Maintenance of Infrastructure</b>	<b>\$ 215,507</b>	<b>250,576</b>	<b>260,940</b>	<b>10,364</b>	<b>4.1%</b>
Toll Collection	156,310	169,995	180,137	10,142	6.0%
<b>Total Toll Collection</b>	<b>\$ 156,310</b>	<b>169,995</b>	<b>180,137</b>	<b>10,142</b>	<b>6.0%</b>
Operations <sup>(1)</sup>	14,442	15,147	15,518	1,512	2.5%
State Police	81,575	89,247	89,784	537	0.6%
<b>Total Traffic Control &amp; State Police</b>	<b>\$ 96,017</b>	<b>104,394</b>	<b>105,302</b>	<b>908</b>	<b>0.9%</b>
Information Technology Services	19,461	24,445	24,035	(410)	-1.7%
<b>Total Technology</b>	<b>\$ 19,461</b>	<b>24,445</b>	<b>24,035</b>	<b>(410)</b>	<b>-1.7%</b>
Executive Office	1,408	1,731	1,801	70	4.0%
Law & Insurance Services	9,116	10,911	12,271	1,360	12.5%
Purchasing & Materials Management	7,948	8,506	8,640	135	1.6%
Human Resources & Office Services	5,644	6,876	6,932	56	0.8%
Finance	13,149	14,472	14,800	328	2.3%
Community & Government Relations <sup>(1)</sup>	1,562	1,486	1,754	268	18.0%
Internal Audit	4,817	5,579	5,712	134	2.4%
<b>Total General &amp; Administrative</b>	<b>\$ 43,643</b>	<b>49,561</b>	<b>51,910</b>	<b>2,350</b>	<b>4.7%</b>
<b>Total Operating Budget</b>	<b>\$ 530,935</b>	<b>598,971</b>	<b>622,324</b>	<b>23,353</b>	<b>3.9%</b>

(1) The Patron Services Department was reorganized into the Traffic Division of the Operations Department. For comparative purposes, the 2019 expenses and 2020 budget for Patron Services have been moved into the Operations Department. Previously, Patron Services had been reported with Community and Government Relations.

**Figure 60: Operating Expense Budget (2019-2021)**

- The Operating Expense Budget is increasing by 3.9%, or \$23.4 million. The key cost factors in the 2021 Operating Expense Budget are as follows:
  - Toll collection costs are budgeted to increase by \$6.7 million due to higher fees for money counting and credit card processing related to higher dollar volumes due to the recent toll increase
  - Pension costs are budgeted to increase by \$3.6 million based on the new experience study by the State PERS, new mortality tables, change in interest rate assumptions, and an increase in covered payroll from the 2018 retroactive salary increases. Pension is allocated to each department at a rate of 22% of the respective department's salary budget. The change in the pension expense seen on the department level is dependent on a combination of respective department's salary increase/decrease and the overall increase in the pension cost

- COVID-19 related expenses are budgeted at \$2.2 million for extra overtime, cleaning, and supplies in anticipation of the pandemic continuing into 2021
  - Health Benefits costs are budgeted to increase by \$2.3 million, based on medical inflation and usage, in addition to an increase in worker's compensation insurance premiums and an increase in Medicare reimbursement rates. Benefits are allocated to each department at a rate of 56% of the respective department's salary budget. The change in the health benefit cost seen at the department level is dependent on a combination of respective department's salary increase/decrease and the overall increase in the health benefit cost
  - Other Professional Services are budgeted to increase by \$1.3 million as bridge inspection and pavement management totaling \$9.5 million are now budgeted as an operating expense. This is partially offset by \$8.2 million in vehicles purchases now being capitalized and budgeted in the Special Project Reserve Fund Budget
  - NJ E-ZPass costs are budgeted to increase by \$1.5 million due to variable costs related to violation processing, increased transponder costs from the tag swap program, and the restart of the MVC registration suspension program
  - Legal Expenses are budgeted to increase by \$1.3 million as a result of collection counsel expenses for EZ-Pass civil litigation (\$0.7 million), legal costs for ongoing litigation, and the legal expenses for land acquisition for the 2021-2025 CIP
  - State Police Services are budgeted to increase by approximately \$1.5 million based on contractual salary increases
  - Snow and Severe Weather costs continue to be budgeted at \$38.1 million, a level consistent with the past 5 years
- The proposed 2021 Operating Expense Budget increase is partially offset by:
    - Operating equipment costs are budgeted to decrease as the Authority's capitalization policy has changed to include all items that are more than \$20,000. This includes \$8.2 million in vehicle purchases in 2021 which will now be budgeted in the Special Project Reserve Fund
    - Vehicle supplies are budgeted to decrease by \$0.5 million due to lower fuel costs
    - Salaries are budgeted to decrease by \$1.5 million due to the reduction of part-time toll collectors by 55 positions and elimination of all 20 Parkway seasonal and temporary toll collectors

Excluding the two unusual items - increase in toll collection costs and COVID-19 related expenses – the operating expense budget is increasing by only 2.4% or \$14.4 million. When excluding pension and health benefit costs, the operating expense budget is only increasing by 1.4%.

## Budget by Functional Area

Condensed Operating Expense Budget by Functional Area					
(\$ In Thousands)	2019 Actuals	2020 Budget	2021 Budget	\$ Change from 2020 Budget	% Change from 2020 Budget
Maintenance of Infrastructure	\$ 215,507	250,576	260,940	10,364	4.1%
Toll Collection	156,310	169,995	180,137	10,142	6.0%
Traffic Control & State Police	96,017	104,394	105,302	908	0.9%
Technology	19,461	24,445	24,035	(410)	-1.7%
General & Administrative	43,643	49,561	51,910	2,350	4.7%
<b>Total Operating Budget</b>	<b>\$ 530,935</b>	<b>598,971</b>	<b>622,324</b>	<b>23,353</b>	<b>3.9%</b>

Figure 61: Condensed Operating Expense Budget by Functional Area (2019-2021)

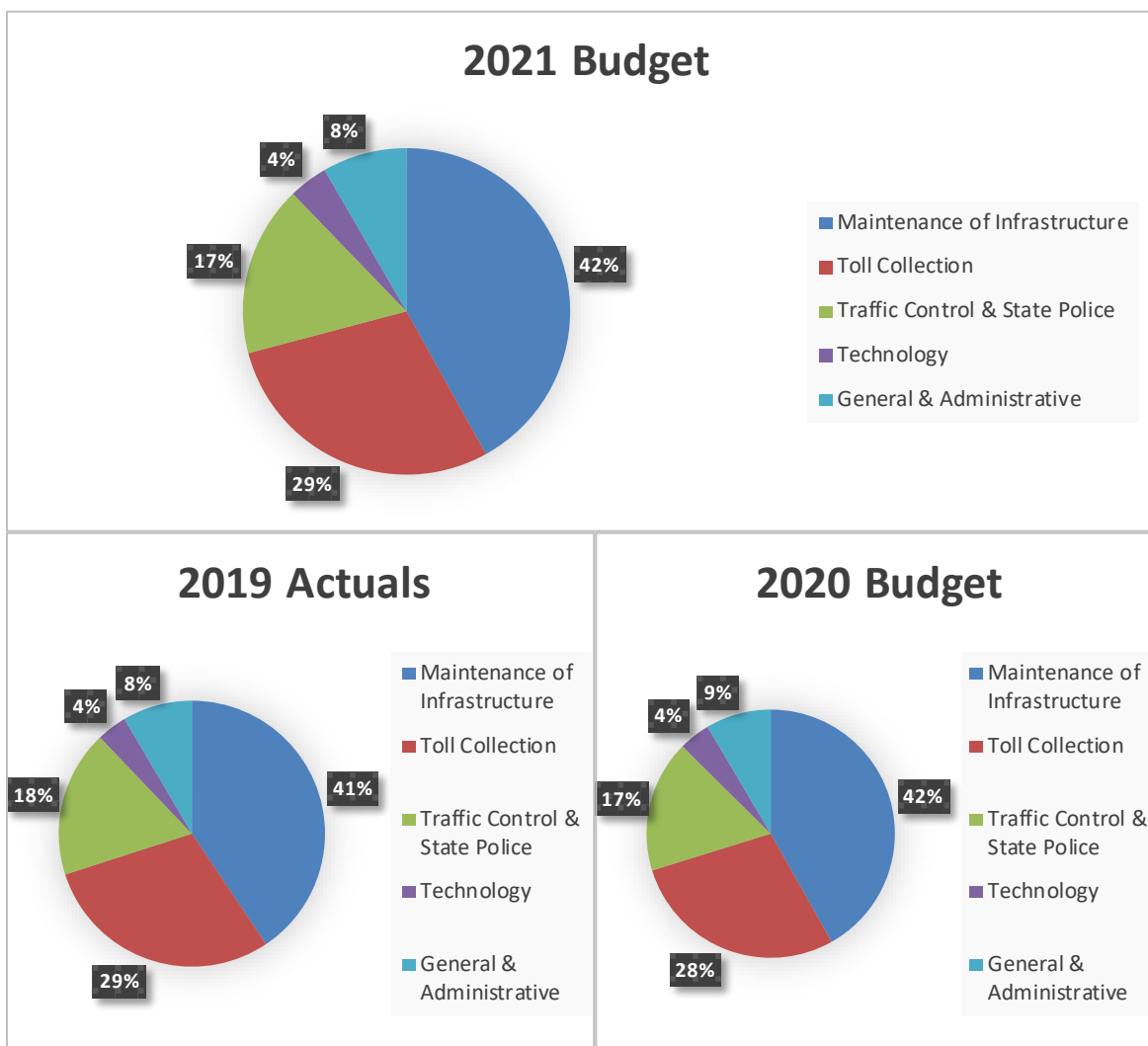


Figure 62: Expense Budget by Functional Area Percentages (2019-2021)

## Budget by Expense Type

Condensed Operating Expense Budget by Expense Type					
(\$ In Thousands)	2019 Actuals	2020 Budget	2021 Budget	\$ Change from 2020 Budget	% Change from 2020 Budget
Personnel Costs	\$ 286,109	305,398	311,665	6,267	2.1%
Materials & Supplies	40,527	47,258	50,052	2,795	5.9%
Services	168,327	188,093	210,479	22,386	11.9%
Maintenance & Fixed Costs	22,520	42,439	40,974	(1,465)	-3.5%
Equipment	13,454	15,782	9,154	(6,628)	-42.0%
<b>Total Operating Budget</b>	<b>\$ 530,935</b>	<b>598,971</b>	<b>622,324</b>	<b>23,354</b>	<b>3.9%</b>

Figure 63: Budget by Expense Type (2019-2021)

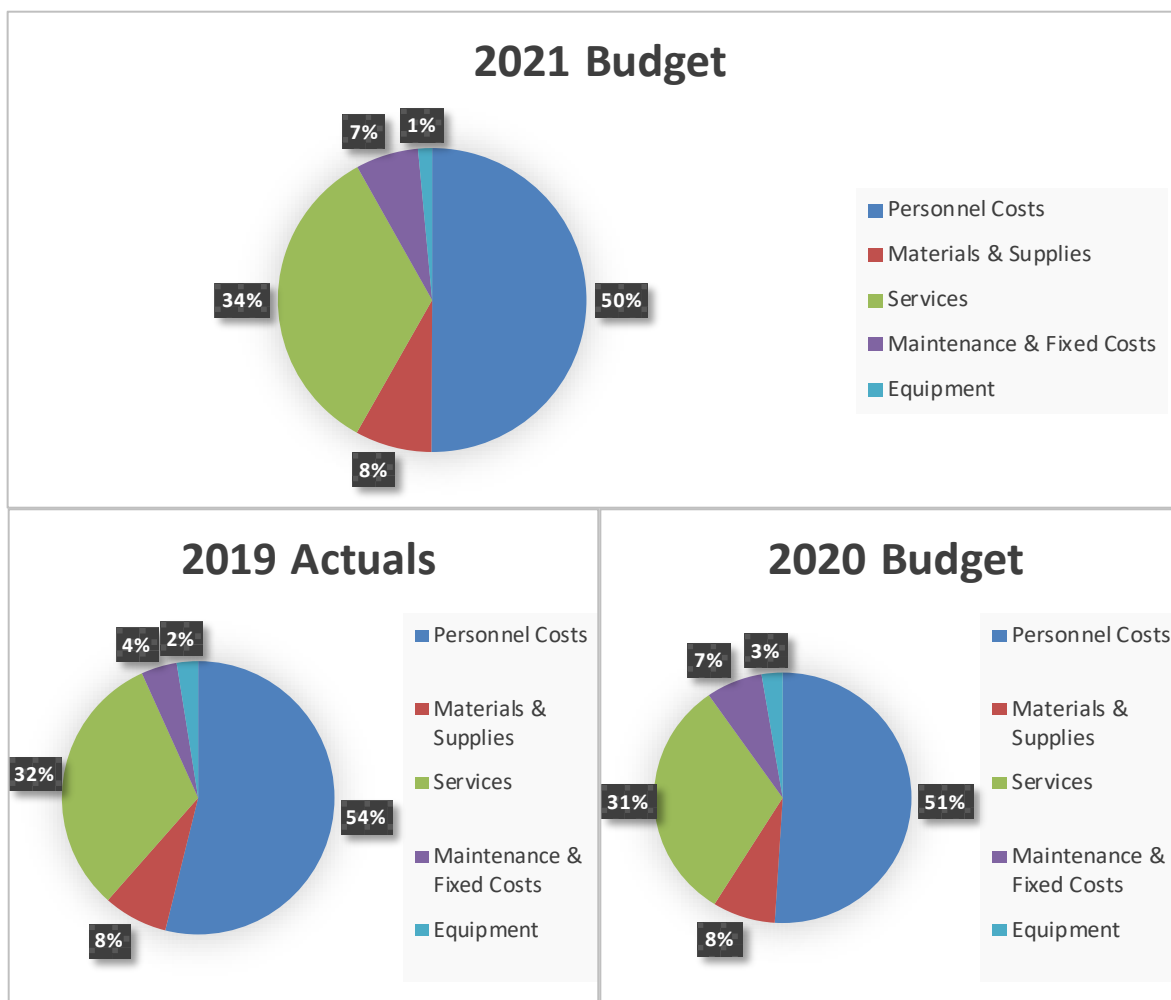


Figure 64: Budget by Expense Type Percentages (2019-2021)

## 2021 Operating Budget Summary by Line Item

Operating Expense Budget by Line Item					
(\$ In Thousands)	2019 Actuals	2020 Budget	2021 Budget	\$ Change from 2020 Budget	% Change from 2020 Budget
Salaries	\$ 170,251	177,153	176,927	(226)	-0.1%
Allowances	1,078	906	1,267	361	39.9%
Pension & Taxes	27,780	34,259	37,898	3,639	10.6%
Employee Relations	38	37	50	13	35.1%
Health Benefits	86,004	91,852	94,163	2,312	2.5%
Tuition	175	200	200	-	-
Training, Travel, & Seminars	782	992	1,160	169	18.0%
<b>Total Personnel Costs</b>	<b>\$ 286,109</b>	<b>305,398</b>	<b>311,665</b>	<b>6,267</b>	<b>2.1%</b>
Printing & Office Supplies	478	525	559	34	6.4%
Vehicle Supplies	4,561	5,218	4,744	(474)	-9.1%
Medical Supplies	44	80	86	6	7.9%
Operating Supplies	1,769	1,856	2,455	599	32.3%
Toll Tickets	282	316	316	(0)	-0.1%
Utilities	11,463	11,694	12,047	353	3.0%
Snow/Ice	6,486	9,536	10,173	637	6.7%
Software	4,558	5,641	5,449	(192)	-3.4%
Other Materials	9,751	10,590	12,604	2,014	19.0%
Landscape	90	140	137	(3)	-2.1%
Roadway	308	475	455	(20)	-4.2%
Electronics	398	903	750	(153)	-16.9%
Other Expenses	340	284	277	(7)	-2.4%
<b>Total Materials &amp; Supplies</b>	<b>\$ 40,527</b>	<b>47,258</b>	<b>50,052</b>	<b>2,795</b>	<b>5.9%</b>
Banking Services	30,190	32,065	38,377	6,312	19.7%
Insurance	10,234	11,657	12,822	1,165	10.0%
Facilities Services	2,298	2,762	4,055	1,293	46.8%
Legal Services	1,654	1,570	2,863	1,293	82.4%
Consulting Services	2,305	4,374	4,761	387	8.8%
Other Professional Services	39,407	47,202	57,893	10,691	22.6%
Environmental Services	4,286	5,246	4,968	(278)	-5.3%
Other Services	663	732	772	40	5.4%
State Police Services	77,291	82,484	83,968	1,484	1.8%
<b>Total Services</b>	<b>\$ 168,327</b>	<b>188,093</b>	<b>210,479</b>	<b>22,386</b>	<b>11.9%</b>
Vehicle Maintenance	632	934	1,083	149	15.9%
Roadway Maintenance	16,219	33,832	31,329	(2,504)	-7.4%
Bridge Maintenance	-	48	12	(36)	-75.2%
Building Maintenance	2,210	3,220	3,433	213	6.6%
Toll Booth Maintenance	12	76	76	(0)	-0.3%
Equipment Maintenance	3,212	3,892	4,620	728	18.7%
Equipment Rental	190	332	315	(17)	-5.0%
Taxes	45	104	106	2	2.1%
<b>Total Maintenance &amp; Fixed Costs</b>	<b>\$ 22,520</b>	<b>42,439</b>	<b>40,974</b>	<b>(1,465)</b>	<b>-3.5%</b>
Equipment	9,053	11,398	3,194	(8,204)	-72.0%
ETC Transponders	4,401	4,384	5,960	1,576	35.9%
<b>Total Equipment</b>	<b>\$ 13,454</b>	<b>15,782</b>	<b>9,154</b>	<b>(6,628)</b>	<b>-42.0%</b>
<b>Total Operating Budget by Line Item</b>	<b>\$ 530,935</b>	<b>598,971</b>	<b>622,324</b>	<b>23,354</b>	<b>3.9%</b>

Figure 65: Operating Budget by Line Item (2019-2021)

### Budgeted Full Time Employees

Authorized Positions				
Departments/Divisions	2019	2020	2021	Change from 2020
Maintenance Division	1,007	1,014	982	(32)
Traffic Division <sup>(1)</sup>	82	87	87	-
Total Operations Department <sup>(2)</sup>	1,089	1,101	1,069	(32)
Engineering	72	70	84	14
Toll Collection	542	542	542	-
State Police	8	11	28	17
Information Technology Services	152	152	151	(1)
Executive Office	6	8	8	-
Law & Insurance Services	19	21	21	-
Procurement & Materials Management	55	55	55	-
Human Resources & Office Services	42	42	42	-
Finance	80	80	79	(1)
Community & Government Relations <sup>(1)</sup>	9	9	10	1
Internal Audit	27	29	31	2
<b>Subtotal</b>	<b>2,101</b>	<b>2,120</b>	<b>2,120</b>	<b>-</b>
Contingency	-	5	5	-
<b>NJTA Department Total</b>	<b>2,101</b>	<b>2,125</b>	<b>2,125</b>	<b>-</b>

(1) 2019 and 2020 presentation is adjusted to reflect the reorganization effective October 2020

(2) Effective October 19, 2020, the Authority made organizational changes that affected several departments. The former Operations Department, now the Traffic Division, and the former Maintenance Department, now the Maintenance Division, together form the Operations Department. The former Patron Services Department is now a component of the Traffic Division and is no longer reported with Community & Government Relations

Figure 66: Budgeted Full Time Employees (2019-2021)

Overall, 2021 Authorized Positions are remaining at the same level of 2020 Authorized Positions. Although total positions are flat, there is movement among the departments/divisions:

- Due to the Authority reorganization, effective October 19, 2020, the Maintenance Department was merged with the Operations Department and became the Maintenance Division of the Operations Department. As part of this reorganization, 17 employees were transferred from Maintenance to the State Police Department and 14 employees were transferred to the Engineering Department
- Other net transfers between departments represent personnel or vacant position moves
- 5 contingency positions remain in the budget to account for any staffing needs that may arise during the year

## Department & Division Budgets

### Maintenance Division

#### Division Description:

Effective October 19, 2020, the Authority merged the Maintenance, Operations and Patron Services Department into the Operations Department. The merger resulted in a model that is common through dozens of state transportation agencies nationwide. As a result of this merger, the Operations Department includes the Traffic Division (discussed on page 75 under Operations Department) and the Maintenance Division.

The Maintenance Division of the Operations Department is responsible for overseeing the maintenance and care of the Turnpike and Parkway roadways and infrastructure, as well as Authority buildings and facilities. Specifically, the Maintenance Division is responsible for the following: the inspection, maintenance and repair of the Authority's maintenance vehicle fleet and equipment; maintenance and repair of approximately 500 facility locations and critical utilities along 321 miles of roadway; HVAC maintenance, inspection and repair; line striping; construction of small structures and facilities; coordination and implementation of snow and ice removal operations; roadway litter and debris removal, and maintenance and care of all roadway vegetation.

In order to preserve the Authority's existing classification of Operating Expenses for financial statement reporting purposes, the Maintenance Division's Operating Expense Budget is shown separate from the Operations Department. This is because the Maintenance Division expenses are considered Maintenance of Infrastructure, separate from the classification of other Operations Department expenses. However, all activities of the maintenance division are the responsibility of the Director of Operations.

#### Division Organization:

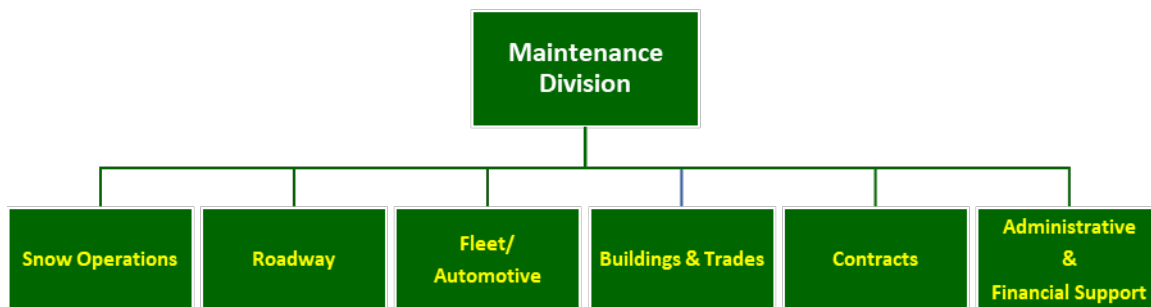


Figure 67: Maintenance Division Organization Chart

#### Senior Staff:

Director of Operations: Kevin Dunn

Deputy Director of Operations: Frank Jordan

#### 2020 Accomplishments:

- Installation of electronic equipment accountability systems at each facility as more sites are constructed and completed
- Completed adequate training on new vehicles for the technicians, up to date diagnostic equipment for the departments, as well as sufficient training on this equipment for the technicians
- Completed the planning and programming phase for the Maintenance Division Lighting Management Program (LMP)



- Implemented First Phase of Enterprise Asset Management (EAM) implementation for the Automotive Division
- Continued validation of automotive fleet with respect to equipment lifecycle cost and with a concentration on light duty vehicles
- Expanded the resources dedicated to the Authority's Enterprise Geographical Information System (EGIS)
- Advertised the first contract for the Maintenance Division's Drainage Management Program (DMP)

**2021 Goals:**

- Continue restoration of roadway illumination levels (state of good repair)
- Expansion of field access to Authority's eGIS system with implementation of field devices (State of Good Repair/Safety)
- Continue Toll facilities upgrades (State of Good Repair)
- Participate and assist with the Implementation of an Authority Capital Project Management System (CPMS) (Financial Stability)

<b>Maintenance Division Operating Budget</b>					
<i>(\$ In Thousands)</i>	<b>2019 Actuals</b>	<b>2020 Budget</b>	<b>2021 Budget</b>	<b>\$ Change from 2020 Budget</b>	<b>% Change from 2020 Budget</b>
Salaries	\$ 85,572	88,596	87,369	(1,227)	-1.4%
Allowances	806	838	1,007	169	20.1%
Pension & Taxes	13,684	16,916	18,296	1,380	8.2%
Employee Relations	5	-	6	6	-
Health Benefits	41,181	43,612	43,643	31	0.1%
Tuition	-	-	33	33	-
Training, Seminars, & Meetings	61	131	127	(4)	-3.2%
Printing & Office Supplies	87	79	87	8	9.7%
Vehicle Supplies	4,560	5,218	4,744	(474)	-9.1%
Medical Supplies	-	-	2	2	-
Operating Supplies	1,392	1,441	2,038	597	41.4%
Utilities	11,463	11,694	12,047	353	3.0%
Snow/Ice	6,486	9,536	10,173	637	6.7%
Software	25	19	25	6	33.0%
Other Materials	8,113	9,498	11,296	1,798	18.9%
Landscape	90	140	137	(3)	-2.1%
Roadway	308	475	455	(20)	-4.2%
Electronics	398	903	750	(153)	-16.9%
Insurance	5,651	6,208	6,829	621	10.0%
Facilities Services	79	84	1,000	917	1097.6%
Consulting Services	-	50	50	-	-
Other Professional Services	-	100	108	8	8.0%
Environmental Services	734	1,200	1,317	117	9.8%
Other Services	88	109	108	(1)	-0.7%
Vehicle Maintenance	404	634	682	48	7.6%
Roadway Maintenance	16,219	33,832	31,328	(2,504)	-7.4%
Bridge Maintenance	-	48	12	(36)	-75.2%
Building Maintenance	2,139	3,125	3,338	213	6.8%
Equipment Maintenance	76	188	205	17	9.0%
Equipment Rental	46	146	129	(17)	-11.5%
Equipment	5,321	5,122	1,160	(3,962)	-77.4%
Other Expenses	227	221	215	(6)	-2.8%
<b>Total Operating Budget</b>	<b>\$ 205,215</b>	<b>240,163</b>	<b>238,716</b>	<b>(1,447)</b>	<b>-0.6%</b>

Figure 68: Maintenance Division Operating Budget (2019-2021)

**2021 Budget Highlights:**

- Salaries are decreasing as 14 positions were transferred to the Engineering Department and 17 positions were transferred to State Police, both as a result of the Authority's reorganization effective October 19, 2020. Also, authorized positions declined by 1 position as a vacant position was transferred to Community & Government Relations. The Maintenance Division comprises 49% of Authority salaries
- Pension and Benefits – see pages [54](#) & [55](#) for explanation
- The budget for COVID-19 related expenses totals \$2.2 million, which includes costs for Overtime (\$1.1 million), Allowances (\$53,000), Operating Supplies (\$557,000), Environmental Services (\$117,000), Vehicle Maintenance (\$36,000), and Building Maintenance (\$238,000)
- Vehicle Supplies are decreasing by \$447,000 as fuel and diesel costs and usage have been lower than previously anticipated
- Utilities are increasing by \$353,000 as electric costs are increasing based on U.S. Energy Information Administration cost estimates and an increase in phone service costs due to added phone lines
- Contingency, which is budgeted in Other Materials, is increasing by \$901,000 to \$1,451,000 for unanticipated costs
- Electronics are decreasing by \$153,000 as spending in previous years has been consistently lower than estimated
- Facilities Services are increasing by \$916,500 due to the transfer of the operation and management of water/wastewater to the department
- Equipment is decreasing as vehicle purchases will now be made from the Special Project Reserve Fund as a result of the change in capitalization threshold from \$50,000 to \$20,000
- Snow/Severe Weather budget in total is unchanged at \$38.1 million, however there has been a reallocation in funding to reflect 2020 actual expenditure patterns, resulting in Snow/Ice increasing by \$638,000, Other Materials increasing by \$855,000, and Roadway Maintenance decreasing by \$2.5 million, among affecting other accounts with lesser increases/decreases

<b>Maintenance Division Budgeted Positions</b>				
	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Change from 2020</b>
Administrative Assistant - Division	2	2	2	-
Administrative Project Supervisor	-	1	1	-
Administrative Secretary - Maintenance	1	1	-	(1)
Apprentice	5	6	3	(3)
Assistant Budget Coordinator - Maintenance	1	-	-	-
Assistant Building Maintenance Manager	1	1	1	-
Assistant Foreman	31	29	27	(2)
Assistant Foreman - Janitorial	3	3	3	-
Assistant Landscape Specialist	1	1	1	-
Assistant Maintenance Admin Manager	1	1	1	-
Assistant Maintenance Engineer	1	1	1	-
Assistant Project Supervisor	1	1	1	-
Assistant to Manager, Inventory Quality Assurance	-	1	1	-
Automotive Craftsperson I	1	1	1	-
Automotive Foreman	3	3	3	-
Automotive Services Coordinator	1	1	1	-
Automotive Services Manager	1	1	1	-
Automotive Technician	41	47	40	(7)
Automotive Training Manager	1	1	1	-
Body Repairperson	3	3	2	(1)
Budget Coordinator	-	1	1	-
Building Craftsperson 3	2	3	3	-
Building Maintenance Foreman	3	3	3	-
Building Maintenance Mechanic	12	13	13	-
Building Maintenance Manager	1	1	1	-

Carpenter	13	13	13	-
Carpenter/Paint Foreman	2	2	2	-
CDL Training Coordinator	-	1	1	-
Construction Manager Maintenance	1	1	1	-
Construction Supervisor Maintenance	1	1	-	(1)
Coordinator - Bargaining (8 hr)	-	1	1	-
Craftsperson Assistant - Auto	2	2	2	-
Craftsperson Field Supervisor	7	7	7	-
Craftsperson 2 - Auto	13	13	4	(9)
Crew Manager	7	7	6	(1)
Crew Supervisor	42	41	41	-
Deputy Director of Maintenance	1	1	-	(1)
Director of Maintenance	1	1	-	(1)
District Equipment Manager	3	3	3	-
District Manager	3	3	3	-
Electrical Craftsperson 2	15	16	16	-
Electrical Engineer	1	1	-	(1)
Electrician -Tpk	20	19	18	(1)
Equipment Trainer	3	3	3	-
Executive Secretary 2	2	2	2	-
Facilities Manager	1	-	-	-
Facility Craftsperson	4	4	4	-
Facility Manager	1	2	2	-
Field Engineer	1	4	1	(3)
General Foreman	7	6	6	-
General Foreman-Automotive	2	2	2	-
Heavy Equipment Operator	27	27	25	(2)
Inventory Quality Assurance Manager & Materials Expert	1	1	-	(1)
Janitor	11	11	12	1
Janitorial Foreman	1	1	1	-
Janitorial Manager	1	1	2	1
Landscape Manager	1	1	-	(1)
Landscape Specialist	-	-	1	1
Landscaper	7	7	6	(1)
Landscaping Foreman	2	2	1	(1)
Maintenance Assistant	1	1	1	-
Maintenance Automotive Manager	1	1	1	-
Maintenance Budget Analyst	-	-	1	1
Maintenance District Coordinator	2	2	2	-
Maintenance Engineer	2	2	1	(1)
Maintenance Financial & Office Manager	1	1	1	-
Maintenance Fleet Admin	1	1	-	(1)
Maintenance Office Assistant	1	1	1	-
Maintenance Person	216	223	234	11
Maintenance Person 1	223	216	219	3
Maintenance Person 2	15	15	11	(4)
Maintenance Person 3	4	5	9	4
Maintenance Person 4	10	12	11	(1)
Maintenance Person General	35	33	31	(2)
Maintenance Records Clerk	20	20	20	-
Maintenance Roadway Special	2	2	2	-
Maintenance Special-Landscape	4	4	5	1

Mason	5	5	3	(2)
Mechanic	4	1	-	(1)
Mechanic I	37	37	38	1
Mechanic Special	2	2	2	-
Mechanical Craftsperson 2	17	17	17	-
One Call Coordinator	1	1	1	-
Painter	4	3	3	-
Power Electric Foreman	5	4	4	-
Procedure Analyst	1	1	-	(1)
Project Analyst-GIS	1	1	-	(1)
Project Coordinator	1	-	1	1
Project Engineer Maintenance	1	1	-	(1)
Project Manager - Environmental	-	1	1	-
Project Supervisor	8	8	7	(1)
Roadway Foreman	17	16	15	(1)
Roadway Maintenance Administrator	-	-	1	1
Roadway Superintendent	4	4	4	-
Senior Administrative Assistant - Division	1	1	1	-
Senior Clerk 80	18	18	18	-
Senior Confidential Secretary	1	1	-	(1)
Senior Maintenance Engineer	1	1	1	-
Senior Maintenance Lighting Specialist	1	1	-	(1)
Senior Sign Shop Manager	1	1	-	(1)
Sign Fabricator 1	8	8	8	-
Specialist - Sign Fabricator	1	2	2	-
Sign Shop Manager	-	-	1	1
Superintendent of Snow Operations	1	-	-	-
Supervising Engineer	1	1	-	(1)
Training Equipment Supervisor	1	1	1	-
Welder	5	5	5	-
Total	1007	1014	982	(32)

Figure 69: Maintenance Division Positions (2019-2021)

## Engineering

### Department Description:

The Engineering Department's mission is focused on the preservation and improvement of the Authority's roadways, structures, buildings and other facilities. Responsibilities include planning, design, and construction management. In-house staff is supplemented by engineers from outside consulting engineering firms who work under direct Authority supervision. The Engineering Department is comprised of two main divisions and a section - Design Division, Construction Division, and the Facilities Section.

The Design Division is organized into four (4) sections; Structures, Highways, Planning and Contracts. The main focus of the Design Division is to plan, and design capital improvements to bridges, roadway and facilities along the New Jersey Turnpike and Garden State Parkway. In addition to the above activities, the Design Division is also responsible for the design of various major annual maintenance projects, including, pavement resurfacing, lighting, drainage, median barrier and bridge deck repairs. The Contracts Section is responsible for transitioning construction contracts from design to construction through the public bid process, maintaining the Authority's standard specifications, providing current supplemental specifications, and prequalifying all contractors interested in bidding on Authority construction contracts.

The Construction Division is organized into three (3) sections; Highways, Structures and Environmental. The Highways and Structures Sections are responsible for ensuring that the Authority's roadway, bridge, structural and other construction contracts are constructed in accordance with the contract plans and specifications. The Environmental Section is responsible for maintaining underground storage tank compliance in accordance with NJDEP regulations, as well as monitoring groundwater remediation systems.

The Facilities Section is responsible for new building construction and major maintenance projects. This section is also responsible for on call emergency response to incidents involving damage to the infrastructure on the Parkway and Turnpike.

### Department Organization:

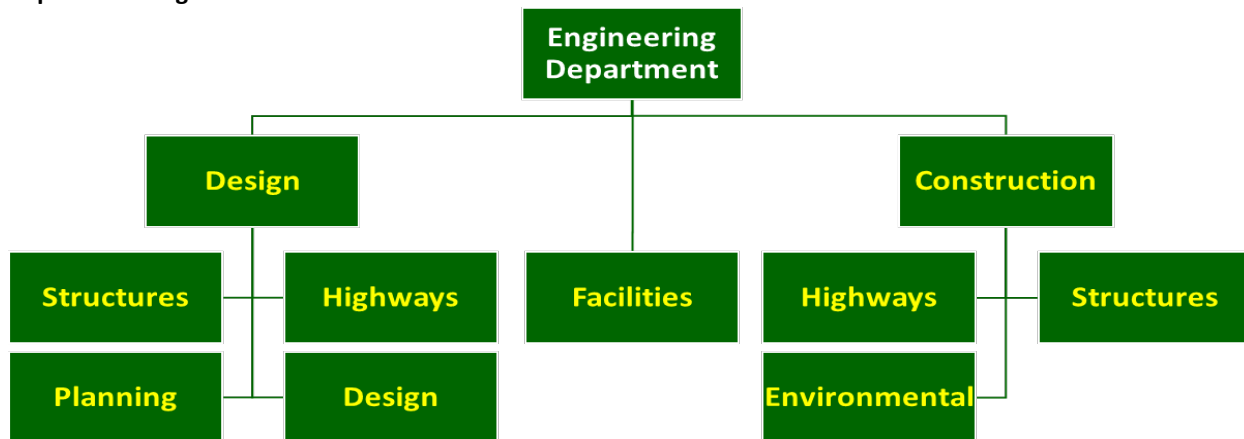


Figure 70: Engineering Department Organization Chart

### Senior Staff:

Chief Engineer: Robert J. Fischer

Deputy Chief Engineer – Construction: Michael Garofalo

Deputy Chief Engineer – Design: J. Lawrence Williams

**2020 Accomplishments:**

- Continued to issue Orders of Professional Services and Contracts and pay contractors and other vendors while working remotely during the COVID-19 shutdown
- Continued implementation and award of contracts in the 2019 Capital Improvement Program
- Began the implementation of the first Phase of the 2021-2025 Capital Improvement Program by issuing supplements to current design OPS' in order to accelerate the design and award of contracts to repair the highest priority bridges and culverts
- Improved the overall condition of the mainline pavement on the Turnpike and Parkway placing over 400,000 tons of asphalt on both roadways
- Continued to fill vacancies

**2021 Goals:**

- Develop, prioritize and finalize the 5-Year Capital Improvement Program (State of Good Repair)
- Continue design and award of contracts for the 2021-2025 Capital Improvement Program (State of Good Repair)
- Maintain and continue to improve the condition of the mainline pavement on the Turnpike and Parkway (State of Good Repair)
- Fill any vacant positions (People)

<b>Engineering Department Operating Budget</b>					
<i>(\$ In Thousands)</i>	<b>2019 Actuals</b>	<b>2020 Budget</b>	<b>2021 Budget</b>	<b>\$ Change from 2020 Budget</b>	<b>% Change from 2020 Budget</b>
Salaries	\$ 3,063	1,735	3,062	1,327	76.5%
Allowances	0	-	-	-	-
Pension & Taxes	510	340	673	334	98.2%
Health Benefits	1,621	945	1,727	782	82.8%
Tuition	-	-	10	10	-
Training, Seminars, & Meetings	11	15	16	1	2.6%
Printing & Office Supplies	22	33	39	6	19.6%
Operating Supplies	1	2	2	0	17.6%
Other Materials	0	-	-	-	-
Consulting Services	1,503	3,330	3,580	250	7.5%
Other Professional Services	-	-	9,500	9,500	-
Environmental Services	3,551	4,000	3,600	(400)	-10.0%
Other Services	9	13	14	1	6.1%
Equipment Maintenance	-	1	1	0	42.9%
<b>Total Operating Budget</b>	<b>\$ 10,292</b>	<b>10,413</b>	<b>22,224</b>	<b>11,811</b>	<b>113.4%</b>

**Figure 71: Engineering Department Operating Budget (2019-2021)****2021 Budget Highlights:**

- Salaries are increasing due to the transfer of 14 positions into the department from the Maintenance Division as part of the Authority's reorganization. Engineering comprises about 2% of total Authority salaries
- Pension and Benefits – see pages [54](#) & [55](#) for explanation
- Other Professional Services are increasing by \$9.5 million as a result of the addition of bridge inspection (\$8 million) and pavement management (\$1.5 million) to the operating budget. These items were previously reported on and expensed from the Special Project Reserve Fund
- Environmental Services are decreasing by \$400,000 as the operation and management of water/wastewater were moved to Facilities Services in Maintenance, where it appropriately belongs

Engineering Department Budgeted Positions				
	2019	2020	2021	Change from 2020
Administrative Secretary/Assistant	5	5	8	3
Assistant Engineer	4	5	5	-
Assistant Manager, Right of Way	-	-	1	1
Assistant Project Supervisor	1	1	1	-
CAAD Engineering Technician	1	1	1	-
Chief Engineer	1	1	1	-
Chief File Clerk	1	1	1	-
Clerk	1	-	-	-
Construction Supervisor, Maintenance	-	-	1	1
Contracts Division Manager	1	1	1	-
Coordinator, Bargaining	1	-	-	-
Deputy Chief Engineer	2	2	2	-
Electrical Engineer	-	-	1	1
Engineering Administrative Aide	1	1	1	-
Engineering Administrative Manager	-	1	1	-
Engineering Assistant	1	1	1	-
Engineering Coordinator	2	2	2	-
Engineering Project Analyst	1	1	1	-
Engineering Technician	2	2	2	-
Environmental Manager	-	-	1	1
Field Engineer	-	-	3	3
Field Environmental Manager	1	1	-	(1)
Highway Engineer	1	1	1	-
Maintenance Engineer	-	-	2	2
Office Administrator, Engineering	1	1	1	-
Project Architect	-	1	1	-
Project Analyst, GIS	-	-	1	1
Project Engineer	19	17	16	(1)
Project Engineer, Maintenance	-	-	1	1
Project Manager	2	1	1	-
Project Supervisor	3	4	4	-
Right of Way Manager	1	1	1	-
Senior CADD Engineering Technician	1	1	1	-
Senior Clerk	3	2	2	-
Senior Confidential Secretary	1	1	-	(1)
Senior Construction Engineer	1	1	1	-
Senior Environmental Manager	1	1	1	-
Senior Environmental Supervisor	2	2	2	-
Senior Facilities Engineer	-	-	1	1
Senior File Room Supervisor	1	1	1	-
Senior Maintenance Engineer	-	-	1	1
Senior Maintenance Lighting Specialist	-	-	1	1
Senior Project Engineer	4	4	4	-
Senior Supervising Engineer	3	2	2	-
Supervising Engineer	2	3	3	-
<b>Total</b>	<b>72</b>	<b>70</b>	<b>84</b>	<b>14</b>

Figure 72: Engineering Department Positions (2019-2021)

## Toll Collection

### Department Description:

The Toll Collection Department oversees the collection of toll revenue in full service manual lanes (cash and E-ZPass), automatic coin machine lanes and E-ZPass only lanes on the New Jersey Turnpike and the Garden State Parkway. The Department currently has 542 full-time employees and 485 part-time employees. In addition to the costs for the manual and automatic coin machine lanes which the Toll Collection Department is directly responsible for, the budget includes the costs associated with Electronic Toll Collection although oversight for this function and responsibility for the New Jersey E-ZPass Customer Service Center is spread over several departments.

The New Jersey E-ZPass Customer Service Center provides all back-office functions related to processing and collecting electronic tolls and violations. The service center opens and maintains customer accounts, distributes transponders and responds to customer requests. The New Jersey E-ZPass Customer Service Center is located in Newark, New Jersey.

### Department Organization:

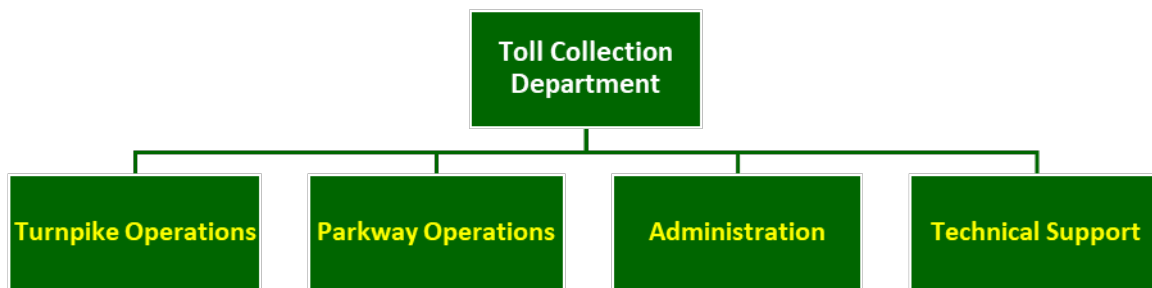


Figure 73: Toll Collection Department Organization Chart

### Senior Staff:

Director of Tolls: John D. Pagliarulo

Deputy Director of Tolls: F. Scott Barton

Assistant Director of Tolls – Training: Colleen L. Lentini

### 2020 Accomplishments:

- Implemented new Toll Collection training procedures to comply with social distancing and safety
- Implemented new guidelines for all Tolls personnel to follow Covid-19 directives
- Began work on Interchanges 16E/18E to install Express E-ZPass on the SNE/NSE Roadways. This will ease congestion for trucks heading 95 North. (Routes 46, 80, GWB etc.) This project will be completed in 2021.
- Targeted older toll buildings that require rehabilitation. East Orange and Asbury Park received substantial face-lifts
- Installed High Speed E-ZPass lanes at Interchange 6 and the New Gretna Toll Plaza
- Implemented numerous touch screen upgrades to further increase collector efficiency
- Implemented a more efficient way of communicating our needs with Human Resources to help better maintain our authorized positions



- Rehabbed toll booths at all mainline toll barriers and staffed ramps on the Parkway. This included new signage, HVAC units, lighting, dutch doors, windows and electronic toll equipment needed to have lanes functioning properly and safely for full service toll collection
- Installed new canopy signs at all ramps and toll barriers on Parkway to meet federal standards
- Transitioned to a new Turnpike field operation team. Promoted new Field Operation Manager and 2 Assistant Division Managers that oversee day to day operations of the Turnpike Division
- Eliminated temporary toll collector program on GSP

#### 2021 Goals:

- Reduce authorized positions by 1 position by the end of the year. Additionally, eliminate 55 part-time collectors and 20 temporary collectors. This is in addition to the previous elimination of the Seasonal and Temporary Collector programs on the turnpike
- Update the Customer Service video for new collector training (People)
- Add a Training Manager position on the Parkway to more efficiently prepare new supervisors for their duties and to assist in collector training to better protect Authority assets. This program has been highly successful on the Turnpike side (People)
- Update and create new innovative ways of training toll collectors/supervisors in real life settings. This must be done to meet COVID-19 and Authority directives (People)
- Continue to Modify/Enhance GSP Touch Screen to help reduce classifications (State of Good Repair/People)
- Ensure that the Interchange 16E/18E project for High-Speed E-ZPass is delivered on time (August 2021) (Mobility)
- Set up a New Jersey Barrier at Interchange 1 for new traffic configuration (State of Good Repair)
- Review safety measures at Interchange 13A (SOT Ramp) and Interchange 16W (SWT Ramp) (Safety)
- Removal of the Satellite Lanes at Union and Bergen Toll Plazas (State of Good Repair)
- Rehabilitation of Toms River and Asbury Park Supervisor offices (State of Good Repair)
- Change the Parkway Supervisory written test phase to bring it up to date with new standards the roadway faces moving forward (People)

Toll Collection Department Operating Budget					
(\$ In Thousands)	2019 Actuals	2020 Budget	2021 Budget	\$ Change from 2020 Budget	% Change from 2020 Budget
Salaries	\$ 46,473	48,393	46,895	(1,498)	-3.1%
Allowances	216	30	219	189	637.4%
Pension & Taxes	7,736	9,479	10,260	781	8.2%
Health Benefits	24,599	26,361	26,454	93	0.4%
Tuition	-	-	40	40	-
Training, Seminars, & Meetings	554	550	550	(0)	0.0%
Printing & Office Supplies	166	80	80	(0)	-0.1%
Operating Supplies	287	326	325	(1)	-0.2%
Toll Tickets	282	316	316	(0)	-0.1%
Software	1,520	1,980	1,776	(204)	-10.3%
Other Materials	657	426	544	118	27.7%
Banking Services	29,362	31,129	37,432	6,303	20.2%
Facilities Services	1,773	2,209	2,585	377	17.0%
Legal Services	105	-	700	700	-
Other Professional Services	36,135	42,151	43,457	1,306	3.1%
Other Services	367	368	372	4	1.1%
Toll Booth Maintenance	12	76	76	(0)	-0.3%
Equipment Maintenance	1,572	1,730	2,089	359	20.8%
Equipment	2	7	7	(0)	-2.8%
ETC Transponders	4,401	4,384	5,960	1,576	35.9%
Other Expenses	88	-	-	-	-
<b>Total Operating Budget</b>	<b>\$ 156,310</b>	<b>169,995</b>	<b>180,137</b>	<b>10,142</b>	<b>6.0%</b>

Figure 74: Toll Collection Department Operating Budget (2019-2021)

**2021 Budget Highlights:**

- Salaries are decreasing due to the reduction of part-time toll collectors by 55 positions and the elimination of all 20 Parkway temporary toll collectors
- Pension and Benefits – see pages 54 & 55 for explanation
- Banking Services are increasing by \$6.3 million due to an increase in credit card fees resulting from the toll rate increase that went into effect on September 13, 2020
- Legal Services are increasing \$700,000 for the collection counsel expenses for violation civil litigation
- Other Professional Services are increasing by \$1.3 million for certain costs related to violation collection and the MVC registration suspension program
- ETC Transponders are increasing \$1.6 million for costs associated with Tag Swap

<b>Toll Collection Department Budgeted Positions</b>				
	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Change from 2020</b>
Administration Toll Collection Manager	1	1	1	-
Administrative Assistant	1	1	1	-
Administrative Secretary	2	2	2	-
Area Manager	6	7	6	(1)
Assistant Director of Tolls - Operations	1	-	-	-
Assistant Director of Tolls - Training	1	1	1	-
Assistant Division Manager	2	2	2	-
Assistant Manager, Toll Facilities	1	1	1	-
Assistant Plaza Supervisor	21	20	20	-
Clerk 3	1	-	-	-
Coordinator - Bargaining	-	1	1	-
Deputy Director Tolls	1	1	1	-
Director of Tolls	1	1	1	-
Field Operations Manager	1	1	2	1
Interchange Manager	8	8	8	-
Manager, Toll Systems Reconciliation	1	1	1	-
Manager, Training Operations	1	1	1	-
Senior Citizen Toll Collector	1	1	-	(1)
Senior Tolls Field Coordinator	-	-	2	2
Temp Assistant Plaza Supervisor	-	4	2	(2)
Temp Toll Plaza Supervisor	1	-	-	-
Toll Collector - Parkway	142	141	145	4
Toll Collector - Turnpike	203	203	205	2
Toll Plaza Supervisor - Parkway	43	41	40	(1)
Toll Plaza Supervisor - Training	3	3	3	-
Toll Plaza Supervisor - Turnpike	93	94	92	(2)
Toll Records Clerk	4	4	4	-
Tolls Field Coordinator	2	2	-	(2)
<b>Total</b>	<b>542</b>	<b>542</b>	<b>542</b>	<b>-</b>

Figure 75: Toll Collection Department Positions (2019-2021)

## Operations

### Department Description:

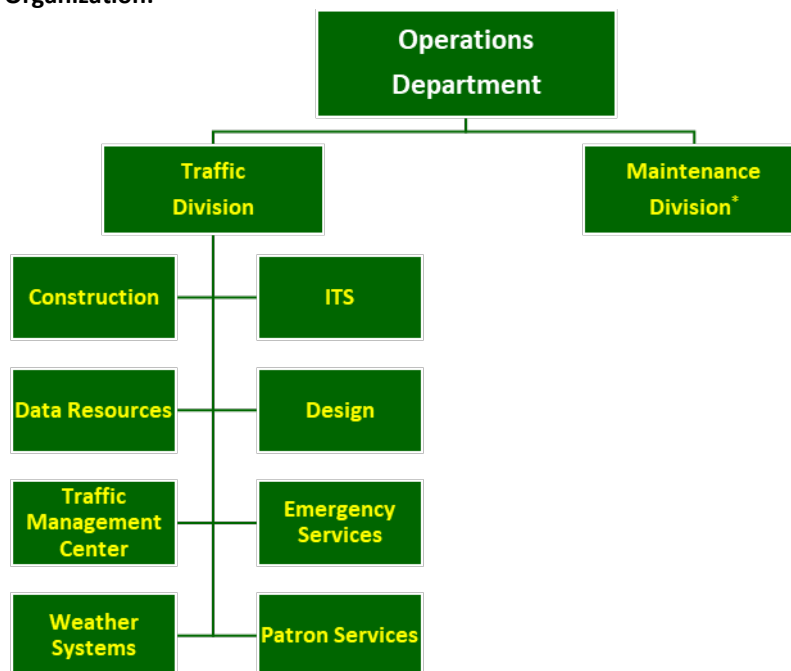
Effective October 19, 2020, the Authority announced a reorganization resulting in the Operations Department merging with the Maintenance Department and the Patron Services Department. The Operations Department is now comprised of two divisions – the Traffic Division, which is the former Operations Department, and the Maintenance Division, which is the former Maintenance Department. Patron Services is now a section within the Traffic Division.

The Traffic Division ensures the continuous, safe and efficient movement of traffic on the Turnpike and Parkway by developing and implementing programs and by scheduling and coordinating activities of other Authority operating departments, contractors and outside agencies. The Traffic Division is also responsible for all traffic engineering functions and all contracts with authorized towers, fire squads, first aid squads, and hazardous material clean-up contractors. The Traffic Division is also the Authority liaison with the New Jersey State Police.

A description of the Maintenance Division, its organization, accomplishments and goals and Operating Expense Budget can be found beginning on page 57.

The Traffic division is included in the functional expense category of Traffic Control and State Police for budgeting and financial reporting purposes. The Maintenance Division is included in the function expense category of Maintenance of Infrastructure. To preserve the integrity of the Authority's functional expense categories used for both financial statement reporting and budgeting, only the Traffic Division is included in the Operations Department Operating Expense Budget shown in this section. Since the Patron Services Department no longer exists as a department, the operating expenses are now included in the Traffic Division of the Operations Department. Previously the Patron Services Department budget and expenses were included in the Community & Government Relations Department.

### Department Organization:



\*Maintenance Division organization chart is found on page 63

Figure 76: Operations Department Organization Chart

**Senior Staff:**

Director of Operations: Kevin Dunn

Deputy Director of Operations: Frank Jordan

**2020 Accomplishments:**

- Assisted in the successful reconstruction and reopening of the Forked River, Richard Stockton and Vince Lombardi Service Areas
- Provided the Maintenance Division and the construction industry an additional 85 taper points on the northern half of the Garden State Parkway
- Deployed the NJTA Weather Operations System (NWOS) to support winter snow operations for the maximization of routing protocols for winter-weather emergencies
- Administered and supported the emergency opening of the COVID-19 public testing facility at the PNC Bank Arts Center
- Designed and assisted in permanent traffic control for the new Interchange 19W at the American Dream commercial and entertainment facility
- Completion of EVgo universal electric vehicle chargers at the Vince Lombardi, Joyce Kilmer, Molly Pitcher, Brookdale North, Brookdale South and Forked River service areas
- Installation of Tesla electric vehicle charging stations at the Clara Barton, John Fenwick, Woodrow Wilson, Richard Stockton, Walt Whitman and James Fenimore Cooper service areas

**2021 Goals:**

- Implement the replacement system for OpenREACH to maintain essential regional transportation communications (Mobility)
- Implement new emergency response resources such as helipads and access gate points in Bergen, Burlington, Cape May, Gloucester and Ocean Counties (Safety)
- Install new Reference Location signing in Gloucester, Salem and Union counties to assist in reducing emergency response times (Safety)
- Reconstruction or renovation of a minimum of 14 restaurant buildings and fuel stations at service areas on the New Jersey Turnpike and Garden State Parkway over the course of the next seven (7) years (State of Good Repair)
- Construction of three (3) new billboard structures on the New Jersey Turnpike (State of Good Repair)

Operations Department Operating Budget					
(\$ In Thousands)	2019 Actuals	2020 Budget	2021 Budget	\$ Change from 2020 Budget	% Change from 2020 Budget
Salaries	\$ 7,800	7,898	7,948	50	1%
Allowances	23	25	25	-	-
Pension & Taxes	1,298	1,547	1,741	194	13%
Health Benefits	4,129	4,302	4,484	182	4%
Tuition	-	-	10	10	-
Training, Seminars, & Meetings	2	8	7	(1)	-10%
Printing & Office Supplies	15	15	15	-	0%
Operating Supplies	2	2	3	1	25%
Other Materials	9	13	13	-	-
Facilities Services	446	470	470	(0)	0%
Consulting Services	118	166	18	(148)	-
Other Professional Services	495	532	621	89	17%
Environmental Services	-	40	40	-	-
Other Services	104	105	109	4	4%
Vehicle Maintenance	-	0	1	1	233%
Roadway Maintenance	0	0	1	1	900%
Equipment	1	22	12	(10)	-45%
<b>Total Operating Budget</b>	<b>\$ 14,442</b>	<b>15,147</b>	<b>15,518</b>	<b>371</b>	<b>2%</b>

The above only includes expenses of the Traffic Division of the Operations Department. See Page 63 for the Maintenance Division Operating Expense Budget. Effective October 19, 2020 the former Patron Services Department was absorbed into the Traffic Division. For comparative purposes, Patron Services 2019 expenses and 2020 budget are included in the above chart. Previously, Patron Services had been reported with Community and Government Relations.

**Figure 77: Operations Department Operating Budget (2019-2021)**

**2021 Budget Highlights:**

- Salaries are increasing by \$50,000 due to seasonal and temporary employees being budgeted in 2021, as they were not budgeted in 2020, as well as for contractual increases. Operations comprises 4.5% of total Authority salaries
- Pension and Benefits – see pages 54 & 55 for explanation
- Consulting services are decreasing as result of a higher percentage of costs being recovered from service area operators for the Department of Health costs
- Other professional services are increasing as costs for Transcom dues, Iteris Weather Forecasting Service, and Language Line Service services have increased, as well as the addition of funds for NIC USA

Operations Department Budgeted Positions				
	2019	2020	2021	Change from 2020
Administrative Assistant	1	1	1	-
Administrative Secretary	1	1	1	-
Assistant Manager STMC	1	1	1	-
Assistant Manager Traffic Operations	1	1	1	-
Assistant Patron Services Manager	1	1	1	-
Assistant Traffic Engineer	2	1	1	-
Clerk	-	1	1	-
Communications Dispatcher	23	24	23	(1)
Contract Services Supervisor	1	1	1	-
Deputy Director of Operations	1	1	1	-
Director of Operations	1	1	1	-
Emergency Services Supervisor	1	2	2	-
Engineering Aide - Traffic	1	2	3	1
Executive Secretary 1	2	2	1	(1)
Incident Management Coordinator	1	1	1	-
Manager, STMC	1	1	1	-
Manager, Traffic Operations	1	1	1	-
Marketing Coordinator	1	1	1	-
Operations Coordinator	1	1	1	-
Operations Engineer	1	1	1	-
Patron Services Contracts Manager	1	1	1	-
Patron Services Manager	1	1	1	-
Roadway Services Administrator	1	1	1	-
Senior Clerk	1	-	-	-
Senior Emergency Services Manager	1	1	1	-
Senior Engineering Technician	1	1	1	-
Senior Patron Services Aide	2	2	2	-
Senior Secretary	-	-	1	1
Shift Supervisor	12	12	12	-
Superintendent of Snow Operations	-	1	1	-
Supervisor, STMC	1	1	1	-
Traffic Control Supervisor	11	11	11	-
Traffic Engineer	4	4	4	-
Traffic Incident Specialist	-	1	1	-
Traffic Operations Specialist	1	1	1	-
Traffic Technician	1	2	2	-
Trailblazer Supervisor	1	1	1	-
Total	82	87	87	-

2019 and 2020 authorized positions are adjusted to reflect department reorganization effective October 2020

Figure 78: Operations Department Positions (2019-2021)

## State Police

### Department Description:

The Authority's State Police Department includes employees who are responsible for administrative and automotive functions, supporting State Police Troop D. The duties and responsibilities range from administrative, secretarial, procurement, and automotive repair and replacement duties. The newly reorganized Automotive Section of the State Police department conducts preventive maintenance and makes repairs on all state police vehicles in the Troop D fleet, including the preparation of outfitting new vehicles in the fleet. The State Police Manager/liaison is an Authority employee who reports directly to the Deputy Executive Director and is responsible for supporting the New Jersey State Police Troop D assigned to patrol the Turnpike and the Parkway. Effective October 19, 2020, the Authority reorganized, which included the State Police Department absorbing all responsibilities for the State Police Motor Pool Fleet. Previously these employees and costs were included in the Maintenance Department.

State Police services, which includes the State Troopers and their commanders, are contracted through an agreement with the New Jersey State Police. Although the costs associated with the State Police are budgeted and paid for by the Authority, the Authority does not exercise control over the Troop assigned to patrol its roadways and does not include the Troop roster in the Authority's headcount. The cost of the State Police is a contractual service.

The Mission of the New Jersey State Police Troop D is the safety of all travelers and patrons of the New Jersey Turnpike and the Garden State Parkway. Troop D provides all police services including, but are not limited to, the enforcement of laws and regulations, the prevention of crime, the pursuit and apprehension of offenders, providing stranded motorists with assistance and policing of service areas, for both the Turnpike and Parkway through its six regional stations in Cranbury, Moorestown, Newark, Galloway, Bloomfield and Holmdel as well as specialized traffic enforcement, construction, operational and criminal investigative units. The strict enforcement of all motor vehicle laws inclusive of Driving While Intoxicated, investigation of motor vehicle accidents and truck inspection and enforcement programs, are essential to maintaining and improving traffic safety. In addition, strict enforcement of all motor vehicle laws is essential to reducing motor vehicle crashes occurring on both roadways as well as the resulting fatalities, injuries, property damage, and traffic flow management.

### Department Organization: (Authority)

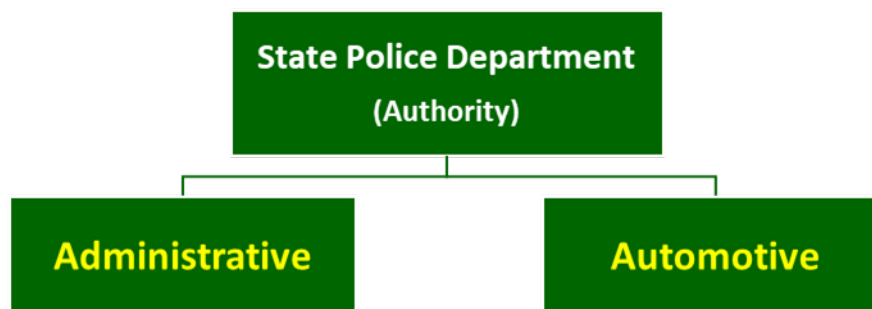
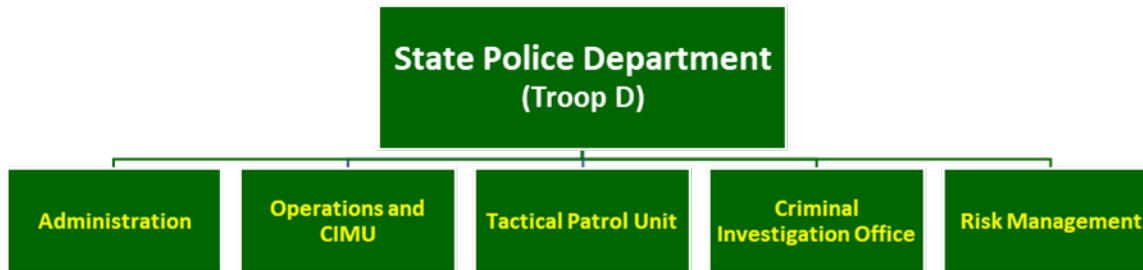


Figure 79: State Police (Authority) Department Organization Chart

**Senior Staff:**

State Police Services Manager: Brian Ingraham

Assistant State Police Services Manager: Jessica Schaeffer

**Department Organization: (State Police Troop D)**

**Figure 80: State Police (Troop D) Department Organization Chart**

**Troop D Leadership:**

Troop Commander: Major Terence Carroll

Deputy Troop Commander: Captain David Yamstick

Regional Commander: Captain Raymond Smink

**2020 Accomplishments: (State Police Troop D)**

- Completed 33 Click it or Ticket and 24 U-Text, U-Drive, U-Lose details year to date. 87 Drive Sober or get Pulled Over details and 26 Over the Limit Under Arrest details. Troop D also conducted 18 enforcement details in the annual I-95 to Save Lives campaign
- Purchased additional LTI TruSpeed speed detection lasers to bring Troop D allotment to 155
- Completed a 40-hour Child Passenger Safety Seat Technician School obtaining CPS certification for 20 additional Troopers
- Added additional ALPR's (Automated License Plate Reader) at the PNC Arts Center which are fully operational and being utilized at all PNC events for counterterrorism and investigative efforts
- Provided security at the PNC Arts Center for the COVID-19 testing center from mid-March through June 30
- Purchase of and installation of additional HD security cameras at the PNC Arts Center with additional monitors placed in the sub-station area for viewing and crime detection. Additionally, infrastructure put in place for ALPR's at recently rebuilt Service Areas
- Troop D trained additional Field Intelligence Officers (FIOs) for the Field Intelligence Officer Program, which allows information obtained from routine arrests to be analyzed and disseminated to the appropriate law enforcement agencies
- NJTA has purchased 100 new digital vehicle radios awaiting installation in Troop D State Police transportation
- Troop D Training Office conducted Troop D Orientations (2), mandated Rifle and Pistol Qualifications, periodic Critical Incident Response Training (CIRT), updated the Troop D Range Shoot House, added new restroom facilities at the Troop D Range, added 5 new members to the Risk Management Office/Field



Training Unit, continues individualized training for members to address deficiencies and continued joint training with other Division of State Police Units

**2021 Goals: (State Police Troop D)**

- Working in conjunction with HMS Host and the NJTA, conduct an Active Shooter Drill at the Cheesequake Service Area (Safety)
- Field Intelligence Officer (FIO) to produce a pre-event briefing report for specific large-scale events at the PNC Arts Center. The intelligence briefing report will provide the Troop "D" Command Staff, the NJTA and Live Nation with a threat assessment to assist with personnel allocation and address any potential areas of concern (Safety)
- Ascertain access to the New Jersey Turnpike Authority database of toll violators in the "Vector" database. In addition to the investigation of chronic toll violators, Troopers and Detectives often encounter toll violators during the course of their normal duties and currently do not have the ability to determine the extent of the violator activity during non-business hours (Financial Stability)
- Provide all Criminal Investigation Office personnel with an issued smart phone, flashlight and portable radio (Safety)
- Commercial Vehicle Inspection (CVI) Unit, in addition to their strict enforcement of commercial vehicle traffic enforcement, will conduct post-crash inspections on all commercial vehicles involved in serious/fatal motor vehicle accidents. Parkway CVI will increase its truck enforcement of overweight vehicle North of milepost 105 (Safety)
- Troop D Stations to detach a Road Trooper to the Criminal Investigation Office to gain experience in criminal investigations and administrative duties of the Criminal Investigation Office (People)
- Participate in the "Click-It-or-Ticket", "Drive Sober or Get Pulled Over", and "U-Text, U-Drive, U-Lose" national campaigns and the "I-95 Drive to Save Lives" multi-state enforcement initiative (Safety)
- Conduct monthly Service Area Commercial Vehicle Enforcement Details to mitigate truck parking violators at the newly re-opened Vince Lombardi (13S) Service Area (Safety)
- Continue safety and security efforts for the PNC Bank Arts Center including full use of recently installed ALPR system to aid in safety, counterterrorism and investigative efforts (Safety)
- Continue Intelligence Led Policing (ILP) and Service Area Frequent Enforcement (SAFE) Details at all Service Areas, commuter and construction lots to detect and thwart criminal activity and apprehend criminals (Safety)
- Leverage technology to detect suspicious activity as well as receive reports of possible traffic issues and criminal activity. Specifically, work with NJTA to obtain more/better security cameras at service areas, critical infrastructures, and the PNC Arts center (Safety)
- Training to increase the number of drug recognition experts as well as increase members who are more readily trained to identify intoxicated drivers assigned to Troop D to combat DUI and specifically drug related DUI (People/Safety)
- Continue strengthening ALPR project with the addition and installation of additional cameras throughout the Troop D region (Safety)
- Install, replace or repair security gates at all NJSP Buildings (Safety)

State Police Department Operating Budget					
(\$ In Thousands)	2019 Actuals	2020 Budget	2021 Budget	\$ Change from 2020 Budget	% Change from 2020 Budget
Salaries	\$ 713	849	2,358	1,509	177.9%
Pension & Taxes	119	166	514	348	209.3%
Health Benefits	377	462	1,330	868	187.7%
Training, Seminars, & Meetings	5	3	6	3	100.0%
Printing & Office Supplies	51	64	64	-	-
Vehicle Supplies	1	-	-	-	-
Medical Supplies	39	70	70	0	0.4%
Operating Supplies	44	40	40	-	-
Software	2	2	387	385	21400.0%
Other Materials	784	541	600	59	10.9%
Consulting Services	10	24	-	(24)	-100.0%
Environmental Services	-	1	5	4	400.0%
State Police Services	77,291	82,484	83,968	1,484	1.8%
Vehicle Maintenance	228	300	400	100	33.3%
Equipment Maintenance	18	40	41	1	1.7%
Equipment Rental	-	1	1	-	-
Equipment	1,895	4,200	-	(4,200)	-100.0%
<b>Total Operating Budget</b>	<b>\$ 81,575</b>	<b>89,247</b>	<b>89,784</b>	<b>537</b>	<b>0.6%</b>

Figure 81: State Police Department Operating Budget (2019-2021)

**2021 Budget Highlights:**

- Salaries are increasing due to the addition of 17 positions to the department from Maintenance as a result of the Authority's reorganization. The Authority employees in the State Police Department comprise about 1% of total Authority salaries
- Pension and Benefits – see pages [54](#) & [55](#) for explanation
- Software costs are increasing for year 2 of Axon body camera software
- State Police Services are increasing by \$1.5 million based on potential contractual salary increases
- Equipment costs are decreasing as all vehicle purchases have been moved to the Special Project Reserve Fund as a result of the change of capitalization threshold from \$50,000 to \$20,000

State Police Department Budgeted Positions				
	2019	2020	2021	Change from 2020
Administrative Assistant	-	1	1	-
Assistant Automotive Foreman	-	-	1	1
Assistant Police Services Manager	1	1	1	-
Automotive Technician	-	-	7	7
Clerk	-	1	1	-
Craftsperson 2 - Auto	-	-	9	9
Confidential Secretarial Aide	1	-	-	-
Motor Pool Fleet Specialist	1	1	1	-
Police Operations Clerk	3	3	3	-
Police Services Manager	1	1	1	-
Secretary	1	1	1	-
State Police Automotive Services Manager	-	1	1	-
State Police Technologies Manager	-	1	1	-
<b>Total</b>	<b>8</b>	<b>11</b>	<b>28</b>	<b>17</b>

Figure 82: State Police Department Positions (2019-2021)

## Information Technology Services

### Department Description:

The Information Technology Services Department (ITS) at the New Jersey Turnpike Authority (NJTA) provides strategic IT vision and enterprise solutions which drive and support NJTA's mission, goals, and operations. ITS is dedicated to collaboration, continuous improvements, state of good repair, innovation, and security. ITS serves two primary customer groups: the motoring public and employee community. The department strives to achieve efficient business processes and economies of scale, as it continues to enhance the IT delivery model. ITS is comprised of nine service teams which collectively work together to deliver value-added services and products.

### Department Organization:

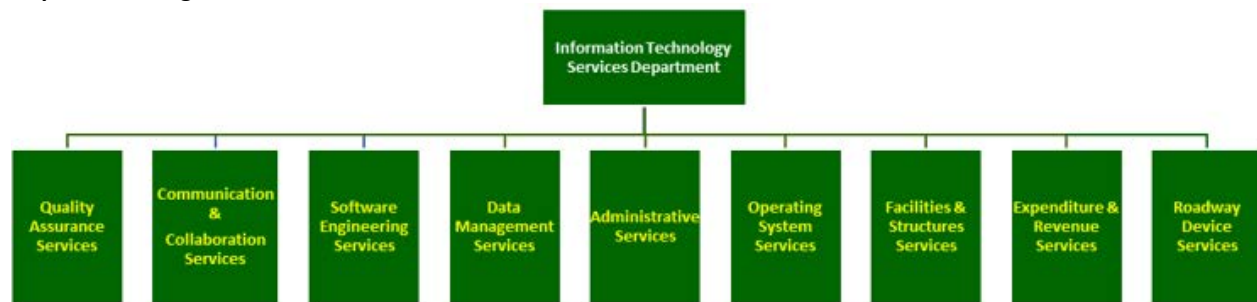


Figure 83: ITS Department Organization Chart

### Senior Staff:

Chief Information Officer: Jose Dios

Assistant Director, Data Management Services: Stanley J. Ciszewski

Assistant Director, Software Engineering Services: Ning Ding

### 2020 Accomplishments:

#### *Administration and Employee*

- Collaborated with Human Resources and began implementing a feature rich, digital recruitment platform and onboarding process. These modules will serve as the foundation for the next generation Human Capital Management System (HCMS)
- Collaborated with Engineering, Finance, and Maintenance and began implementing the next generation Capital Project Management System (CPMS) and Financial Planning and Budgeting System
- Completed technology gathering requirements and resource allocation, as specified in NJTA's ten-year Strategic Plan
- Deployed a new IT service desk and project management tool improving internal customer service
- Completed website enhancements on NJTA.com, providing a modern look and feel

#### *Enterprise Communications and Digital Transformation*

- Deployed hundreds of secure laptops, equipped with collaboration tools, to all Headquarters' administrative staff, transforming the labor force to 100% mobile
- Deployed platform agnostic video conferencing tools to be used by employees throughout the entire state

- Continued network upgrades (wired and wireless) to ensure additional capacity, as required by roadway demand
- Continued to enhance NJTA's enterprise-wide unmanned aerial vehicle (drone) program by adopting formal operating procedures
- Completed installation and configuration of IP enabled fire alarm communication modules at identified locations, improving communications
- Deployed digital auditing software improving the audit tracking process
- Negotiated and finalized a six-year support contract that continuously upgrades and monitors NJTA's radio system
- Improved radio coverage at maintenance districts by installing repeaters
- Identified a business intelligence platform and applicable use cases

#### *Financial, Contract, and Business Administration*

- Continued Phase II deployment of the E-ZPass Customer Service Center Contract
- Continued to lead, operate, and manage the Active Management Model for the New Jersey E-ZPass Group
- Continued to improve all technology contract terms and conditions
- Continued to leverage key supplier relationships to consolidate maintenance and licensing agreements, reducing Total Cost of Ownership
- Continued to utilize available capital funds in the most efficient and expeditious manner by ensuring on-time and on-budget delivery of major initiatives
- Continued to meet operating expense objectives
- Continued to achieve monthly procurement objectives as outlined in the ITS 2020 procurement plan.
- Completed warehouse inventory software upgrade
- Finalized a fiber contract template to be used for all future fiber contract renewals

#### *Maintenance Operations and Management*

- Completed Phase I deployment of the Enterprise Asset Management (EAM) Program
- Completed installation of fueling dispensing monitoring system
- Completed geographic information system (GIS) software enhancements for subsurface utilities, assets, and corresponding dashboards

#### *Motorist and Public*

- Continued State Police Troop D mobile radio upgrade
- Completed State Police Troop D body camera deployments
- Completed installation of technology and surveillance equipment at Service Areas
- Completed installation and configuration of subpoena and Open Public Records Act (OPRA) administration software

#### *Risk Management*

- Completed data storage conversion to most current technology platform
- Upgraded all Windows 7 hardware to Windows 10
- Continued to refresh aging hardware with new standardized equipment which includes multi-year warranty support contracts
- Continued to prioritize and implement security remediation activities using a data-driven approach
- Continued to update disaster recovery and business continuity plans
- Continued to enhance employee security training program
- Updated and published Information Technology policies

*Talent Management*

- Continued to fill ITS vacancies
- Continued to maintain a high level of leadership visibility and energy within the ITS team and across NJTA
- Continued to implement an active succession plan by positioning the next generation of ITS leaders in challenging and visible roles

*Traffic Operations and Management*

- Completed SafeTrip NJ enhancements, the next generation motorist aide tool, improving overall customer service communication
- Began installation of next generation Hybrid Changeable Messaging Signs (HCMS)
- Deployed enhancement features to the Traffic Permitting and Lane Closure application
- Completed activation of twenty-six (26) variable Message Signs across both roadways

*Tolling Operations and Management*

- Modified tolling software in support of log range capital plan and toll adjustments
- Continued to maintain, install, and improve critical components of the Toll Lane System
  - Activated the Interchange 6 Express E-ZPass lanes
  - Activated the New Gretna Express E-ZPass lanes
  - Deployed a mobile application allowing Patron Without Funds to pay Insufficient Funds Receipt online

**2021 Goals:***Administration and Employee*

- Continue implementation of the next generation Capital Project Management System (CPMS)
- Continue implementation of the next generation Human Capital Management System (HCMS)
- Continue implementation of the next generation Financial Planning and Budgeting System
- Continue addressing NJTA's Strategic Plan goals

*Enterprise Communications and Digital Transformation*

- Continue network upgrades (wired and wireless) to ensure additional capacity, as required by roadway demand
- Implement business intelligent program

*Financial, Contract, and Business Administration*

- Continue to lead, operate, and manage the Active Management Model for the New Jersey E-ZPass Group
- Continue to improve all technology contract terms and conditions
- Continue to leverage key supplier relationships to consolidate maintenance and licensing agreements, reducing Total Cost of Ownership
- Continue to utilize available capital funds in the most efficient and expeditious manner by ensuring on time and on-budget delivery of major initiatives
- Continue to meet operating expense objectives
- Continue to achieve monthly procurement objectives as outlined in the ITS 2021 procurement plan

*Maintenance Operations and Management*

- Gather and document requirements for Phase II of the Enterprise Asset Management (EAM) Program

*Motorist and Public*

- Continue State Police Troop D mobile radio upgrade

*Risk Management*

- Continue to prioritize and implement security remediation activities using a data-driven approach
- Continue to update disaster recovery and business continuity plans
- Update the data governance model
- Continue to refresh aging hardware with new standardized equipment which includes multi-year warranty support contracts
- Continued to refresh aging software with current programming standards
- Continue to enhance the employee security training program

*Talent Management*

- Continue to fill ITS vacancies
- Continue to maintain high level of leadership, visibility, and energy within the ITS team and across NJTA
- Continue to implement an active succession plan by positioning the next generation of ITS leaders in challenging and visible roles

*Traffic Operations and Management*

- Continue to explore enhancement and feasibility to expand installation and configuration of Dedicated Short-Range Communications (DSRC) and Cellular Vehicle-to-Everything (C-V2X) radios for Vehicle-to-Infrastructure (V2I) communications across both roadways
- Continue installation and deployment of the Hybrid Changeable Messaging Signs (HCMS)
- Continue to deploy enhancement features to the Traffic Permitting and Lane Closure application
- Gather and document requirements for the next generation Advance Traffic Management Platform

*Tolling Operations and Management*

- Continue to maintain, install, and improve critical components of the Toll Lane System

<b>Information Technology Services Department Operating Budget</b>					
<i>(\$ In Thousands)</i>	<b>2019 Actuals</b>	<b>2020 Budget</b>	<b>2021 Budget</b>	<b>\$ Change from 2020 Budget</b>	<b>% Change from 2020 Budget</b>
Salaries	\$ 6,653	8,185	8,069	(116)	-1.4%
Allowances	3	3	5	2	51.5%
Pension & Taxes	1,108	1,602	1,765	163	10.2%
Health Benefits	3,522	4,459	4,552	93	2.1%
Tuition	-	-	27	27	-
Training, Seminars, & Meetings	37	78	79	1	-
Printing & Office Supplies	22	21	21	0	1.0%
Operating Supplies	9	4	5	1	25.0%
Software	3,011	3,640	3,261	(379)	-10.4%
Other Materials	184	100	138	38	38.0%
Other Professional Services	1,843	3,000	2,500	(500)	-16.7%
Other Services	1	4	5	1	25.0%
Equipment Maintenance	1,162	1,290	1,548	258	20.0%
Equipment Rental	134	160	160	-	-
Equipment	1,773	1,900	1,900	-	-
<b>Total Operating Budget</b>	<b>\$ 19,461</b>	<b>24,445</b>	<b>24,035</b>	<b>(410)</b>	<b>-1.7%</b>

Figure 84: ITS Department Operating Budget (2019-2021)

**2021 Budget Highlights:**

- Salaries are decreasing as authorized positions have been reduced by 1 position due to the transfer of an existing employee to Internal Audit during 2020, the elimination of a temporary ITS Contract Administrator, and no budgeted temporary or seasonal employees in 2021. ITS comprises about 5% of total Authority salaries

- Pension and Benefits – see pages [54](#) & [55](#) for explanation
- Software is decreasing based on actual expenses and current licenses
- Other Professional Services are decreasing based on expected services to be provided in 2021
- Equipment Maintenance is increasing due to an increase in fiber maintenance costs and a new radio system maintenance contract

Information Technology Services Department Budgeted Positions				
	2019	2020	2021	Change from 2020
Administrative Assistant	-	1	1	-
Administrative Secretary	2	1	-	(1)
Administrative/Executive Assistant	1	-	-	-
ASP Programmer	1	1	1	-
Assistant Director	2	2	2	-
Assistant Telecom Manager	1	1	1	-
Chief Information Officer	1	1	1	-
Clerk	-	1	1	-
Collaboration Services Manager	1	1	1	-
Configuration/Software Quality Assurance Manager	1	1	1	-
CSC/VPC Operations Manager	1	1	1	-
Customer Service Contract Administrator	1	1	-	(1)
Customer Operations & Contracts Administrative Manager	-	-	1	1
Customer Operations & Contracts Administrative Assistant	-	-	1	1
Data Processing Operating Coordinator	1	1	1	-
Database Administrator	2	2	2	-
Electrical Engineer	1	1	1	-
Electronic Project Supervisor	1	1	1	-
ETC Database Manager	1	1	1	-
ETC Programmer	4	4	4	-
ETC Project Engineer	1	1	1	-
Fiber Optic Engineer	1	1	1	-
Field Electronics Manager	1	1	1	-
Human Resources Manager	-	1	1	-
Information Security Analyst	-	1	1	-
ITS Admin Support Specialist	1	1	1	-
ITS Aide	1	1	1	-
ITS Contract Administrator	-	1	1	-
ITS Coordinator	1	1	1	-
ITS Customer Operations	-	1	2	1
IT Radio Engineer	-	1	1	-
IT Voice and Video Engineer	-	2	2	-
ITS Repair & Asset Specialist	1	1	1	-
ITS Software Engineer	1	-	-	-
ITS Trainer, Software Quality Assurance	1	-	-	-
Junior IT Voice and Video Admin	1	1	1	-
Junior Software Programmer 1	1	-	-	-
LAN/WAN Network Administrator	1	1	-	(1)
Manager, Administration Software	1	1	1	-
Manager, Communication Services	1	1	1	-
Manager, GIS Platform	1	1	1	-
Manager, GSP Tech Device Technician	2	2	2	-
Manager, Infrastructure/User Support	1	1	1	-
Manager, IT Facilities	1	1	1	-
Manager, Technical Services	1	1	1	-
Manager, Technology Leased Assets	1	1	1	-
Manager, TPK Tech Device Technician	2	2	2	-
Manager, Traffic Operations Software	1	1	1	-
Manager, Windows Administration	1	1	1	-



Network Engineer	1	1	1	-
Program Analyst	1	1	1	-
Programmer	1	1	1	-
Project Change Manager	1	1	1	-
Project Engineer, ITS	1	1	1	-
Project Manager Telecommunications	1	1	1	-
Radio Engineer	1	-	-	-
Security Analyst	1	-	-	-
Senior Engineer, Voice & Coliab Services	1	1	1	-
Senior ETC Programmer	2	2	2	-
Senior IT Engineer, Facilities & Structures	3	3	3	-
Senior IT Software Developer	2	2	2	-
Senior Network Administrator	8	8	7	(1)
Senior Telecom Technical Assistant	1	1	1	-
Software Engineer	2	3	3	-
Systems Administrator	4	4	4	-
Systems Supervisor Parkway	2	2	2	-
Technology Device Technician	60	59	59	-
Technology Device Technician Supervisor	7	7	7	-
Telecom Systems Administrator	1	1	1	-
Toll Equipment Supervisor	1	1	1	-
Voice Engineer	2	-	-	-
Windows Platform Support Manager	1	1	1	-
Total	152	152	151	(1)

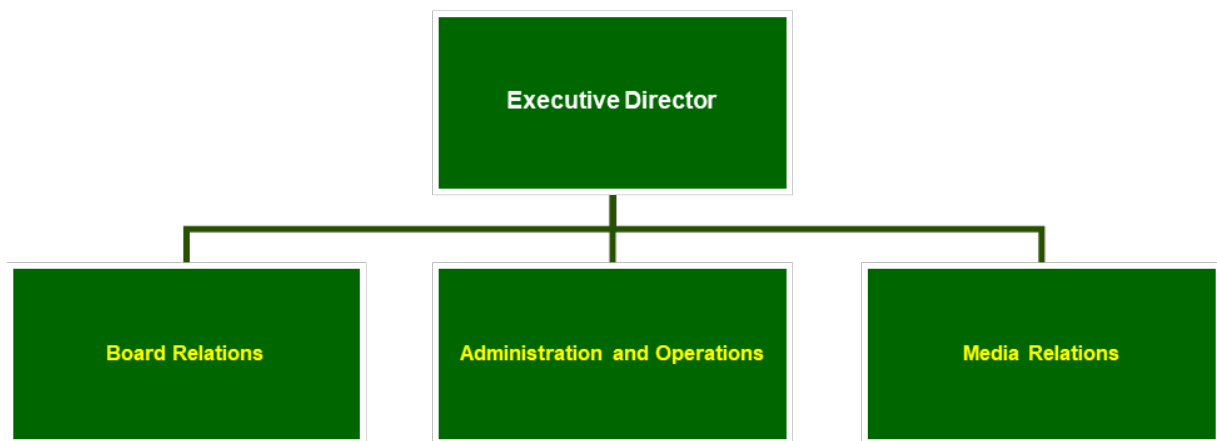
Figure 85: ITS Department Positions (2019-2021)

## Executive Offices

### Department Description:

The Executive Office is the primary liaison with the Board of Commissioners and is responsible for the daily and long-term administration and operations of the Authority, which includes strategic planning, policy making and implementation, and special projects. The Department provides leadership and oversight in the development and implementation of efficient solutions and responses to matters concerning both internal and external departmental functions and Authority initiatives.

### Department Organization:



**Figure 86: Executive Offices Department Organization Chart**

### Senior Staff:

Executive Director: John M. Keller

Deputy Executive Director: James D. Carone

### 2020 Accomplishments:

- Approved a 20-year Long-Range Capital Plan supported by toll revenue adjustments with indexed increases on both the Turnpike and Parkway to allow the Authority to enhance its infrastructure
- Implemented the 10-year Strategic Plan that guides the Authority in prudently managing its finances and operations
- Collaborated with the appropriate departments within the Authority to implement a 5-year rolling capital budget to efficiently plan the Authority's capital projects and expenses
- Approved the implementation and procurement of a new Capital Project Management System to help the Authority efficiently manage its capital projects, including the 2020 Long-Range Capital Plan
- Established a Health and Safety Committee to meet the needs and requirements of Authority staff as a result of the COVID-19 pandemic
- Maintained the Authority's construction schedule throughout the COVID-19 pandemic
- Expanded Media Relations and increased communication through social media outlets

**2021 Goals:**

- Negotiate successor contracts with all employee unions (People)
- Streamline and monitor Authority policies and procedures for further efficiencies (People)
- Oversee the Human Resource Department updating of NJTA Policies and Procedures in conjunction with technology solutions to advance efficiencies and processes (People)
- Oversee the Authority's technology strategies, implementing changes as needed (Mobility)
- Oversee the ongoing efforts of the Health and Safety Committee as the Covid-19 pandemic enters 2021 and the plethora of challenges the Authority faces during the winter season (People)

<b>Executive Office Department Operating Budget</b>					
<i>(\$ In Thousands)</i>	<b>2019 Actuals</b>	<b>2020 Budget</b>	<b>2021 Budget</b>	<b>\$ Change from 2020 Budget</b>	<b>% Change from 2020 Budget</b>
Salaries	\$ 763	946	961	15	1.6%
Pension & Taxes	127	185	210	25	13.6%
Health Benefits	404	515	542	27	5.2%
Training, Seminars, & Meetings	11	9	11	2	-28.6%
Printing & Office Supplies	2	5	5	-	11.1%
Other Professional Services	89	60	60	-	-
Other Services	12	11	12	1	6.2%
<b>Total Operating Budget</b>	<b>\$ 1,408</b>	<b>1,731</b>	<b>1,801</b>	<b>70</b>	<b>4.0%</b>

Figure 87: Executive Offices Department Operating Budget (2019-2021)

**2021 Budget Highlights:**

- Salaries are increasing due to minor salary adjustments. Executive Office comprises 0.5% of total Authority salaries
- Pension and Benefits – see pages [54](#) & [55](#) for explanation

<b>Executive Offices Department Budgeted Positions</b>				
	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Change from 2020</b>
Administrative/Executive Assistant	1	1	1	-
Deputy Executive Director	1	1	1	-
Executive Director	1	1	1	-
Media Relations Coordinator	1	1	1	-
Media Relations Staff	-	2	2	-
Mobility Assignment	1	1	1	-
Secretary to the Authority	1	1	1	-
<b>Total</b>	<b>6</b>	<b>8</b>	<b>8</b>	<b>-</b>

Figure 88: Executive Offices Department Positions (2019-2021)

## Law

### Department Description:

The Law Department manages the legal affairs of the New Jersey Turnpike Authority which include, but are not limited to: matters involving Authority contract review and drafting, review and oversight of insurance coverages, real estate right of way and property related matters, employment, discipline and human resource issues, design, construction, maintenance and operational document approvals, risk management, labor negotiations/collective bargaining agreement oversight, toll violator enforcement, state and federal law compliance, EEO, SBE, Equal Pay Act, OPRA, subpoena compliance and evidence retrieval, E-ZPass enforcement issues, and bid and procurement issues. The Department also provides or supervises daily the provision of diverse legal advice to the Authority's Departments, supervising and managing outside counsel assigned matters, management of third-party administrators, insurance brokers, risk management consultants, coordination and oversight with NJSP operations, and liaisons with the MVC, OAL, OSC, Attorney General, GAU, and DOT on legal matters, and matters involving OCIP and worker's compensation. The Law Department Budget also includes the costs of various insurance including professional liability, OCIP and workers compensation. Major bridge and property insurance costs are budgeted in the Maintenance Division, although the Law Department is responsible for the managing the insurance program

### Department Organization:

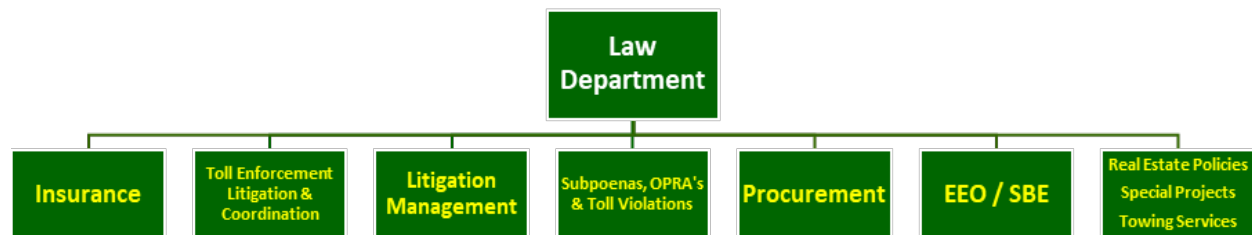


Figure 89: Law Department Organization Chart

### Senior Staff:

Director of Law, Acting: Ann Christine Monica

### 2020 Accomplishments:

- Completed initial reorganization of Law Department attorneys and staff to improve oversight, efficiency and coordination among all Authority Departments, external law firms and Authority legal professionals
- Coordinated the first comprehensive Toll Enhancement Program and major \$24 Billion-dollar Capital Improvement Project since 2012 for public and Board evaluation; this Capital Program involves over 30 significant projects on the Parkway and Turnpike
- Completed Public Hearings on Toll Enhancement and Long-Range Capital Plan in live and online public formats to receive citizen comments; Produced a comprehensive Hearing Report detailing the process, toll rate changes, capital project description, anticipated funding methods and detailing public input and Authority responses
- Continued to monitor Equal Pay Act Compliance in conjunction with General Counsel, initiating corrective actions when appropriate to ensure compliance with the 2018 EPA requirements
- Continued to provide advice and guidance to the Authority Executive Officers and Department Directors regarding diverse COVID-19 issues and minimizing disruptions of regular order of Authority operations and services where possible

- Successfully negotiated a major Electric Vehicle Charging Agreement that will enable electric vehicle patrons to have ready access to charging stations on Authority roadways
- Continued inter-departmental development of enhanced toll violator remedies to respond to escalating and repetitive toll violator activities, including improving enforcement of existing laws and regulations; finalizing NJSP improved and more efficient access to the Authority toll violation database; improving coordination with Authority external collections law firms pursuing violator litigations; developed efficient criteria and the methodology for referral of repetitive offenders for administrative, civil or if appropriate, criminal sanctions
- Continued pursuit of outstanding payments of insurance claim resulting from Delaware River Turnpike Bridge damage in January 2017 presently having recovered an additional \$615,945 in the reporting period
- Supervised resolution of numerous real estate right of way acquisitions and transfers with NJDOT, County and/or local municipalities as a result of the conclusion of the Turnpike Interchange 6-9 Widening and GSP Interchange 30-80 Widening in the Authority's \$7 Billion Capital Improvement Program
- Negotiated and oversaw renewals and rate adjustments of major Authority Insurance contracts; evaluation of claim intake and resolutions
- Negotiated and renewed HMS Host Capital Improvement Agreement

#### **2021 Goals:**

- Complete internal Authority restructuring to increase effectiveness of MVC suspensions and expand civil and criminal enforcement efforts against toll violators with a special emphasis on large repetitive violators. Expand personnel to assist in collection matters through staff additions as budgetarily feasible (Financial Strength)
- Continue to evaluate and mitigate the Authority's critical risk exposures identified by the Risk Management Committee (Financial Strength)
- Continue to identify, process and market surplus real estate (Financial Strength)
- Finalize installation of selected vendor software and new hardware to improve and integrate diverse Law Department functions, including but not limited to litigation oversight, case tracking, OPRAs, subpoenas, litigation holds and document preservation (People)
- Draft, review, and coordinate Board review of recommended new Authority Personnel Policy amendments with Human Resources Department (People)
- Work with Human Resources and other departments to increase workforce diversity; expand outreach; Continue to provide legal guidance to resolve inter-employee disputes (People)
- Continue coordination with Human Resources and the department EEO Officer to continue/emphasize Sexual Harassment and Diversity training. Provide on-site personal instruction on proper employee conduct standards and the effective avoidance of offending co-worker sensibilities through improper or insensitive conduct (People)
- Continue to work with the Risk Management Committee to advance a full review of the Authority's operations, for the purpose of strategic planning to prioritize the Authority's enterprise risk management goals, including a timetable for implementing all goals, actions and recommendations identified in the strategic plan (Financial Strength)
- Continue real estate acquisitions and transfers as a result of the Authority's \$7 Billion CIP (Mobility)
- Finalize negotiations with billboard service providers (Financial Stability)
- Finalize negotiations with towing service provider contracts (Mobility)

Law Department Operating Budget					
(\$ In Thousands)	2019 Actuals	2020 Budget	2021 Budget	\$ Change from 2020 Budget	% Change from 2020 Budget
Salaries	\$ 1,655	1,974	2,044	70	3.6%
Pension & Taxes	276	386	448	62	16.0%
Health Benefits	876	1,075	1,153	78	7.2%
Tuition	-	-	10	10	-
Training, Seminars, & Meetings	5	11	11	0	2.8%
Printing & Office Supplies	26	30	30	-	-
Insurance	4,582	5,448	5,993	545	10.0%
Legal Services	1,549	1,570	2,163	593	37.8%
Other Professional Services	98	293	292	(1)	-0.2%
Other Services	2	12	12	-	-
Taxes	45	104	106	2	2.1%
Equipment	-	9	9	0	4.7%
<b>Total Operating Budget</b>	<b>\$ 9,116</b>	<b>10,911</b>	<b>12,271</b>	<b>1,360</b>	<b>12.5%</b>

Figure 90: Law Department Operating Budget (2019-2021)

**2021 Budget Highlights:**

- Salaries are increasing due to higher salaried employees filling vacancies. Law comprises about 1% of total Authority salaries
- Pension and Benefits – see pages [54](#) & [55](#) for explanation
- Insurance costs are increasing based on prior experience and the overall increase in market rates
- Legal Services are increasing due to higher costs of outside counsel and for preliminary work related to the 2020 Long Range Capital Plan

Law Department Budgeted Positions				
	2019	2020	2021	Change from 2020
Administrative Assistant	1	2	2	-
Administrative Secretary	1	1	-	(1)
Attorney	6	7	4	(3)
Claims Coordinator	1	1	1	-
Compliance Manager	1	1	1	-
Confidential Secretary	1	-	-	-
Coordinator	1	1	1	-
Deputy Director of Law	1	1	1	-
Director of Law	1	1	1	-
Document Services Coordinator	1	1	2	1
Document Specialist Attorney	-	-	1	1
Equal Employment Opportunity Officer	1	1	1	-
Executive Secretary 1	-	-	1	1
Program Administrator	-	1	-	(1)
Secretary	1	1	1	-
Senior Attorney	-	-	2	2
Senior ETC Project Analyst	1	1	1	-
Senior Secretary	1	1	-	(1)
Toll Compliance & Enforcement Program Coordinator	-	-	1	1
<b>Total</b>	<b>19</b>	<b>21</b>	<b>21</b>	<b>-</b>

Figure 91: Law Department Positions (2019-2021)

## Procurement & Materials Management

### Department Description:

Procurement & Materials Management is tasked with procuring goods and services and managing the flow of inventory items in the most efficient and cost-effective manner. Objectives include enhancing all procurement and materials management processes; reducing spending on contracts; monitoring compliance with procurement laws, policies, and procedures; maintaining strong internal controls for the Authority's physical inventory of goods (centralized receiving); increasing revenue via surplus property sales and significantly reducing paper/manual processes.

The Department is separated into two primary functional areas: Procurement and Materials Management. Procurement is further divided into staff generally dedicated to types of commodities/services as well as methods of procurement. For example, most of technology goods and services are procured via the New Jersey State Contract system and most of maintenance equipment and services are procured via competitive (public bid/informal solicitations or request for proposals for professional services.) The Materials Management Section is separated into Inventory Control with one centralized warehouse and one satellite facility on the Southern end of the Turnpike; Supply Chain Management and Property Control and Surplus Personal Property Sales.



### Department Organization:

Figure 92: Procurement & Materials Management Department Organization Chart

### Senior Staff:

Director of Procurement and Materials Management: Dale Barnfield  
Supply Chain Manager: Janet Rzepka

### 2020 Accomplishments:

- To date, completed approximately 62 public bid solicitations which included 44 maintenance equipment bids totaling approximately \$7 million. Notable complex procurements such as Snow Removal and Salting Services for locations on both Roadways and a Comprehensive Maintenance Program HVAC equipment at all Authority facilities. Staff also completed 180 informal solicitations for goods and services under \$44,000; In addition, Procurement has completed or is currently conducting solicitations for 9 professional services contracts including Investment Banking Services, NJTA Employee Assistance

Program, Insurance and Risk Management Consulting, Occupational Healthcare and Physician Services and Workers Compensation Administrator

- Continued to emphasize and encourage participation of diverse vendors (S/M/W/VOB firms) in procurement contracts
- To date \$19,983,000 in contracts have been awarded by way of competitive solicitation – of that \$2,886,000 has been awarded to S/M/W/VOB firms
- Procurement, distribution and tracking of all Personal Protective Equipment (PPE) and other COVID-19 related items Authority wide to ensure all employees have the proper safety items needed to perform their job functions and maintain the daily operations of both roadways
- Successfully completed the 2020 toll ticket rate changeover in September
- Successfully added photos into the item master in PeopleSoft Financials
- Participation in the Authority's new Enterprise Asset Management (EAM) system project. This will be a multi-year, multi-departmental effort which includes the creation and approval of inventory stock requests, and systematically generated fuel and bulk fluid usage entries in the new EAM. These will be interfaced into PeopleSoft Financials then to High Jump (the warehouse management system) for processing

**2021 Goals:**

- Restructure or implementation of an electronic bidding platform for public bids as well as professional service contracts (requiring mandatory electronic submission for select contracts) by end of 2021 (Financial Stability)
- Commence searchable vendor database via the updated Authority website (People)
- Complete staffing re-assignments which were submitted as part of PMM Vision to strengthen and enhance workflow process. Fill all vacancies within the department (People)
- Creation of Inventory preparedness plan to ensure the Authority is well equipped with essential items needed to ensure the safety and well-being of all employees during any future crises (People)
- Continue the addition of photos to the item master in PeopleSoft Financials to assist users when ordering stock items. Mowing items along with auto related items will be the next areas of focus (People)
- Continued participation in the implementation of the Authority's new Enterprise Asset Management (EAM) system (Financial Stability)
- Commence the warehouse management system (HighJump) upgrade project. Along with required software updates, this project will focus on improvement needs to the current system as well as possibly reducing paper documentation by utilizing handheld devices to capture signature at time of delivery as well as improve delivery tracking visibility (Financial Stability)
- Implementation of an email notification process to external vendors to alert them when Purchase Orders (for goods) have not been received within a certain time frame (30 days). This automated process will drastically reduce the amount of time spent manually reviewing open orders and contacting vendors for order status (People)



<b>Procurement &amp; Materials Management Department Operating Budget</b>					
<i>(\$ In Thousands)</i>	<b>2019 Actuals</b>	<b>2020 Budget</b>	<b>2021 Budget</b>	<b>\$ Change from 2020 Budget</b>	<b>% Change from 2020 Budget</b>
Salaries	\$ 4,626	4,786	4,726	(60)	-1.3%
Allowances	10	-	-	-	-
Pension & Taxes	770	937	1,035	98	10.4%
Health Benefits	2,449	2,607	2,666	59	2.3%
Tuition	-	-	20	20	-
Training, Seminars, & Meetings	8	3	8	5	175.9%
Printing & Office Supplies	12	17	17	-	-
Operating Supplies	9	11	11	(0)	-1.8%
Other Materials	1	1	1	0	25.0%
Other Services	21	50	60	10	19.3%
Equipment Maintenance	0	0	3	3	1400.0%
Equipment	17	31	31	1	1.6%
Other Expenses	24	62	62	(0)	-0.5%
<b>Total Operating Budget</b>	<b>\$ 7,948</b>	<b>8,506</b>	<b>8,640</b>	<b>135</b>	<b>1.6%</b>

Figure 93: Procurement &amp; Materials Management Department Operating Budget (2019-2021)

**2021 Budget Highlights:**

- Salaries are decreasing as retirements will be filled with lower salaried employees. Procurement and Materials Management comprises about 3% of total Authority Salaries
- Pension and Benefits – see pages [54](#) & [55](#) for explanation
- Other Services are increasing as the department is now responsible for IT equipment disposal, which was formally budgeted in the ITS Department

<b>Procurement &amp; Materials Management Department Budgeted Positions</b>				
	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Change from 2020</b>
Assistant Buyer	1	1	1	-
Assistant Manager, Inventory Control	2	2	2	-
Buyer	5	5	4	(1)
Confidential Secretary	1	-	-	-
Deputy Director Procurement & Materials Management	-	1	1	-
Director Procurement & Materials Management	1	1	1	-
Expediter	1	1	1	-
Inventory and Materials Supervisor	6	7	7	-
Inventory Records Clerk	1	1	1	-
IT Procurement Contract Specialist	-	-	1	1
Maintenance Records Clerk	2	2	2	-
Office Services Assistant	-	-	-	-
Parts/Inventory Counter Clerk	14	14	14	-
Procurement Coordinator	1	-	-	-
Procurement Specialist	2	2	1	(1)
Property & Materials Supervisor	2	1	1	-
Property Control Manager	1	1	1	-
Property Control Specialist	1	1	1	-
Purchasing Assistant	-	1	1	-
Purchasing Manager	1	1	1	-
Senior Buyer	-	-	1	1
Senior Clerk	1	1	1	-
Senior Secretary Parkway	1	-	-	-
Senior Supply Chain Analyst	1	1	1	-
Storekeeper 2	2	2	2	-
Storekeeper 3	6	6	6	-
Supply Chain Manager	1	1	1	-
Tolls Inventory and Staffing Manager	1	1	1	-
Vendor Compliance Specialist	-	1	1	-
<b>Total</b>	<b>55</b>	<b>55</b>	<b>55</b>	<b>-</b>

Figure 94: Procurement &amp; Materials Management Department Positions (2019-2021)

## Human Resources & Office Services

### Department Description:

The Human Resources & Office Services Department supports the activities of the Authority by providing pre-employment applicant services and on-boarding new employees. Other duties include the training and development of the workforce, labor relations management, employee and retiree health care and benefits administration and the Authority worker's compensation program. The department also manages all printing services and ensures the timely delivery of all internal and external mail Authority wide.

### Department Organization:



Figure 95: Human Resources & Office Services Department Organization Chart

### Senior Staff:

Director of Human Resources: Mary-Elizabeth Garrity

Assistant Director of Human Resources: Kevin Burke

Assistant Director of Human Resources – Policy & Training: Brenda Coleman-Caldwell

### 2020 Accomplishments:

- Implemented an Applicant Tracking System
- Revised policies and established a new process for revision and adoption of policies
- Implemented and monitored a new evaluation system for non-aligned employees
- Increased training options for employees and enhanced delivery of training via e-learning
- Assigned senior human resources manager to Medical Section to update various workflow procedures and processes

### 2021 Goals:

- In collaboration with the EEO Office, create and implement diversity and inclusion training for the workforce (People)
- Implement on-boarding software (People)
- Implement policy and training software (People)
- Improve the physical layout of the medical section by reconfiguring existing office locations of staff to improve the flow of employee visitors and enhance safety protocols (People/Safety)
- Complete the Authority employee handbook (People)
- Implement the new occupational health provider contract for the Authority (People)
- Continue to update the Authority policy book to ensure adherence to the latest state and federal regulations and laws (People/Safety)
- Work in collaboration with the Information Technology Services Department in support of expanded telework options for the workforce (People)
- Continue to offer various training modules to employees and supervisory staff of the Authority to further the professional and technical development of the workforce (People)

<b>Human Resources &amp; Office Services Department Operating Budget</b>					
<i>(\$ In Thousands)</i>	<b>2019 Actuals</b>	<b>2020 Budget</b>	<b>2021 Budget</b>	<b>\$ Change from 2020 Budget</b>	<b>% Change from 2020 Budget</b>
Salaries	\$ 3,024	3,277	3,115	(162)	-4.9%
Allowances	6	7	7	0	4.5%
Pension & Taxes	504	642	683	41	6.4%
Employee Relations	32	32	39	7	21.9%
Health Benefits	1,601	1,785	1,757	(28)	-1.6%
Tuition	175	200	20	(180)	-90.0%
Training, Seminars, & Meetings	82	176	326	150	85.4%
Printing & Office Supplies	38	139	144	5	3.7%
Medical Supplies	5	10	14	4	40.0%
Operating Supplies	6	10	10	-	-
Other Materials	4	11	11	0	2.8%
Consulting Services	11	33	33	0	0.9%
Other Professional Services	90	390	613	223	57.2%
Environmental Services	1	4	5	1	22.0%
Other Services	2	4	12	8	200.0%
Building Maintenance	-	-	-	-	-
Equipment Maintenance	54	88	108	20	22.9%
Equipment Rental	1	1	1	0	11.1%
Equipment	10	69	34	(35)	-50.4%
<b>Total Operating Budget</b>	<b>\$ 5,644</b>	<b>6,876</b>	<b>6,932</b>	<b>56</b>	<b>0.8%</b>

Figure 96: Human Resources &amp; Office Services Department Operating Budget (2019-2021)

**2021 Budget Highlights:**

- Salaries are decreasing as retirements will be replaced with lower salaried employees, in addition to fewer temporary employees and no seasonal employees budgeted for 2021. Human Resources and Office Services comprise 2% of total Authority salaries
- Pension and Benefits – see pages 54 & 55 for explanation
- Tuition is decreasing as each individual department is now responsible for their employee's tuition reimbursement expenses
- Training, Seminars, & Meetings is increasing due to compliance/regulatory mandated training requirements for NJTA personnel Authority-wide
- Other Professional Services are increasing due to higher consulting fees for preparation of employee benefit procurement documents and review of proposal responses

<b>Human Resources &amp; Office Services Department Budgeted Positions</b>				
	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Change from 2020</b>
Administrative Assistant	-	1	1	-
Administrative Manager	1	1	-	(1)
Assistant Director of Human Resources	1	1	1	-
Assistant Director, HR Policy & Training	1	1	1	-
Assistant Office Services Manager	1	1	1	-
Benefits Administrator	1	1	1	-
Benefits Manager	1	1	-	(1)
Benefits Supervisor	-	-	1	1
Camera Person	1	1	1	-
Clerk 1 - 70	1	1	1	-
Computer Graphics Coordinator	1	1	1	-
Confidential Secretary	3	2	2	-
Deputy Director of Human Resources	-	1	1	-
Director of Human Resources	1	1	1	-
Employment Manager	1	1	1	-
Human Resources Clerk	1	2	2	-
Human Resources Coordinator	-	1	1	-
Human Resources Generalist	2	3	4	1
Human Resources Project Coordinator	1	1	1	-
Human Resources Specialist	1	1	1	-
Junior Printer	3	3	2	(1)
Labor Relations Generalist	-	-	1	1
Nurse	2	1	-	(1)
Office Services Assistant	2	2	2	-
Paste-Up / Graphic Artist	1	1	1	-
Print Shop Manager	1	1	1	-
Printer	1	1	1	-
Printing and Support Specialist	1	1	1	-
Senior Benefits Manager	1	1	2	1
Senior Clerk	1	1	1	-
Senior Human Resources Generalist	4	2	1	(1)
Senior Mail Clerk	2	2	2	-
Senior Nurse	1	1	2	1
Senior Printer	2	2	2	-
Senior Secretary Parkway	1	-	-	-
<b>Total</b>	<b>42</b>	<b>42</b>	<b>42</b>	<b>-</b>

Figure 97: Human Resources and Office Services Department Positions (2019-2021)

## Finance

### Department Description:

The Finance Department is responsible to prudently manage the finances of the Authority. The department ensures compliance with trust agreements including the bond resolution, manages the Authority's resources, structures financial plans to maintain debt service coverage, and works with all departments to optimize costs. The Finance Department leads the issuance of Turnpike Revenue Bonds to provide funding for capital needs.

Overall financial policies and reporting requirements are dictated by the terms of the Authority's Bond Resolution and mandated by statute or Executive Order or required by Securities & Exchange Commission (SEC) rules and Internal Revenue Service (IRS) code. Responsibility for meeting all financial reporting deadlines and financial covenants lies with the Finance Department. Financial policies approved by the Board of Commissioners and managed by the Finance Department include the Financial Management Principals and Guidelines, Debt Management Policy, Interest Rate Swap Management Plan, and Investment Policy. The Finance Department oversees and prudently manages a \$2.1 billion revenue budget, \$2 billion of investments, and \$11 billion of debt. In addition, the department monitors funding and spending for all the Authority's capital programs.

### Department Organization:

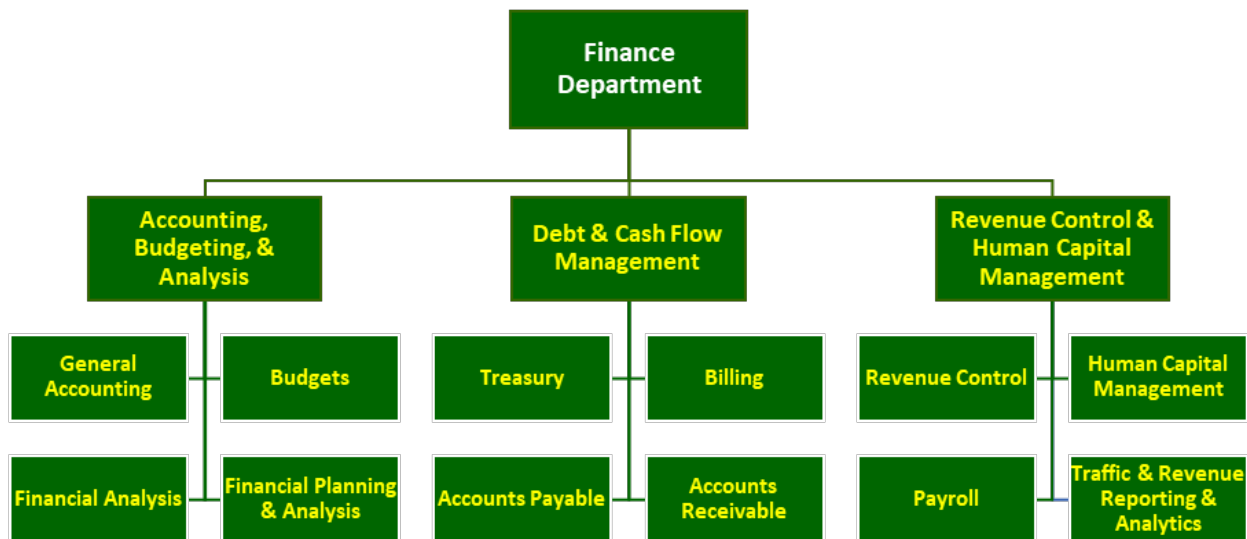


Figure 98: Finance Department Organization Chart

### Senior Staff:

Chief Financial Officer: Donna Manuelli  
 Comptroller: Mukta Puranik  
 Assistant Comptroller: Louis Polise  
 Assistant Comptroller: Erwin Luna  
 Assistant Comptroller: Stellan Callanan

**2020 Accomplishments:**

- Fitch has affirmed 'A' rating and maintains the Positive Outlook on April 2, 2020
- Partially refunded \$222 million of multiple Turnpike Revenue Bonds Series in April and June 2020. The refunding in April was to meet the mandatory tender date on the bonds to avoid increased interest costs, and the June refunding resulted in debt service savings by restructuring principal payment.
- Established measuring and reporting on the strategic plan financial goals on a quarterly basis
- Despite traffic and revenue losses due to the global pandemic, met all bond covenants and continued funding existing capital programs
- In response to the global pandemic, successfully implemented a work from home policy for department staff to protect staff without sacrificing productivity
- Received board approval on the 2020 Long-Range Capital Plan and the toll rate increase, which became effective September 13, 2020
- Worked with the Toll Collection Department to improve interface for manual toll collection to reduce errors in reporting
- Developed cohesive Strategic Plan goals report for all the departments of the Authority
- Voted on selection of Capital Program Management System vendor
- Established new Senior Manager and Co-Manager pool for underwriting services
- Converted all capital budgets to a rolling 5-year basis consistent with leading practice recommendations
- Developed proposal analysis model to assist in union contract negotiations

**2021 Goals:**

- Increase general reserve balance to no less than \$215 million which is 10% of 2021 budgeted revenue (Financial Stability)
- Further improve process efficiencies through automation (People)
- Further improve internal and external reporting (People)
- Establish funding for OPEB Trust (Financial Stability)
- Improve bond ratings to provide the lowest cost of capital (Financial Stability)
- Issue \$500 million of new money bonds in 2021 to fund the Long-Range Capital Plan approved in May 2020 (Financial Stability)
- Continue to review and update Finance Department policies and procedures. Implement leading practices and document current workflows (People)
- Continue to encourage employee training in finance and technology (People)
- Continue to improve cross-section collaboration to reach Finance department goals (People)
- Implement and integrate Capital Project Management System and Enterprise Asset Management systems to improve recording and reporting of capital expenditure (People)

<b>Finance Department Operating Budget</b>					
<i>(\$ In Thousands)</i>	<b>2019 Actuals</b>	<b>2020 Budget</b>	<b>2021 Budget</b>	<b>\$ Change from 2020 Budget</b>	<b>% Change from 2020 Budget</b>
Salaries	\$ 6,435	6,941	6,730	(211)	-3.0%
Allowances	4	2	3	1	30.4%
Pension & Taxes	1,071	1,360	1,474	114	8.4%
Health Benefits	3,406	3,781	3,796	15	0.4%
Tuition	-	-	20	20	-
Training, Seminars, & Meetings	2	2	13	11	828.6%
Printing & Office Supplies	28	31	34	3	9.3%
Operating Supplies	-	-	1	1	-
Other Materials	0	1	1	0	42.9%
Banking Services	828	937	945	9	0.9%
Consulting Services	663	771	1,080	309	40.0%
Other Professional Services	656	592	637	45	7.7%
Other Services	56	54	66	12	21.5%
Other Expenses	-	0	-	(0)	-100.0%
<b>Total Operating Budget</b>	<b>\$ 13,149</b>	<b>14,472</b>	<b>14,800</b>	<b>328</b>	<b>2.3%</b>

Figure 99: Finance Department Operating Budget (2019-2021)

**2021 Budget Highlights:**

- Salaries are decreasing due to a position reduction resulting from the transfer of a position to Internal Audit during 2020, and lower salaried employees replacing retirees. Finance comprises about 4% of total Authority salaries
- Pension and Benefits – see pages [54](#) & [55](#) for explanation
- Consulting Services are increasing based on an increase in estimates for existing projects, in addition to the addition of 3 new tasks for the General Consulting Engineers (annual budget development assistance, net revenue maximization strategies, and renewal and replacement funding)

Finance Department Budgeted Positions				
	2019	2020	2021	Change from 2020
Accounting Manager, General Ledger	1	1	1	-
Accounting Manager, Internal Control	1	1	1	-
Accounts Clerk	2	1	2	1
Accounts Payable Manager	1	1	1	-
Accounts Receivable Analyst	1	1	1	-
Accounts Receivable Manager	1	1	1	-
Administrative Assistant	1	1	2	1
Assistant Comptroller	1	3	3	-
Audit Data Inspector	1	1	1	-
Audit Data Specialist	2	2	2	-
Billings Manager/Administrator	1	1	1	-
Billings Supervisor	1	1	1	-
Budget Coordinator, Finance	1	1	1	-
Budget Supervisor	1	1	1	-
Cash Manager	1	-	1	1
Cash Management Supervisor	-	1	-	(1)
Cash Toll Audit Manager	1	-	-	-
Chief Financial Officer	1	1	1	-
Clerk 1, 70	1	2	1	(1)
Comptroller	-	1	1	-
Confidential Secretary	1	1	-	(1)
Coordinator - Bargaining	1	-	-	-
Data Analyst	3	3	1	(2)
Disbursements Clerk	1	1	-	(1)
Disbursements Section Supervisor	2	2	2	-
Documents Services Coordinator	-	1	1	-
Financial Analyst	2	2	4	2
Financial Manager	2	-	-	-
Financial Planning & Analytics Manager	-	-	1	1
Financial Resources Specialist	-	-	2	2
Human Capital Management Analyst	1	1	1	-
Human Capital Management Manager	1	1	1	-
Human Capital Management Specialist	2	2	2	-
Junior Accountant	4	5	5	-
Junior Accounting Analyst	15	14	10	(4)
Payroll Administrator/Manager	1	1	1	-
Payroll Analyst	2	2	2	-
Payroll Coordinator	2	2	3	1
Revenue Control Manager	-	1	1	-
Senior Accounts Clerk	1	-	-	-
Senior Accounting Analyst	-	2	1	(1)
Senior Accounts Payable Supervisor	1	1	-	(1)
Senior Budget Supervisor	2	2	2	-
Senior Clerk	5	2	4	2
Senior Contract Administrative Manager	-	1	-	(1)
Senior Data Analyst	1	1	2	1
Senior Document Services Coordinator	1	-	-	-
Senior F&B Document Specialist	1	1	1	-
Senior Financial Analyst	-	-	2	2
Senior Toll Audit Coordinator	3	3	3	-
Staff Accountant	3	3	3	-
Variance Analyzer Coordinator	2	2	1	(1)
Violations Analyst	-	1	-	(1)
<b>Total</b>	<b>80</b>	<b>80</b>	<b>79</b>	<b>(1)</b>

Figure 100: Finance Department Positions (2019-2021)



## Community & Government Relations

### Department Description:

The Community and Government Relations Department's primary responsibilities include both customer service and public policy. The department responds to and interacts with the public, the Governor's Office, the Department of Transportation key staff, legislators and their staff, and other agencies, as well as municipal and county leaders. The department has a legislative tracking list to follow and respond to any state legislative proposals that could impact the Authority. The Customer Service Division's goal is to provide the most effective and efficient customer service experience for our internal and external customers, partners and stakeholders. Together, the public policy component and customer service function work together as one team.

### Department Organization:

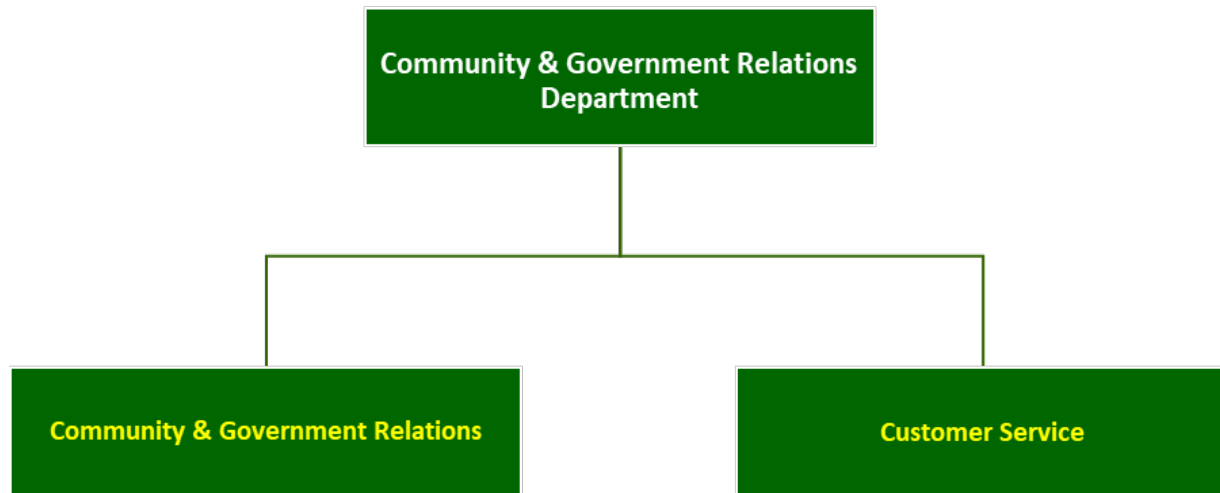


Figure 101: Community & Government Relations Department Organization Chart

### Senior Staff

Director of Community & Government Relations: Shawn Taylor

Customer Services Manager: Denise DeSante

### 2020 Accomplishments

- Promulgated changes to the NJ E-ZPass customer service experience by improving manual, voice and website processes
- Enhanced the information guides for the Parkway and Turnpike to provide useful and updated information to our customers
- Updated the Senior Citizen E-ZPass Discount Program Application
- Enhanced the current legislative referral database
- Assisted the Governor's Office and Legislators to amend legislation to benefit the Authority's stakeholders
- Appeared at local public meetings concerning Authority engineering projects
- Attended legislative hearings, voting sessions and budget hearings in Trenton
- Became Co-Chairs of the Towing Committee

### 2021 Goals

- Appear at local public meetings concerning Authority engineering projects (State of Good Repair)
- Communicate with Legislators concerning Authority engineering projects in their area (People)

- Attend legislative hearings and voting sessions in Trenton (People)
- Advocate internally and externally on transportation and labor policies affecting the Authority (People)
- Study relevant legislation and regulations, focusing on those with financial implications for the Authority (Financial Stability)
- Continue to work with our Tow Operators and strengthen our working relationship to provide better customer service (Financial Stability and People)
- Communicate with Legislators on new policy initiatives, such as “E-ZPass App” and other wide-ranging policy initiatives (People)

<b>Community &amp; Government Relations Department Operating Budget</b>					
<i>(\$ In Thousands)</i>	<b>2019 Actuals</b>	<b>2020 Budget</b>	<b>2021 Budget</b>	<b>\$ Change from 2020 Budget</b>	<b>% Change from 2020 Budget</b>
Salaries	\$ 918	847	975	128	15.2%
Allowances	-	1	1	1	100.0%
Pension & Taxes	153	166	214	48	29.1%
Employee Relations	2	5	5	-	0.0%
Health Benefits	486	461	550	89	19.3%
Training, Seminars, & Meetings	0	2	3	1	87.5%
Printing & Office Supplies	3	6	6	0	5.3%
<b>Total Operating Budget</b>	<b>\$ 1,562</b>	<b>1,486</b>	<b>1,754</b>	<b>268</b>	<b>18.0%</b>

Effective October 19, 2020 Patron Services became a part of the Operations Department. For Comparative purposes, Patron Services 2019 expenses and 2020 budget are reported with the Operations Department. Prior to this change, Community & Government Relations and Patron Services budgets were combined.

**Figure 102: Community & Government Relations Department Operating Budget (2019-2021)**

**2021 Budget Highlights:**

- Salaries are increasing to reflect the addition of an authorized position during 2020, as well as minor salary adjustments. Community and Government Relations comprises less than 1% of total Authority salaries
- Pension and Benefits – see pages [54](#) & [55](#) for explanation

<b>Community &amp; Government Relations Budgeted Positions</b>				
	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Change from 2020</b>
Administrative Secretary	1	1	1	-
Assistant Customer Service Manager	2	2	2	-
Community & Government Relations Specialist	1	1	2	1
Customer Service Manager	1	1	1	-
Director Community & Government Relations	1	1	1	-
Receptionist	2	2	2	-
Senior Clerk	1	1	1	-
<b>Total</b>	<b>9</b>	<b>9</b>	<b>10</b>	<b>1</b>

**Figure 103: Community & Government Relations Department Positions (2019-2021)**

## Internal Audit

### Department Description:

The Internal Audit Department reports functionally to the Audit Committee and the Authority's Commissioners and administratively to the Executive Director. The department is responsible for providing an independent appraisal of Authority financial and operating activities. In addition, the department is responsible for safeguarding the Authority's assets as well as its employees.

### Department Organization

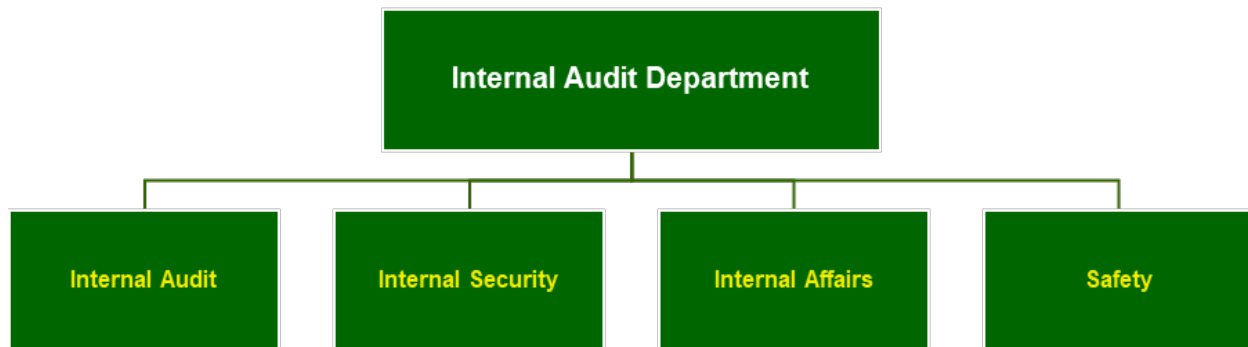


Figure 104: Internal Audit Department Organization Chart

### Senior Staff:

Director of Internal Audit: Donna Wilser  
 Deputy Director of Internal Audit: Tracey Walters  
 Senior Security Manager: Thomas McGowan  
 Safety Program Manager: Paul Butrico

### 2020 Accomplishments:

- Selected, procured and implemented new audit software which will facilitate an enterprise risk assessment as well as automated workpapers and reporting
- Conducted numerous Toll Plaza/Interchange inspections with the assistance of the New Jersey State Police as well as providing information and assistance to the New Jersey State Police for toll collection theft cases
- In response to COVID-19, updated the Authority's Crisis Management Plan, along with a COVID-19 preparedness plan, and updated Authority policies and procedures impacted by COVID-19
- Monitored, assessed and updated where necessary the Authority's Employee Health and Safety Program in response to COVID-19

### 2021 Goals:

- Continue to monitor the Authority's Employee Safety Program (Safety)
- Utilize the Authority's new audit software to provide an efficient and systematic risk assessment to develop a 2021 Audit Plan (Financial Stability)
- Continued installation and implementation of security enhancements and upgrades at Authority facilities (Safety)

<b>Internal Audit Department Operating Budget</b>					
<i>(\$ In Thousands)</i>	<b>2019 Actuals</b>	<b>2020 Budget</b>	<b>2021 Budget</b>	<b>\$ Change from 2020 Budget</b>	<b>% Change from 2020 Budget</b>
Salaries	\$ 2,556	2,727	2,675	(52)	-1.9%
Allowances	10	-	-	-	-
Pension & Taxes	426	534	585	51	9.6%
Health Benefits	1,353	1,485	1,509	24	1.6%
Tuition	-	-	10	10	-
Training, Seminars, & Meetings	3	5	3	(2)	150.0%
Printing & Office Supplies	6	6	17	11	165.6%
Operating Supplies	20	20	20	-	-
Other Professional Services	-	85	105	20	23.5%
Environmental Services	1	1	1	0	42.9%
Other Services	1	1	2	1	66.7%
Building Maintenance	71	95	95	-	-
Equipment Maintenance	330	555	625	70	12.6%
Equipment Rental	9	24	24	-	-
Equipment	33	40	41	1	2.0%
<b>Total Operating Budget</b>	<b>\$ 4,817</b>	<b>5,579</b>	<b>5,712</b>	<b>134</b>	<b>2.4%</b>

Figure 105: Internal Audit Department Operating Budget (2019-2021)

**2021 Budget Highlights:**

- Salaries are decreasing, although authorized positions are increasing by 2, as there are fewer temporary and seasonal employees in 2021, as well as vacancies from retirements are budgeted at lower salaries. Internal Audit comprises about 2% of total Authority salaries
- Pension and Health Benefits – see pages [54](#) & [55](#) for explanation
- Other Professional Services are increasing due to actuarial certifications for the Retiree Drug Subsidy (RDS) Program now being administered by the department
- Equipment Maintenance is increasing due to the increase in the annual C-Cure service contract

Internal Audit Department Budgeted Positions				
	2019	2020	2021	Change from 2020
Acting Director Internal Audit	1	-	-	-
Administrative Assistant/Secretary	-	1	2	1
Audit Manager	1	1	1	-
Auditor	3	3	4	1
Case Manager	1	-	-	-
Clerk	2	2	2	-
Confidential Secretary	2	1	-	(1)
Deputy Director Internal Audit	1	1	1	-
Director Internal Audit	-	1	1	-
Executive Administrative Assistant	-	-	1	1
Manager - Safety Programs	1	1	1	-
Safety Manager	2	3	3	-
Security Inspector	1	2	2	-
Security Officer	2	3	3	-
Security Supervisor	2	2	2	-
Senior Auditor	2	2	2	-
Senior Contract Administrative Manager	-	-	1	1
Senior Maintenance Budget Supervisor	1	1	1	-
Senior Safety Inspector	1	1	1	-
Senior Security Manager	1	1	1	-
Tolls Investigation Manager	1	1	1	-
Tolls Investigation Supervisor	2	2	1	(1)
<b>Total</b>	<b>27</b>	<b>29</b>	<b>31</b>	<b>2</b>

Figure 106: Internal Audit Department Positions (2019-2021)

## Debt Service

### Debt Limit

In accordance with the 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 203 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 Revenue of the Authority (Pledged Revenue minus Operating Expenses) for any period of twelve (12) consecutive calendar months out of the twenty-four (24) 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 Revenue 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 Revenue in the 5th such calendar year must equal or exceed the future maximum Aggregate Debt Service in any year

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 on all outstanding Authority bonds, the Maintenance Reserve Payments, the Special Project Reserve Payment and all deposits to the Charges Fund in such year; or
  - (ii) 1.20 times the Aggregate Debt Service on all outstanding Authority bonds in such year
- 2) **Additional Bonds Test - Refunding:** In accordance with Section 204 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 clauses (a) and (b) of the preceding subsection of this policy entitled “Additional Bonds Test – New Money Purposes”

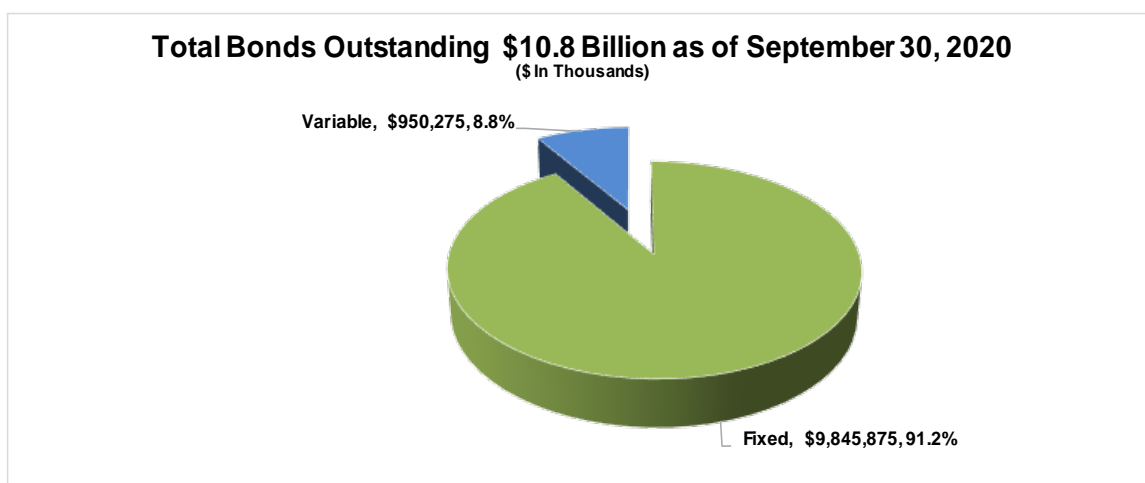


Figure 107: Total Outstanding Bonds

## Bond Indebtedness

Bond Indebtedness				
<i>(\$ In Thousands)</i>				
Bond Series	Amount Outstanding September 30, 2020	Mandatory Redemption / Sinking Fund Installments	Projected Debt Issuance	Amount Outstanding 12/31/2021
Series 2004 C-2	\$ 132,850	-	-	132,850
Series 2005 A	173,650	-	-	173,650
Series 2005 D1-D4	208,735	-	-	208,735
Series 2009 F	1,375,000	-	-	1,375,000
Series 2010 A	1,850,000	-	-	1,850,000
Series 2012A	15,000	-	-	15,000
Series 2012B	540,445	-	-	540,445
Series 2013A	295,520	-	-	295,520
Series 2013F	90,880	-	-	90,880
Series 2014A	1,000,000	-	-	1,000,000
Series 2014C	128,555	-	-	128,555
Series 2015A	26,225	-	-	26,225
Series 2015C	10,625	-	-	10,625
Series 2015D	10,600	-	-	10,600
Series 2015E	750,000	-	-	750,000
Series 2015F	72,350	-	-	72,350
Series 2015G	25,000	-	-	25,000
Series 2015H	48,235	-	-	48,235
Series 2016A	149,995	-	-	149,995
Series 2016B	75,025	-	-	75,025
Series 2016C	50,015	-	-	50,015
Series 2016D	50,000	-	-	50,000
Series 2017A	600,000	-	-	600,000
Series 2017B	646,765	-	-	646,765
Series 2017C	368,950	-	-	368,950
Series 2017D	179,375	-	-	179,375
Series 2017E	359,680	-	-	359,680
Series 2017F	164,885	(51,120)	-	113,765
Series 2017G	726,640	-	-	726,640
Series 2019A	449,110	-	-	449,110
Series 2020A	33,875	(21,750)	-	12,125
Series 2020B	24,935	-	-	24,935
Series 2020C	163,230	-	-	163,230
Series 2020 D*	-	-	500,000	500,000
Series 2021 A*	-	-	500,000	500,000
Premiums and discounts, net	500,245	-	-	436,230
<b>Total Bond Indebtedness</b>	<b>\$ 11,296,395</b>	<b>(72,870)</b>	<b>1,000,000</b>	<b>12,159,510</b>

\*Amounts are projected

Figure 108: Bond Indebtedness

## Aggregate Bond Debt Service Requirement

Aggregate Bond Debt Service Requirements			
<i>(\$ In Thousands)</i>			
Fiscal Year Ending 12/31	Principal	Interest <sup>(1)</sup>	Total Debt Service <sup>(1) (2)</sup>
2020 <sup>(1)</sup>	\$ 72,870	585,439	658,309
2021 <sup>(1)</sup>	278,700	584,254	862,954
2022	289,050	572,430	861,480
2023	304,350	560,059	864,409
2024	355,750	546,529	902,279
2025	381,810	528,245	910,055
2026	400,425	509,633	910,058
2027	420,160	489,908	910,068
2028	435,905	469,144	905,049
2029	457,520	447,518	905,038
2030	479,410	425,596	905,006
2031	502,095	402,882	904,977
2032	526,500	378,440	904,940
2033	551,330	353,589	904,919
2034	543,163	327,512	870,675
2035	541,447	299,187	840,634
2036	555,979	266,097	822,076
2037	598,532	228,201	826,733
2038	631,404	188,569	819,973
2039	674,732	145,217	819,949
2040	773,078	98,830	871,908
2041	184,080	46,819	230,899
2042	192,250	38,654	230,904
2043	117,400	30,123	147,523
2044	123,095	24,426	147,521
2045	129,070	18,452	147,522
2046	134,950	12,573	147,523
2047	141,095	6,426	147,521
<b>Total Bond Debt Service</b>	<b>\$ 10,796,150</b>	<b>8,584,752</b>	<b>19,380,902</b>

## Notes:

(1) Does not agree to the 2020 Debt Service Fund Budget as the budget includes debt service on a projected \$200 million new money issuance in July 2020 (which did not occur) and does not include savings from the June 2020 refunding. Does not agree to the 2021 Debt Service Fund Budget as the budget includes debt service on a projected \$500 million new money bond issue in November 2020 and a \$500

(2) Total Debt Service does not include debt service from the potential \$500 million 2020D & \$500 million 2021A new money issuance

Figure 109: Aggregate Bond Debt Service Requirement



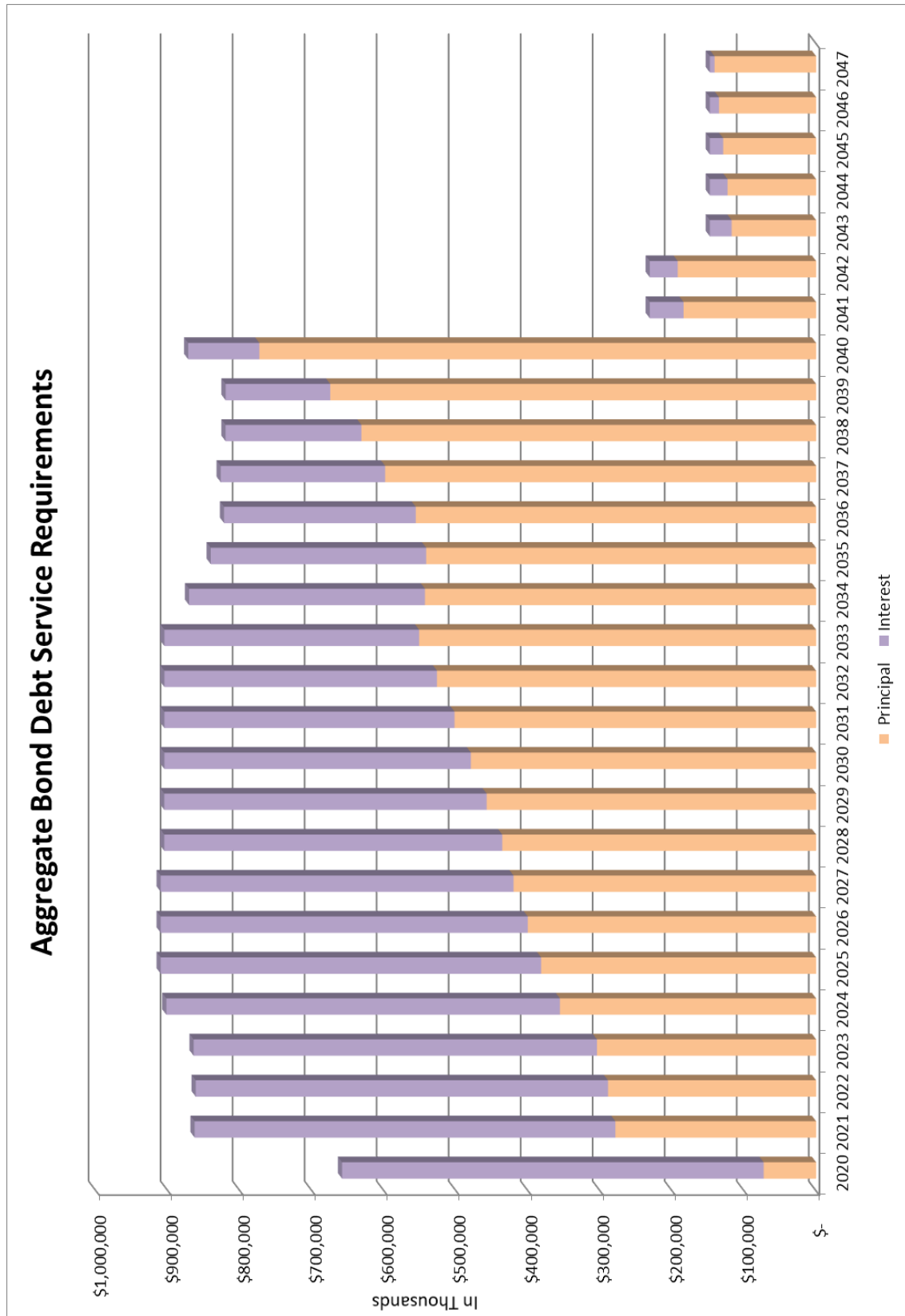


Figure 110: Aggregate Bond Debt Service Requirement Graph

## Debt Service Fund Budget

Debt Service Fund Interest Budget					
(\$ In Thousands)	2019 Actual	2020 Budget	2021 Budget	\$ Change from 2020 Budget	% Change from 2020 Budget
2004 Series C-2	\$ 7,307	7,307	7,307	-	-
2005 Series A	9,117	9,117	9,117	-	-
2005 Series D1-4	10,959	10,959	10,959	-	-
2009 Series F	101,943	101,943	101,943	-	-
2009 Series H	1,835	-	-	-	-
2010 Series A	131,387	131,387	131,387	-	-
2012 Series A	581	581	581	-	-
2012 Series B	31,850	28,676	26,572	(2,104)	-
2013 Series A	13,419	13,182	12,874	(308)	-
2013 Series F	4,357	4,357	4,357	-	-
2014 Series A	48,890	48,890	48,890	-	-
2014 Series C	9,937	7,482	6,428	(1,054)	-
2015 Series A (1)(2)(3)	3,388	2,869	1,437	(1,432)	-
2015 Series B (1)(3)	1,896	1,281	-	(1,281)	-
2015 Series C (1)(3)	1,728	1,171	420	(751)	-
2015 Series D (1)(3)	1,730	1,172	419	(753)	-
2015 Series E	36,413	36,413	36,413	-	-
2015 Series F (1)(3)	2,956	2,926	2,926	-	-
2015 Series G (1)(3)	993	988	988	-	-
2015 Series H (1)(3)	1,951	1,951	1,951	-	-
2016 Series A	7,312	7,312	7,312	-	-
2016 Series B (1)(3)	2,975	3,060	3,060	-	-
2016 Series C (1)(3)	2,007	2,040	2,040	-	-
2016 Series D (1)(3)	2,023	1,995	1,995	-	-
2017 Series A	29,409	29,409	29,409	-	-
2017 Series B	31,304	31,304	31,304	-	-
2017 Series C (1)(3)	18,878	18,967	17,566	(1,401)	-
2017 Series D (1)(3)	7,316	7,340	7,340	-	-
2017 Series E	17,984	17,983	17,984	1	-
2017 Series F	5,343	5,306	4,010	(1,296)	-
2017 Series G	30,480	30,480	30,480	-	-
2019 Series A	18,410	20,456	20,456	-	-
2020 Series A	-	-	448	448	-
2020 Series B	-	-	623	623	-
2020 Series C	-	-	5,261	5,261	-
2020 New Money - Series D (4)	-	5,000	28,900	23,900	-
2021 New Money - Series A (5)	-	-	28,900	28,900	-
<b>Total DS Interest Fund</b>	<b>\$ 596,078</b>	<b>593,304</b>	<b>642,057</b>	<b>48,753</b>	<b>8.2%</b>

Debt Service Fund Principal Budget					
(\$ In Thousands)	2019 Actual	2020 Budget	2021 Budget	\$ Change from 2020 Budget	% Change from 2020 Budget
2009 Series H	\$ 36,695	-	-	-	-
2012 Series B (6)	63,485	42,070	32,605	(9,465)	-
2013 Series A (6)	4,795	6,165	4,810	(1,355)	-
2014 Series C (6)	49,085	21,090	21,840	750	-
2015 Series A (6)	28,200	38,075	6,575	(31,500)	-
2015 Series B	16,125	21,750	-	(21,750)	-
2015 Series C (6)	14,100	19,025	3,300	(15,725)	-
2015 Series D (6)	14,100	19,050	3,275	(15,775)	-
2015 Series F	-	-	72,350	72,350	-
2015 Series G	-	-	8,040	8,040	-
2015 Series H	-	-	48,235	48,235	-
2016 Series B	-	-	-	-	-
2016 Series C	-	-	-	-	-
2016 Series D	-	-	16,075	16,075	-
2017 Series C (6)	-	31,050	32,775	1,725	-
2017 Series D	-	-	16,075	16,075	-
2017 Series F	1,620	51,120	8,995	(42,125)	-
2020 Series A	-	-	3,750	3,750	-
<b>Total DS Principal Fund</b>	<b>\$ 228,205</b>	<b>249,395</b>	<b>278,700</b>	<b>29,305</b>	<b>11.8%</b>

Debt Service Fund Total Payment Budget					
(\$ In Thousands)	2019 Actual	2020 Budget	2021 Budget	\$ Change from 2020 Budget	% Change from 2020 Budget
<b>Total Debt Service Fund</b>	<b>\$ 824,283</b>	<b>842,699</b>	<b>920,757</b>	<b>78,058</b>	<b>9.3%</b>

- (1) Variable rate debt with an associated Interest Swap Agreement has interest included at the fixed swap rate  
(2) Interest on the \$5,000,000 unhedged portion is calculated at the maximum rate of 12%  
(3) Includes the fixed credit spread as interest expense  
(4) Budget 2021 assumes new money issuance in October/November 2020 of \$500 million to fund 2019 CIP with interest at 5.78%  
(5) Assumes new money issuance in January 2021 of \$500 million to fund the 2021-2025 CIP with interest at 5.78%  
(6) In June 2020, issued Series 2020BC bonds to refund certain maturities of outstanding bonds. This resulted in reduction of debt service obligation by restructuring principal payments due on 1/1/2021 to 1/1/2026 at the earliest

Figure 111: Debt Service Fund Budget

The Debt Service Fund Budget is increasing in 2021, mainly due to an almost \$50 million increase in interest expense. The 2021 budget provides for a full year of interest payments on the assumed new money issuance in late 2020 of \$500 million for the 2019 CIP and a new money issuance in 2021 of \$500 million to fund the 2021-2025 CIP. There is an increase in principal payments on existing bonds of about \$30 million when comparing the 2021 budget to the 2020 budget. When comparing 2021 budget to 2020 actual, principal payments are increasing by about \$206 million, as principal payments were refinanced in June 2020.

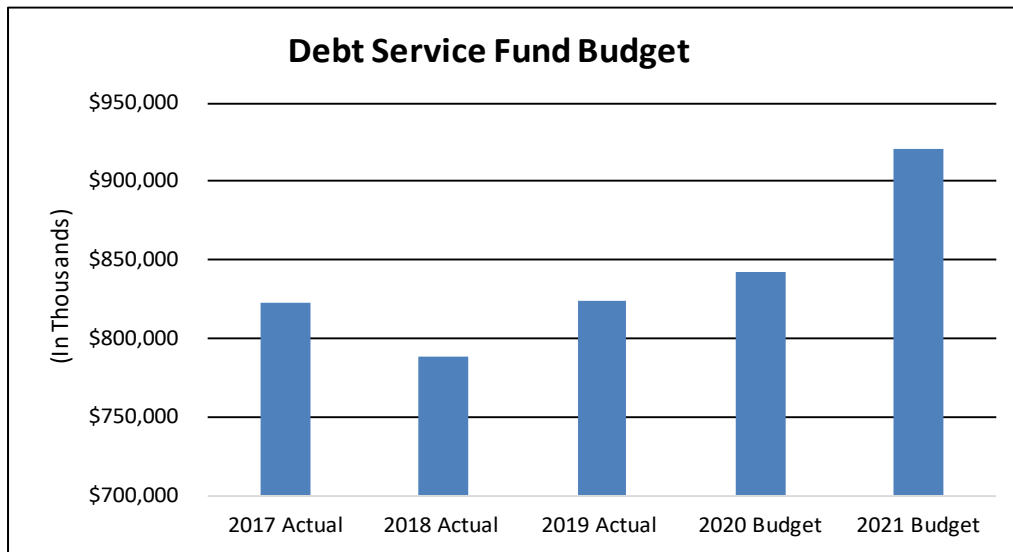


Figure 112: Debt Service Fund Budget Graph (2017-2021)

Debt Service Fund Balance					
(\$ In Thousands)	2019 Actual	2020 Est/Actual	2021 Budget	\$ Change from 2020 Est/Actual	% Change from 2020 Est/Actual
Beginning Balance	\$ 201,025	228,205	72,870	(155,335)	-
Revenue Transfers	824,283	659,470	920,757	261,287	-
Interest Expense	(596,078)	(586,600)	(642,057)	(55,457)	-
Principal Payments	(201,025)	(228,205)	(72,870)	155,335	-
<b>Ending Balance</b>	<b>\$ 228,205</b>	<b>72,870</b>	<b>278,700</b>	<b>205,830</b>	<b>282.5%</b>

Figure 113: Debt Service Fund Balance (2019-2021)

### Debt Reserve Fund

No spending budget is required for the Debt Reserve Fund, as no draws on the Debt Reserve Fund are anticipated for 2021. The Debt Reserve Fund is expected to increase in 2021, as bond proceeds will be deposited to meet increased Debt Reserve requirements from the anticipated additional bonds to be issued.

Debt Reserve Fund Balance					
(\$ In Thousands)	2019 Actual	2020 Budget(1)	2021 Budget(2)	\$ Change from 2020 Budget	% Change from 2020 Budget
Beginning Balance	\$ 598,756	598,976	613,154	-	-
Fair Market Value Adjustment	220	986	-	-	-
Bond Proceeds	-	13,192	28,900	-	-
<b>Ending Balance</b>	<b>\$ 598,976</b>	<b>613,154</b>	<b>642,054</b>	<b>28,900</b>	<b>4.7%</b>

(1) Maximum debt service is expected to increase from potential bond issuance of \$500 million in 2020

(2) Maximum debt service is expected to increase from the potential bond issuance of \$500 million in 2021

Figure 114: Debt Reserve Fund Balance (2019-2021)

## General Reserve Spending Budgets

### General Reserve Fund

The total 2021 Budget for the General Reserve Fund is \$395.8 million, which is a decrease of \$19.7 million from the 2020 Budget. The 2021 General Reserve Fund Budget includes \$32.3 million for state of emergency events, and \$15.0 million in reserves for Other Post-Employment Benefits (OPEB). The 2021 Budget includes both existing payments on the State Transportation Projects Funding Agreement through its expiration on 6/30/21 as well as \$187.5 million (6 months of an annual \$375.0 million) for the anticipated New State Transportation Projects Funding Agreement to begin on 7/1/21.

In addition to a net spending budget of \$342.3 million, the 2021 General Reserve Budget includes a net transfer budget of \$53.5 million. The \$63.4 million transfer to the Construction Fund will provide funding for 2021 spending in the Supplemental Capital Program. The Funding for Chargebacks represents the transfer to cover internal costs allocated to capital projects that are bond funded. Slightly offsetting these transfers out of General Reserve are the Live Nation Contribution and the HMS Host and Sunoco repayment. The Live Nation Contribution represents Live Nations contractual obligation to provide 50% of the funding for the Garden State Arts Center Rehabilitation project included in the 2021 Supplemental Capital Program, and the HMS Host and Sunoco repayment is the reimbursement to the Authority of advanced funding in 2020 to complete the curb - inward service area renovations.

General Reserve Fund Budget					
	2019 Actual	2020 Budget	2021 Budget	\$ Δ from 2020 Budget	% Δ from 2020 Budget
(\$ In Thousands)					
<b>Expenditures</b>					
Extraordinary Events	\$ 12,852	32,295	32,295	-	0.0%
Claim Settlements	4,000	4,000	-	(4,000)	-100.0%
Other Post-Employment Benefits	15,000	15,000	15,000	-	0.0%
Bond Cost of Issuance	-	1,000	1,000	-	0.0%
Miscellaneous Expenditures	-	50	50	-	0.0%
Transportation Trust Fund	22,000	22,000	22,000	-	0.0%
Feeder Road Reimbursement NJDOT	3,500	2,500	2,500	-	0.0%
State Transportation Projects Funding Agreement 2016-2021	154,000	129,000	77,000	(52,000)	-40.3%
North Portal Bridge	-	25,000	-	(25,000)	-100.0%
State Transportation Projects Funding Agreement - New	-	-	187,500	187,500	0.0%
OCIP Claim Payment	-	11,000	-	(11,000)	-100.0%
Reimbursable Expenditures	3,126	4,500	1,600	(2,900)	-64.4%
Contingency	-	5,000	5,000	-	0.0%
<b>Total GRF Expenditures</b>	<b>\$ 214,478</b>	<b>251,345</b>	<b>343,945</b>	<b>92,600</b>	<b>36.8%</b>
Recoveries from Reimbursable Expenditures	\$ -	-	(1,600)	(1,600)	0.0%
<b>Total GRF Expenditures Net of Recoveries</b>	<b>\$ 214,478</b>	<b>251,345</b>	<b>342,345</b>	<b>91,000</b>	<b>36.2%</b>
<b>Transfers</b>					
Funding for Supplemental Capital Spending	\$ 73,871	143,936	63,380	(80,556)	-56.0%
Funding for Chargebacks	-	-	10,000	10,000	0.0%
Funding for Passaic River Bridge	25,000	25,000	-	(25,000)	-100.0%
Live Nation Contribution	(4,750)	(4,750)	(2,750)	2,000	-42.1%
HMS Host and Sunoco	-	-	(17,134)	(17,134)	0.0%
<b>Total Transfers - Net</b>	<b>\$ 94,121</b>	<b>164,186</b>	<b>53,496</b>	<b>(110,690)</b>	<b>-67.4%</b>
<b>Total General Reserve Fund</b>	<b>\$ 308,599</b>	<b>415,531</b>	<b>395,841</b>	<b>(19,690)</b>	<b>-4.7%</b>

Figure 115: General Reserve Fund Budget (2019-2021)

<b>Condensed General Reserve Fund Budget by Functional Area</b>					
<i>(\$ In Thousands)</i>	<b>2019 Actual</b>	<b>2020 Budget</b>	<b>2021 Budget</b>	<b>\$ Δ from 2020 Budget</b>	<b>% Δ from 2020 Budget</b>
<b>Operating</b>					
Maintenance of Infrastructure	\$ 15,978	50,738	42,251	(8,487)	-16.7%
Toll Collection	-	4,321	5,720	1,399	32.4%
Traffic Control & State Police	-	5,203	968	(4,235)	-81.4%
Technology	-	629	818	189	30.0%
General & Administrative	19,000	10,954	2,588	(8,366)	-76.4%
<b>Total Operating</b>	<b>\$ 34,978</b>	<b>71,845</b>	<b>52,345</b>	<b>(19,500)</b>	<b>-27.1%</b>
<b>Non-Operating</b>					
Bond Cost of Issuance	\$ -	1,000	1,000	-	0.0%
State Payments	179,500	178,500	289,000	110,500	61.9%
Loss on Disposal of Capital Assets	-	-	-	-	0.0%
<b>Total Non-Operating</b>	<b>\$ 179,500</b>	<b>179,500</b>	<b>290,000</b>	<b>110,500</b>	<b>61.6%</b>
<b>Total General Reserve Spending*</b>	<b>\$ 214,478</b>	<b>251,345</b>	<b>342,345</b>	<b>91,000</b>	<b>36.2%</b>

\* Does not include net transfers from General Reserve

Figure 116: Condensed General Reserve Fund Budget by Functional Area (2019-2021)

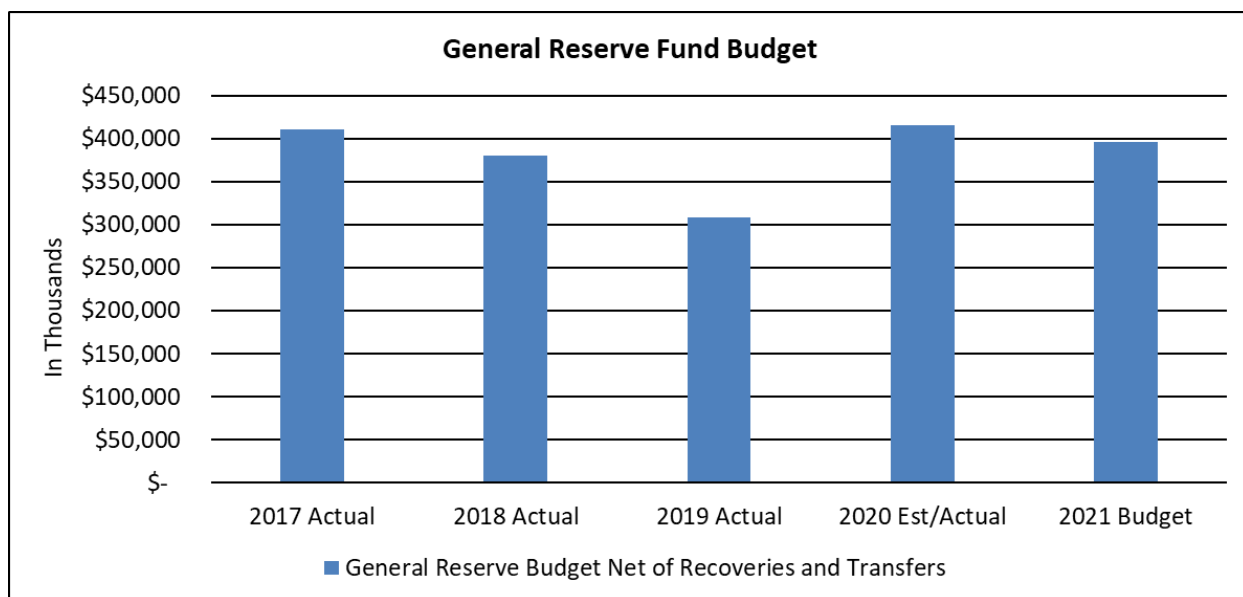


Figure 117: General Reserve Fund Budget Graph (2016-2021)

The graph below depicts the General Reserve Fund ending balance for the past five years as compared to the targets in the Authority's Financial Management Principles and Guidelines. The General Reserve Fund balance has exceeded the target each year and is projected to exceed the target again in 2021. The General Reserve Fund balance in 2021 is expected to be unchanged from the estimated balance at December 31, 2020. Although General Reserve Fund spending is budgeted to increase in 2021 as compared to 2020 estimated/actual spending, the budgeted transfer in of excess net revenue in 2021 is also higher than the 2020 estimated/actual excess net revenue which offsets the increase in spending.

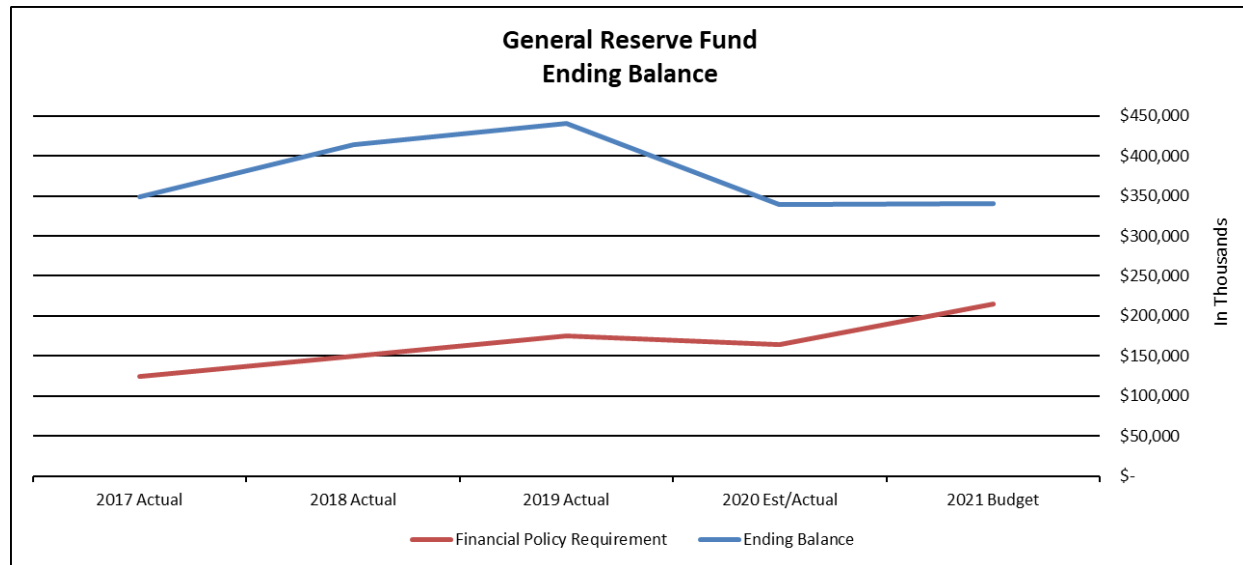


Figure 118: General Reserve Fund Ending Balance Graph (2017-2021)

General Reserve Fund Balance					
	2019	2020	2021	\$ Δ from	% Δ from
(\$ In Thousands)	Actual	Est/Actual	Budget	2020 Est/Actual	2020 Est/Actual
Beginning Balance	\$ 414,339	440,129	339,626	(100,503)	-22.8%
Transfer from Revenue Fund	334,022	241,318	396,387	155,069	64.3%
GRF Expenditures	(214,111)	(226,992)	(342,345)	(115,353)	50.8%
Transfer to Construction Fund - Net	(94,121)	(114,829)	(53,496)	61,333	-53.4%
<b>Ending Balance</b>	<b>\$ 440,129</b>	<b>339,626</b>	<b>340,172</b>	<b>546</b>	<b>0.2%</b>

- Totals may not add due to rounding

Figure 119: General Reserve Fund Balance (2019-2021)

<b>General Reserve Fund</b>	
<b>Category</b>	<b>Description</b>
Extraordinary Events	To pay for the cost of major weather or other events when there is a declared state of emergency.
Other Post-Employment Benefits	To fund reserve for OPEB, representing a portion of the additional funding necessary to meet the difference between actuarially calculated ARC and pay-go expenses paid through the Operating Expense budget.
Bond Cost of Issuance	To pay rating agency, legal, trustee, financial advisor, general consulting & traffic engineer fees, etc. for cost of issuance expenses related to variable rate debt.
Miscellaneous Expenditures	To fund reserve for potential arbitrage payments due to the IRS on the Authority's bonds based upon the arbitrage consultant's annual calculations.
Transportation Trust Fund	Under an agreement dated 4/27/84, Authority pays the Treasurer of State of New Jersey. These funds are to be used by the State of New Jersey, or the Transportation Trust Fund, to pay or provide for the development of State transportation projects, in effort to further satisfy the overall transportation needs of the State. The agreement expires when all obligations of the Transportation Trust Fund have been satisfied.
Feeder Road Reimbursement NJDOT	Cost Sharing Agreement expiring 6/30/23, providing reimbursement by the Authority to the NJDOT for reconstruction, maintenance and repair of Feeder Roads at twenty New Jersey Turnpike Interchanges and thirty-six Garden State Parkway Interchanges.
State Transportation Projects Funding Agreement 2016-2021	The Authority makes annual payments to the State of New Jersey under a five-year Transportation Projects Funding Agreement for the development of transportation purposes. The agreement expires in June 2021.
State Transportation Projects Funding Agreement - New	New anticipated agreement starting June 2021, replacing expiring State Transportation Projects Funding Agreement 2016-2021.
PTC - Delaware River Bridge	Replacement of the suspenders and suspender protection in the main arch truss portion of the bridge.
PTC - Delaware River Bridge - Reimbursable	Reimbursement to be received from the Pennsylvania Turnpike.
PTC - Repaint and Improvements	Bridge Painting and seismic retrofit, structural steel repairs, catwalk repairs, and installation of security gates.
PTC - Repaint and Improvements - Reimbursable	Reimbursement to be received from the Pennsylvania Turnpike.
Contingency	To fund any unanticipated emergency work.

Figure 120: General Reserve Fund Project Descriptions

## Capital Spending Program

The Authority's 2021 Annual Budget also includes its Capital Spending Program Budget presented on a rolling five-year basis for the first time in 2021, with spending included for the years 2021-2025. The Capital Spending Program Budget includes revenue funded projects as well as bond funded projects. The revenue funded capital projects, referred to as the Capital Budget, include projects in the Maintenance Reserve Fund, Special Project Reserve Fund and Supplemental Capital Program. The bond funded capital projects, referred to as the Construction Fund, include – (i) 2021 – 2025 Capital Improvement Program, (ii) 2019 Capital Improvement Program and (iii) 2008 \$7 Billion Capital Improvement Program. These capital projects are presented on a rolling five-year (2021-2025) spending basis along with their respective total project budgets. Each year a new rolling five-year spending plan will be approved with the changes, if any, to the total project budgets, as a part of the annual budget approval.

The 2021 rolling five-year Capital Spending Program Budget includes \$5.2 billion to be spent during 2021-2025, or an average of over \$1.0 billion/year. Of this, 38% is budgeted to be spent on Bridge Construction, Preservation and Security, while 10% each is budgeted to be spent on Capacity Enhancements on both roadways, Pavement Resurfacing and Drainage Structures, all combining for a total of 68% of budgeted spending. Approximately 30%, or \$1.5 billion, will be funded by revenue, while 70%, or \$3.7 billion will be funded by bond proceeds.

2021 - 2025 Rolling 5-Year Capital Spending Plan						
Revenue Funded and Bond Funded						
Funding Source						
	(\$ In Thousands)		Spending Plan			
Revenue Funded	2021	2022	2023	2024	2025	Total
Maintenance Reserve Fund	\$ 185,292	158,198	246,342	226,750	226,750	1,043,332
Special Project Reserve Fund	73,912	51,347	49,629	49,823	50,639	275,348
Supplemental Capital Program Fund	73,380	38,100	30,800	30,035	29,000	201,315
<b>Total Revenue Funded</b>	<b>\$ 332,584</b>	<b>247,645</b>	<b>326,771</b>	<b>306,608</b>	<b>306,389</b>	<b>1,519,995</b>
<b>Bond Funded</b>						
2021-2025 Capital Improvement Program	227,356	620,975	679,365	629,849	634,425	2,791,970
2019 Capital Improvement Program	268,135	168,910	98,198	55,313	15,770	606,325
2008 \$7 Billion Capital Improvement Program	146,034	55,873	34,088	39,367	14,957	290,319
<b>Total Bond Funded</b>	<b>\$ 641,525</b>	<b>845,758</b>	<b>811,651</b>	<b>724,529</b>	<b>665,151</b>	<b>3,688,614</b>
<b>Total Capital Spending</b>	<b>\$ 974,109</b>	<b>1,093,403</b>	<b>1,138,422</b>	<b>1,031,136</b>	<b>971,540</b>	<b>5,208,610</b>

Percentage Revenue Funded	34%	23%	29%	30%	32%	29%
Percentage Bond Funded	66%	77%	71%	70%	68%	71%

Figure 121: 2021-2025 Rolling 5-Year Spending Plan Fund Source (Revenue Funded and Bond Funded)



2021 - 2025 Rolling 5-Year Capital Spending Plan By Project Type						
Revenue Funded and Bond Funded						
(\$ In Thousands)	Spending Plan					Total
	2021	2022	2023	2024	2025	
Capitalized Project by Category						
Roadway						
Bridge Construction, Preservation & Security	\$ 341,802	451,454	447,974	385,630	375,187	2,002,047
Capacity Enhancements - Turnpike	24,380	94,268	146,603	118,303	115,764	499,318
Capacity Enhancements - Parkway	3,057	2,999	1,144	3,331	9,924	20,455
Pavement Resurfacing	98,471	60,000	120,000	120,000	120,000	518,471
Interchanges	58,514	17,825	9,974	11,929	13,001	111,243
Resiliency	1,000	2,300	13,600	57,200	66,400	140,500
Concrete Barrier	23,130	9,114	8,322	23,379	-	63,945
Drainage Structures	69,736	144,712	105,187	44,156	52,177	415,968
Roadway Lighting	52,931	43,622	36,280	25,603	34,609	193,045
Other Roadway Improvements	86,630	111,322	106,661	118,118	80,981	503,713
<b>Total Roadway</b>	\$ 759,651	937,617	995,745	907,649	868,043	4,468,705
Non Roadway						
Facilities	\$ 66,781	37,891	32,807	32,121	32,121	201,721
Fleet	22,797	23,005	23,745	24,523	25,339	119,408
Service Areas & Arts Center	22,449	18,408	15,750	8,200	5,200	70,006
Technology Improvements	88,459	71,782	65,174	53,444	35,637	314,497
<b>Total Non Roadway</b>	\$ 200,486	151,086	137,476	118,288	98,297	705,633
<b>Total Capitalized Projects</b>	\$ 960,137	1,088,703	1,133,221	1,025,937	966,340	5,174,338
Expensed Project by Functional Area						
Maintenance of Infrastructure	\$ 1,533	200	200	200	200	2,333
Traffic Control & State Police	2,500	1,000	1,000	1,000	1,000	6,500
Technology	8,440	2,500	3,000	3,000	3,000	19,940
General & Administrative	1,500	1,000	1,000	1,000	1,000	5,500
<b>Total Expensed Projects</b>	\$ 13,973	4,700	5,200	5,200	5,200	34,272
<b>Total Spending (Capitalized+Expensed)</b>	\$ 974,110	1,093,402	1,138,421	1,031,137	971,540	5,208,610

Figure 122: 2021-2025 Rolling 5-Year Capital Spending Plan by Project Type (Revenue Funded and Bond Funded)

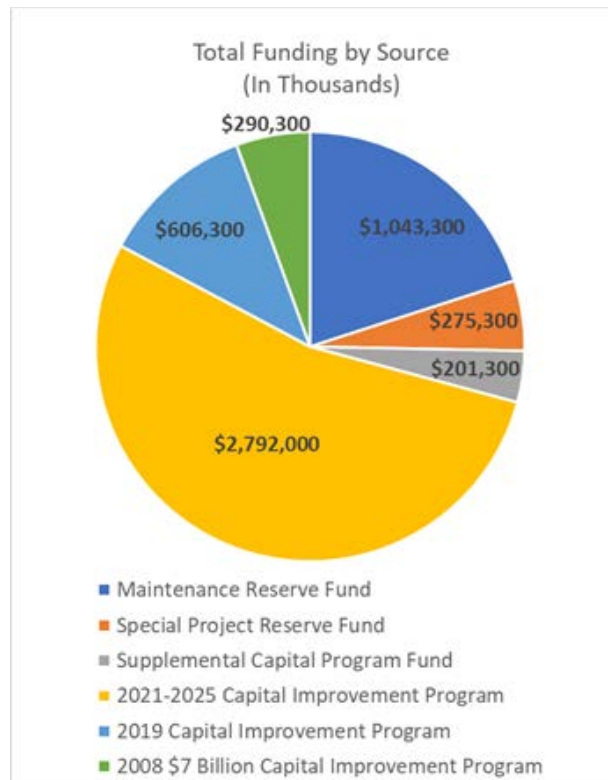


Figure 123: Total Funding by Source Pie Chart

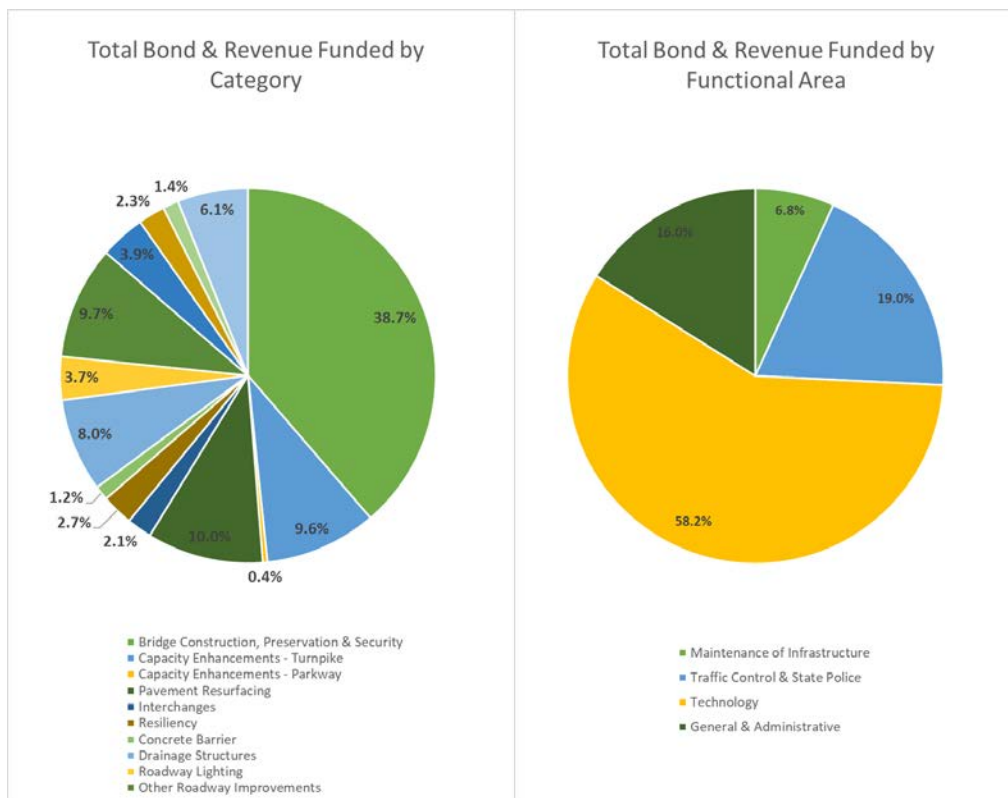


Figure 124: 2021-2025 Total Bond &amp; Revenue Funded by Category &amp; Functional Area Pie Charts

## Capital Budget (Revenue Funded)

The 2021 Capital Budget includes the Maintenance Reserve Fund, the Special Projects Reserve Fund and the Supplemental Capital Program. The Capital Budget primarily supports the spending for the maintenance of both the roadways and bridges, scheduled fleet augmentation, several multi-year capital program projects such as pavement repairs, replacement of toll collection equipment etc. The work in the Maintenance Reserve Fund and Special Projects Reserve Fund is funded from the Authority's revenue after paying for the operating expenses and debt service. These two funds are separate funds established by the Authority's Bond Resolution. The work in the Supplemental Capital Program is funded by transfers from the General Reserve Fund. This program is a separate account in the Construction Fund. The Construction Fund is established by the Authority's Bond Resolution. All projects submitted for consideration for funding in the 2021 Capital Budget were categorized into one of the following eleven (11) categories that briefly describe the need for or benefit of the project. They are:

1. Public Safety
2. Employee Health & Safety
3. Regulatory Mandate
4. Frequent Problems
5. Generates Revenues
6. Generates Cost Savings
7. Age or Condition of Existing
8. Public Benefit
9. Public Demand
10. Synergy with Other Projects
11. Strategic Goal

During the evaluation process of determining which projects would be funded, the categories were considered. Priority was given to those projects that maintain a state of good repair of the roadways and facilities, improve the safety of our roadways for our patrons, and provide a high level of service for our patrons. A summary of the 2021 Capital Budget projects by category is as follows:

<u>Category</u>	<u>% of Total Capital Budget Funding</u>
Age or Condition of Existing	52%
Public Safety	15%
Generates Revenues	11%
Employee Health & Safety	7%
Synergy with Other Projects	6%
Regulatory Mandate	4%
Public Benefit	4%
Frequent Problems	1%

Approximately 52% of the total funding for 2021 is intended to maintain assets in a state of good repair. This includes bridge repair, roadway resurfacing projects and facility improvements. The Authority continues to increase its funding to maintain the roadways in a state of good repair. In 2021 the Authority will continue the goal of resurfacing 305 lane miles per year (12-year repaving cycle) and painting 30,000 tons of steel per year (15-year cycle). Approximately 15% of the total 2021 Capital Budget funding is for projects which are intended to improve Public Safety, such as providing shoulder widening and more effective signage, and programs that will provide a benefit to the public other than safety, such as the evaluation of interchanges or sections of the roadway that may be improved to provide patrons with a more efficient travel experience.

2021 - 2025 Rolling 5-Year Capital Spending Plan By Project Type							
Revenue Funded							
	Spending Plan						
(\$ In Thousands)	2021	2022	2023	2024	2025	Total	
Capitalized Project by Category							
Roadway							
Bridge Construction, Preservation & Security	\$ 90,621	71,590	86,800	69,900	69,900	388,811	
Pavement Resurfacing	98,471	60,000	120,000	120,000	120,000	518,471	
Resiliency (1)	1,000	-	-	-	-	1,000	
Drainage Structures	5,750	15,750	11,250	11,250	11,250	55,250	
Roadway Lighting	20,100	9,558	10,192	7,500	7,500	54,850	
Other Roadway Improvements	25,852	22,919	34,250	33,485	32,450	148,956	
Total Roadway	\$ 241,794	179,817	262,492	242,135	241,100	1,167,338	
Non Roadway							
Facilities	\$ 45,781	31,823	27,033	26,450	26,450	157,537	
Fleet	22,797	23,005	23,745	24,523	25,339	119,408	
Service Areas & Arts Center	200	200	200	200	200	1,000	
Technology Improvements	8,040	8,100	8,100	8,100	8,100	40,440	
Total Non Roadway	\$ 76,817	63,128	59,079	59,273	60,089	318,385	
Total Capitalized Projects	\$ 318,611	242,945	321,571	301,408	301,189	1,485,723	
Expensed Project by Functional Area							
Maintenance of Infrastructure	\$ 1,533	200	200	200	200	2,333	
Traffic Control & State Police	2,500	1,000	1,000	1,000	1,000	6,500	
Technology	8,440	2,500	3,000	3,000	3,000	19,940	
General & Administrative	1,500	1,000	1,000	1,000	1,000	5,500	
Total Expensed Projects	\$ 13,973	4,700	5,200	5,200	5,200	34,272	
Total Spending (Capitalized+Expensed)	\$ 332,584	247,645	326,771	306,608	306,389	1,519,995	

Funding Sources						
(\$ In Thousands)	Spending Plan					Total
	2021	2022	2023	2024	2025	
<b>Revenue Funded</b>						
Maintenance Reserve Fund	\$ 185,292	158,198	246,342	226,750	226,750	1,043,332
Special Project Reserve Fund	73,912	51,347	49,629	49,823	50,639	275,348
Supplemental Capital Program Fund	73,380	38,100	30,800	30,035	29,000	201,315
<b>Total Revenue Funded</b>	<b>\$ 332,584</b>	<b>247,645</b>	<b>326,771</b>	<b>306,608</b>	<b>306,389</b>	<b>1,519,995</b>

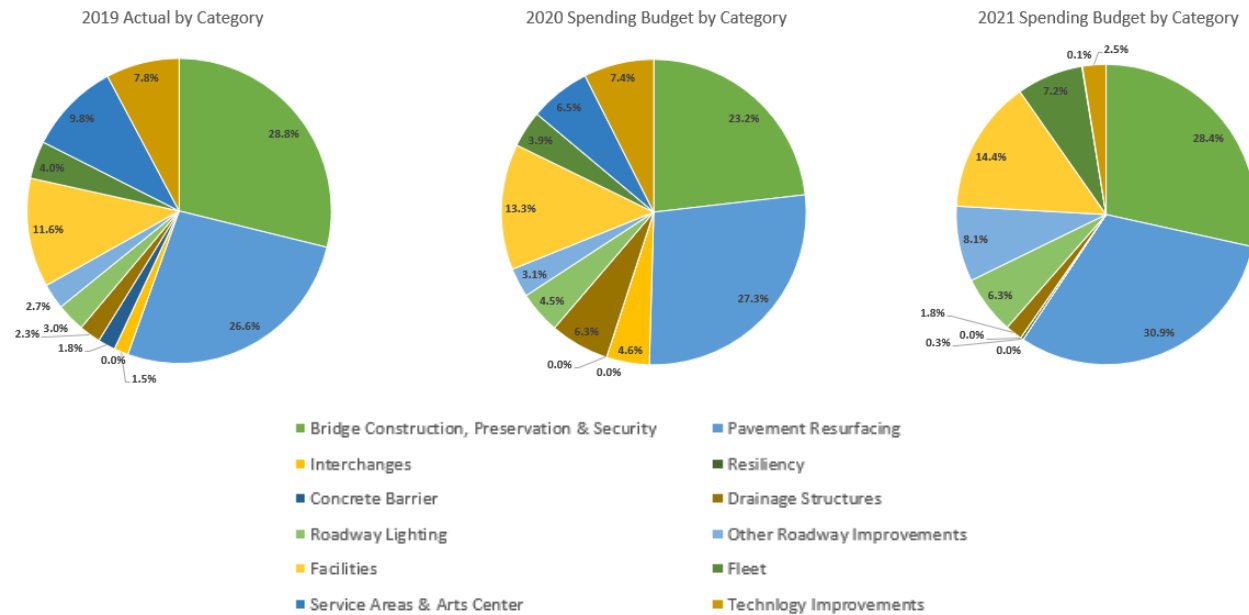
(1) After 2021, major resiliency projects are funded through the 2021-2025 CIP.

Figure 125: 2021-2025 Rolling 5-Year Capital Spending by Project Type (Revenue Funded)

### Capital Budget – Revenue Funded – Spending by Project Type

Includes all revenue funded capital projects contained in the Maintenance Reserve Fund, Special Project Reserve Fund, and Supplemental Capital Program. The combined project budgets in 2021, on a rolling 5-year basis, total \$1.5 billion, or an average spend of about \$300 million/year. Budgeted spending includes 34% for Pavement Resurfacing, 26% for Bridge Construction, Preservation & Security and 10% on Facilities, for a combined total of 70% of 2021 budgeted spending.

### Capital Budget – Capitalized Projects – Spending by Category



### Capital Budget - Expensed Projects – Spending by Functional Area

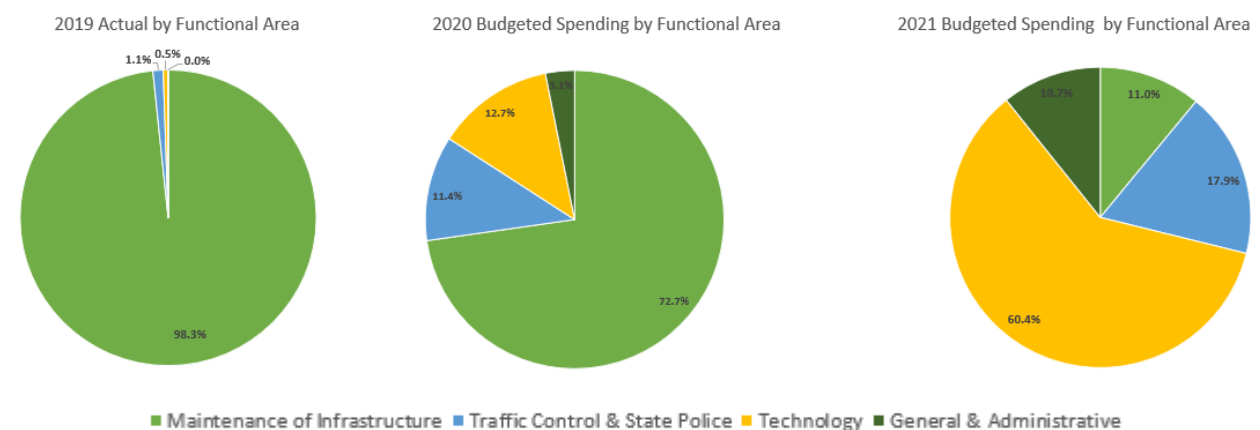


Figure 126: 2019-2021 Revenue Funded Spending by Category & Functional Area Pie Charts

Capital Budget Spending By Program					
<i>(\$ In Thousands)</i>	2019 Actual	2020 Budget	2021 Budget	\$ Δ from 2020 Budget	% Δ from 2020 Budget
<b>Revenue Funded</b>					
Maintenance Reserve Fund	\$ 121,604	195,850	185,292	(10,558)	-5.4%
Special Project Reserve Fund	40,340	73,079	73,912	833	1.1%
Supplemental Capital Program Fund	85,238	143,936	73,380	(70,556)	-49.0%
Passaic River Bridge Program <sup>(1)</sup>	9,558	26,865	-	(26,865)	-100.0%
<b>Total Funding Sources</b>	<b>\$ 256,740</b>	<b>439,730</b>	<b>332,584</b>	<b>(107,146)</b>	<b>-24.4%</b>

(1) 2021 onwards spending for the Passaic River Bridges is moved to the 2019 Capital Improvement Program

Figure 127: Revenue Funded Capital Budget Spending by Program (2019-2021)

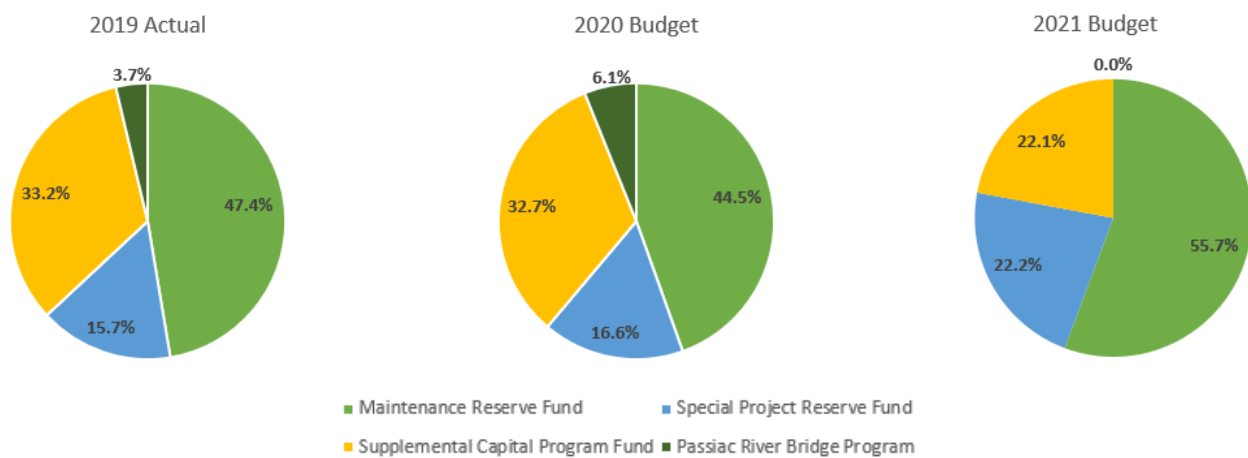


Figure 128: Revenue Funded Capital Budget Percentage Pie Charts (2019-2021)

<b>Capital Budget Spending by Project Type</b>						
	(\$ In Thousands)	2019	2020	2021	\$ Δ from 2020	% Δ from 2020
<b>Capitalized Project Category</b>		<b>Actual</b>	<b>Budget</b>	<b>Budget</b>	<b>Budget</b>	<b>Budget</b>
<b>Roadway</b>						
Bridge Construction, Preservation & Security	\$	71,183	85,965	90,621	4,656	5%
Pavement Resurfacing		65,768	104,978	98,471	(6,507)	-6%
Interchanges		3,760	17,540	-	(17,540)	-100%
Resiliency		-	-	1,000	1,000	0%
Concrete Barrier		4,547	2,705	-	(2,705)	0%
Drainage Structures		5,659	32,645	5,750	(26,895)	-82%
Roadway Lighting		7,486	17,317	20,100	2,783	16%
Other Roadway Improvements		6,682	17,341	25,852	8,511	49%
<b>Total Roadway</b>		\$165,085	278,491	241,794	(36,697)	-13%
<b>Non Roadway</b>						
Facilities	\$	28,593	53,578	45,781	(7,797)	-15%
Fleet		9,844	15,396	22,797	7,401	48%
Service Areas & Arts Center		24,110	24,877	200	(24,677)	-99%
Technology Improvements		19,225	33,491	8,040	(25,451)	-76%
<b>Total Non Roadway</b>	\$	81,772	127,342	76,817	(50,525)	-40%
<b>Total Capitalized Projects</b>		\$246,857	405,833	318,611	(87,222)	-21%
<b>Expensed Projects Functional Areas</b>						
Maintenance of Infrastructure	\$	9,668	23,253	1,533	(21,720)	-93%
Traffic Control & State Police		145	3,764	2,500	(1,264)	-34%
Technology		70	5,885	8,440	2,555	43%
General & Administrative		-	995	1,500	505	51%
<b>Total Expensed Projects</b>	\$	9,883	33,897	13,973	(19,924)	-59%
<b>Total Spending (Capitalized+Expensed)</b>		\$256,740	439,730	332,584	(107,146)	-24%

Figure 129: Capital Budget Spending by Project Type (2019-2021)

The 2021 Capital Spending Budget is declining about 24%, due primarily to declines in Service Area and Art Center budgeted spending, technology improvements drainage structure and interchanges. The budgeted declines are due mainly to certain projects budgeted to be completed in 2020, and the transfer of some projects to the 2019 CIP and the 2021-2025 CIP. Despite the decline in budgeted spending, bridge deck repairs and roadway resurfacing will continue at targeted replacement cycles.

## Maintenance Reserve Fund

Approximately 46% of budgeted spending in 2021 will be for Bridge Construction, Preservation and Security, while 38% is budgeted to be spent on Pavement Resurfacing.

- The Turnpike lanes will be resurfaced from Mileposts 96.23 to 101.03 northbound and southbound mainline roadways, from mileposts 107.88 to 111.15 northbound and southbound easterly roadways, and mileposts 113.16 to 116.42 northbound and southbound easterly roadways. In addition, various locations throughout the mainline are included. Resurfacing for the Turnpike is a total of 170 lane miles.
- The Turnpike is scheduled to have 28 bridge decks repaired.
- The Parkway lanes will be resurfaced from mileposts 115.8 to 104.5, southbound local and express roadways, Interchange 105, as well as milepost 125.3 to 115.8 southbound local and express roadways, Interchange 118 and Interchange 117. Resurfacing for the Parkway is a total of 135 lanes miles.
- The Parkway is scheduled to have 20 bridge decks repaired.

The following chart shows the actual spending for 2019 as well as the budgeted spending for 2020 and 2021:

<b>Maintenance Reserve Fund Spending by Category (Capitalized Projects)</b>					
<i>(\$ In Thousands)</i>	<b>2019 Actual</b>	<b>2020 Budget</b>	<b>2021 Budget</b>	<b>\$ Δ from 2020</b>	<b>% Δ from 2020</b>
<b>Roadway</b>					
Bridge Construction, Preservation & Security	\$ 52,400	53,547	85,421	31,874	59.5%
Pavement Resurfacing	50,064	86,528	70,471	(16,057)	-18.6%
Concrete Barrier	4,547	2,705	-	(2,705)	-100.0%
Drainage Structures	5,659	32,645	5,750	(26,895)	-82.4%
Roadway Lighting	6,871	17,317	19,600	2,283	13.2%
Other Roadway Improvements	2,063	3,108	4,050	942	30.3%
<b>Total by Category</b>	<b>\$ 121,604</b>	<b>195,850</b>	<b>185,292</b>	<b>(10,558)</b>	<b>-5.4%</b>

Figure 130: Maintenance Reserve Fund Spending by Category (2019-2021)

<b>Maintenance Reserve Fund Balance</b>									
<i>(\$ In Thousands)</i>	<b>2019 Actual</b>	<b>2020 Est/Actual</b>	<b>2021 Budget</b>	<b>\$ Δ from 2020</b>	<b>% Δ from 2020</b>	<b>2022 Budget</b>	<b>2023 Budget</b>	<b>2024 Budget</b>	<b>2025 Budget</b>
Beginning Balance	\$ 74,159	84,023	36,569	(47,454)	-56.5%	11,277	53,079	16,737	9,987
Transfer from Revenue Fund	131,468	134,097	160,000	25,903	19.3%	200,000	210,000	220,000	230,000
Total Project Spending	(121,604)	(181,551)	(185,292)	(3,741)	2.1%	(158,198)	(246,342)	(226,750)	(226,750)
<b>Ending Balance</b>	<b>\$ 84,023</b>	<b>36,569</b>	<b>11,277</b>	<b>(25,292)</b>	<b>-69.2%</b>	<b>53,079</b>	<b>16,737</b>	<b>9,987</b>	<b>13,237</b>

Figure 131: Maintenance Reserve Fund Balance (2019-2025)



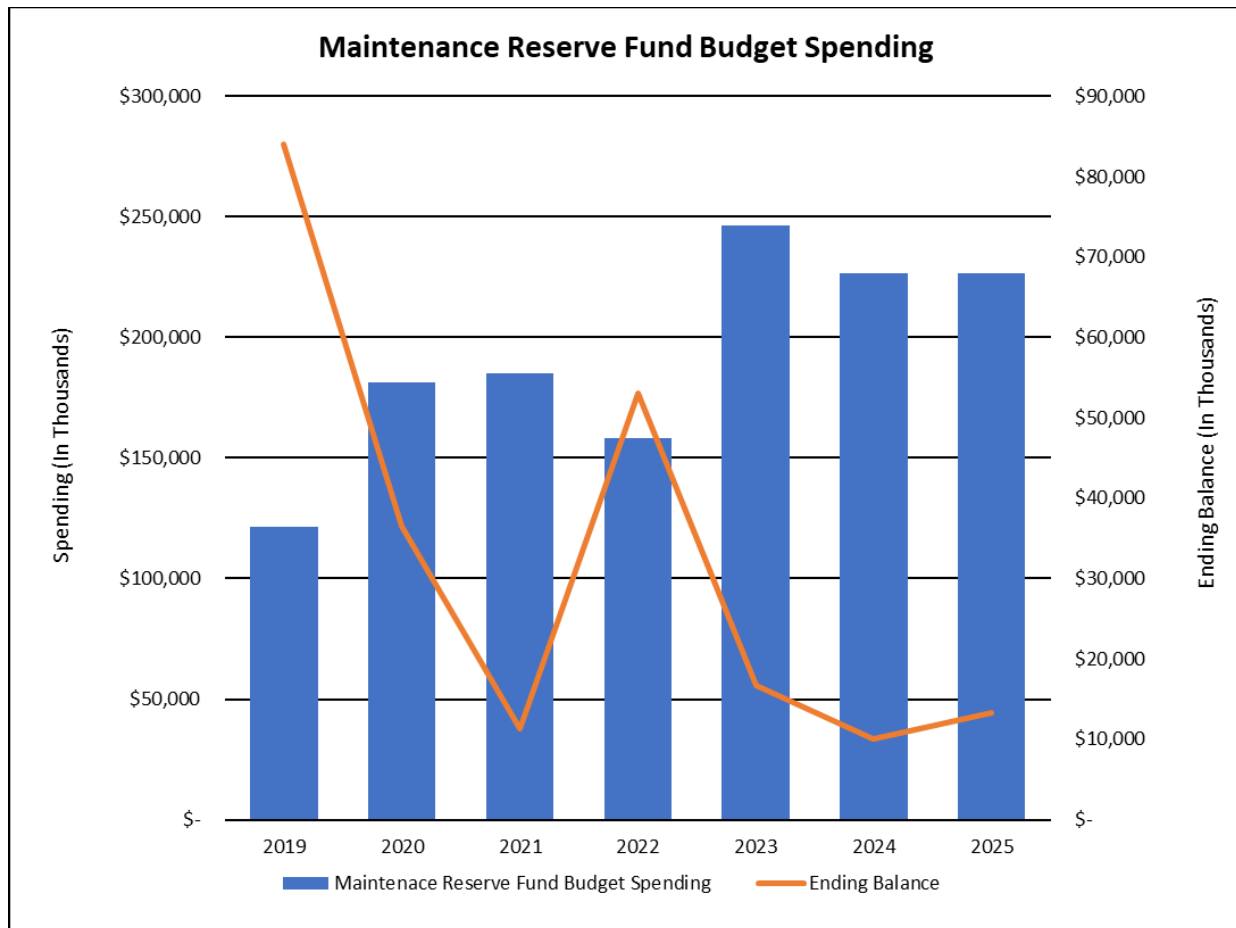


Figure 132: Maintenance Reserve Fund Budget Spending & Ending Balance Graph (2019-2025)

Maintenance Reserve Fund Project Summary			
	2021 Total Project Budget	Spent/Committed Through 10/31/20	% of Budget
(\$ In Thousands)			
<b>Capitalized Projects Category</b>			
<b>Roadway</b>			
Bridge Construction, Preservation & Security	\$ 414,753	77,901	18.8%
Drainage Structures	79,406	22,615	28.5%
Pavement Resurfacing	576,999	99,033	17.2%
Roadway Lighting	71,667	25,101	35.0%
Other Roadway Improvements	40,058	2,253	5.6%
<b>Non Roadway</b>			
Facilities	42,000	-	0.0%
<b>Total Maintenance Reserve Fund</b>	<b>\$ 1,224,883</b>	<b>226,905</b>	<b>18.5%</b>

Figure 133: Maintenance Reserve Fund Project Summary

<b>Maintenance Reserve Fund</b>						
<b>2021 - 2025 Rolling 5-Year Spending Budget by Project Type</b>						
<i>(\$ In Thousands)</i>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>Total 5-Year</b>
<b>Capitalized Projects Category</b>						
<b>Roadway</b>						
Bridge Construction, Preservation & Security	\$ 85,421	66,390	81,900	65,000	65,000	363,711
Pavement Resurfacing	70,471	60,000	120,000	120,000	120,000	490,471
Drainage Structures	5,750	15,750	11,250	11,250	11,250	55,250
Roadway Lighting	19,600	9,558	10,192	7,500	7,500	54,350
Other Roadway Improvements	4,050	6,500	9,000	9,000	9,000	37,550
<b>Non Roadway</b>						
Facilities (1)	-	-	14,000	14,000	14,000	42,000
<b>Total Maintenance Reserve Fund</b>	<b>\$ 185,292</b>	<b>158,198</b>	<b>246,342</b>	<b>226,750</b>	<b>226,750</b>	<b>1,043,332</b>

(1) Facility projects, including Major Roof Repairs and HVAC/Boiler Replacement are currently funded in Supplemental Capital Program through 2022.

**Figure 134: Maintenance Reserve Fund 5-Year Spending Budget by Project Type (2021-2025)**

Approximately \$1.04 billion is budgeted for a rolling 5-year spending budget. Of this approximately \$364 million is budgeted for the Bridge Construction, Preservation and Security and \$490 million is budgeted for the Pavement Resurfacing work. This combined cost of these two categories accounts for 82% of the rolling 5-year spending budget.

The following is a list of the projects in the 2021 Maintenance Reserve Spending Budget:

Maintenance Reserve Fund - Capitalized Projects Spending						
(\$ In Thousands)						
Project Name	2021 Spending	2022 Spending	2023 Spending	2024 Spending	2025 Spending	Rolling 5 Year Budget Total
<b>Prior Approved 2020 Projects</b>						
GSP Bridge Repairs	\$ 24,832	-	-	-	-	24,832
TPK Bridge Repairs	18,198	-	-	-	-	18,198
GSP Resurfacing	13,000	-	-	-	-	13,000
TPK Resurfacing	3,971	-	-	-	-	3,971
Roadway Lighting Repairs	7,100	-	-	-	-	7,100
Major Reconstruction & Replacement of Roadway Lighting	1,750	-	-	-	-	1,750
Contingency	90	-	-	-	-	90
<b>Total Prior Approved 2020 Projects</b>	<b>\$ 68,941</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>68,941</b>
<b>2021-2025 New Projects</b>						
Section 19 & 20 STR E107.88 to STR E111.15, STR E113.16 to STR E116.42	\$ 22,250	-	-	-	-	22,250
Section 16 MP 96.23 to 101.03	20,250	-	-	-	-	20,250
Milepost 92 to 122, & the Newark Bay Hudson County Extension	12,130	3,410	-	-	-	15,540
Cleanup contract MP 0 to 122 various locations	11,000	-	-	-	-	11,000
Milepost 0 to 92, & the Pearl Harbor Memorial TPK Extension	10,130	4,370	-	-	-	14,500
Bridge Repairs & Resurfacing, Milepost 0 to 126	7,875	1,125	-	-	-	9,000
All In Construction TPK 15E & 15W Lighting Repair	7,000	-	-	-	-	7,000
Contingency	5,000	5,000	5,000	5,000	5,000	25,000
On-Call List per year	3,000	2,000	-	-	-	5,000
2 pipe crossing replacements per year	2,000	2,000	-	-	-	4,000
TPK Bridge Repairs NB	1,800	9,200	9,000	-	-	20,000
TPK Lighting I/C 7 Outside Plaza	1,650	-	-	-	-	1,650
TPK Bridge Repairs SB	1,550	7,950	7,900	-	-	17,400
GSP & TPK Long Joint Repair	1,500	-	-	-	-	1,500
GSP Bridge Repairs NB	1,150	50	-	-	-	1,200
GSP Bridge Repairs SB	1,150	50	-	-	-	1,200
Large Asphalt & Concrete Restoration locations TBD	1,000	-	-	-	-	1,000
TPK Bridge Chargebacks	768	184	-	-	-	952
GSP Bridge Repairs Chargebacks	548	51	-	-	-	599
On-Call Inspector	500	500	-	-	-	1,000
On-Call Customer Management	500	500	-	-	-	1,000
On-Call Inspector Electrical	500	500	-	-	-	1,000
Pavement Management Dashboard	500	-	-	-	-	500
TPK Service Area 13S LED Repair	500	-	-	-	-	500
NJSP Shooting Range Gate	350	-	-	-	-	350
GSP I/C 98 Lighting Supplement	350	-	-	-	-	350
Authority Category A Reporting	250	-	-	-	-	250
Raritan South Tunnel	250	-	-	-	-	250
Major Roadway Lighting Scoping Program	250	-	-	-	-	250
Drainage Dashboard	250	-	-	-	-	250
GSP Bridge Repairs Utility Orders/Permits	200	-	-	-	-	200
GSP 97 SB Pavement Repair	200	-	-	-	-	200
TPK Resurfacing	-	40,000	80,000	80,000	80,000	280,000
GSP Resurfacing	-	20,000	40,000	40,000	40,000	140,000
GSP Bridge Repairs	-	20,000	30,000	30,000	30,000	110,000
TPK Bridge Repairs	-	15,000	30,000	30,000	30,000	105,000
Drainage Structure Repairs (Maintenance - Construction Contracts)	-	6,250	6,250	6,250	6,250	25,000
Guiderail	-	3,000	3,000	3,000	3,000	12,000
Major Signs	-	3,000	3,000	3,000	3,000	12,000
IR or On-Call OPS Tasks	-	3,000	-	-	-	3,000
Drainage Structure Repairs (Maintenance - IR or On-Call OPS tasks)	-	2,500	2,500	2,500	2,500	10,000
Drainage Structure Repairs (Maintenance - Professional Services)	-	2,500	2,500	2,500	2,500	10,000
IR Contract Tasks	-	2,500	-	-	-	2,500
TPK Lighting I/C 9 Inside Plaza LED	-	1,250	-	-	-	1,250
EGIS Mapping Underground Electric	-	1,000	-	-	-	1,000
TD 2, SA 4N, TD 8, NJSP Cranberry, SA 7S	-	808	2,692	-	-	3,500
On-Call OPS Tasks	-	500	-	-	-	500
HVAC & Boiler Replacement Program	-	-	5,000	5,000	5,000	15,000
Major Backup Generator Replacement	-	-	5,000	5,000	5,000	15,000
Major Roofing Replacements	-	-	4,000	4,000	4,000	12,000
Major Roadway Repairs (IR Contract Tasks)	-	-	2,500	2,500	2,500	7,500
Major Reconstruction & Replacement of Roadway Lighting (Construction Contracts)	-	-	2,500	2,500	2,500	7,500
Major Reconstruction & Replacement of Roadway Lighting (IR or On-Call OPS tasks)	-	-	2,500	2,500	2,500	7,500
Major Reconstruction & Replacement of Roadway Lighting (Professional Services)	-	-	2,500	2,500	2,500	7,500
Major Roadway Repairs (On-Call OPS Tasks)	-	-	500	500	500	1,500
<b>Total 2021-2025 New Projects</b>	<b>\$ 116,351</b>	<b>158,198</b>	<b>246,342</b>	<b>226,750</b>	<b>226,750</b>	<b>974,391</b>
<b>Total 2021-2025 Capitalized Project Spending</b>	<b>\$ 185,292</b>	<b>158,198</b>	<b>246,342</b>	<b>226,750</b>	<b>226,750</b>	<b>1,043,332</b>

Figure 135: Maintenance Reserve Fund 5-Year Spending by Capitalized Projects

The chart below shows the 2021 Total Project Budget for each project as compared to the 2020 Total Project Budget for each of the projects included in the Maintenance Reserve Fund Budget. The Total Project Budgets include prior estimated/actual project life-to-date spending, the rolling 5-year spending budget, and any future spending on the project beyond 2025.

Maintenance Reserve Fund - Capitalized Projects Budget						
(\$ In Thousands)						
Project Name	Rolling 5 Year Budget	Estimated/Actual LTD Spending	Future Spending	Total Project Budget 2021	Total Project Budget 2020	\$ Δ from 2020 Budget
<b>Prior Approved 2020 Projects</b>						
GSP Bridge Repairs	\$ 24,832	20,228	-	45,060	35,028	10,032
TPK Bridge Repairs	18,198	28,194	-	46,392	37,544	8,848
Concrete Barrier Repairs	-	-	-	-	6,972	(6,972)
Drainage Structure Repairs (Engineering)	-	10,837	-	10,837	21,837	(11,000)
Drainage Structure Repairs (Maintenance)	-	13,319	-	13,319	13,919	(600)
GSP Resurfacing	13,000	19,797	-	32,797	24,797	8,000
TPK Resurfacing	3,971	66,731	-	70,702	71,731	(1,029)
Roadway Lighting Repairs	7,100	8,300	-	15,400	26,900	(11,500)
Major Reconstruction & Replacement of Roadway Lighting	1,750	9,017	-	10,767	9,017	1,750
Major Roadway Repairs	-	2,508	-	2,508	3,108	(600)
Contingency	90	2,620	-	2,710	5,000	(2,290)
<b>Total Prior Approved 2020 Projects</b>	<b>\$ 68,941</b>	<b>181,551</b>	<b>-</b>	<b>250,492</b>	<b>255,853</b>	<b>(5,361)</b>
<b>2021-2025 New Projects</b>						
GSP Bridge Repairs	\$ 110,000	-	-	110,000	-	110,000
TPK Bridge Repairs	105,000	-	-	105,000	-	105,000
TPK Bridge Repairs NB	20,000	-	-	20,000	-	20,000
TPK Bridge Repairs SB	17,400	-	-	17,400	-	17,400
Milepost 92 to 122, & the Newark Bay Hudson County Extension	15,540	-	-	15,540	-	15,540
Milepost 0 to 92, & the Pearl Harbor Memorial TPK Extension	14,500	-	-	14,500	-	14,500
Bridge Repairs & Resurfacing, Milepost 0 to 126	9,000	-	-	9,000	-	9,000
GSP Bridge Repairs NB	1,200	-	-	1,200	-	1,200
GSP Bridge Repairs SB	1,200	-	-	1,200	-	1,200
TPK Bridge Chargebacks	952	-	-	952	-	952
GSP Bridge Repairs Chargebacks	599	-	-	599	-	599
GSP Bridge Repairs Utility Orders/Permits	200	-	-	200	-	200
Drainage Structure Repairs (Maintenance - Construction Contracts)	25,000	-	-	25,000	-	25,000
Drainage Structure Repairs (Maintenance - IR or On-Call OPS tasks)	10,000	-	-	10,000	-	10,000
Drainage Structure Repairs (Maintenance - Professional Services)	10,000	-	-	10,000	-	10,000
On-Call List per year	5,000	-	-	5,000	-	5,000
2 pipe crossing replacements per year	4,000	-	-	4,000	-	4,000
On-Call Inspector	1,000	-	-	1,000	-	1,000
Drainage Dashboard	250	-	-	250	-	250
HVAC & Boiler Replacement Program	15,000	-	-	15,000	-	15,000
Major Backup Generator Replacement	15,000	-	-	15,000	-	15,000
Major Roofing Replacements	12,000	-	-	12,000	-	12,000
TPK Resurfacing	280,000	-	-	280,000	-	280,000
GSP Resurfacing	140,000	-	-	140,000	-	140,000
Section 19 & 20 STR E107.88 to STR E111.15, STR E113.16 to STR E116.42	22,250	-	-	22,250	-	22,250
Section 16 MP 96.23 to 101.03	20,250	-	-	20,250	-	20,250
Cleanup contract MP 0 to 122 various locations	11,000	-	-	11,000	-	11,000
Major Reconstruction & Replacement of Roadway Lighting (Construction Contracts)	7,500	-	-	7,500	-	7,500
Major Reconstruction & Replacement of Roadway Lighting (IR or On-Call OPS tasks)	7,500	-	-	7,500	-	7,500
Major Reconstruction & Replacement of Roadway Lighting (Professional Services)	7,500	-	-	7,500	-	7,500
All In Construction TPK 15E & 15W Lighting Repair	7,000	-	-	7,000	-	7,000
TD 2, SA 4N, TD 8, NJSP Cranberry, SA 7S	3,500	-	-	3,500	-	3,500
IR or On-Call OPS Tasks	3,000	-	-	3,000	-	3,000
IR Contract Tasks	2,500	-	-	2,500	-	2,500
TPK Lighting I/C 7 Outside Plaza	1,650	-	-	1,650	-	1,650
TPK Lighting I/C 9 Inside Plaza LED	1,250	-	-	1,250	-	1,250
EGIS Mapping Underground Electric	1,000	-	-	1,000	-	1,000
On-Call Customer Management	1,000	-	-	1,000	-	1,000
On-Call Inspector Electrical	1,000	-	-	1,000	-	1,000
On-Call OPS Tasks	500	-	-	500	-	500
TPK Service Area 13S LED Repair	500	-	-	500	-	500
GSP I/C 98 Lighting Supplement	350	-	-	350	-	350
Authority Category A Reporting	250	-	-	250	-	250
Major Roadway Lighting Scoping Program	250	-	-	250	-	250
Guiderail	12,000	-	-	12,000	-	12,000
Major Signs	12,000	-	-	12,000	-	12,000
Major Roadway Repairs (IR Contract Tasks)	7,500	-	-	7,500	-	7,500
GSP & TPK Long Joint Repair	1,500	-	-	1,500	-	1,500
Major Roadway Repairs (On-Call OPS Tasks)	1,500	-	-	1,500	-	1,500
Large Asphalt & Concrete Restoration locations TBD	1,000	-	-	1,000	-	1,000
Pavement Management Dashboard	500	-	-	500	-	500
NJSP Shooting Range Gate	350	-	-	350	-	350
Raritan South Tunnel	250	-	-	250	-	250
GSP 97 SB Pavement Repair	200	-	-	200	-	200
Contingency	25,000	-	-	25,000	-	25,000
<b>Total 2021-2025 New Projects</b>	<b>\$ 974,391</b>	<b>-</b>	<b>-</b>	<b>974,391</b>	<b>-</b>	<b>974,391</b>
<b>Total Capitalized Projects Budget</b>	<b>\$ 1,043,332</b>	<b>181,551</b>	<b>-</b>	<b>1,224,883</b>	<b>255,853</b>	<b>969,030</b>

Figure 136: Maintenance Reserve Fund Budget by Capitalized Project

Maintenance Reserve Fund Capitalized Project Descriptions	
Project Name	Project Description
<b>Prior Approved 2020 Projects</b>	
GSP Bridge Repairs	Inspection, design, construction and construction supervision for repairs of Garden State Parkway bridges; includes 24 bridge repairs in 2020.
TPK Bridge Repairs	Inspection, design, construction and construction supervision for repairs of New Jersey Turnpike bridges; includes 37 bridge repairs for 2020.
GSP Resurfacing	Provides resources for the annual roadway resurfacing program for the Garden State Parkway mainline and ramps including inspection, design, construction and construction supervision. This funding allows surface course pavement to be maintained in a safe and serviceable condition for the benefit of patrons.
TPK Resurfacing	Provides resources for the annual roadway resurfacing program for the New Jersey Turnpike mainline and ramps including inspection, design, construction and construction supervision. This funding allows surface course pavement to be maintained in a safe and serviceable condition for the benefit of patrons.
Roadway Lighting Repairs	Provides resources for the design, construction and construction supervision of the repairs/replacements of roadway lighting on the New Jersey Turnpike and Garden State Parkway mainlines and ramps.
Major Reconstruction & Replacement of Roadway Lighting	Funding for roadway lighting system repairs and replacements with costs over \$50,000.00.
Contingency	Provides additional funding for increased project needs or unanticipated projects.
<b>2021-2025 New Projects</b>	
GSP Bridge Repairs	Provides resources for the annual roadway resurfacing program for the Garden State Parkway mainline and ramps including inspection, design, construction and construction supervision. This funding allows surface course pavement to be maintained in a safe and serviceable condition for the benefit of patrons.
TPK Bridge Repairs	Inspection, design, construction and construction supervision for repairs of New Jersey Turnpike bridges.
TPK Bridge Repairs NB	Inspection, design, construction and construction supervision for repairs of New Jersey Turnpike bridges.
TPK Bridge Repairs SB	Inspection, design, construction and construction supervision for repairs of New Jersey Turnpike bridges.
Milepost 92 to 122, & the Newark Bay Hudson County Extension	Inspection, design, construction and construction supervision for repairs of New Jersey Turnpike bridges.
Milepost 0 to 92, & the Pearl Harbor Memorial TPK Extension	Inspection, design, construction and construction supervision for repairs of New Jersey Turnpike bridges.
Bridge Repairs & Resurfacing, Milepost 0 to 126	Inspection, design, construction and construction supervision for repairs of Garden State Parkway bridges.
GSP Bridge Repairs NB	Inspection, design, construction and construction supervision for repairs of Garden State Parkway bridges.
GSP Bridge Repairs SB	Inspection, design, construction and construction supervision for repairs of Garden State Parkway bridges.
TPK Bridge Chargebacks	Inspection, design, construction and construction supervision for repairs of New Jersey Turnpike bridges.
GSP Bridge Repairs Chargebacks	Inspection, design, construction and construction supervision for repairs of Garden State Parkway bridges.
GSP Bridge Repairs Utility Orders/Permits	Inspection, design, construction and construction supervision for repairs of Garden State Parkway bridges.
Drainage Structure Repairs (Maintenance - Construction Contracts)	Funding for stormwater system repairs and replacements with costs over \$50,000.00.
Drainage Structure Repairs (Maintenance - IR or On-Call OPS tasks)	Funding for stormwater system repairs and replacements with costs over \$50,000.00.
Drainage Structure Repairs (Maintenance - Professional Services)	Funding for stormwater system repairs and replacements with costs over \$50,000.00.
On-Call List per year	Funding for stormwater system repairs and replacements with costs over \$50,000.00.
2 pipe crossing replacements per year	Funding for stormwater system repairs and replacements with costs over \$50,000.00.
On-Call Inspector	Funding for stormwater system repairs and replacements with costs over \$50,000.00.
Drainage Dashboard	Funding for stormwater system repairs and replacements with costs over \$50,000.00.
HVAC & Boiler Replacement Program	Funding for design, permitting, purchasing and construction resources to continue the Maintenance Departments Authority wide HVAC equipment replacement program. Facilities include toll department facilities, maintenance yards, etc.
Major Backup Generator Replacement	Funding for backup up generators with costs over \$50,000.00.
Major Roofing Replacements	Funding for design, permitting, purchasing and construction resources to continue the Maintenance Departments roofing replacement program. Facilities include service areas, toll department facilities, maintenance yards, etc.
TPK Resurfacing	Provides resources for the annual roadway resurfacing program for the New Jersey Turnpike mainline and ramps including inspection, design, construction and construction supervision. This funding allows surface course pavement to be maintained in a safe and serviceable condition for the benefit of patrons.
GSP Resurfacing	Provides resources for the annual roadway resurfacing program for the Garden State Parkway mainline and ramps including inspection, design, construction and construction supervision. This funding allows surface course pavement to be maintained in a safe and serviceable condition for the benefit of patrons.
Section 19 & 20 STR E107.88 to STR E111.15, STR E113.16 to STR E116.42	New Jersey Turnpike Resurfacing of this section of roadway.
Section 16 MP 96.23 to 101.03	New Jersey Turnpike Resurfacing of this section of roadway.
Cleanup contract MP 0 to 122 various locations	New Jersey Turnpike Resurfacing of this section of roadway.
Major Reconstruction & Replacement of Roadway Lighting (Construction Contracts)	Funding for roadway lighting system repairs and replacements with costs over \$50,000.00.
Major Reconstruction & Replacement of Roadway Lighting (IR or On-Call OPS tasks)	Funding for roadway lighting system repairs and replacements with costs over \$50,000.00.
Major Reconstruction & Replacement of Roadway Lighting (Professional Services)	Funding for roadway lighting system repairs and replacements with costs over \$50,000.00.
All In Construction TPK 15E & 15W Lighting Repair	Provides resources for the design, construction and construction supervision of the repairs/replacements of roadway lighting on the New Jersey Turnpike and Garden State Parkway mainlines and ramps.
TD 2, SA 4N, TD 8, NJSP Cranberry, SA 7S	Provides resources for the design, construction and construction supervision of the repairs/replacements of roadway lighting on the New Jersey Turnpike and Garden State Parkway mainlines and ramps.
IR or On-Call OPS Tasks	Provides resources for the design, construction and construction supervision of the repairs/replacements of roadway lighting on the New Jersey Turnpike and Garden State Parkway mainlines and ramps.
IR Contract Tasks	Funding for roadway and structural repairs with costs over \$50,000.00.
TPK Lighting I/C 7 Outside Plaza	Provides resources for the design, construction and construction supervision of the repairs/replacements of roadway lighting on the New Jersey Turnpike and Garden State Parkway mainlines and ramps.
TPK Lighting I/C 9 Inside Plaza LED	Provides resources for the design, construction and construction supervision of the repairs/replacements of roadway lighting on the New Jersey Turnpike and Garden State Parkway mainlines and ramps.
EGIS Mapping Underground Electric	Provides resources for the design, construction and construction supervision of the repairs/replacements of roadway lighting on the New Jersey Turnpike and Garden State Parkway mainlines and ramps.
On-Call Customer Management	Provides resources for the design, construction and construction supervision of the repairs/replacements of roadway lighting on the New Jersey Turnpike and Garden State Parkway mainlines and ramps.
On-Call Inspector Electrical	Provides resources for the design, construction and construction supervision of the repairs/replacements of roadway lighting on the New Jersey Turnpike and Garden State Parkway mainlines and ramps.
On-Call OPS Tasks	Funding for roadway and structural repairs with costs over \$50,000.00.
TPK Service Area 13S LED Repair	Provides resources for the design, construction and construction supervision of the repairs/replacements of roadway lighting on the New Jersey Turnpike and Garden State Parkway mainlines and ramps.
GSP I/C 98 Lighting Supplement	Provides resources for the design, construction and construction supervision of the repairs/replacements of roadway lighting on the New Jersey Turnpike and Garden State Parkway mainlines and ramps.
Authority Category A Reporting	Funding for roadway and structural repairs with costs over \$50,000.00.
Major Roadway Lighting Scoping Program	Provides resources for the design, construction and construction supervision of the repairs/replacements of roadway lighting on the New Jersey Turnpike and Garden State Parkway mainlines and ramps.
Guiderail	New program for Guiderail replacement when funding become available.
Major Signs	New program for Major Sign replacement when funding become available.
Major Roadway Repairs (IR Contract Tasks)	Funding for roadway and structural repairs with costs over \$50,000.00.
GSP & TPK Long Joint Repair	Funding for roadway and structural repairs with costs over \$50,000.00.
Major Roadway Repairs (On-Call OPS Tasks)	Funding for roadway and structural repairs with costs over \$50,000.00.
Large Asphalt & Concrete Restoration locations TBD	Funding for roadway and structural repairs with costs over \$50,000.00.
Pavement Management Dashboard	Funding for roadway and structural repairs with costs over \$50,000.00.
NJSP Shooting Range Gate	Funding for roadway and structural repairs with costs over \$50,000.00.
Raritan South Tunnel	Funding for roadway and structural repairs with costs over \$50,000.00.
GSP 97 SB Pavement Repair	Funding for roadway and structural repairs with costs over \$50,000.00.
Contingency	Provides additional funding for increased project needs or unanticipated projects.

Figure 137: Maintenance Reserve Fund Project Descriptions

### Special Project Reserve Fund

During 2021, approximately 41% of the Special Project Reserve Fund spending budget will be for facility improvements, while 31% is budgeted to be spent on fleet replacement.

The following chart shows the actual spending for 2019 as well as the budgeted spending for 2020 and 2021:

<b>Special Project Reserve Fund Spending By Category (Capitalized Projects)</b>					
<i>(\$ In Thousands)</i>	<b>2019 Actual</b>	<b>2020 Budget</b>	<b>2021 Budget</b>	<b>\$ Δ from 2020</b>	<b>% Δ from 2020</b>
<b>Roadway</b>					
Bridge Construction, Preservation & Security	\$ -	-	500	500	0.0%
Resiliency		-	1,000	1,000	0.0%
Other Roadway Improvements	4,499	1,734	4,910	3,176	183.2%
<b>Non Roadway</b>					
Facilities	10,650	16,507	30,071	13,564	82.2%
Fleet	9,844	15,396	22,797	7,401	48.1%
Technology Improvements	3,990	13,406	2,440	(10,966)	-81.8%
<b>Total by Category</b>	<b>\$ 28,982</b>	<b>47,043</b>	<b>61,717</b>	<b>14,674</b>	<b>31.2%</b>
<b>Special Project Reserve Fund Spending By Functional Area (Expensed Projects)</b>					
<i>(\$ In Thousands)</i>	<b>2019 Actual</b>	<b>2020 Budget</b>	<b>2021 Budget</b>	<b>\$ Δ from 2020</b>	<b>% Δ from 2020</b>
<b>Functional Area</b>					
Maintenance of Infrastructure	\$ 8,899	19,304	1,492	(17,812)	-92.3%
Traffic Control & State Police	628	1,552	1,250	(302)	-19.5%
Technology	1,689	4,185	7,953	3,768	90.0%
General & Administrative	141	995	1,500	505	50.8%
<b>Total by Functional Area</b>	<b>\$ 11,357</b>	<b>26,036</b>	<b>12,195</b>	<b>(13,841)</b>	<b>-53.2%</b>
<b>Total Special Project Reserve Fund</b>	<b>\$ 40,340</b>	<b>73,079</b>	<b>73,912</b>	<b>833</b>	<b>1.1%</b>

Figure 138: Special Project Reserve Fund Budget by Category & Functional Area (2019-2021)

<b>Special Project Reserve Fund Balance</b>									
<i>(\$ In Thousands)</i>	<b>2019 Actual</b>	<b>2020 Est/Actual</b>	<b>2021 Budget</b>	<b>\$ Δ from 2020</b>	<b>% Δ from 2020</b>	<b>2022 Budget</b>	<b>2023 Budget</b>	<b>2024 Budget</b>	<b>2025 Budget</b>
Beginning Balance	\$ 76,447	77,408	50,375	(27,033)	-34.9%	26,463	25,116	26,988	30,210
Transfer from Revenue Fund	41,300	41,300	50,000	8,700	21.1%	50,000	51,500	53,045	54,636
Total Project Spending	(40,340)	(68,333)	(73,912)	(5,579)	8.2%	(51,347)	(49,629)	(49,823)	(50,639)
<b>Ending Balance</b>	<b>\$ 77,407</b>	<b>50,375</b>	<b>26,463</b>	<b>(23,912)</b>	<b>-47.5%</b>	<b>25,116</b>	<b>26,988</b>	<b>30,210</b>	<b>34,207</b>

Figure 139: Special Project Reserve Fund Balance (2019-2025)

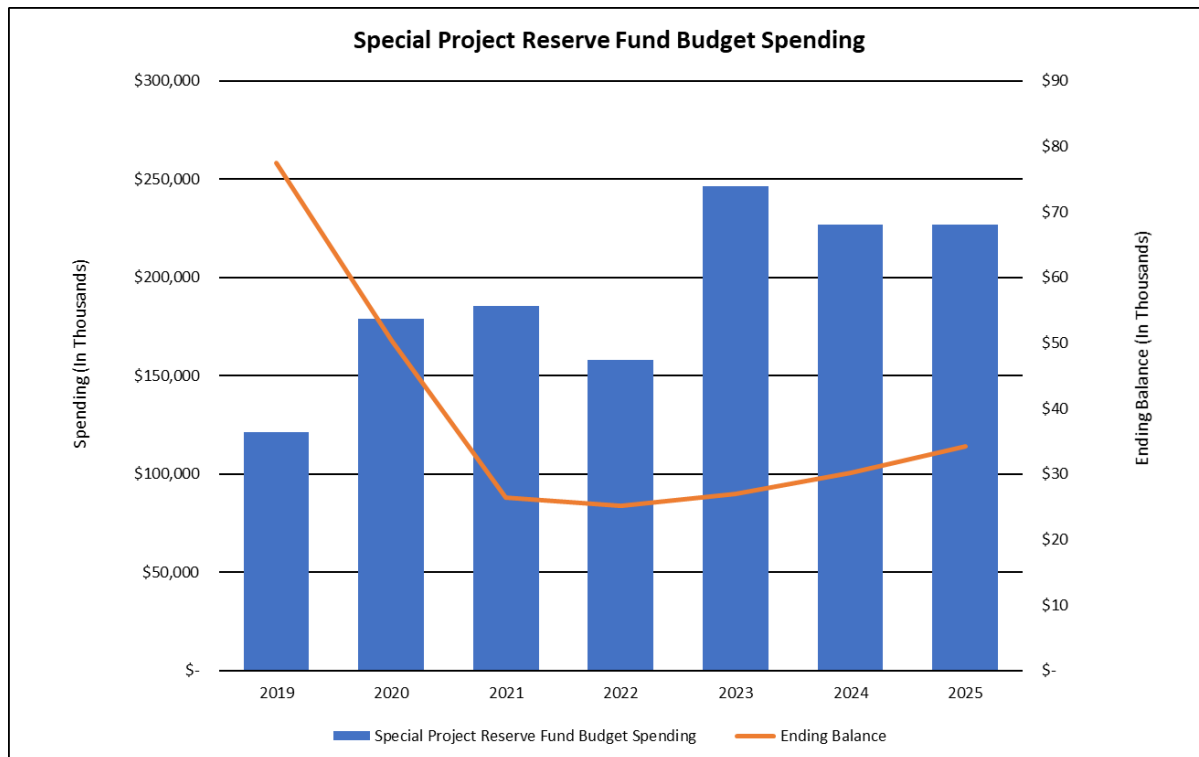


Figure 140: Special Project Reserve Fund Budget Spending &amp; Ending Balance Graph (2019-2025)

Special Project Reserve Fund Project Summary			
	2021 Total Project Budget	Spent/Committed Through 10/31/20	% of Budget
<i>(\$ In Thousands)</i>			
<b>Capitalized Projects Category</b>			
<b>Roadway</b>			
Bridge Construction, Preservation & Security	2,800	-	0.0%
Resiliency	1,000	-	0.0%
Other Roadway Improvements	26,477	1,043	3.9%
<b>Non Roadway</b>			
Facilities	97,403	9,083	9.3%
Fleet	134,307	15,183	11.3%
Technology Improvements	24,022	4,582	19.1%
<b>Expensed Project Functional Areas</b>			
Maintenance of Infrastructure	21,138	17,309	81.9%
Traffic Control & State Police	6,606	626	9.5%
Technology	23,446	1,549	6.6%
General & Administrative	6,484	1,143	17.6%
<b>Total Special Project Reserve Fund</b>	<b>\$ 343,682</b>	<b>50,518</b>	<b>14.7%</b>

Figure 141: Special Projects Reserve Fund Project Summary

Special Project Reserve Fund						
2021 - 2025 Rolling 5-Year Spending Budget by Project Type						
(\$ In Thousands)	2021	2022	2023	2024	2025	Total 5-Year
<b>Capitalized Projects Category</b>						
<b>Roadway</b>						
Bridge Construction, Preservation & Security	\$ 500	800	500	500	500	2,800
Resiliency	1,000	-	-	-	-	1,000
Other Roadway Improvements	4,910	4,109	5,450	5,450	5,450	25,369
<b>Non Roadway</b>						
Facilities	30,071	16,233	12,233	11,650	11,650	81,837
Fleet	22,797	23,005	23,745	24,523	25,339	119,408
Technology	2,440	2,500	2,500	2,500	2,500	12,440
<b>Expensed Projects Functional Areas</b>						
Maintenance of Infrastructure	1,492	200	200	200	200	2,292
Traffic Control & State Police	1,250	1,000	1,000	1,000	1,000	5,250
Technology	7,953	2,500	3,000	3,000	3,000	19,453
General & Administrative	1,500	1,000	1,000	1,000	1,000	5,500
<b>Total Special Project Reserve Fund</b>	<b>\$ 73,912</b>	<b>51,347</b>	<b>49,629</b>	<b>49,823</b>	<b>50,639</b>	<b>275,348</b>

Figure 142: Special Project Reserve Fund 5-Year Spending Budget by Project Type (2021-2025)

Approximately \$275.4 million is budgeted for the rolling 5-year spending budget. Of this \$81.8 million (30%) is budgeted for Facilities, \$38.7 million (14%) is budgeted for Roadway Improvements, \$23.9 million (11%) is budgeted for Technology Improvements, \$119.4 million (43%) for Fleet Upgrades, and \$5 million (2%) is budgeted for Non-Roadway Improvements.



A detailed list of all projects contained in the 2021 Special Project Reserve spending budget follows:

Special Project Reserve Fund - Capitalized Projects Spending						
(\$ In Thousands)						
Project Name	2021 Spending	2022 Spending	2023 Spending	2024 Spending	2025 Spending	Rolling 5 Year Budget Total
<b>Prior Approved 2020 Projects</b>						
Pleasant Plains Sub-Barracks	\$ 3,000	-	-	-	-	3,000
Stormwater Pump Replacement Building Renovations	1,633	-	-	-	-	1,633
Major Building Improvements	1,547	-	-	-	-	1,547
6S Wastewater Pre-Treatment Plant	1,100	-	-	-	-	1,100
Safety Implementation at NJSP & Maintenance District	932	-	-	-	-	932
3S Pump Station Force Main Upgrade	825	-	-	-	-	825
Pre-Engineered Buildings	752	-	-	-	-	752
Replacement of UST	589	-	-	-	-	589
Building Renovations	500	-	-	-	-	500
Bassett Building Improvements	200	-	-	-	-	200
GSP Maintenance Winter Trailer Replacement	58	-	-	-	-	58
Major Fleet Augmentation - Tractor	392	-	-	-	-	392
Major Fleet Augmentation - Tandem	105	-	-	-	-	105
Major Sign & Safety Replacement	550	-	-	-	-	550
Guide Sign Guide Rail Improvement	510	-	-	-	-	510
HR Software Improvement & Implementation	1,240	-	-	-	-	1,240
Traffic Permit Lane Closure Application	300	-	-	-	-	300
Capex eGIS Project Planning	300	-	-	-	-	300
Finance Software Discovery and Implementation	250	-	-	-	-	250
Security Remediation	250	-	-	-	-	250
Business Intel and Analytics	100	-	-	-	-	100
<b>Total Prior Approved 2020 Projects</b>	<b>\$ 15,134</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>15,134</b>
<b>2021-2025 New Projects</b>						
Major Fleet Augmentation - Dump Trucks	\$ 5,300	5,300	5,565	5,843	6,135	28,144
Major Building Improvements	5,250	5,000	2,500	4,000	4,000	20,750
State Police Vehicles	4,200	4,200	4,200	4,200	4,200	21,000
Maintenance Vehicles	4,000	4,325	4,341	4,358	4,376	21,401
Utility Replacement & Improvements	3,500	3,000	5,000	3,500	3,500	18,500
Major Sign & Safety Replacement & Improvements	3,450	2,950	2,950	2,950	2,950	15,250
Major Fleet Augmentation	3,400	3,570	3,749	3,936	4,133	18,787
Water & Wastewater Asset Management & Improvements	3,333	3,533	3,833	3,250	3,250	17,200
Major Roofing Replacements	3,150	3,150	-	-	-	6,300
Major Fleet Augmentation - Tandem Dump Trucks	2,100	2,205	2,315	2,431	2,553	11,604
Maintenance Department Material Storage Facilities	1,575	750	400	400	400	3,525
Major Fleet Augmentation - Tractors	1,200	1,260	1,323	1,389	1,459	6,631
Major Fleet Augmentation - Loaders	1,200	1,200	1,260	1,323	1,389	6,372
Security Enhancements Facilities	1,200	800	500	500	500	3,500
Resiliency	1,000	-	-	-	-	1,000
Major Fleet Augmentation - Trades Utility Trucks	900	945	992	1,042	1,094	4,973
Replacement of UST	650	-	-	-	-	650
HAER Bridge Recordation	500	800	500	500	500	2,800
Turnpike Misc Geometric Upgrades	250	-	-	-	-	250
Equipment Relocation I/C 11	250	-	-	-	-	250
Turnpike SN 80 Operational Study	150	-	-	-	-	150
Hearing Booth	25	-	-	-	-	25
Other ITS Project	-	2,500	2,500	2,500	2,500	10,000
Other Roadway	-	1,159	2,500	2,500	2,500	8,659
<b>Total 2021-2025 New Projects</b>	<b>\$ 46,583</b>	<b>46,647</b>	<b>44,429</b>	<b>44,623</b>	<b>45,439</b>	<b>227,720</b>
<b>Total 2021-2025 Capitalized Project Spending</b>	<b>\$ 61,717</b>	<b>46,647</b>	<b>44,429</b>	<b>44,623</b>	<b>45,439</b>	<b>242,854</b>

Figure 143: Special Project Reserve Fund 5-Year Spending by Capitalized Projects

Special Project Reserve Fund - Expensed Projects Spending						
(\$ In Thousands)						
Project Name	2021 Spending	2022 Spending	2023 Spending	2024 Spending	2025 Spending	Rolling 5 Year Budget Total
<b>Prior Approved 2020 Projects</b>						
On-Call Traffic & Revenue Study	\$ 950	1,000	1,000	1,000	1,000	4,950
Building Demolition	37	-	-	-	-	37
Permitting Bass River Maintenance Yard	10	-	-	-	-	10
Electric Vehicle Compliance	503	-	-	-	-	503
Maintenance Studies & Scoping	473	-	-	-	-	473
NBHCE Capacity Study	426	-	-	-	-	426
Engineering Documents	208	-	-	-	-	208
ITS & Light Design Document Update	103	-	-	-	-	103
Culvert Inspections	35	-	-	-	-	35
ERP Consultant	150	-	-	-	-	150
Preliminary AET Study	100	-	-	-	-	100
<b>Total Prior Approved 2020 Projects</b>	<b>\$ 2,995</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>6,995</b>
<b>2021-2025 New Projects</b>						
AET Implementation	\$ 3,250	2,500	3,000	3,000	3,000	14,750
On-Call Traffic Engineering Studies	1,250	1,000	1,000	1,000	1,000	5,250
Maintenance Studies & Scoping	200	200	200	200	200	1,000
Next Generation CSC Back Office	1,900	-	-	-	-	1,900
Bridge Inspection Software	400	-	-	-	-	400
UCS Upgrade	320	-	-	-	-	320
F5 Upgrade	300	-	-	-	-	300
CRMS	250	-	-	-	-	250
Safety Application	250	-	-	-	-	250
Camera Upgrade	195	-	-	-	-	195
Activu Upgrade	175	-	-	-	-	175
NJSP Network Upgrade	160	-	-	-	-	160
EGIS Enhancements	150	-	-	-	-	150
Business process assessment and improvements/Reengineering	100	-	-	-	-	100
Conduent Contract Reassessment – Financial Aspect	100	-	-	-	-	100
MS SQL Environment EOL Replacement	100	-	-	-	-	100
Policy and Procedures	100	-	-	-	-	100
<b>Total 2021-2025 New Projects</b>	<b>\$ 9,200</b>	<b>3,700</b>	<b>4,200</b>	<b>4,200</b>	<b>4,200</b>	<b>25,500</b>
<b>Total 2021-2025 Expensed Projects Spending</b>	<b>\$ 12,195</b>	<b>4,700</b>	<b>5,200</b>	<b>5,200</b>	<b>5,200</b>	<b>32,494</b>
<b>Total 2021-2025 Project Spending (Capitalized+Expensed)</b>	<b>\$ 73,912</b>	<b>51,347</b>	<b>49,629</b>	<b>49,823</b>	<b>50,639</b>	<b>275,348</b>

Figure 144: Special Project Reserve Fund 5-Year Spending Expensed Projects

Special Project Reserve Fund - Capitalized Projects Budget						
(\$ In Thousands)						
Project Name	Rolling 5 Year Budget	Estimated/Actual LTD Spending	Future Spending	Total Project Budget 2021	Total Project Budget 2020	\$ Δ from 2020 Budget
<b>Prior Approved 2020 Projects</b>						
Pleasant Plains Sub-Barracks	\$ 3,000	500	-	3,500	500	3,000
Stormwater Pump Replacement Building Renovations	1,633	1,063	-	2,696	2,625	71
Major Building Improvements	1,547	1,900	-	3,447	3,900	(453)
65 Wastewater Pre-Treatment Plant	1,100	225	-	1,325	1,325	-
Safety Implementation at NJSP & Maintenance District	932	2,350	-	3,282	2,350	932
35 Pump Station Force Main Upgrade	825	280	-	1,105	1,105	-
Pre-Engineered Buildings	752	2,845	-	3,597	3,542	55
Replacement of UST	589	-	-	589	-	589
Building Renovations	500	1,382	-	1,882	1,382	500
Bassett Building Improvements	200	100	-	300	300	-
GSP Maintenance Winter Trailer Replacement	58	-	-	58	-	58
Backup Storage	-	476	-	476	476	-
BDA (Bi-Directional Amplifier)	-	478	-	478	500	(22)
HQ Water Main Improvements	-	600	-	600	600	-
Maintenance Department Material Storage Facility	-	467	-	467	525	(58)
Salt Shed TMD 6 Elizabeth	-	741	-	741	1,199	(458)
Toll Canopy Signs - Turnpike	-	71	-	71	475	(404)
Toll Plaza Safety Improvements	-	2,000	-	2,000	2,000	-
TPK Regulatory Signage	-	563	-	563	563	-
Major Fleet Augmentation - Tractor	392	1,238	-	1,630	1,238	392
Major Fleet Augmentation - Tandem	105	2,016	-	2,121	2,016	105
Major Fleet Augmentation	-	4,699	-	4,699	4,699	-
Major Fleet Augmentation - Dump Trucks	-	4,935	-	4,935	5,040	(105)
Major Fleet Augmentation - General	-	160	-	160	160	-
Major Fleet Augmentation - Loader	-	1,013	-	1,013	1,155	(142)
Major Fleet Augmentation - Trade	-	838	-	838	1,088	(250)
Major Sign & Safety Replacement	550	550	-	1,100	1,100	-
Guide Sign Guide Rail Improvement	510	169	-	679	169	510
Construction Barrier Steel Post	-	115	-	115	115	-
GSP I/C 127 SB Entrance Merge Improvements	-	274	-	274	274	-
Turnpike Milepost 29 Grade Sep	-	-	-	-	626	(626)
HR Software Improvement & Implementation	1,240	500	-	1,740	1,700	40
Traffic Permit Lane Closure Application	300	240	-	540	240	300
Capex eGIS Project Planning	300	600	-	900	900	-
Finance Software Discovery and Implementation	250	250	-	500	500	-
Security Remediation	250	900	-	1,150	1,150	-
Business Intel and Analytics	100	100	-	200	100	100
Cap Program Management Software	-	1,600	-	1,600	1,250	350
Enterprise Asset Management	-	4,002	-	4,002	4,002	-
High Jump Upgrade & Sky Track	-	150	-	150	150	-
Law Department Software Enhancements	-	45	-	45	145	(100)
Motorola Console Upgrade	-	-	-	-	2,000	(2,000)
NJDOT Route 42 Bridge	-	100	-	100	100	-
NJSP/Emergency Services Upgrades	-	800	-	800	800	-
Radio Tower Backup Power	-	44	-	44	68	(24)
TMC Communication Upgrades	-	1,000	-	1,000	1,000	-
TPLC	-	-	-	-	300	(300)
UPS Replacement - Holmdel NJSP	-	775	-	775	775	-
<b>Total Prior Approved 2020 Projects</b>	<b>\$ 15,134</b>	<b>43,154</b>	<b>-</b>	<b>58,288</b>	<b>56,227</b>	<b>2,061</b>
<b>2021-2025 New Projects</b>						
Major Building Improvements	\$ 20,750	-	-	20,750	-	20,750
Utility Replacement & Improvements	18,500	-	-	18,500	-	18,500
Water & Wastewater Asset Management & Improvements	17,200	-	-	17,200	-	17,200
Major Roofing Replacements	6,300	-	-	6,300	-	6,300
Maintenance Department Material Storage Facilities	3,525	-	-	3,525	-	3,525
Security Enhancements Facilities	3,500	-	-	3,500	-	3,500
Replacement of UST	650	-	-	650	-	650
Equipment Relocation I/C 11	250	-	-	250	-	250
Hearing Booth	25	-	-	25	-	25
Major Fleet Augmentation - Dump Trucks	28,144	-	-	28,144	-	28,144
Maintenance Vehicles	21,401	-	-	21,401	-	21,401
State Police Vehicles	21,000	-	-	21,000	-	21,000
Major Fleet Augmentation	18,787	-	-	18,787	-	18,787
Major Fleet Augmentation - Tandem Dump Trucks	11,604	-	-	11,604	-	11,604
Major Fleet Augmentation - Tractors	6,631	-	-	6,631	-	6,631
Major Fleet Augmentation - Loaders	6,372	-	-	6,372	-	6,372
Major Fleet Augmentation - Trades Utility Trucks	4,973	-	-	4,973	-	4,973
Other Roadway	18,159	-	-	18,159	-	18,159
Major Sign & Safety Replacement & Improvements	15,250	-	-	15,250	-	15,250
HAER Bridge Recordation	2,800	-	-	2,800	-	2,800
Turnpike Misc Geometric Upgrades	250	-	-	250	-	250
Turnpike SN 80 Operational Study	150	-	-	150	-	150
Resiliency	1,000	-	-	1,000	-	1,000
Other ITS Project	20,000	-	-	20,000	-	20,000
<b>Total 2021-2025 New Projects</b>	<b>\$ 247,220</b>	<b>-</b>	<b>-</b>	<b>247,220</b>	<b>-</b>	<b>247,220</b>
<b>Total Project Capitalized Projects Budget</b>	<b>\$ 262,354</b>	<b>43,154</b>	<b>-</b>	<b>305,508</b>	<b>56,227</b>	<b>249,281</b>

Figure 145: Special Project Reserve Fund Budget by Capitalized Projects

Special Project Reserve Fund - Expensed Projects Budget						
(\$ In Thousands)						
Project Name	Rolling 5 Year Budget	Estimated/Actual LTD Spending	Future Spending	Total Project Budget 2021	Total Project Budget 2020	Change
<b>Prior Approved 2020 Projects</b>						
Building Demolition	37	-	-	37	-	37
Permitting Bass River Maintenance Yard	10	-	-	10	-	10
DCA Compliance	-	750	-	750	750	-
Electric Vehicle Compliance	503	-	-	503	-	503
Maintenance Studies & Scoping	473	450	-	923	900	23
NBHCE Capacity Study	426	274	-	700	302	398
Engineering Documents	208	1,000	-	1,208	1,000	208
ITS & Light Design Document Update	103	-	-	103	-	103
Culvert Inspections	35	565	-	600	565	35
Bridge and Structure Inspection	-	12,241	-	12,241	12,241	-
Development Roadway Lighting Program	-	20	-	20	20	-
Emergency Access SN 23.4	-	165	-	165	165	-
Engineering Studies	-	796	-	796	1,173	(377)
General Permit Expansion	-	150	-	150	150	-
GSP 130-132 Crash Mitigation	-	82	-	82	269	(187)
I/C 114 Traffic Signal Study	-	-	-	-	9	(9)
New Mile Markers - TPK & GSP	-	300	-	300	300	-
On-Call Traffic Services Engineering	-	709	-	709	709	-
Pavement Management	-	988	-	988	1,693	(705)
Prep of Jurisdictional Limits Map	-	19	-	19	100	(81)
Remediation at Chromate Sites	-	1,593	-	1,593	1,593	-
Sensys Puck Expansion Study	-	100	-	100	100	-
On-Call Traffic & Revenue Study	950	411	-	1,361	411	950
ERP Consultant	150	150	-	300	300	-
Preliminary AET Study	100	124	-	224	224	-
Cell Tower Security	-	-	-	-	189	(189)
Contract Audit	-	100	-	100	100	-
Direct to Plate System, Cron	-	110	-	110	110	-
Disaster Recovery & Business Continuity	-	97	-	97	100	(3)
E-ZPass Contract Implementation	-	1,970	-	1,970	1,970	-
Financial Planning Study & Analysis	-	189	-	189	400	(211)
Fire Alarm	-	150	-	150	150	-
Rutgers Assignment Maintenance Software	-	176	-	176	176	-
Contingency	-	1,500	-	1,500	1,500	-
<b>Total Prior Approved 2020 Projects</b>	<b>\$ 2,995</b>	<b>25,179</b>	<b>-</b>	<b>28,173</b>	<b>27,669</b>	<b>504</b>
<b>2021-2025 New Projects</b>						
On-Call Traffic Engineering Studies	1,250	-	-	1,250	-	1,250
Maintenance Studies & Scoping	1,000	-	-	1,000	-	1,000
Bridge Inspection Software	400	-	-	400	-	400
eGIS Enhancements	150	-	-	150	-	150
AET Implementation	3,250	-	-	3,250	-	3,250
Next Generation CSC Back Office	1,900	-	-	1,900	-	1,900
UCS Upgrade	320	-	-	320	-	320
F5 Upgrade	300	-	-	300	-	300
CRMS	250	-	-	250	-	250
Safety Application	250	-	-	250	-	250
Camera Upgrade	195	-	-	195	-	195
Activu Upgrade	175	-	-	175	-	175
NJSP Network Upgrade	160	-	-	160	-	160
Business process assessment and improvements/Reengineering	100	-	-	100	-	100
Conduent Contract Reassessment – Financial Aspect	100	-	-	100	-	100
MS SQL Environment EOL Replacement	100	-	-	100	-	100
Policy and Procedures	100	-	-	100	-	100
<b>Total 2021-2025 New Projects</b>	<b>\$ 10,000</b>	<b>-</b>	<b>-</b>	<b>10,000</b>	<b>-</b>	<b>10,000</b>
<b>Total Project Expensed Projects Budget</b>	<b>\$ 12,995</b>	<b>25,179</b>	<b>-</b>	<b>38,173</b>	<b>27,669</b>	<b>10,504</b>
<b>Total 2021-2025 Project Budget (Capitalized+Expensed)</b>	<b>\$ 275,348</b>	<b>68,333</b>	<b>-</b>	<b>343,682</b>	<b>83,896</b>	<b>259,786</b>

Figure 146: Special Project Reserve Fund Budget by Expensed Projects

Special Project Reserve Fund Capitalized Projects Descriptions	
Project Name	Project Descriptions
<b>Prior Approved 2020 Projects</b>	
Pleasant Plains Sub-Barracks	Funding for design, construction, construction supervision and all other associated costs for a new NJSP sub-barracks building at Pleasant Plains and associated site work to replace the existing building.
Stormwater Pump Replacement Building Renovations	Issue OPS for the preparation of plans and specifications to replace the existing Pump House at MP 92 on the New Jersey Turnpike.
Major Building Improvements	Major Repairs and/or Improvements to Authority's buildings with a project cost greater than \$50,000.00.
65 Wastewater Pre-Treatment Plant	Replacement of the plant which is past its useful life. Many components have reached the end of their lifespans and cannot be replaced. The air supply system is expensive to operate and breaks annually. The SBR system will be replaced by a smaller system that will allow the plant to meet new township sewage quality standards.
Safety Implementation at NJSP & Maintenance District	Funding for the design and construction of safety enhancements for Maintenance and NJSP Buildings to prevent vehicles from veering off the roadway and into the buildings.
3S Pump Station Force Main Upgrade	Funding for the replacement of the force main at Service Area 3S. The existing force main is excessively long with many dips and rises. The pipe clogs often and due to the profile cannot be cleaned safely.
Pre-Engineered Buildings	Preparation of plans and specifications for the construction of pre-engineered metal storage buildings at various locations on the Garden State Parkway and New Jersey Turnpike. Upon completion of plans and specifications construction contracts (or Change of Plan if appropriate) will be issued. Locations to include TMD 1 (Swedesboro) and PMD 5 (Telegraph Hill). Improvements will also include required stormwater management and permitting requirements, such as tree planting, enhancement, etc.
Replacement of UST	Request funding for preparation of Plans and Specifications for replacing Underground Storage Tanks at Garden State Parkway Maintenance Districts 1, 2, & 3.
Building Renovations	Preparation of plans and specifications for the construction of a new trades building as well as a new vehicle storage building at New Jersey Turnpike Maintenance District 7. Also to include the renovation of the Sign Shop at PMD 5 (Telegraph Hill). Construction to take place in 2020 and includes work at ND, Print Shop, and Smith Street.
Bassett Building Improvements	This project will include an installation of roll-top door, concrete pad, and ramp at the Bassett Building warehouse. These additions will allow us to improve material handling at this facility and allow forklift transfers from outside storage containers to inside.
GSP Maintenance Winter Trailer Replacement	Funding for design, permitting, purchasing and construction resources for the replacement of the seasonal Maintenance facility and associated site work at this location for Pleasant Plains and Bass river trailer replacement.
Major Fleet Augmentation - Tractor	Designated Program for lawn tractor replacement.
Major Fleet Augmentation - Tandem	The purchase of replacement and supplemental equipment as needed on a priority and lifecycle basis.
Major Sign & Safety Replacement	Funding for design, permitting, purchasing and construction resources for replacement or new installs of roadside signage and safety features with costs greater than \$50,000.00.
Guide Sign Guide Rail Improvement	To comply with congressional legislation, adds/replaces guide signs with in the limits of the Interchange 6 to 9 Widening to achieve sign message congruency for the I-95 co-designation. Also includes relocation of I-95 SNX/SNL milepost 120.6Z-turn north to 120.7 in order to facilitate accel and decel between roadways and a more level transition. New Z-turn for TMD 3 at MP 58.4.
HR Software Improvement & Implementation	Purchase, implement, configure, and/or install various HR centric software solutions which are required to streamline and automate many manual processes in the HR department. This project will provide funding for services, software, and hardware.
Traffic Permit Lane Closure Application	Funding will provide for the next phase and possible options to migrate application from the cloud to on premise.
Capex eGIS Project Planning	This request is to provide upgrades to the CapEx Manager application in order to allow design consultants, NJTA staff as well as construction supervision consultants to provide up-to-date (construction) project planning data (on a daily basis) directly into CapEx Manager so that it can be exported to the NJTA eGIS system (eGIS Project Planning "Mapplication"). Having the ability to enter this additional data into CapEx will assist the designers, contractors, as well as NJTA staff when planning/scheduling new and/or active projects as well as aid with lane closing planning. This will also be used to coordinate New Jersey Turnpike projects with other agencies project schedules.
Finance Software Discovery and Implementation	This project will allow the Authority to discover a replacement for PSFin. PSFSCM92 is supported until 2030 and there is no future releases or enhancements. This project escalates Enterprise Planning. Funding will be used for hardware, software and services.
Security Remediation	ITS requests funding to remediate any security vulnerabilities identified in the security assessment the Authority had conducted.
Business Intel and Analytics	Create a project that will form a core of senior management team to explore how Business Intelligence and Business Analytics can help the agency to gain insights into it operations from the data source internal to the agency and available externally, identify exceptions such that analyst resource are focused on problem areas only, provide end users with the ability to create customized reports without the need to have report programs written and provide management with tools to measure KPIs and to create meaningful dashboards that help them carry out their responsibilities to operate the agency. Funding will be used for hardware, software and services.

Special Project Reserve Fund Capitalized Projects Descriptions	
Project Name	Project Descriptions
<b>2021-2025 New Projects</b>	
Major Building Improvements	Major Reconstruction, Replacement and Improvements to Authority's buildings with a project cost greater than \$50,000.00.
Utility Replacement & Improvements	Funding for design, permitting, purchasing and construction resources to address immediate and scheduled utility replacements and improvements within our jurisdiction.
Water & Wastewater Asset Management & Improvements	Funding for design, permitting, purchasing and construction resources to address asset management requirements with respect to the water and wastewater assets that are operated and maintained by the Authority.
Major Roofing Replacements	Funding for design, permitting, purchasing, investigation, building commissioning and construction resources for all Authority Buildings, facilities and building structures with costs over \$50,000.00. Facilities include service areas, toll department facilities, maintenance yards, etc.
Maintenance Department Material Storage Facilities	Funding for design, permitting, purchasing and construction resources for a storage facility for equipment, materials, etc.
Security Enhancements Facilities	This project includes but is not limited to cameras, alarm systems, and C-Cure at all Authority facilities including Toll Plazas and Maintenance Facilities.
Replacement of UST	Request funding for preparation of Plans and Specifications for replacing Underground Storage Tanks at Garden State Parkway Maintenance Districts 1, 2, & 3.
Equipment Relocation I/C 11	Move equipment from ETC shelter into Radio Tower shelter.
Hearing Booth	New hearing booth for pre-employment hearing test.
Major Fleet Augmentation - Dump Trucks	Annual purchase of 22 single axle dump trucks to maintain current lifecycle levels. (Vehicles have a 12 year life cycle). Replace models that have exhausted their life expectancy.
Maintenance Vehicles	Purchase of Maintenance Department Vehicles.
State Police Vehicles	Purchase of State Police Vehicles.
Major Fleet Augmentation	The purchase of replacement and supplemental equipment over \$50,000.00 as needed on a priority and lifecycle basis.
Major Fleet Augmentation - Tandem Dump Trucks	Annual purchase of 8 tandem axle dump trucks to maintain current lifecycle levels and replace single axle dump trucks for additional capacity during winter operations. (Vehicles have a 12 year life cycle).
Major Fleet Augmentation - Tractors	Designated Program for lawn tractor replacement.
Major Fleet Augmentation - Loaders	Designated Program for Loader replacement.
Major Fleet Augmentation - Trades Utility Trucks	Designated Program for Trades Utility Vehicles.
Other Roadway	Additional projects not yet identified.
Major Sign & Safety Replacement & Improvements	Funding for design, permitting, purchasing and construction resources for replacement or new installs of roadside signage and safety features with costs greater than \$50,000.00.
HAER Bridge Recordation	Requirement of a Programmatic Agreement to be executed between the NJTA and NJDEP Historic Preservation Office for the Garden State Parkway Historic District. Recordation will be a requirement. Project will record approximately 50 structures per year starting in year two, until all 450 are recorded.
Turnpike Misc Geometric Upgrades	This is an analysis to establish the rebuilding of several insufficient ramp terminals on the Turnpike. The ramps included will be the TSO Ramp connection to the NSO, the SOSA Ramps at 8S and at 10S and lengthening the TSO Ramp at Interchange 10.
Turnpike SN 80 Operational Study	Operations wants to restripe SN80 from a full left and right shoulder and two travel lanes to three travel lanes with a full right shoulder. SN80 does not have shoulders that can support traffic so this cannot be accomplished through restriping. This operational study will conduct traffic modeling to determine if the third lane is added from the SNW80 Ramp or the EN46 Ramp. The study would also establish how to properly bifurcate the SN80 Roadway into Westbound Interstate 80. Study will arrive at a construction cost for future budgeting.
Resiliency	Funding for design, permitting, planning, purchasing and construction resources for delivering the resiliency program through tasks and projects associated with the Authority's Strategic goals on the New Jersey Turnpike and Garden State Parkway.
Other ITS Project	Additional projects not yet identified.

Special Project Reserve Fund Expensed Projects Descriptions	
Project Name	Project Descriptions
<b>Prior Approved 2020 Projects</b>	
Building Demolition	Funding for design related to demolition of existing Authority assets including the former NJTA Headquarters at Interchange 9, the former NJHA Headquarters near Interchange 11, and the Celebrity House at the PNC Arts Center.
Permitting Bass River Maintenance Yard	In order for Maintenance to replace the existing trailer or move staff into the State Police Building, Bass River site must be reviewed to determine unpermitted activities that likely have occurred, required actions to make this site compliant and if the existing building can be used by Maintenance staff or if a new trailer can be installed. Based on the analysis, it will be decided if permitting is feasible and/or cost beneficial. The GSP Interchange 41 permit states any change of use at Bass River State Police Barracks requires the completion of an application with the Commission.
DCA Compliance	Provide funding in order to comply with the Department of Community Affairs recent changes to NO/CO codes for buildings.
Electric Vehicle Compliance	To comply we new electric vehicle mandate.
Maintenance Studies & Scoping	The study of various maintenance projects. The consultant will assist the maintenance department in properly studying, scoping, and quantifying projects on a immediate or scheduled basis. Including scoping, studying, feasibility, permitting, etc.
NBHCE Capacity Study	Engineering study related to the NBHCE capacity and options to increase it.
Engineering Documents	Provides funding to implement updates to the Design and Procedures Manuals, Standard Drawings and Specifications for Lighting, ITS and Guidedrail.
ITS & Light Design Document Update	Revisions to sections 7 and 8 of the Design Manual and associated standard drawings and specifications to reflect current practices.
Culvert Inspections	Inspection of large culverts (5ft. to 20 ft. span) on the New Jersey Turnpike and Garden State Parkway.
On-Call Traffic & Revenue Study	Various studies pertaining to Traffic and Revenue.
ERP Consultant	To independently evaluate and analyze proposed ERP solutions for Financial as well as HCM.
Preliminary AET Study	Preliminary work relate to all electronic tolling including but not limited to studies, business rules etc.
<b>2021-2025 New Projects</b>	
On-Call Traffic Engineering Studies	Funding for Traffic Engineering Studies required by the Authority's Operations Department.
Maintenance Studies & Scoping	The study of various maintenance projects. The consultant will assist the maintenance department in properly studying, scoping, and quantifying projects on a immediate or scheduled basis. Including scoping, studying, feasibility, permitting, etc.
Bridge Inspection Software	Software services for Bridge inspection and research to find alternatives to Bentley InspectTech software.
eGIS Enhancements	Consulting support for eGIS enhancements.
AET Implementation	This project is for miscellaneous tasks and consultation services associated with preparing the Authority for Roadside AET equipment.
Next Generation CSC Back Office	Begin writing the RFP for the Next Generation of CSC back office. The current contract will exp 2/1/25 (without the 2 one-year extensions).
UCS Upgrade	The VoIP server infrastructure is end of support and needs to be upgraded.
F5 Upgrade	Current F5 Load balancers are end of support and need to be upgraded.
CRMS	This project will allow the Authority to research and begin implementing a Customer Relationship Management System.
Safety Application	This project will allow the Authority to implement a safety platform to meet a strategic goal.
Camera Upgrade	The Authority has many cameras that are over 20 years old have to be replaced.
Activu Upgrade	The Activu software at STMC and HQ requires a software upgrade. This upgrade will require new hardware.
NJSP Network Upgrade	The firewalls for 4 NJSP barracks and switches for 2 NJSP barracks are end of support and needs to be replaced.
Business process assessment and improvements/Reengineering	Consulting services to analyze and assess various departmental processes with an objective of optimization and documenting best practices.
Conduent Contract Reassessment – Financial Aspect	To evaluate the financial aspect of Conduent contract for accurate and timely reporting of information and to validate Conduent processes.
MS SQL Environment EOL Replacement	Servers running MS SQL at EOL and need to be replaced.
Policy and Procedures	To provide for consulting services to review and update the Finance Department Policies & Procedures manual.

Figure 147: Special Project Reserve Fund Project Descriptions

### 2021 Supplemental Capital Program (Construction Fund Revenue Funded)

Total Supplemental Capital Program budgeted spending in 2021 is reduced by about 47%, as certain projects were budgeted to be completed in 2020, while others will have their funding completed through the 2019 CIP or the 2021-2025 CIP.

The following chart shows the actual spending for 2019 as well as the budgeted spending for 2020 and 2021:

<b>Supplemental Capital Program Fund by Category (Capitalized Projects)</b>					
<i>(\$ In Thousands)</i>	<b>2019 Actual</b>	<b>2020 Budget</b>	<b>2021 Budget</b>	<b>\$ Δ from 2020</b>	<b>% Δ from 2020</b>
<b>Roadway</b>					
Bridge Construction, Preservation & Security	\$ 8,069	5,553	4,700	(853)	-15.4%
Pavement Resurfacing	14,907	18,450	28,000	9,550	51.8%
Interchanges	-	17,540	-	(17,540)	-100.0%
Roadway Lighting	-	-	500	500	0.0%
Other Roadway Improvements	10,613	12,499	16,892	4,393	35.1%
<b>Non Roadway</b>				-	
Facilities	12,787	37,071	15,710	(21,361)	-57.6%
Service Area & Arts Center	26,070	24,877	200	(24,677)	-99.2%
Technology Improvements	12,702	20,085	5,600	(14,485)	-72.1%
<b>Total by Category</b>	<b>\$ 85,148</b>	<b>136,075</b>	<b>71,602</b>	<b>(64,473)</b>	<b>-47.4%</b>
<b>Supplemental Capital Program Fund by Functional Area (Expensed Projects)</b>					
<i>(\$ In Thousands)</i>	<b>2019 Actual</b>	<b>2020 Budget</b>	<b>2021 Budget</b>	<b>\$ Δ from 2020</b>	<b>% Δ from 2020</b>
<b>Functional Area</b>					
Maintenance of Infrastructure	\$ -	3,949	41	(3,908)	-99.0%
Traffic Control & State Police	90	2,212	1,250	(962)	-43.5%
Technology	-	1,700	487	(1,213)	-71.4%
<b>Total by Functional Area</b>	<b>\$ 90</b>	<b>7,861</b>	<b>1,778</b>	<b>(6,083)</b>	<b>-77.4%</b>
<b>Total Supplemental Capital Program Fund</b>	<b>\$ 85,238</b>	<b>143,936</b>	<b>73,380</b>	<b>(70,556)</b>	<b>-49.0%</b>

Figure 148: Supplemental Capital Program Budget by Category & Functional Area (2019-2021)

<b>Supplemental Capital Program Fund Balance</b>									
<i>(\$ In Thousands)</i>	<b>2019 Actual</b>	<b>2020 Est/Actual</b>	<b>2021 Budget</b>	<b>\$ Δ from 2020</b>	<b>% Δ from 2020</b>	<b>2022 Budget</b>	<b>2023 Budget</b>	<b>2024 Budget</b>	<b>2025 Budget</b>
Beginning Balance	\$ -	-	-	-	0.0%	-	-	-	-
Transfer from Revenue Fund	85,238	127,779	71,602	(56,177)	-44.0%	38,100	30,800	30,035	29,000
Total Project Spending	(85,238)	(127,779)	(71,602)	56,177	-44.0%	(38,100)	(30,800)	(30,035)	(29,000)
<b>Ending Balance</b>	<b>\$ -</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.0%</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

Figure 149: Supplemental Capital Program Fund Balance (2019-2025)



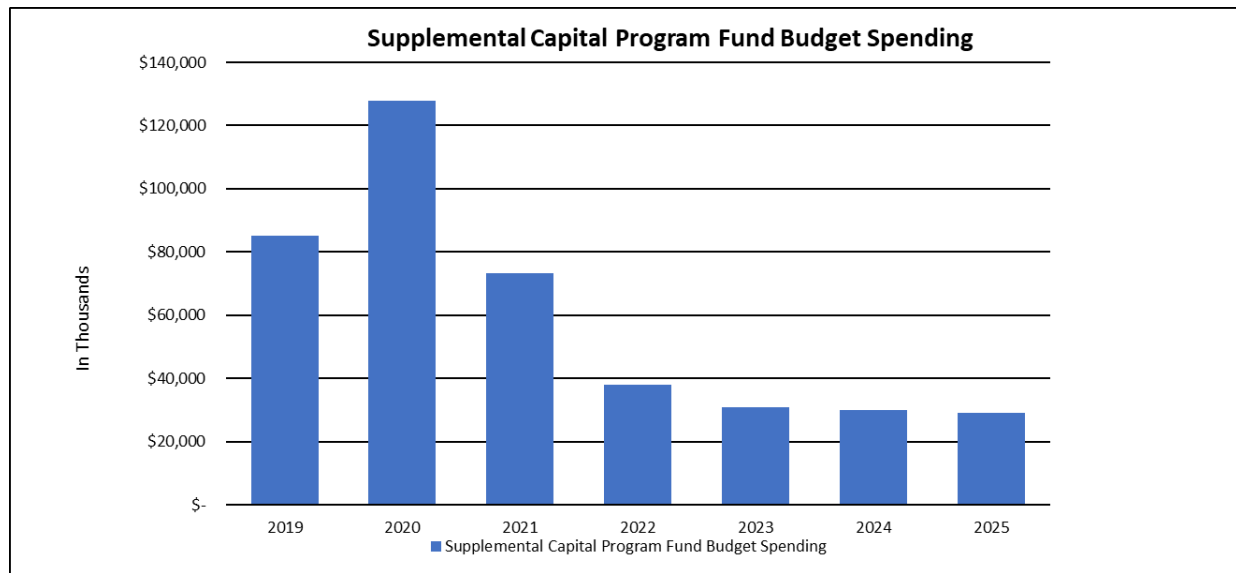


Figure 150: Supplemental Capital Program Fund Budget Spending Graph (2019-2025)

Supplemental Capital Program Fund Project Summary			
	2021 Total Project Budget	Spent/Committed Through 10/31/20	% of Budget
<i>(\$ In Thousands)</i>			
<b>Capitalized Projects Category</b>			
<b>Roadway</b>			
Bridge Construction, Preservation & Security	23,443	2,331	9.9%
Pavement Resurfacing	46,450	15,907	34.2%
Interchanges	17,540	47	0.0%
Roadway Lighting	500	345	68.9%
Other Roadway Improvements	94,359	35,538	37.7%
<b>Non Roadway</b>			
Facilities	69,438	18,699	26.9%
Service Area & Arts Center (1)	25,877	27,245	105.3%
Technology Improvements	42,048	5,622	13.4%
<b>Expensed Project Functional Areas</b>			
Maintenance of Infrastructure	3,990	4,724	118.4%
Traffic Control & State Police	3,462	-	0.0%
Technology	1,987	2,230	112.2%
<b>Total Supplemental Capital Program Fund</b>	<b>\$ 329,094</b>	<b>112,689</b>	<b>34.2%</b>

(1) Service Area & Arts Center Commitments will move to the 2019 CIP in 2021

Figure 151: Supplemental Capital Program Fund Project Summary

<b>Supplemental Capital Program Fund</b>						
<b>2021 - 2025 Rolling 5-Year Spending Budget by Project Type</b>						
<i>(\$ In Thousands)</i>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>Total 5-Year</b>
<b>Capitalized Project Category</b>						
<b>Roadway</b>						
Bridge Construction, Preservation & Security	\$ 4,700	4,400	4,400	4,400	4,400	22,300
Pavement Resurfacing (1)	28,000	-	-	-	-	28,000
Interchanges	-	-	-	-	-	-
Roadway Lighting (2)	500	-	-	-	-	500
Other Roadway Improvements	16,892	12,310	19,800	19,035	18,000	86,037
<b>Non Roadway</b>						
Facilities	15,710	15,590	800	800	800	33,700
Service Area & Arts Center	200	200	200	200	200	1,000
Technology Improvements	5,600	5,600	5,600	5,600	5,600	28,000
<b>Expensed Project Functional Areas (3)</b>						
Maintenance of Infrastructure	41	-	-	-	-	41
Traffic Control & State Police	1,250	-	-	-	-	1,250
Technology	487	-	-	-	-	487
<b>Total Supplemental Capital Program Fund</b>	<b>\$ 73,380</b>	<b>38,100</b>	<b>30,800</b>	<b>30,035</b>	<b>29,000</b>	<b>201,315</b>

(1) Additional resurfacing beyond what is funded through Maintenance Reserve Fund after 2021 will be funded in 2021-2025 CIP.

(2) Roadway lighting work done by the Maintenance Division will be funded in Maintenance Reserve Fund after 2021.

(3) After 2021, any expense project required will be funded through Special Project Reserve Fund.

**Figure 152: Supplemental Capital Program Fund 5-Year Spending Budget by Project Type (2021-2025)**

Approximately \$201.3 million is budgeted for the Supplemental Capital Program rolling 5-year spending budget. Of this, \$86 million (43%) is budgeted for Other Roadway Improvements, \$33.7 million (17%) is for Facilities, \$28.0 million (14%) is for Pavement Resurfacing, \$28.5 million (14%) is for Technology Improvements, and \$22.3 million (11%) for Bridge Construction, Preservation & Security.

A detailed list of all projects contained in the 2021 Supplemental Capital Program spending budget follows:

Supplemental Capital Program Fund - Capitalized Projects Spending						
(\$ In Thousands)						
Project Name	2021 Spending	2022 Spending	2023 Spending	2024 Spending	2025 Spending	Rolling 5 Year Budget Total
<b>Prior Approved 2020 Projects</b>						
Redecking NJDOT STR 0730170	\$ 300	-	-	-	-	300
LED Lighting Upgrades	500	-	-	-	-	500
Tremley Point Connector Road	6,000	5,500	1,500	1,185	-	14,185
Roadside Appurtenances	6,355	-	-	-	-	6,355
NWC/CNW Ramp	537	-	-	-	-	537
Toll Facility Repairs & Improvements	800	-	-	-	-	800
Commuter Park & Ride Design	550	-	-	-	-	550
Security Enhancements Facilities	170	-	-	-	-	170
Major Backup Generator Replacement	130	-	-	-	-	130
Contingency	5,000	-	-	-	-	5,000
<b>Total Prior Approved 2020 Projects</b>	<b>\$ 20,342</b>	<b>5,500</b>	<b>1,500</b>	<b>1,185</b>	<b>-</b>	<b>28,527</b>
<b>2021-2025 New Projects</b>						
Additional Resurfacing	\$ 28,000	-	-	-	-	28,000
Major Backup Generator Replacement	6,758	5,442	-	-	-	12,200
HVAC & Boiler Replacement Program	6,502	9,348	-	-	-	15,850
Funding for Chargebacks - Bridge Construction, Preservation & Security	4,400	4,400	4,400	4,400	4,400	22,000
Funding for Chargebacks - Other Roadway	4,000	4,000	4,000	4,000	4,000	20,000
Funding for Chargebacks - Facility	800	800	800	800	800	4,000
Funding for Chargebacks - Technology	600	600	600	600	600	3,000
Funding for Chargebacks - Service Area & Arts Center	200	200	200	200	200	1,000
Contingency	-	5,000	5,000	5,000	5,000	20,000
Other Roadway	-	2,810	14,300	13,850	14,000	44,960
<b>Total 2021-2025 New Projects</b>	<b>\$ 51,260</b>	<b>32,600</b>	<b>29,300</b>	<b>28,850</b>	<b>29,000</b>	<b>171,010</b>
<b>Total 2021-2025 Capitalized Project Spending</b>	<b>\$ 71,602</b>	<b>38,100</b>	<b>30,800</b>	<b>30,035</b>	<b>29,000</b>	<b>199,537</b>

Figure 153: Supplemental Capital Program Fund 5-Year Spending by Capitalized Projects

Supplemental Capital Program Fund - Expensed Projects Spending						
(\$ In Thousands)						
Project Name	2021 Spending	2022 Spending	2023 Spending	2024 Spending	2025 Spending	Rolling 5 Year Budget Total
<b>Prior Approved 2020 Projects</b>						
Morris Canal Bridge	\$ 41	-	-	-	-	41
NJSP Motorola Mobile Radio	1,250	-	-	-	-	1,250
Network Infrastructure Improvements	450	-	-	-	-	450
Gasboy Fuel Plus	37	-	-	-	-	37
<b>Total 2021-2025 Expensed Projects Spending</b>	<b>\$ 1,778</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,778</b>
<b>Total 2021-2025 Project Spending (Capitalized+Expensed)</b>	<b>\$ 73,380</b>	<b>38,100</b>	<b>30,800</b>	<b>30,035</b>	<b>29,000</b>	<b>201,315</b>

Figure 154: Supplemental Capital Program Fund 5-Year Spending Expensed Projects

Supplemental Capital Program Fund - Capitalized Projects Budget						
(\$ In Thousands)						
Project Name	Rolling 5 Year Budget Total	Estimated/Actual LTD Spending	Future Spending	Total Project Budget 2021	Total Project Budget 2020	Change
<b>Prior Approved 2020 Projects</b>						
Redecking NJDOT STR 0730170	\$ 300	600	-	900	900	-
Bridge Fender Reconstruction - Phase 2	-	-	-	-	1,640	(1,640)
W110.42, W111.48, W112.B080	-	375	-	375	375	-
Westerly Hackensack River Bridge	-	-	-	-	5,770	(5,770)
Reconstruction Westerly Hackensack River Bridge Pier	-	168	-	168	168	-
I-78 Pavement Repairs	-	17,514	-	17,514	17,514	-
Interchange Improvements	-	21	-	21	21	-
TPK I/C 14B Canopy Replacement	-	5	-	5	5	-
Additional Roadway Resurfacing	-	18,450	-	18,450	18,450	-
LED Lighting Upgrades	500	-	-	500	-	500
Tremley Point Connector Road	14,185	4,000	-	18,185	18,185	-
Roadside Appurtenances	6,355	1,618	-	7,973	7,973	-
NWC/CNW Ramp	537	90	-	627	90	537
Concept Develop & Preliminary Engineering	-	1,075	-	1,075	1,075	-
CR 50 Improvements	-	-	-	-	2,203	(2,203)
Heards Brook Improvements	-	582	-	582	9,582	(9,000)
Non-Vegetative Management	-	957	-	957	1,897	(940)
Toll Facility Repairs & Improvements	800	2,196	-	2,996	2,196	800
Commuter Park & Ride Design	550	-	-	550	-	550
Security Enhancements Facilities	170	-	-	170	-	170
Major Backup Generator Replacement	130	1,700	-	1,830	1,700	130
HVAC & Boiler Replacement Program	-	6,802	-	6,802	7,965	(1,163)
Major Roofing Replacements	-	1,250	-	1,250	1,250	-
Replace Toll Booths TPK/GSP	-	72	-	72	72	-
Security Systems/C Cure	-	1,400	-	1,400	1,570	(170)
Arts Center Improvements	-	22,165	-	22,165	22,165	-
Service Area Redevelopment	-	153	-	153	153	-
SA - HMS Host & Sunoco	-	24,877	-	24,877	24,877	-
Hybrid Changeable Message Sign	-	845	-	845	845	-
Production Toll Lane System Refresh	-	7,000	-	7,000	7,000	-
Road Weather Information System	-	505	-	505	6,542	(6,037)
Traffic Software Upgrade & Improvements	-	698	-	698	698	-
Contingency	5,000	5,000	-	10,000	5,000	5,000
<b>Total Prior Approved 2020 Projects</b>	<b>\$ 28,527</b>	<b>120,118</b>	<b>-</b>	<b>148,645</b>	<b>167,881</b>	<b>(19,236)</b>
<b>2021-2025 New Projects</b>						
Funding for Chargebacks - Bridge Construction, Preservation & Security	\$ 22,000	-	-	22,000	-	22,000
Additional Resurfacing	28,000	-	-	28,000	-	28,000
Other Roadway	44,960	-	-	44,960	-	44,960
Funding for Chargebacks - Other Roadway	20,000	-	-	20,000	-	20,000
HVAC & Boiler Replacement Program	15,850	-	-	15,850	-	15,850
Major Backup Generator Replacement	12,200	-	-	12,200	-	12,200
Funding for Chargebacks - Facility	4,000	-	-	4,000	-	4,000
Funding for Chargebacks - Service Area & Arts Center	1,000	-	-	1,000	-	1,000
Funding for Chargebacks - Technology	3,000	-	-	3,000	-	3,000
Contingency	20,000	-	-	20,000	-	20,000
<b>Total 2021-2025 New Projects</b>	<b>\$ 171,010</b>	<b>-</b>	<b>-</b>	<b>171,010</b>	<b>-</b>	<b>171,010</b>
<b>Total Project Capitalized Projects Budget</b>	<b>\$ 199,537</b>	<b>120,118</b>	<b>-</b>	<b>319,655</b>	<b>167,881</b>	<b>151,774</b>

Figure 155: Supplemental Capital Program Fund Budget by Capitalized Projects

Supplemental Capital Program Fund - Expensed Projects Budget						
(\$ In Thousands)						
Project Name	Rolling 5 Year Budget Total	Estimated/Actual LTD Spending	Future Spending	Total Project Budget 2021	Total Project Budget 2020	Change
<b>Prior Approved 2020 Projects</b>						
Morris Canal Bridge	\$ 41	3,949	-	3,990	3,990	-
PTC - Delaware River Bridge	-	500	-	500	500	-
PTC - Delaware River Bridge - Reimbursable	-	(500)	-	(500)	(500)	-
PTC - Design Services - A3291	-	500	-	500	500	-
PTC - Design Services - A3291-Reimbursable	-	(500)	-	(500)	(500)	-
PTC - Repaint and Improvements	-	2,880	-	2,880	2,880	-
PTC - Repaint and Improvements - Reimbursable	-	(2,880)	-	(2,880)	(2,880)	-
NJSP Motorola Mobile Radio	1,250	2,212	-	3,462	2,962	500
Network Infrastructure Improvements	450	200	-	650	350	300
Gasboy Fuel Plus	37	500	-	537	500	37
Barracks Local Survivability	-	150	-	150	250	(100)
NJSP Body Cameras	-	400	-	400	500	(100)
NJSP Interview Room Equipment	-	250	-	250	250	-
<b>Total Project Expensed Projects Budget</b>	<b>\$ 1,778</b>	<b>7,661</b>	<b>-</b>	<b>9,439</b>	<b>8,802</b>	<b>637</b>
<b>Total 2021-2025 Project Budget (Capitalized+Expensed)</b>	<b>\$ 201,315</b>	<b>127,779</b>	<b>-</b>	<b>329,094</b>	<b>176,683</b>	<b>152,411</b>

Figure 156: Supplemental Capital Program Fund Budget by Expensed Projects

Supplemental Capital Program Fund Capitalized Projects Descriptions	
Project Name	Project Descriptions
<b>Prior Approved 2020 Projects</b>	
Redecking NJDOT STR 0730170	Funding for the design, construction and construction supervision for repairs to the severely deteriorated bridge deck of NJDOT Str. No. 0730170, which carries the Garden State Parkway over Interstate 280. The repairs are required to safely maintain traffic over the bridge which is located within the work zone of the Authority's Contract No. P300.433, Replacement of the Central Avenue Overpass at Interchange 145 & Bridge Deck Reconstruction, MP 144 to 152. NJDOT is the owner of the structure and cost sharing will be investigated.
LED Lighting Upgrades	Upgrade multiple locations to LED lights for TPK Underpasses, High mast Poles, Interchange and Ramp lights, Toll Department Facilities, etc. New LED systems will provide maintenance free lighting for 10 years as well as a 55% reduction in energy usage.
Tremley Point Connector Road	Funding for the design associated with this new predominantly pier/pile supported, 1.1 mile long four lane elevated roadway/bridge that will connect Industrial Highway in Carteret, Middlesex County with Tremley Point Road in Linden, Union County traversing the Rahway River.
Roadside Appurtenances	Design, Construction and Supervision of the installation or upgrade of roadside devices including weathering steel guiderail on the GSP.
NWC/CNW Ramp	Installation of permanent toll collection in conjunction with the opening of the American Dream project.
Toll Facility Repairs & Improvements	Funding for the design, construction and construction supervision of Toll Plaza Site rehabilitation and various locations on the Garden State Parkway and New Jersey Turnpike.
Commuter Park & Ride Design	Funding is required for the Authority to reimburse Ocean County for the design and construction of a new park & ride at MP 58 on the Garden State Parkway. The design costs (maximum of \$400,000.00) are to be paid upon completion of the design & the construction costs (\$2,000,000.00 max) are to be paid monthly based on construction progress.
Security Enhancements Facilities	This project includes but is not limited to cameras, alarm systems, and C-Cure at all Authority facilities including Toll Plazas and Maintenance Facilities. Life cycle of project estimated 1/1/2021 through 12/31/2026.
Major Backup Generator Replacement	Funding for backup up generators with costs over \$50,000.00.
Contingency	Provides additional funding for increased project needs or unanticipated projects.
<b>2021-2025 New Projects</b>	
Funding for Chargebacks - Bridge Construction, Preservation & Security	Direct labor costs of employees working on bond funded projects.
Funding for Chargebacks - Other Roadway	Direct labor costs of employees working on bond funded projects.
Funding for Chargebacks - Facility	Direct labor costs of employees working on bond funded projects.
Funding for Chargebacks - Technology	Direct labor costs of employees working on bond funded projects.
Funding for Chargebacks - Service Area & Arts Center	Direct labor costs of employees working on bond funded projects.
Additional Resurfacing	Funding for additional roadway resurfacing.
Other Roadway	Additional projects not yet identified.
HVAC & Boiler Replacement Program	Funding for design, permitting, purchasing and construction resources to continue the Maintenance Departments Authority wide HVAC equipment replacement program. Facilities include toll department facilities, maintenance yards, etc.
Major Backup Generator Replacement	Funding for design, permitting, purchasing and construction resources for facility and site improvements in coordination with our overall generator replacement program.
Contingency	Provides additional funding for increased project needs or unanticipated projects.

Supplemental Capital Program Fund Expensed Project Descriptions	
Project Name	Project Descriptions
<b>Prior Approved 2020 Projects</b>	
Morris Canal Bridge	Design, Supervision and Construction of vehicular bridge over the Morris Canal; connecting Jersey Avenue and Phillips Street in Jersey City. The existing mobile radios in NJSP vehicles are end-of-life and are no longer supported by the vendor. Currently there are approximately 300 marked and 200 unmarked vehicles that require a mobile radio. The existing radios in the vehicles are analog and will no longer function on the new P25 Phase 2 radio system currently being deployed by NJSP. The new radios are fully compatible with the P25 Phase 2 system. Funding will be used for hardware, software and services.
NJSP Motorola Mobile Radio	This is a multiyear project which will provide fiber or wireless communication to roadway signs that are currently on modems and have poor network connectivity. Funding will be used for hardware, software and services.
Network Infrastructure Improvements	This project will automate the mileage reading of vehicles and hours from equipment. This project includes: a. Hardware and installation for equipment in 2,000 vehicles b. Hardware for two new virtual machines c. Services to support the setup of new hardware
Gasboy Fuel Plus	Funding will be used for hardware, software and services.

Figure 157: Supplemental Capital Project Descriptions

## Construction Fund (Bond Funded)

The bond funded capital projects, referred to as the Construction Fund, include – (i) 2021 – 2025 Capital Improvement Program, part of the 2020 Long-Range Capital Plan, (ii) 2019 Capital Improvement Program and (iii) 2008 \$7 Billion Capital Improvement Program. These capital projects are presented on a rolling five-year (2021-2025) spending basis along with their respective total project budgets. Each year a new rolling five-year spending plan will be approved with the changes, if any, to the total project budgets, as a part of the annual budget approval.

2021 - 2025 Rolling 5-Year Capital Spending Plan By Project Type							
Bond Funded							
	Spending Plan						
(\$ In Thousands)	2021	2022	2023	2024	2025	Total	
Capitalized Project by Category							
Roadway							
Bridge Construction, Preservation & Security	\$ 251,181	379,864	361,174	315,730	305,287	1,613,236	
Capacity Enhancements - Turnpike	24,380	94,268	146,603	118,303	115,764	499,318	
Capacity Enhancements - Parkway	3,057	2,999	1,144	3,331	9,924	20,455	
Interchanges	58,514	17,825	9,974	11,929	13,001	111,243	
Resiliency	-	2,300	13,600	57,200	66,400	139,500	
Concrete Barrier	23,130	9,114	8,322	23,379	-	63,945	
Drainage Structures	63,986	128,962	93,937	32,906	40,927	360,718	
Roadway Lighting	32,831	34,064	26,088	18,103	27,109	138,195	
Other Roadway Improvements	60,778	88,403	72,411	84,633	48,531	354,757	
<b>Total Roadway</b>	\$ 517,857	757,800	733,253	665,514	626,943	3,301,367	
Non Roadway							
Facilities	\$ 21,000	6,068	5,774	5,671	5,671	44,184	
Service Areas & Arts Center	22,249	18,208	15,550	8,000	5,000	69,006	
Technology Improvements	80,419	63,682	57,074	45,344	27,537	274,057	
<b>Total Non Roadway</b>	\$ 123,668	87,958	78,398	59,015	38,208	387,247	
<b>Total Spending (Capitalized)</b>	\$ 641,525	845,758	811,651	724,529	665,151	3,688,614	

Funding Source							
	(\$ In Thousands)		Spending Plan				
Bond Funded	2021	2022	2023	2024	2025	Total	
2021-2025 Capital Improvement Program	\$ 227,356	620,975	679,365	629,849	634,425	2,791,970	
2019 Capital Improvement Program	268,135	168,910	98,198	55,313	15,770	606,325	
2008 \$7 Billion Capital Improvement Program	146,034	55,873	34,088	39,367	14,957	290,319	
<b>Total Bond Funded</b>	\$ 641,525	845,758	811,651	724,529	665,151	3,688,614	

Figure 158: 2021-2025 Rolling 5-Year Capital Spending by Project Type (Bond Funded)

## Construction Fund Budget— Spending by Project Type

This includes all bond funded capital projects contained in the 2021-2025 Capital Improvement Program, 2019 Capital Improvement Program, and the 2008 \$7 Billion Capital Improvement Program. The combined project budgets in 2021, on a rolling 5-year budget, total \$3.7 billion, or an average spend of about \$738 million/year.

### Construction Fund Budget – Capitalized Projects – Spending by Category

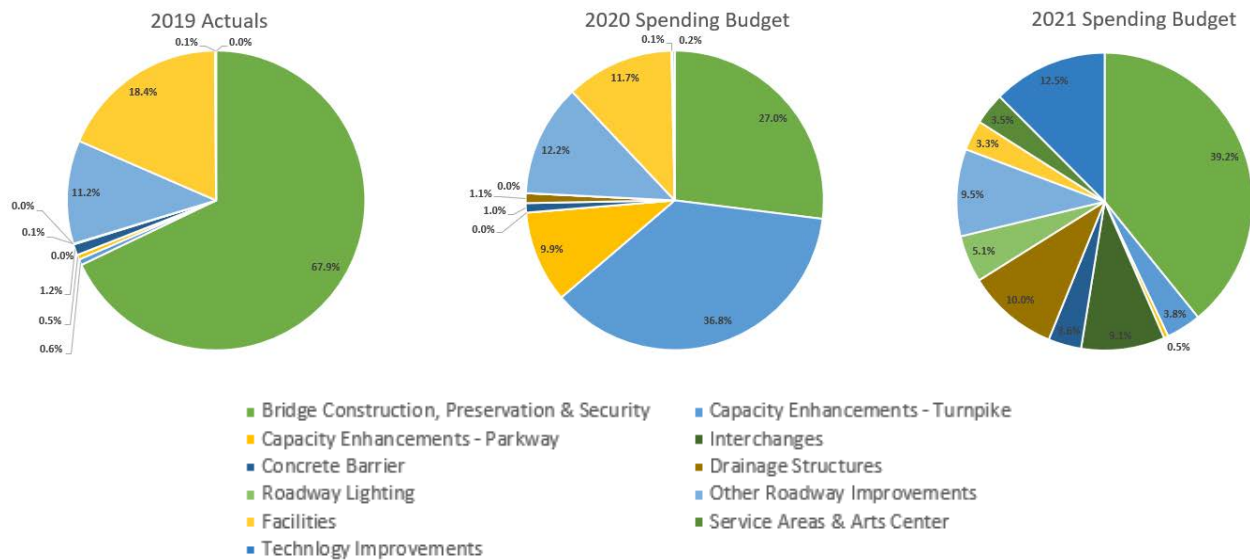


Figure 159: 2019-2021 Construction Fund Spending by Category Pie Charts

Construction Fund Balance									
	2019	2020	2021	\$ Δ from	% Δ from	2022	2023	2024	2025
(\$ In Thousands)	Actual	Est/Actual	Budget	2020	2020	Budget	Budget	Budget	Budget
Beginning Balance	\$ 214,080	490,142	391,369	(98,773)	-20.2%	249,843	154,085	342,434	617,906
Bond Proceeds	478,629	500,000	500,000	-	0.0%	750,000	1,000,000	1,000,000	1,000,000
Interest Income	8,244	6,000	6,000	-	0.0%	9,000	12,000	12,000	12,000
Total Project Spending	(210,811)	(304,773)	(641,525)	(336,752)	110.5%	(845,758)	(811,651)	(724,529)	(665,151)
Ending Balance*	\$ 490,142	691,369	255,843	(435,525)	-63.0%	163,085	354,434	629,906	964,754

\* Does not agree to fund balance in financial statement as this chart excludes capitalized assets.

Figure 160: Construction Fund Bond Proceeds Balance (2019-2021)

## 2021-2025 Capital Improvement Program

The 2021- 2025 CIP, which is derived from the 2020 Long-Range Capital Plan which was approved in May 2020, is starting with total project budgets of \$4.5 billion, and a rolling five-year spending plan of \$2.7 billion, or an average spending of approximately \$600 million each year. As this program develops further, it is expected that the spending plan may go up to about \$1 billion per year.

Included in this program initially are several projects focusing on bridge rehabilitation and replacement on both roadways, capacity enhancements such as the Newark Bay Hudson County Extension on the Turnpike, Interchanges 1 to 4 on the Turnpike and Interchange 80 between mileposts 80 and 83 on the Parkway, culvert rehabilitation on both roadways, and Turnpike Interchange 17 ramp bridge replacement.

The 2021-2025 CIP will be funded through bond proceeds. It is expected that a number of bonds will be issued each year, beginning in 2021, to fund the ongoing spending needs of the program.

<b>2021-2025 Capital Improvement Program Spending by Category</b>					
	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>\$ Δ from</b>	<b>% Δ from</b>
<i>(\$ In Thousands)</i>	<b>Actual</b>	<b>Budget</b>	<b>Budget</b>	<b>2020 Budget</b>	<b>2020 Budget</b>
<b>Roadway</b>					
Bridge Construction, Preservation & Security	\$ -	-	62,117	62,117	-
Capacity Enhancements - Turnpike	-	-	22,915	22,915	-
Interchanges	-	-	1,105	1,105	-
Concrete Barrier	-	-	3,168	3,168	-
Drainage Structures	-	-	63,986	63,986	-
Roadway Lighting	-	-	32,831	32,831	-
Other Roadway Improvements	-	-	3,729	3,729	-
<b>Non Roadway</b>					
Technology Improvements	-	-	37,505	37,505	-
<b>Total by Category</b>	\$ -	-	227,356	227,356	-

Figure 161: 2021-2025 Capital Improvement Program Spending by Category (2019-2021)



<b>2021-2025 Capital Improvement Program Project Summary by Category</b>			
<i>(\$ In Thousands)</i>	<b>2021 Total</b>	<b>Spent/Committed</b>	<b>% of</b>
	<b>Project Budget</b>	<b>Through 10/31/20</b>	<b>Budget</b>
<b>Capitalized Projects Category</b>			
<b>Roadway</b>			
Bridge Construction, Preservation & Security	\$ 1,606,440	22,050	1.4%
Capacity Enhancements - Turnpike	1,495,300	4,500	0.3%
Capacity Enhancements - Parkway	85,000	-	0.0%
Interchanges	132,000	-	0.0%
Resiliency	139,500	-	0.0%
Concrete Barrier	34,400	785	2.3%
Drainage Structures	423,075	1,300	0.3%
Roadway Lighting	161,985	3,575	2.2%
Other Roadway Improvements	216,900	3,545	1.6%
<b>Non Roadway</b>			
Technology Improvements	219,000	2,500	0.0%
<b>Total 2021-2025 Capital Improvement Program</b>	<b>\$ 4,513,600</b>	<b>38,255</b>	<b>0.8%</b>

Figure 162: 2021-2025 Capital Improvement Program Project Summary

<b>2021-2025 Capital Improvement Program</b>						
<b>2021 - 2025 Rolling 5-Year Spending Budget by Project Type</b>						
<i>(\$ In Thousands)</i>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>Total 5-Year</b>
<b>Capitalized Projects Category</b>						
<b>Roadway</b>						
Bridge Construction, Preservation & Security	\$ 62,117	250,369	298,121	264,566	293,269	1,168,441
Capacity Enhancements - Turnpike	22,915	94,268	146,603	118,303	115,764	497,852
Capacity Enhancements - Parkway	-	-	-	3,331	9,924	13,255
Interchanges	1,105	1,825	1,874	3,829	5,058	13,690
Resiliency	-	2,300	13,600	57,200	66,400	139,500
Concrete Barrier	3,168	7,723	4,170	19,228	-	34,289
Drainage Structures	63,986	128,954	93,844	32,812	40,833	360,429
Roadway Lighting	32,831	34,064	26,088	18,103	27,109	138,195
Other Roadway Improvements	3,729	51,434	37,991	67,133	48,531	208,819
<b>Non Roadway</b>						
Technology Improvements	37,505	50,039	57,074	45,344	27,537	217,500
<b>Total 2021-2025 Capital Improvement Program</b>	<b>\$ 227,356</b>	<b>620,975</b>	<b>679,365</b>	<b>629,849</b>	<b>634,425</b>	<b>2,791,970</b>

Figure 163: 2021-2025 Capital Improvement Program 5-Year Spending Budget by Project Type (2021-2025)

Individual projects within the 2021- 2025 Capital Improvement Program are shown below:

<b>2021-2025 Capital Improvement Program - Spending</b>						
(\$ In Thousands)						
Project Name	2021 Spending	2022 Spending	2023 Spending	2024 Spending	2025 Spending	Rolling 5 Year Budget Total
GSP Corrugated Metal Pipe Replacement & Culvert Rehabilitation	\$ 63,986	128,954	93,844	32,812	40,833	360,429
GSP & TPK Bridge Rehabilitation/Replacement Program	50,979	208,009	267,272	213,139	269,115	1,008,515
GSP & TPK Lighting Upgrades	32,831	34,064	26,088	18,103	27,109	138,195
GSP & TPK ITS Infrastructure & Software Upgrades	27,000	27,000	27,000	27,000	27,000	135,000
TPK Newark Bay Hudson County Extension Capacity Enhancements	14,130	37,364	55,791	84,590	93,331	285,207
TPK Hybrid Changeable Message Signs	10,505	23,039	30,074	18,344	537	82,500
TPK Mainline Capacity Enhancements between I/C NOS 1-4	8,785	56,903	74,312	213	22,432	162,645
TPK Bridges (W110.42,W111.48,W112.B080)	7,500	36,800	10,400	-	-	54,700
TPK I/C 17 Ramp Bridge Replacement	3,638	5,560	20,448	51,427	24,153	105,226
GSP & TPK Median Barrier Improvements	3,168	7,723	4,170	19,228	-	34,289
Pavement Preservation Program	2,427	42,126	15,447	-	-	60,000
GSP Service Area Ramps	1,302	7,020	11,677	-	-	20,000
GSP I/C 80 Completion & Capacity Enhancements between 80-83	1,105	1,825	1,874	3,829	5,058	13,690
Resiliency	-	2,300	13,600	57,200	66,400	139,500
GSP & TPK MSE Wall Replacement	-	2,221	8,783	65,383	48,531	124,919
GSP & TPK UST Upgrades	-	66	2,084	1,750	-	3,900
Westerly Alignment Mainline Capacity Enhancements	-	-	16,500	33,500	-	50,000
GSP Mainline Capacity Enhancements between I/C 129-142	-	-	-	3,331	6,669	10,000
GSP Mainline Capacity Enhancements between I/C 154-163	-	-	-	-	3,255	3,255
<b>Total Spending</b>	<b>\$ 227,356</b>	<b>620,975</b>	<b>679,365</b>	<b>629,849</b>	<b>634,425</b>	<b>2,791,970</b>

Figure 164: 2021-2025 Capital Improvement Program 5-Year Spending by Projects

<b>2021-2025 Capital Improvement Program - Budget</b>						
(\$ In Thousands)						
Project Name	Rolling 5 Year Budget	Estimated/Actual LTD Spending	Future Spending	Total Project Budget 2021	Total Project Budget 2020	Change
GSP Corrugated Metal Pipe Replacement & Culvert Rehabilitation	\$ 360,429	-	62,646	423,075	-	423,075
GSP & TPK Bridge Rehabilitation/Replacement Program	1,008,515	-	435,275	1,443,790	-	1,443,790
GSP & TPK Lighting Upgrades	138,195	-	23,790	161,985	-	161,985
GSP & TPK ITS Infrastructure & Software Upgrades	135,000	-	-	135,000	-	135,000
TPK Newark Bay Hudson County Extension Capacity Enhancements	285,207	-	55,093	340,300	-	340,300
TPK Hybrid Changeable Message Signs	82,500	-	1,500	84,000	-	84,000
TPK Mainline Capacity Enhancements between I/C Nos. 1-4	162,645	-	942,355	1,105,000	-	1,105,000
TPK Bridges (W110.42,W111.48,W112.B080)	54,700	-	-	54,700	-	54,700
TPK I/C 17 Ramp Bridge Replacement	105,226	-	2,724	107,950	-	107,950
GSP & TPK Median Barrier Improvements	34,289	-	111	34,400	-	34,400
Pavement Preservation Program	60,000	-	-	60,000	-	60,000
GSP Service Area Ramps	20,000	-	-	20,000	-	20,000
GSP I/C 80 Completion & Capacity Enhancements between 80-83	13,690	-	98,310	112,000	-	112,000
Resiliency	139,500	-	-	139,500	-	139,500
GSP & TPK MSE Wall Replacement	124,919	-	8,081	133,000	-	133,000
GSP & TPK UST Upgrades	3,900	-	-	3,900	-	3,900
GSP I/C 153 Completion	-	-	20,000	20,000	-	20,000
Westerly Alignment Mainline Capacity Enhancements	50,000	-	-	50,000	-	50,000
GSP Mainline Capacity Enhancements between I/C 129 to 142	10,000	-	35,000	45,000	-	45,000
GSP Mainline Capacity Enhancements between I/C 154 to 163	3,255	-	36,745	40,000	-	40,000
<b>Total Budget</b>	<b>\$ 2,791,970</b>	<b>-</b>	<b>1,721,630</b>	<b>4,513,600</b>	<b>-</b>	<b>4,513,600</b>

Figure 165: 2021-2025 Capital Improvement Program Budget by Projects

## NEW JERSEY TURNPIKE AUTHORITY 2021 - 2025 CAPITAL IMPROVEMENT PROGRAM

- GSP & TPK Pavement Preservation Program (system-wide)
- GSP & TPK Hybrid Changeable Message Signs (system-wide)
- GSP & TPK Lighting Upgrade Program (system-wide)
- GSP & TPK Underground Storage Tank Upgrade Program (system-wide)
- GSP & TPK Median Barrier Improvement Program (system-wide)
- GSP Service Area Ramp Widening Program (system-wide)
- GSP & TPK ITS Infrastructure and Software Upgrade Program (system-wide)
- GSP & TPK Bridge Rehabilitation/Replacement Program (system-wide)
- GSP Corrugated Metal Pipe Replacement and Culvert Rehabilitation Program (system-wide)
- GSP & TPK Resiliency Program (system-wide)
- GSP & TPK MSE Wall Replacement Program (system-wide)
- 1 TPK Interchange 17 Ramp Bridge Replacement
- 2 GSP Interchange 80 Completion and Capacity Enhancements between MP 80 - 83
- 3 GSP Mainline Capacity Enhancements Between Interchanges 129 - 142
- 4 GSP Mainline Capacity Enhancements Between Interchanges 154 - 163
- 5 TPK Mainline Widening Between Interchanges 1 - 4
- 6 TPK Newark Bay - Hudson County Extension Mainline Capacity Enhancements
- 7 TPK Westerly Alignment Mainline Capacity Enhancements
- 8 TPK Bridge Replacements (W110.42, W111.48, W112.72B)



Figure 166: 2021-2025 Capital Improvement Program Projects Map

The 2021 – 2025 Capital Improvement Program includes the following projects:

**Bridge Construction, Preservation & Security**

**1. GSP & TPK Bridge Rehabilitation/Replacement Program**

- i. **Location:** Various Counties
- ii. **Description:** This proposed 10-year program involves replacement of various bridge decks or superstructures each year, repainting various superstructures each year, and the rehabilitation of various bridge substructures every year. This program is intended to supplement the Authority's ongoing annual maintenance program for bridges.
- iii. **Status:** The individual projects that are part of this program are under design
- iv. **Impact on Operating Budget:** The program is planned to address approximately 10 – 20 bridges annually and will decrease operation and maintenance costs a minor amount. These minor operation and maintenance cost savings will be considered when developing the operating budget for the future.

**2. TPK Bridges (W110.42, W111.49, W112.B080)**

- i. **Location:** Hudson County
- ii. **Description:** This project will replace three bridges on the Turnpike Westerly Alignment. These bridges are deteriorated and in need of replacement.
- iii. **Status:** Project concepts are under study
- iv. **Impact on Operating Budget:** This project will replace three deteriorated bridges resulting in minor operation and maintenance cost reductions. The operation and maintenance reductions will be considered when developing the operating budget for the future.

**3. TPK I/C 17 Ramp Bridge Replacement**

- i. **Location:** Hudson County
- ii. **Description:** This project will replace ramp bridge E112.95A at Interchange 17 on the Turnpike. This bridge is deteriorated and in need of replacement.
- iii. **Status:** Project is under design
- iv. **Impact on Operating Budget:** With replacement of the severely deteriorated bridge, operation and maintenance costs will see a minor reduction. The operation and maintenance reduction will be considered when developing the operating budget for the future.

**Capacity Enhancement - Turnpike**

**4. TPK Mainline Capacity Enhancements between I/C NOS 1 - 4**

- i. **Location:** Salem, Gloucester, Camden, and Burlington Counties
- ii. **Description:** The project includes design and construction of one additional lane and full shoulders in each direction between Interchanges 1 and 4, approximately 37 miles in length. Many other improvements in addition to the roadway and bridge capacity enhancements will be provided including improvements to drainage, guide rail, lighting, signing, striping, median barrier, and other items.
- iii. **Status:** This project will begin preliminary design in 2021
- iv. **Impact on Operating Budget:** The project will add approximately 148 lane miles of new pavement and bridge deck which will increase operation and maintenance costs by about 3%. However, due to the other improvements included in the project, a reduction in operation and maintenance costs will be experienced for the existing assets. These operation and maintenance cost impacts will be considered when developing the operating budget for the future.

## 5. TPK Newark Bay Hudson County Extension Capacity Enhancements

- i. **Location:** Essex and Hudson Counties
- ii. **Description:** The early phases of this project will determine capacity enhancement strategies for the Newark Bay – Hudson County Extension. Prior to the studies being completed and in order to provide a general project description for purposes of this document, it is assumed that this project may widen the Turnpike mainline from two lanes in each direction to four lanes in each direction between Interchanges 14 and 14A. The project may widen the Turnpike mainline from two lanes in each direction to three lanes in each direction between Interchanges 14A and 14C. This project will provide full shoulders on the mainline throughout the project length. The eight-mile project would replace or widen multiple bridges and construct a new Newark Bay Bridge providing four lanes of traffic in each direction. Upgrades for drainage, lighting, signing, striping, retaining walls, and other roadway improvements would also be included.
- iii. **Status:** Project will be under study beginning in 2021
- iv. **Impact on Operating Budget:** As currently envisioned, the project will add approximately 38 lane miles of new pavement and bridge deck which will increase operation and maintenance costs by about 1%. In addition, due to the other improvements included in the project, a reduction in operation and maintenance costs will be experienced for the existing assets. These operation and maintenance cost impacts will be considered when developing the operating budget for the future. As the project becomes more defined, impacts to future operation and maintenance expense estimates will be adjusted.

## 6. Westerly Alignment Mainline Capacity Enhancements

- i. **Location:** Essex, Hudson, and Bergen Counties
- ii. **Description:** The early phases of this project will determine capacity enhancement strategies for the Turnpike Westerly Alignment. Prior to the studies being completed and in order to provide a general project description for purposes of this document, it is assumed that this project may widen the Turnpike Westerly Alignment between the Southern Mixing Bowl (where the Westerly and Easterly Alignments diverge) and the Northern Mixing Bowl (where the Westerly and Easterly Alignments merge), adding one lane in each direction and providing full-width shoulders. The 13-mile project would also replace or widen multiple bridges and upgrade drainage, lighting, signing, striping, retaining walls, and other roadway appurtenances.
- iii. **Status:** This project will be under study beginning in 2023
- iv. **Impact on Operating Budget:** As currently envisioned, the project will add approximately 52 lane miles of new pavement and bridge deck which will increase operation and maintenance costs by about 1%. However, due to the other improvements included in the project, a reduction in operation and maintenance costs will be experienced for the existing assets. These operation and maintenance cost impacts will be considered when developing the operating budget for the future. As the project becomes more defined, impacts to future operation and maintenance expense estimates will be adjusted.

**Capacity Enhancement - Parkway****7. GSP Mainline Capacity Enhancements between I/C 129 - 142**

- i. **Location:** Middlesex and Union Counties
- ii. **Description:** The early phases of this project will determine capacity enhancement strategies for this portion of the Parkway. Prior to the studies being completed and in order to provide a general project description for purposes of this document, it is assumed that the project would widen the Parkway mainline from five lanes in each direction to six lanes in each direction with full shoulders along the entire length of the project. The project will replace or widen approximately 36 bridges to accommodate the capacity enhancements. The total project length is approximately 13 miles.
- iii. **Status:** This project will be under study beginning in 2024
- iv. **Impact on Operating Budget:** The project will add approximately 52 lane miles of new pavement and bridge deck which will increase operation and maintenance costs by about 1%. However, due to the other improvements included in the project, a reduction in operation and maintenance costs will be experienced for the existing assets. These operation and maintenance cost impacts will be considered when developing the operating budget for the future. As the project becomes more defined, impacts to future operation and maintenance expense estimates will be adjusted.

**8. GSP Mainline Capacity Enhancements between I/C 154 - 163**

- i. **Location:** Passaic and Bergen Counties
- ii. **Description:** The early phases of this project will determine capacity enhancement strategies for this portion of the Parkway. Prior to the studies being completed and in order to provide a general project description, it is assumed that this project may widen the Parkway in various locations throughout the limits of this project. The nine-mile project would also focus on providing full shoulders, upgraded weaving and merge distances, and general upgrades to the various other aspects of the facility such as drainage, lighting, and other roadway appurtenances.
- iii. **Status:** Project will be under study beginning in 2025
- iv. **Impact on Operating Budget:** As currently envisioned, the project will add approximately 36 lane miles of new pavement and bridge deck which will increase operation and maintenance costs by about 1%. In addition, due to the other improvements included in the project, a reduction in operation and maintenance costs will be experienced for the existing assets. These operation and maintenance cost impacts will be considered when developing the operating budget for the future. As the project becomes more defined, impacts to future operation and maintenance expense estimates will be adjusted.

**Interchanges****9. GSP I/C 80 Completion & Capacity Enhancements between I/C 80 - 83**

- i. **Location:** Ocean County
- ii. **Description:** Interchange 80 consists of a southbound exit ramp and northbound entrance ramp at US Route 9 and County Route 530. The missing directional movements would be added to this interchange. In addition, capacity enhancements are needed from Interchanges 80 – 83 to accommodate existing and future traffic demands. The early phases of this project will determine capacity enhancement strategies for this section of the Parkway. Prior to the studies and preliminary design being completed and in order to provide a general project description for purposes of this document, it is assumed that this project may widen the Parkway mainline in each direction to four lanes between Interchanges 80 and 83. The project will provide full shoulders on the mainline throughout the project length. The approximately three-mile project would replace or widen multiple bridges including across Toms River and under Lakehurst Road (County Route 527). Upgrades for drainage, lighting, signing, striping, retaining walls, and other roadway improvements would also be included.
- iii. **Status:** Studies and design for this project are currently underway
- iv. **Impact on Operating Budget:** As currently envisioned, the project will add approximately 12 lane miles of new pavement and bridge deck which will increase operation and maintenance costs a very minor amount. In addition, due to the other improvements included in the project, a reduction in operation and maintenance costs will be experienced for the existing assets. These operation and maintenance cost impacts will be considered when developing the operating budget for the future.

**Resiliency****10. Resiliency**

- i. **Location:** Various Counties
- ii. **Description:** This program will incorporate resilient and sustainable components into the various capital projects that are part of the current capital improvement programs. In addition, several individual resiliency and sustainability projects may be developed as a result of this program.
- iii. **Status:** Project studies will be underway beginning in 2022
- iv. **Impact on Operating Budget:** Depending on the outcome of the various studies that will be carried out beginning in 2022, the impact to operation and maintenance costs is unknown at this time. As project components and/or individual projects are identified, the impacts to future operation and maintenance cost estimates will be considered.

**Concrete Barrier****11. GSP & TPK Median Barrier Improvements**

- i. **Location:** Various Counties
- ii. **Description:** This project will replace deteriorated sections of median barrier on both roadways. The new median barriers will be designed to the latest design standards and will be prioritized by areas of greatest need. This program is intended to supplement the Authority's annual maintenance program for median barrier.
- iii. **Status:** Project design is currently underway
- iv. **Impact on Operating Budget:** This project will address and replace deteriorated sections of median barrier which will reduce maintenance needs. These reductions will be considered when forecasting the future operation and maintenance budgets.

**Drainage Structures****12. GSP Corrugated Metal Pipe Replacement & Culvert Rehabilitation**

- i. **Location:** Various Counties
- ii. **Description:** This program will replace existing corrugated metal pipes used in drainage systems and culverts on the Parkway. The metal pipes have significantly deteriorated due to corrosion and age. In addition, culverts would be rehabilitated to repair pipes or concrete boxes and repair erosion.
- iii. **Status:** Several projects are under design
- iv. **Impact on Operating Budget:** This program will replace significant drainage infrastructure that has deteriorated and will result in operation and maintenance cost reductions. The operation and maintenance cost reductions will be considered when developing the operating budget for the future.

**Roadway Lighting****13. GSP & TPK Lighting Upgrades**

- i. **Location:** Various Counties
- ii. **Description:** This program will upgrade existing filament bulb fixtures to LED fixtures and upgrade the wiring at multiple locations along both the Parkway and the Turnpike.
- iii. **Status:** Several projects are under design
- iv. **Impact on Operating Budget:** This program will replace outdated lighting fixtures and associated infrastructure resulting in operation and maintenance cost reductions. The operation and maintenance cost reductions will be considered when developing the operating budget for the future.

**Other Roadway Improvements****14. GSP & TPK MSE Wall Replacement**

- i. **Location:** Various Counties
- ii. **Description:** This program will replace deteriorated first generation MSE retaining walls with new retaining walls. This program is intended to supplement the Authority's annual maintenance program for MSE walls.
- iii. **Status:** Project studies and design services will be underway beginning in 2022
- iv. **Impact on Operating Budget:** This project will address and replace deteriorated MSE retaining walls which will reduce maintenance needs. These reductions will be considered when forecasting the future operation and maintenance budgets.

**15. GSP & TPK UST Upgrades**

- i. **Location:** Various Counties
- ii. **Description:** This project involves removing underground storage tanks and replacing them with above-ground tanks.
- iii. **Status:** Project studies and design will be underway beginning in 2022
- iv. **Impact on Operating Budget:** This project will have no significant impact on the operation and maintenance budget.



**16. Pavement Preservation Program**

- i. **Location:** Various Counties
- ii. **Description:** This program involves supplemental pavement milling and replacement covering multiple sections of the Garden State Parkway and New Jersey Turnpike. This program is intended to supplement the Authority's annual resurfacing program carried out as part of the annual maintenance programs on both facilities.
- iii. **Status:** The individual projects that are part of this program are under design
- iv. **Impact on Operating Budget:** The program is planned to address several additional sections for resurfacing on the Parkway and Turnpike to improve the state of repair for the pavement such that routine annual maintenance can then keep up with pavement needs. This program will result in a minor decrease in operation and maintenance costs. These operation and maintenance cost savings will be considered when developing the operating budget for the future.

**17. GSP Service Area Ramps**

- i. **Location:** Various Counties
- ii. **Description:** This project will widen certain access ramps that serve service areas to a sufficient width to accommodate vehicle movement past a disabled vehicle. The work will typically include widened pavement and associated items such as drainage, lighting, signing, and addressing any other impacts of the capacity enhancements.
- iii. **Status:** The project is currently under design
- iv. **Impact on Operating Budget:** The project is primarily a safety improvement project and will have little, if any, impact on the operation and maintenance budget.

**Technology Improvements****18. GSP & TPK ITS Infrastructure & Software Upgrades**

- i. **Location:** Various Counties
- ii. **Description:** This program involves upgrade and replacement of software, hardware and related infrastructure associated with Intelligent Transportation Systems that are used for traffic operations for both roadways. It will also address internal Authority software and hardware associated with the Authority's day-to-day business operations and functions. This program is intended to supplement the Authority's normal technology refresh and replacement process with a focus on new technologies that can improve safety, efficiency, and cost effectiveness.
- iii. **Status:** Studies for technology needs are underway
- iv. **Impact on Operating Budget:** The program is planned to address technology needs to replace or add to existing systems. Operation and maintenance cost estimates will consider the nature of the proposed technologies and will incorporate the impacts to future budgets.

**19. TPK Hybrid Changeable Message Signs**

- i. **Location:** Various Counties
- ii. **Description:** This project includes the deployment of 89 Hybrid Changeable Message Signs (HCMSs) at 50 sites along the New Jersey Turnpike to replace the existing changeable message drum signs. The project provides for design and construction of the HCMS structural supports, provision and installation of HCMSs, and connectivity utilizing fiber optic communication networks back to the Statewide Traffic Management Center (STMC). All signs are monitored and controlled from the STMC.
- iii. **Status:** Project is under construction
- iv. **Impact on Operating Budget:** This project results in a reduction in maintenance costs because the new signs allow access from the roadway shoulder thereby eliminating the need for lane closures to perform maintenance and the HCMSs utilize new technology that further reduces maintenance needs. These savings will be considered during the operating budget forecasts for the year in which construction is completed and beyond.

## 2019 Capital Improvement Program

The Authority adopted a 2019 Capital Improvement Program (2019 CIP) in April 2019 which consists of the design, supervision and construction of 21 capital improvement projects on both roadways. The projects include several bridge deck improvements on both roadways, the shoulder widening and reconstruction of the Garden State Parkway between mileposts 30 and 35, the first phase of the replacement of the hybrid changeable message signs on the New Jersey Turnpike, and rehabilitation of three bridges that cross the Passaic River on both roadways. In 2021, the 2019 Capital Improvement Program budget will increase to \$673 million from \$500 million primarily due to the transfer of the remaining Passaic River Bridge Projects and the Service Area Improvement Project (outside the curb line) as well as increased funding for existing project needs primarily in the Parkway shoulder widening project. The 5-year spending plan for these additional projects totals to \$173 million.

The 2019 CIP will be funded through bond proceeds. Additional bonds needed to fund the 2019 CIP will not be issued until late 2020 or early 2021. Any additional funds required will be obtained through future bond issuances after 2021.

<b>2019 Capital Improvement Program Spending by Category</b>					
<i>(\$ In Thousands)</i>	<b>2019 Actual</b>	<b>2020 Budget</b>	<b>2021 Budget</b>	<b>\$ Δ from 2020 Budget</b>	<b>% Δ from 2020 Budget</b>
<b>Roadway</b>					
Bridge Construction, Preservation & Security	\$10,557	32,593	116,763	84,170	258.2%
Interchanges	-	7,873	19,876	12,003	152.5%
Concrete Barrier	-	10,500	19,636	9,136	87.0%
Other Roadway Improvements	6,366	52,874	46,698	(6,176)	-11.7%
<b>Non Roadway</b>					
Service Areas & Arts Center	171	7,188	22,249	15,061	209.5%
Technology Improvements	-	-	42,914	42,914	0.0%
<b>Total by Category</b>	<b>\$ 17,094</b>	<b>111,028</b>	<b>268,135</b>	<b>157,107</b>	<b>141.5%</b>

Figure 167: 2019 Capital Improvement Program Spending by Category (2019-2021)

<b>2019 Capital Improvement Program Project Summary by Category</b>			
<i>(\$ In Thousands)</i>	<b>2021 Total Project Budget</b>	<b>Spent/Committed Through 10/31/20</b>	<b>% of Budget</b>
<b>Capitalized Projects Category</b>			
<b>Roadway</b>			
Bridge Construction, Preservation & Security	\$ 315,258	204,579	64.9%
Interchanges	30,829	29,830	96.8%
Concrete Barrier	36,558	26,367	72.1%
Other Roadway Improvements	144,563	118,768	82.2%
<b>Non Roadway</b>			
Service Areas & Arts Center	76,743	1,822	2.4%
Technology Improvements	68,907	64,107	93.0%
<b>Total 2019 Capital Improvement Program</b>	<b>\$ 672,857</b>	<b>445,473</b>	<b>66.2%</b>

Figure 168: 2019 Capital Improvement Program Project Summary

<b>2019 Capital Improvement Program</b>						
<b>2021 - 2025 Rolling 5-Year Spending Budget by Project Type</b>						
<i>(\$ In Thousands)</i>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>Total 5-Year</b>
<b>Capitalized Projects Category</b>						
<b>Roadway</b>						
Bridge Construction, Preservation & Security	\$ 116,763	100,883	44,087	25,668	10,770	298,170
Interchanges	19,876	1,790	-	-	-	21,666
Concrete Barrier	19,636	1,371	4,145	4,145	-	29,298
Other Roadway Improvements	46,698	33,014	34,416	17,500	-	131,629
<b>Non Roadway</b>						
Service Areas & Arts Center	22,249	18,208	15,550	8,000	5,000	69,006
Technology Improvements	42,914	13,644	-	-	-	56,557
<b>Total 2019 Capital Improvement Program</b>	<b>\$ 268,135</b>	<b>168,910</b>	<b>98,198</b>	<b>55,313</b>	<b>15,770</b>	<b>606,325</b>

Figure 169: 2019 Capital Improvement Program 5-Year Spending Budget by Project Type (2021-2025)

Individual projects within the 2019 Capital Improvement Program are shown below:

<b>2019 Capital Improvement Program - Spending</b>						
(\$ In Thousands)						
<b>Project Name</b>	<b>2021 Spending</b>	<b>2022 Spending</b>	<b>2023 Spending</b>	<b>2024 Spending</b>	<b>2025 Spending</b>	<b>Rolling 5 Year Budget Total</b>
TPK Install New Hybrid CMS	\$ 42,914	13,644	-	-	-	56,557
GSP Shoulder Widening Reconstruction MP 30-35	39,739	28,537	25,416	10,000	-	103,693
Passaic River Bridge Rehabilitation (1)	25,753	34,565	15,083	11,424	8,747	95,572
GSP STR 160.6 to 161.9 NB SB	24,277	15,028	17,409	5,500	-	62,214
GSP Bridge Deck Reconstruction 141-142	23,174	32,432	912	-	-	56,518
GSP Rehabilitation Concrete Median Barrier	19,636	1,371	4,145	4,145	-	29,298
TPK I/C 18E High Speed E-ZPass 16E	18,764	1,790	-	-	-	20,554
TPK Redecking STR E106.68 E106.92	15,836	5,423	1,793	-	-	23,052
SA - HMS Host & Sunoco	12,000	17,950	15,550	8,000	5,000	58,500
TPK Bridge Lengthening 30.75 & 33.94	11,552	7,974	-	-	-	19,525
GSP Arts Center Signal Lot Expansion	10,249	258	-	-	-	10,506
GSP Weather Guiderail Replacement	6,959	4,477	1,500	-	-	12,936
TPK Improve Str N2.01 Piers	6,907	1,237	-	-	-	8,144
Laderman Bridge Repair Project (2)	4,767	2,000	2,000	2,000	778	11,545
Washington Bridge Repair Project (3)	1,870	1,638	1,244	1,244	1,245	7,240
TPK Bridge Rehabilitation	1,339	412	146	-	-	1,897
TPK I/C 6 Express E-ZPass Improvement	1,036	-	-	-	-	1,036
TPK Bridge Fender Reconstruction	888	-	5,500	5,500	-	11,888
TPK Redecking STR 87.27 NSI	400	175	-	-	-	575
TPK I/C 6-9 Berm Surface Revision	76	-	-	-	-	76
Horizontal Curve Warn Sign Installation	-	-	7,500	7,500	-	15,000
<b>Total Spending</b>	<b>\$ 268,135</b>	<b>168,910</b>	<b>98,198</b>	<b>55,313</b>	<b>15,770</b>	<b>606,325</b>

(1) Total costs of the Passaic River Bridge Rehab are \$103.3 million however, \$7.8 million of those cost was funded from revenues.

(2) Total costs of the Laderman Bridge Repair Project are \$24.9 million however, \$13.4 million of those cost was funded from revenues.

(3) Total costs of the Washington Bridge Repair Project are \$9.9 million however, \$2.6 million of those cost was funded from revenues.

**Figure 170: 2019 Capital Improvement Program 5-Year Spending by Projects**

<b>2019 Capital Improvement Program - Budget</b>						
(\$ In Thousands)						
<b>Project Name</b>	<b>Rolling 5 Year Budget</b>	<b>Estimated/Actual LTD Spending</b>	<b>Future Spending</b>	<b>Total Project Budget 2021</b>	<b>Total Project Budget 2020</b>	<b>Change</b>
TPK Install New Hybrid CMS	\$ 56,557	12,350	-	68,907	98,450	(29,543)
GSP Shoulder Widening Reconstruction MP 30-35	103,693	5,853	-	109,546	76,650	32,896
Passaic River Bridge Rehabilitation (1)	95,572	-	-	95,572	-	95,572
GSP STR 160.6 to 161.9 NB SB	62,214	5,532	-	67,746	53,250	14,496
GSP Bridge Deck Reconstruction 141-142	56,518	-	-	56,518	46,700	9,818
GSP Rehabilitation Concrete Median Barrier	29,298	7,260	-	36,558	35,000	1,558
TPK I/C 18E High Speed E-ZPass 16E	20,554	920	-	21,474	25,000	(3,526)
TPK Redecking STR E106.68 E106.92	23,052	8,278	-	31,330	26,000	5,330
SA - HMS Host & Sunoco	58,500	-	-	58,500	-	58,500
TPK Bridge Lengthening 30.75 & 33.94	19,525	1,490	-	21,015	13,200	7,815
GSP Arts Center Signal Lot Expansion	10,506	7,737	-	18,243	10,000	8,243
GSP Weather Guiderail Replacement	12,936	4,247	-	17,183	12,000	5,183
TPK Improve Str N2.01 Piers	8,144	313	-	8,457	12,275	(3,818)
Laderman Bridge Repair Project (2)	11,545	-	-	11,545	-	11,545
Washington Bridge Repair Project (3)	7,240	-	-	7,240	-	7,240
TPK Bridge Rehabilitation	1,897	-	-	1,897	26,000	(24,103)
TPK I/C 6 Express E-ZPass Improvement	1,036	8,243	-	9,279	8,300	979
TPK Bridge Fender Reconstruction	11,888	1,105	-	12,993	12,100	893
TPK Redecking STR 87.27 NSI	575	370	-	945	5,000	(4,055)
TPK I/C 6-9 Berm Surface Revision	76	-	-	76	22,275	(22,199)
Horizontal Curve Warn Sign Installation	15,000	2,834	-	17,834	12,800	5,034
Contingency	-	-	-	-	5,000	(5,000)
<b>Total Budget</b>	<b>\$ 606,325</b>	<b>66,532</b>	<b>-</b>	<b>672,857</b>	<b>500,000</b>	<b>172,857</b>

(1) Total costs of the Passaic River Bridge Rehab are \$103.3 million however, \$7.8 million of those cost was funded from revenues.

(2) Total costs of the Laderman Bridge Repair Project are \$24.9 million however, \$13.4 million of those cost was funded from revenues.

(3) Total costs of the Washington Bridge Repair Project are \$9.9 million however, \$2.6 million of those cost was funded from revenues.

**Figure 171: 2019 Capital Improvement Program Budget by Projects**

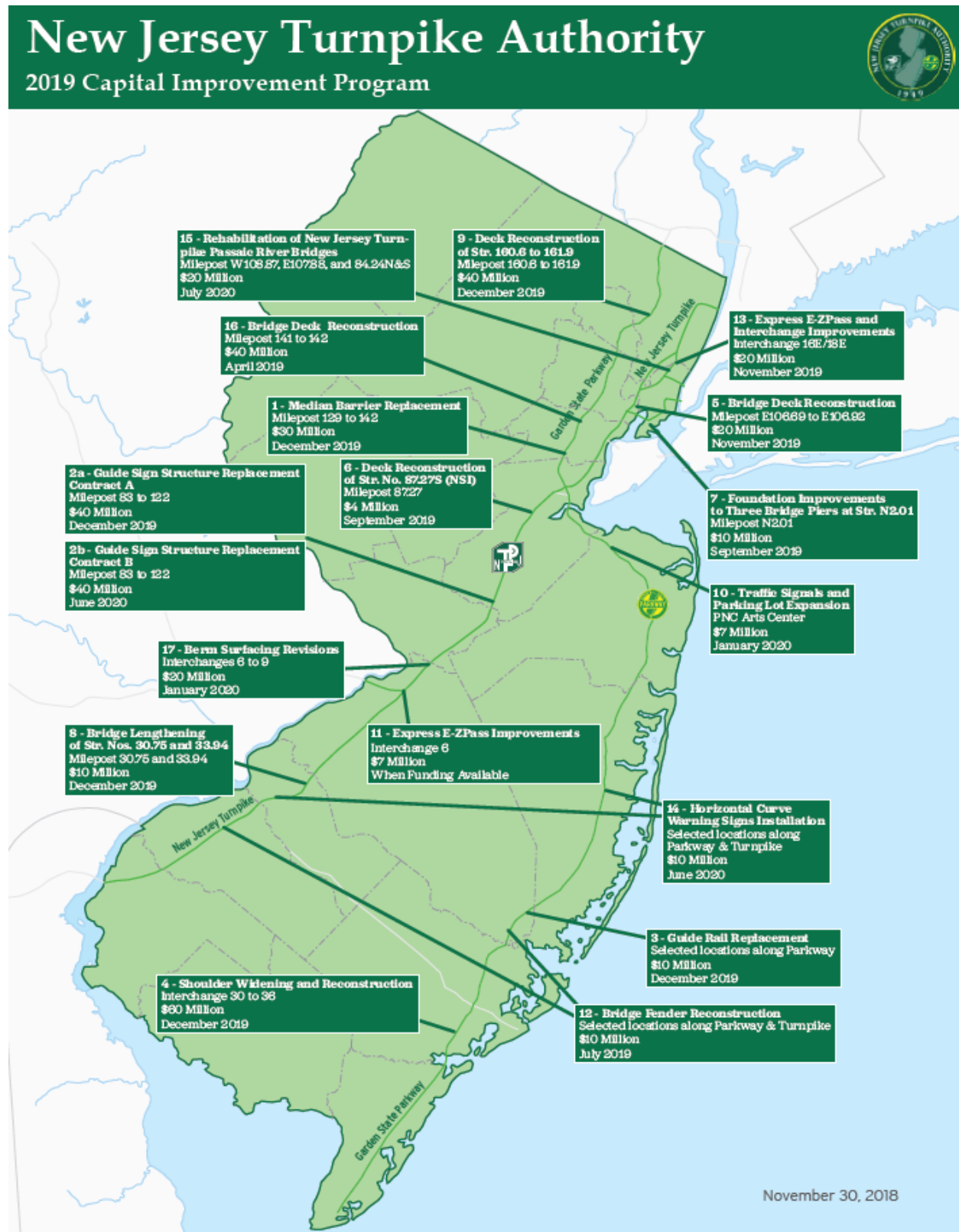


Figure 172: 2019 Capital Improvement Program Projects Map

The 2019 CIP includes the following projects:

**Bridge Construction, Preservation & Security**

**1. GSP Bridge Deck Reconstruction 141-142**

- i. **Location:** Union County
- ii. **Description:** This project provides for the reconstruction and/or superstructure replacement of severely deteriorated, high priority bridge decks located between milepost 140 and 143. The reconstruction work will also include median barrier, bridge painting, and approach roadway improvements.
- iii. **Status:** Project is currently under construction
- iv. **Impact on Operating Budget:** This project will extend the life of several bridges between Parkway MP 140 and 143 and will reduce the need for intermittent repairs resulting in minor reductions in routine maintenance costs. These minor savings will be considered when developing the operating budget for future years.

**2. GSP STR 160.6 to 161.9 NB SB**

- i. **Location:** Bergen County
- ii. **Description:** This project includes the reconstruction of six severely deteriorated, high priority bridge decks which carry the Parkway mainline over local roads located between Mileposts 160.6 and 161.9. Approximately two miles of deteriorated median barrier will also be replaced.
- iii. **Status:** Project is currently under design
- iv. **Impact on Operating Budget:** This project will extend the life of six bridges and will reduce the need for intermittent repairs resulting in minor reductions in routine maintenance costs which will be considered during development of the operating budget estimates for future years.

**3. TPK Bridge Fender Reconstruction**

- i. **Location:** Various Counties
- ii. **Description:** This project will design and reconstruct deteriorated structural members and channel marking lighting systems of waterway channel fender protection systems of select Turnpike and Parkway bridges
- iii. **Status:** Project is currently under construction
- iv. **Impact on Operating Budget:** This project will extend the life of waterway channel fender protection systems and will reduce the need for intermittent repairs resulting in minor reductions in routine maintenance costs which will be considered in the operating budget forecasts for future years.

**4. TPK Bridge Lengthening 30.75 & 33.94**

- i. **Location:** Camden and Burlington Counties
- ii. **Description:** This project provides for the design and deck reconstruction and lengthening of one severely deteriorated bridge deck which carries a local road over the southern portion of the Turnpike located at Milepost 30.75. The bridge lengthening will provide for adequate space for future widening of the Turnpike between Interchanges 1 and 4. Preliminary engineering studies resulted in the conclusion that a second bridge at Milepost 33.94 which was originally part of this project will not be part of the 2019 Capital Improvement Program.
- iii. **Status:** Project is currently under construction
- iv. **Impact on Operating Budget:** This project will extend the life of one bridge and will reduce the need for intermittent repairs resulting in minor reductions in routine maintenance costs. These minor savings will be included in the operating budget forecast for the year construction will be completed and beyond.

**5. TPK Bridge Rehabilitation**

- i. **Location:** Essex, Hudson and Middlesex Counties
- ii. **Description:** This project provides for the design and continued rehabilitation of the Turnpike Passaic River and Raritan River Bridge Structure Nos. W107.87, E107.88 and 84.24N & S.
- iii. **Status:** Project is currently under design
- iv. **Impact on Operating Budget:** This project will extend the life of these bridges and will reduce the need for intermittent repairs resulting in minor reductions in routine maintenance costs. These minor reductions will be considered when developing the operating budget for the year of construction completion and beyond.

**6. TPK Improve Str N2.01 Piers**

- i. **Location:** Essex and Hudson Counties
- ii. **Description:** This project provides for the design and reconstruction of three high priority undermined bridge pier foundations between Piers E6 and E9 for the Newark Bay Bridge, Turnpike Structure No. N2.01, on the Hudson County Extension.
- iii. **Status:** Project is currently under construction
- iv. **Impact on Operating Budget:** This project will extend the life of three piers associated with Bridge No. N2.01 and will reduce the need for intermittent repairs resulting in very minor reductions in routine maintenance costs. These minor reductions will be considered in the development of the operating budget for the year of construction completion and beyond.

**7. TPK Redecking STR 87.27 NSI**

- i. **Location:** Middlesex County
- ii. **Description:** This project provides for the design and construction for the reconstruction of a severely deteriorated, high priority bridge deck located at Milepost 87.27S on the Turnpike which carries the mainline over Main Street (CR 531).
- iii. **Status:** Project is currently under construction
- iv. **Impact on Operating Budget:** This project will extend the life of Bridge No. 87.27S and will reduce the need for intermittent repairs resulting in very minor reductions in routine maintenance costs. This will be reflected in the future operating budget estimates.

**8. TPK Redecking STR E106.68 E106.92**

- i. **Location:** Essex County
- ii. **Description:** This project provides for the design and construction for the deck reconstruction of two severely deteriorated, high priority bridge decks located at Mileposts E106.68 and E106.92B along the easterly extension of the Turnpike.
- iii. **Status:** Project is currently under construction
- iv. **Impact on Operating Budget:** This project will extend the life of two bridges and will reduce the need for intermittent repairs resulting in minor reductions in routine maintenance costs. These routine maintenance cost savings will be considered when developing the future operating budgets.

**9. Passaic River Bridge Rehabilitation**

- i. **Location:** Passaic County
- ii. **Description:** This project provides for the design, construction, construction supervision, and permitting services for the superstructure replacement and widening of Parkway Bridge Structure No. 158.2 over the Passaic River, US Route 46, and River Road.
- iii. **Status:** Project is currently under design
- iv. **Impact on Operating Budget:** This project will extend the life of Parkway Bridge Structure No. 158.2 and will reduce the need for intermittent repairs resulting in minor reductions in routine maintenance costs. These minor savings will be considered when developing the operating budget for future years.

**10. Laderman Bridge Repair Project**

- i. **Location:** Essex County
- ii. **Description:** This project provides for the design, construction, and construction supervision services for superstructure repairs to Turnpike Structure No. W107.87, Laderman Memorial Passaic River Bridge on the Turnpike Westerly Alignment. The project also provides for strengthening of low rating superstructure members.
- iii. **Status:** Project is currently under construction
- iv. **Impact on Operating Budget:** This project will extend the life of Turnpike Structure No. W107.87 and will reduce the need for intermittent repairs resulting in minor reductions in routine maintenance costs. These minor savings will be considered when developing the operating budget for future years.

**11. Washington Bridge Repair Project**

- i. **Location:** Essex County
- ii. **Description:** This project provides for the design, construction, and construction supervision services for superstructure repairs to Turnpike Structure No. E107.88, Chaplain Washington Memorial Passaic River Bridge on the Turnpike Easterly Alignment. The project also provides for strengthening of low rating superstructure members and the replacement of the major pin and hanger assemblies of the superstructure.
- iii. **Status:** Project is currently under construction
- iv. **Impact on Operating Budget:** This project will extend the life of Turnpike Structure No. E107.88 and will reduce the need for intermittent repairs resulting in minor reductions in routine maintenance costs. These minor savings will be considered when developing the operating budget for future years.

**Interchanges****9. TPK I/C 18E High Speed E-ZPass 16E**

- i. **Location:** Bergen County
- ii. **Description:** This project will design and construct an Express E-ZPass bypass for Interchange 18E and allow 18E cash customers to use the remaining toll plaza lanes at 16E. This will improve the overall traffic flow at the Interchange and reduce the exiting bus queuing that utilizes the contraflow Exclusive Bus Lane (XBL).
- iii. **Status:** Project is currently under construction
- iv. **Impact on Operating Budget:** This project will construct new express E-ZPass lanes at Interchange 18E and will slightly increase the need for intermittent repairs resulting in a minor increase in routine maintenance costs. This small increase will be considered when developing the operating budget for the year of construction completion and beyond.



**10. TPK I/C 6 Express E-ZPass Improvement**

- i. **Location:** Burlington County
- ii. **Description:** This project will construct improvements to implement dual Express E-ZPass lanes in the eastbound and westbound directions at the Interchange 6 toll plaza.
- iii. **Status:** This project is under construction
- iv. **Impact on Operating Budget:** This project will implement dual Express E-ZPass lanes at Interchange 6 and will reduce the need for intermittent repairs for the existing toll plaza resulting in very minor reductions in routine maintenance costs. The minor reductions will be considered when developing the operating budget for the future.

**11. TPK I/C 6-9 Berm Surface Revision**

- i. **Location:** Middlesex, Mercer and Burlington Counties
- ii. **Description:** This project will design and construct berm surfacing improvements at select locations adjacent to and underneath exiting guide rail systems and at various median locations on the Turnpike between Interchanges 6 and 9.
- iii. **Status:** Project is currently under construction
- iv. **Impact on Operating Budget:** This project will construct berm surfacing improvements that will slightly decrease operating and maintenance expenses for personnel, materials and equipment. These expense reductions will be considered for the operating budget development for the year of construction completion.

**Concrete Barrier****12. GSP Rehabilitation Concrete Median Barrier**

- v. **Location:** Middlesex and Union Counties
- vi. **Description:** This project includes the inspection and condition assessment of concrete median barrier and the implementation of a repair, replacement, and upgrade program along the Parkway in the former "State section" between MP 129 and MP 142.
- vii. **Status:** Project is currently under construction
- viii. **Impact on Operating Budget:** This project extends the life of concrete median barrier and reduces the need for intermittent repairs which results in very minor reductions in routine maintenance costs. These reductions will be considered when developing the operating budget for the year of construction completion and beyond.

**Other Roadway Improvements****13. GSP Shoulder Widening Reconstruction MP 30-35**

- i. **Location:** Cape May and Atlantic Counties
- ii. **Description:** Safety and maintenance improvements to this section of the Parkway are necessary to be consistent with the other safety improvements recently completed under the \$7 Billion Capital Improvement Program in adjacent sections. This project provides for the construction of standard width shoulders for the five-mile section, reconstruction of eight bridges, drainage improvements, and roadside area improvements.
- iii. **Status:** Project is currently under construction
- iv. **Impact on Operating Budget:** This project will add approximately 10 lanes miles of pavement, reconstruct eight bridges, and improve drainage facilities. Although there will be a slight increase in operation and maintenance costs for the widened shoulders, overall operation and maintenance costs will be slightly reduced after accounting for the extended life of the bridges and drainage systems. These slight reductions will be considered in the operating budget estimates.

**14. GSP Weather Guiderail Replacement**

- i. **Location:** Various counties
- ii. **Description:** The Parkway guide rail systems are comprised of weathering steel. This project will provide for upgrades to the highest priority guide rail systems along the Parkway to comply with recently adopted Federal crash test standards.
- iii. **Status:** Project is currently under design
- iv. **Impact on Operating Budget:** This project extends the life of weathering steel guide rail systems and reduces the need for intermittent repairs which results in minor reductions in routine maintenance costs. These reductions will be considered when developing the operating budget for the year of construction completion and beyond.

**15. Horizontal Curve Warn Sign Installation**

- i. **Location:** Various Counties
- ii. **Description:** This project will design and construct new curve warning signs on select Parkway and Turnpike ramps to provide advanced warning to the motoring public in order to improve safety.
- iii. **Status:** Project is currently on hold
- iv. **Impact on Operating Budget:** This project will have no impact on the operating budget.

**Technology Improvements****16. TPK Install New Hybrid CMS**

- v. **Location:** Various Counties
- vi. **Description:** This project includes the deployment of 89 Hybrid Changeable Message Signs (HCMSs) at 50 sites along the New Jersey Turnpike to replace the existing changeable message drum signs. The project provides for design and construction of the HCMS structural supports, provision and installation of HCMSs, and connectivity utilizing fiber optic communication networks back to the Statewide Traffic Management Center (STMC). All signs are monitored and controlled from the STMC.
- vii. **Status:** Project is currently under construction
- viii. **Impact on Operating Budget:** This project implements new HCMS signs to replace the existing drum signs and adds several new signs for a total of 126 HCMSs. Since the majority of the new HCMSs replace existing signs, there will be a reduction in maintenance costs because the new signs allow access from the roadway shoulder eliminating the need for lane closures to perform maintenance and the HCMSs utilize new technology that reduces maintenance needs. These savings will be considered during the operating budget forecasts for the year in which construction is completed and beyond.

**Service Areas & Arts Center****17. GSP Arts Center Signal Lot Expansion**

- i. **Location:** Ocean County
- ii. **Description:** This project includes the construction of new traffic signals for access roadways at the PNC Arts Center.
- iii. **Status:** Project is currently under design
- iv. **Impact on Operating Budget:** This project will construct new traffic signals at the PNC Arts Center and will slightly increase the need for intermittent repairs resulting in a minor increase in routine maintenance costs. These minor increases will be considered when developing the operating budget for the year of construction completion.

**18. SA - HMS Host & Sunoco**

- i. **Location:** Various Counties
- ii. **Description:** The Authority entered into 25-year contracts with HMSHost Toll Roads Inc. to provide food services and Sunoco Retail LLC to provide fuel services at Authority service areas, which includes all service areas on both the Parkway and Turnpike except Colonia (Northbound) and Colonia (Southbound) which are privately owned and operated. As a result of the contracts, HMSHost and Sunoco will be investing in the service areas from 2018 through approximately 2029 providing new and rehabilitated restaurant buildings and fueling station facilities. The Authority will be investing in rehabilitated infrastructure outside the building envelopes at each of the service areas which will include resurfaced parking lots and commuter lots, updated lighting, enhanced security, landscaping, signing, and striping.
- iii. **Status:** The following service areas have been completed and are open to the public:
  - Monmouth (Parkway)
  - Alexander Hamilton (Turnpike)
  - Brookdale North (Parkway)
  - Forked River (Parkway)
  - Richard Stockton (Turnpike)The following service areas are under construction:
  - Thomas Edison (Turnpike)
  - Vince Lombardi (Turnpike)The following service areas are under design:
  - Grover Cleveland (Turnpike)
  - Woodrow Wilson (Turnpike)
  - Molly Pitcher (Turnpike)
  - James Fenimore Cooper (Turnpike)
  - Joyce Kilmer (Turnpike)
  - Walt Whitman (Turnpike)
  - Clara Barton (Turnpike)
  - John Fenwick (Turnpike)
  - Atlantic (Parkway)
  - Cheesecake (Parkway)
  - Montvale (Parkway)
  - Vauxhall (Parkway)
  - Brookdale South (Parkway)
  - Oceanview (Parkway)
- iv. **Impact on Operating Budget:** This program of improvements will replace and renew nearly all infrastructure assets associated with the various service areas on the Turnpike and Parkway. As the service area rehabilitations are completed, operation and maintenance costs will decrease as a result of the improvements. The operation and maintenance cost reductions will be considered when developing future operation and maintenance cost estimates.

## 2008 \$7 Billion Capital Improvement Program

The New Jersey Turnpike Authority's 2008 \$7 Billion CIP was adopted in October 2008, with the first contract awarded in 2009. Several projects were added to the program from bid savings and could not be started until recently due to the need to coordinate scheduling and location of work with existing projects to minimize patron disruption. In addition, work on the NBHCE could not begin until the Pulaski Skyway work was completed by the state, with the Pulaski Skyway only reopening in July of 2018. Due to these factors, in September 2018 the Authority's Board extended the program an additional two years to allow completion of contract awards. In addition, due to the favorable bid prices and project close outs, an additional \$16.0 million of design work was approved, keeping within the \$7 billion total. The 2008 \$7 Billion CIP included the extremely successful widening of the Turnpike between Interchanges 6 and 9 and the widening of the Parkway between mileposts 35 and 80. The work remaining to be completed includes the Newark Bay Hudson County Extension bridge rehabilitation, facilities improvements, interchange improvements and bridge deck reconstruction. To date, the Authority has fully funded the program through the issuance of Turnpike Revenue Bonds.

A summary of the projects in the 2008 \$7 Billion CIP is shown below:

<b>2008 \$7 Billion Capital Improvement Program Spending by Category</b>					
	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>\$ Δ from</b>	<b>% Δ from</b>
<i>(\$ In Thousands)</i>	<b>Actual</b>	<b>Budget</b>	<b>Budget</b>	<b>2020 Budget</b>	<b>2020 Budget</b>
<b>Roadway</b>					
Bridge Construction, Preservation & Security	\$ 95,829	101,886	72,302	(29,584)	-29.0%
Capacity Enhancements - Turnpike	973	722	1,466	744	103.0%
Capacity Enhancements - Parkway	824	10,631	3,057	(7,574)	-71.2%
Interchanges	80,524	41,205	37,534	(3,671)	-8.9%
Concrete Barrier	1,854	-	325	325	0.0%
Drainage Structures	122	-	-	-	0.0%
Other Roadway Improvements	11,129	10,207	10,350	143	1.4%
<b>Non Roadway</b>					
Facilities	28,811	29,095	21,000	(8,095)	-27.8%
<b>Total by Category</b>	<b>\$ 220,065</b>	<b>193,746</b>	<b>146,034</b>	<b>(47,712)</b>	<b>-24.6%</b>

Figure 173: 2008 \$7 Billion Capital Improvement Program Spending by Category (2019-2021)

2008 \$7 Billion Capital Improvement Program Project Summary by Category			
<i>(\$ In Thousands)</i>	2021 Total Project Budget	Spent/Committed Through 10/31/20	% of Budget
<b>Capitalized Projects Category</b>			
<b>Roadway</b>			
Bridge Construction, Preservation & Security	\$ 1,691,879	1,670,040	98.7%
Capacity Enhancements - Turnpike	2,131,439	2,131,439	100.0%
Capacity Enhancements - Parkway	582,368	577,867	99.2%
Interchanges	1,051,911	1,037,815	98.7%
Concrete Barrier	51,825	51,478	99.3%
Drainage Structures	62,123	61,914	99.7%
Other Roadway Improvements	705,549	705,000	99.9%
<b>Non Roadway</b>			
Facilities	722,906	678,441	93.8%
<b>Total 2008 \$7 Billion Capital Improvement Program</b>	<b>\$ 7,000,000</b>	<b>6,913,993</b>	<b>98.8%</b>

\* The total Capacity Enhancement for Parkway is \$583 million but \$100 million was financed with Bond Anticipation Notes proceeds prior to the first series of bonds being issued for the CIP.

Figure 174: Capital Improvement Program Project Summary

2008 \$7 Billion Capital Improvement Program						
2021 - 2025 Rolling 5-Year Spending Budget by Project Type						
<i>(\$ In Thousands)</i>	2021	2022	2023	2024	2025	Total 5-Year
<b>Capitalized Projects Category</b>						
<b>Roadway</b>						
Bridge Construction, Preservation & Security	\$ 72,302	28,612	18,966	25,496	1,249	146,625
Capacity Enhancements - Turnpike	1,466	-	-	-	-	1,466
Capacity Enhancements - Parkway	3,057	2,999	1,144	-	-	7,200
Interchanges	37,534	14,210	8,100	8,100	7,943	75,887
Concrete Barrier	325	20	6	6	-	358
Drainage Structures	-	8	94	94	94	289
Other Roadway Improvements	10,350	3,956	4	-	-	14,309
<b>Non Roadway</b>						
Facilities	21,000	6,068	5,774	5,671	5,671	44,184
<b>Total 2008 \$7 Billion CIP</b>	<b>\$146,034</b>	<b>55,873</b>	<b>34,088</b>	<b>39,367</b>	<b>14,957</b>	<b>290,319</b>

Figure 175: 2008 \$7 Billion Capital Improvement Program 5-Year Spending Budget by Project Type (2021-2025)

Individual projects within the 2008 \$7 Billion CIP along with 2021 Amended Budget changes, is shown below:

<b>2008 \$7 Billion Capital Improvement Program - Spending</b>						
<i>(\$ In Thousands)</i>						
<b>Project Name</b>	<b>2021 Spending</b>	<b>2022 Spending</b>	<b>2023 Spending</b>	<b>2024 Spending</b>	<b>2025 Spending</b>	<b>Rolling 5 Year Budget Total</b>
Newark Bay Hudson County Extension Bridge Redecking	\$ 58,979	26,963	17,797	24,390	206	128,335
Facilities Improvements Phase I	21,000	6,068	5,774	5,671	5,671	44,184
I/C Improvements	18,886	12,523	7,465	7,465	7,308	53,647
Deck Reconstruction Phase II	10,692	927	967	967	967	14,519
GSP I/C 91 Improvements	8,942	-	-	-	-	8,942
Sign Replacements Phase II	7,198	3,951	-	-	-	11,149
GSP I/C 125 Phase I	5,300	1,051	-	-	-	6,351
GSP I/C 9, 10 & 11 Improvements	4,252	-	-	-	-	4,252
GSP Mainline Shoulder Improvements	3,140	-	-	-	-	3,140
GSP Widening of I/C 35-63	2,999	2,999	1,144	-	-	7,142
GSP Great Egg Harbor/Drag Channel	2,183	591	59	-	-	2,833
TPK I/C 6-9 Widening	1,466	-	-	-	-	1,466
Bridge Preservation & Security	406	111	63	63	-	643
Median Barrier Improvements	325	20	6	6	-	358
TPK I/C 14A Reconstruction	81	635	635	635	635	2,623
GSP I/C 41 Improvements	72	-	-	-	-	72
GSP Widening of I/C 63-80	58	-	-	-	-	58
TPK Hackensack East Bridge Rehabilitation	27	-	-	-	-	27
Sign Replacements Phase I	12	-	-	-	-	12
Bridge Painting Phase II	8	-	-	-	-	8
TPK Specialized Bridge STR Repairs	4	-	-	-	-	4
GSP Bass River Bridge	2	-	-	-	-	2
Bridge Painting Phase I	-	17	76	76	76	246
Drainage Improvements	-	8	94	94	94	289
Improvement Roadway Appurtenances	-	4	4	-	-	8
Deck Reconstruction Phase I	-	2	4	-	-	7
<b>Total Spending</b>	<b>\$ 146,034</b>	<b>55,873</b>	<b>34,088</b>	<b>39,367</b>	<b>14,957</b>	<b>290,319</b>

Figure 176: 2008 \$7 Billion Capital Improvement Program 5-Year Spending by Projects

2008 \$7 Billion Capital Improvement Program - Budget						
(\$ In Thousands)						
Project Name	Rolling 5 Year Budget	Estimated/Actual LTD Spending	Future Spending	Total Project Budget 2021	Total Project Budget 2020	Change
Newark Bay Hudson County Extension Bridge Redecking	\$ 128,335	389,479	-	517,814	531,612	(13,798)
Facilities Improvements Phase I	44,184	661,161	-	705,345	686,525	18,820
I/C Improvements	53,647	367,805	-	421,452	416,699	4,753
Deck Reconstruction Phase II	14,519	124,008	-	138,527	144,702	(6,175)
GSP I/C 91 Improvements	8,942	2,505	-	11,447	2,505	8,942
Sign Replacements Phase II	11,149	135,443	-	146,592	156,843	(10,251)
GSP I/C 125 Phase I	6,351	86,196	-	92,547	97,994	(5,447)
GSP I/C 9, 10 & 11 Improvements	4,252	82,791	-	87,043	82,791	4,252
GSP Mainline Shoulder Improvements	3,140	359,145	-	362,285	359,145	3,140
GSP Widening of I/C 35-63	7,142	448,291	-	455,433	448,346	7,087
GSP Great Egg Harbor/Drag Channel	2,833	254,130	-	256,963	264,196	(7,233)
TPK I/C 6-9 Widening	1,466	2,129,973	-	2,131,439	2,129,997	1,442
Bridge Preservation & Security	643	93,960	-	94,603	93,960	643
Median Barrier Improvements	358	51,467	-	51,825	51,467	358
TPK I/C 14A Reconstruction	2,623	280,750	-	283,373	288,248	(4,875)
GSP I/C 41 Improvements	72	22,899	-	22,971	22,899	72
GSP Widening of I/C 63-80	58	126,877	-	126,935	126,877	58
TPK Hackensack East Bridge Rehabilitation	27	131,858	-	131,885	131,904	(19)
Sign Replacements Phase I	12	139,322	-	139,334	139,322	12
Bridge Painting Phase II	8	65,099	-	65,107	67,430	(2,323)
TPK Specialized Bridge STR Repairs	4	7,334	-	7,338	7,339	(1)
GSP Bass River Bridge	2	76,432	-	76,434	76,432	2
Bridge Painting Phase I	246	105,016	-	105,262	105,027	235
Drainage Improvements	289	61,834	-	62,123	61,834	289
Improvement Roadway Appurtenances	8	41,464	-	41,472	41,464	8
Deck Reconstruction Phase I	7	200,150	-	200,157	200,150	7
Salt Storage Facilities	-	17,561	-	17,561	17,561	-
GSP I/C 142 Improvements	-	655	-	655	655	-
GSP I/C 44 Improvements	-	28,833	-	28,833	28,833	-
GSP I/C 88 Improvements	-	97,433	-	97,433	97,433	-
TPK I/C 8A to Route 130 Connector Improvements	-	6,157	-	6,157	6,157	-
TPK/GSP SB Improvements	-	15,865	-	15,865	15,865	-
GSP Mullica River Bridge	-	49,392	-	49,392	49,392	-
GSP Substructure Bridge Repairs	-	33,249	-	33,249	33,249	-
TPK I/C 16E-18E Bridge Improvements	-	15,147	-	15,147	15,147	-
<b>Total Budget</b>	<b>\$ 290,319</b>	<b>6,709,681</b>	<b>-</b>	<b>7,000,000</b>	<b>7,000,000</b>	<b>0</b>

Figure 177: 2008 \$7 Billion Capital Improvement Program Budget by Projects

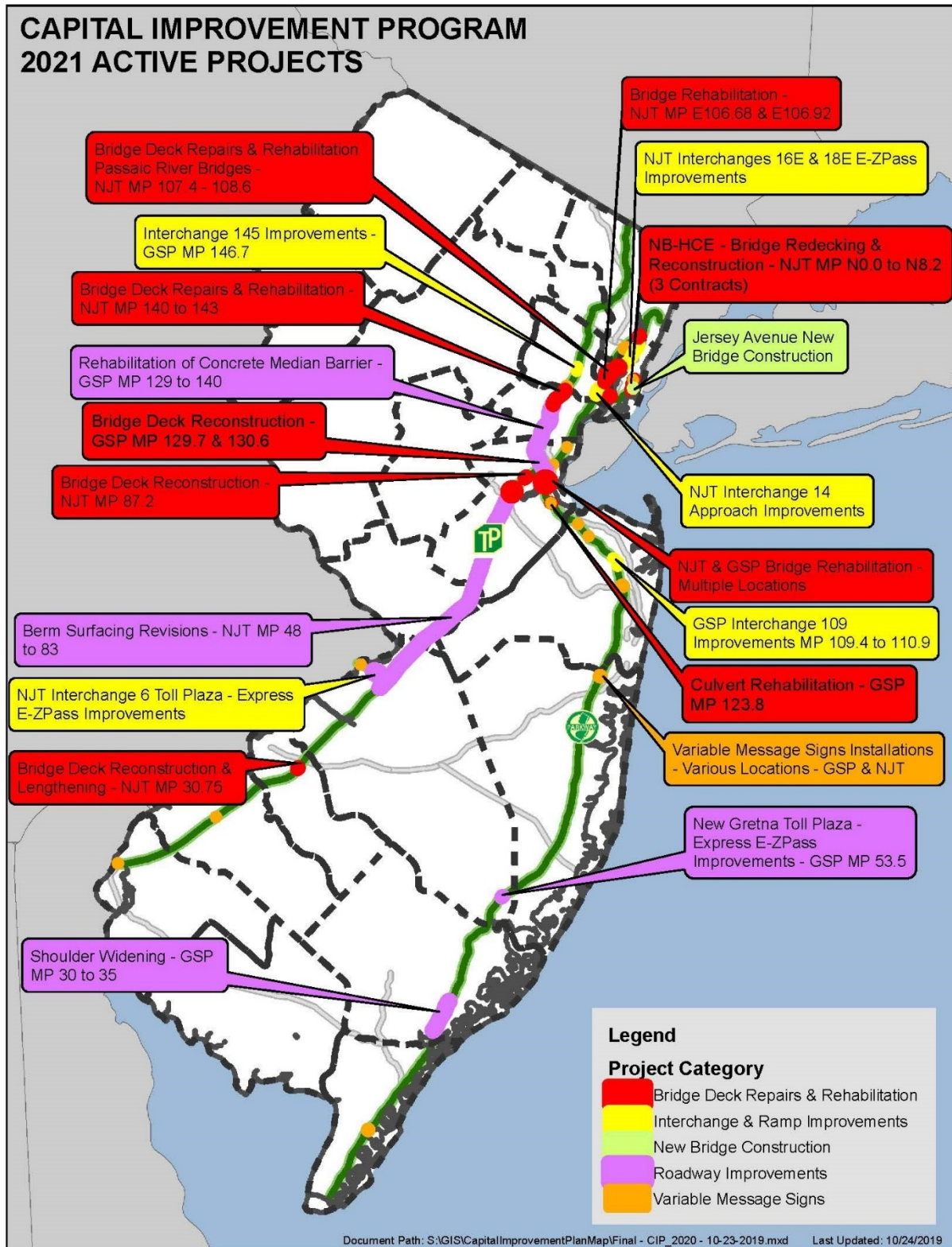


Figure 178: 2008 \$7 Billion Capital Improvement Program Active Projects Map



The 2008 \$7 Billion CIP includes the following projects:

**Bridge Construction, Preservation & Security**

**1. Bridge Painting Phase I**

- i. **Location:** Various Counties
- ii. **Location:** This project provided for the design and construction for the cleaning and repainting of structural steel of the highest priority Turnpike and Parkway major bridges.
- iii. **Status:** Design and construction completed – September 2014
- iv. **Impact on Operating Budget:** This group of bridge projects, which extended the life of the structural steel and reduced the need for intermittent repairs, has been completed for numerous years. The operating and maintenance expense impacts are reflected in the actual expenses over recent years.

**2. Bridge Painting Phase II**

- i. **Location:** Various Counties
- ii. **Description:** This project provides for the design and construction for the cleaning and repainting of structural steel of the highest priority Turnpike and Parkway major and non-major bridges.
- iii. **Status:** Design and construction is on-going
- iv. **Impact on Operating Budget:** This group of bridge projects extends the life of the structural steel and reduces the need for intermittent repairs resulting in minor reductions in routine maintenance costs. These reductions have been incorporated into the operating budget.

**3. Bridge Preservation & Security**

- i. **Location:** Various Counties
- ii. **Description:** This project provides for the design and construction phases of countermeasures and security improvements for the Authority's 16 major bridges on the Turnpike and Parkway. It also includes the design and construction of seismic retrofitting of the Turnpike's highest priority bridges as recommended from the Phase I Seismic Screening and Prioritization Report. This project further provides for the design and construction for the miscellaneous bridge work on the Turnpike not covered under the annual miscellaneous structural repair contracts. The primary work includes bridge bearing replacement and significant substructure repairs.
- iii. **Status:** Design and construction is on-going
- iv. **Impact on Operating Budget:** This group of bridge projects focuses primarily on security measures and seismic retrofitting, which has little to no impact on the operating budget. The miscellaneous bridge repairs will provide minor reductions in routine maintenance costs and have been incorporated into the budget estimates.

**4. Deck Reconstruction Phase I**

- i. **Location:** Various Counties
- ii. **Description:** This project provided for the design and construction of the re-decking of the highest priority non-major Turnpike and Parkway mainline and overpass bridges.
- iii. **Status:** Design and construction completed and opened to traffic – March 2016
- iv. **Impact on Operating Budget:** This group of bridge projects, which extended the life of the bridge decks and reduced the need for intermittent repairs resulting in minor reductions in routine maintenance costs, has been completed for numerous years. The operating and maintenance expense impacts are reflected in the actual expenses over recent years.

**5. Deck Reconstruction Phase II**

- i. **Location:** Various Counties
- ii. **Description:** This project provides for the design and construction of the re-decking of the highest priority non-major Turnpike and Parkway mainline and overpass bridges.
- iii. **Status:** Design and construction is substantially complete – Spring 2020

- iv. **Impact on Operating Budget:** This group of bridge projects extends the life of the bridge decks and reduces the need for intermittent repairs which results in minor reductions in routine maintenance costs. These minor reductions have been incorporated into the operating budget.
- 6. GSP Bass River Bridge**
- i. **Location:** Atlantic County
  - ii. **Description:** This project provided for the design and construction of improvements to the Parkway crossing of the Bass River. The primary work included the construction of a new parallel bridge and re-decking, structural repairs, re-painting and seismic retrofit on the existing bridge, Structure No. 51.9.
  - iii. **Status:** Design and construction completed and opened to traffic – May 2015
  - iv. **Impact on Operating Budget:** This bridge project extended the life of the existing bridge and added a new bridge. This project has been completed for numerous years. The operating and maintenance expense impacts are reflected in the actual expenses over recent years.
- 7. GSP Great Egg Harbor/Drag Channel**
- i. **Location:** Atlantic and Cape May Counties
  - ii. **Description:** This project provides for the design and construction of new parallel bridges carrying the southbound Parkway over Great Egg Harbor and Drag Channel. The new bridges will be constructed west of the existing southbound structures. Construction will also include demolition of the existing southbound bridges; rehabilitation of the northbound Parkway bridges; and demolition of the nearby existing Beesley's Point Bridge. Special construction features include a ten-foot-wide multi-use pathway on the west side of the new bridges and approach roadways, and a plastic lumber fender system to protect the bridge piers.
  - iii. **Status:** Design and construction is substantially complete – August 2019
  - iv. **Impact on Operating Budget:** This bridge project extends the life of the existing bridge and reduces the need for intermittent repairs which results in minor reductions in routine maintenance costs. In addition, new bridges were added (4.5 lane miles) which increase the operations and maintenance costs by approximately 0.1%. These operations and maintenance cost savings and additions have been incorporated into the operating budget.
- 8. GSP Mullica River Bridge**
- i. **Location:** Atlantic County
  - ii. **Description:** This project provided for the design and construction of improvements to the Parkway crossing of the Mullica River. The primary work included the construction of a new parallel bridge and re-decking, structural repairs, re-painting and seismic retrofit on the existing bridge, Structure No. 49.0.
  - iii. **Status:** Design and construction of new bridge completed and opened to traffic – December 2012. Design and reconstruction of existing bridge completed and opened to traffic – April 2014.
  - iv. **Impact on Operating Budget:** This bridge project extended the life of the existing bridge and added a new bridge. This project has been completed for numerous years. The operating and maintenance expense impacts are reflected in the actual expenses over recent years.
- 9. GSP Substructure Bridge Repairs**
- i. **Location:** Various Counties
  - ii. **Description:** This project provided for the design and construction of repairs and rehabilitation of the substructure elements of the Northbound Driscoll Bridge, Structure No. 127.2N, along with pier caps, columns, and substructure elements on other major and non-major bridge water crossings.
  - iii. **Status:** Design and construction completed and opened to traffic – December 2015
  - iv. **Impact on Operating Budget:** This group of bridge projects extended the life of the bridges and reduces the need for intermittent repairs which results in minor reductions in routine maintenance

costs. This project has been completed for numerous years. The operating and maintenance expense impacts are reflected in the actual expenses over recent years.

**10. Newark Bay Hudson County Extension Bridge Redecking**

- i. **Location:** Hudson and Essex Counties
- ii. **Description:** This project provides for the design and construction of the re-decking of various structures on the Newark Bay-Hudson County Extension, including the Newark Bay Bridge, Structure No. N2.01. This project also provides for the repairs to structural steel and substructure units, security improvements, and re-painting.
- iii. **Status:** Design and construction on-going
- iv. **Impact on Operating Budget:** This group of bridge projects extends the life of the bridges. These projects reduce the need for intermittent repairs which results in minor reductions in routine maintenance costs. These minor reductions have been incorporated into the operating budget.

**11. TPK Hackensack East Bridge Rehabilitation**

- i. **Location:** Hudson County
- ii. **Description:** This project provided for the design and construction of the rehabilitation on the Turnpike's existing Eastern Hackensack River Bridge, Structure No. E109.83. The primary work included bridge re-decking, structural repairs, re-painting and seismic retrofit.
- iii. **Status:** Design and construction completed and opened to traffic – April 2015
- iv. **Impact on Operating Budget:** This bridge project extended the life of the bridge, reduced the need for intermittent repairs which resulted in minor reductions in routine maintenance costs, and has been completed for numerous years. The operating and maintenance expense impacts are reflected in the actual expenses over recent years.

**12. TPK I/C 16E-18E Bridge Improvements**

- i. **Location:** Hudson County
- ii. **Description:** This project provided for the widening and re-decking of Structure No. E112.58A and the widening of Secaucus Road, Structure No. E112.10.
- iii. **Status:** Design and construction completed and opened to traffic – 2011
- v. **Impact on Operating Budget:** This bridge project extended the life of the rehabilitated bridges and reduced the need for intermittent repairs resulting in minor reductions in routine maintenance costs. This project has been completed for numerous years. The operating and maintenance expense reductions are reflected in the actual expenses over recent years.

**13. TPK Specialized Bridge STR Repairs**

- i. **Location:** Various Counties
- ii. **Description:** This project provided for the design and construction of specialized bridge repairs on the Turnpike that were not covered under the annual miscellaneous structural repair contracts. The primary work included improvements to structural steel modifications, bearing replacements, and steel repairs for various non-major bridges.
- iii. **Status:** Design and construction is complete
- iv. **Impact on Operating Budget:** This group of bridge projects extended the life of the bridges and reduced the need for intermittent repairs which results in minor reductions in routine maintenance costs. These minor reductions have been incorporated into the operating budget.

**Capacity Enhancements - Turnpike****28. TPK I/C 6-9 Widening**

- i. **Location:** Burlington, Mercer, and Middlesex Counties
- ii. **Description:** The project involved the construction of 3 additional lanes, both northbound and southbound, between Interchanges 6 and 8A, approximately 25 miles. The project also included the addition of one lane in each direction between Interchanges 8A and 9. The widening project resulted in 12 total mainline lanes being provided between Interchanges 6 and 9. In addition, the project included interchange improvements within the project limits as determined to be necessary to meet traffic demands for the design year of 2032.
- iii. **Status:** Design and construction completed and opened to traffic – November 2014.
- iv. **Impact on Operating Budget:** This project, which added 216 lane miles of new pavement, has been completed for numerous years. The operating and maintenance expense impacts are reflected in the actual expenses over recent years.

**Capacity Enhancement - Parkway****16. GSP Widening of I/C 35-63**

- i. **Location:** Various Counties
- ii. **Description:** This project provides for the construction of a third travel lane with full shoulders in each direction on the Parkway. Six (6) individual design and construction contracts will provide for the widening of the 28-mile section in both directions the Parkway, new sign structures, and multiple bridge replacements.
- iii. **Status:** Design and construction from Interchange 63 to 41 completed - 2016. Design and construction from Interchange 41 to 35 was opened to traffic in the spring of 2018.
- iv. **Impact on Operating Budget:** The project adds 56 lane miles of new pavement which increases operating and maintenance expenses. This project has been completed for numerous years. The operating and maintenance expense impacts are reflected in the actual expenses over recent years.

**17. GSP Widening of I/C 63-80**

- i. **Location:** Various Counties
- ii. **Description:** This project provided for a third travel lane with full shoulders in each direction on the Parkway and Express E-ZPass/One-Way Southbound Tolls at the Barnegat Toll Plaza. Three (3) individual design and construction contracts were provided for mainline widening of the 17-mile section in both directions, new sign structures, ten bridge replacements, realignment of the Parkway at the Barnegat Toll Plaza to provide for the elimination of tolls in the northbound direction, creating Express E-ZPass operation in the southbound direction, and a new toll utility building.
- iii. **Status:** Design and construction completed and opened to traffic – May 2011
- iv. **Impact on Operating Budget:** This project adds new pavement which increases operating and maintenance expenses for personnel, materials and equipment. The project has been completed for numerous years. The operating and maintenance expense impacts are reflected in the actual expenses over recent years.

**Interchanges****16. GSP I/C 125 Phase I**

- i. **Location:** Middlesex County
- ii. **Description:** Interchange 125 is a partial interchange presently configured with a southbound entrance and northern exit ramp. This project will provide a new northbound entrance and new southbound exit ramp. The southbound exit ramp was opened July 2017 and is tolled to be consistent with one-way tolls at the Raritan Toll Plaza.
- iii. **Status:** Design and construction is substantially complete – June 2020

- iv. **Impact on Operating Budget:** This project adds one lane mile of new pavement which increases operating and maintenance expenses less than 0.1% for personnel, materials and equipment. These slight increases in costs have been incorporated into the budget.

**17. GSP I/C 142 Improvements**

- i. **Location:** Union County
- ii. **Description:** This project was a joint cooperative project between the Authority and the New Jersey Department of Transportation (NJDOT) that provided for the design and construction of missing ramp connections between the Parkway and I-78. The project also provided improvements to the interchange's existing ramp network, toll plaza, and to the I-78 mainline. The project was funded by the Federal Highway Administration, NJDOT, and the Authority. The project cost presented herein represents the Authority's share of the overall project cost.
- iii. **Status:** Design and construction completed and opened to traffic – April 2011
- iv. **Impact on Operating Budget:** This project added new pavement and bridge structures which increased operating and maintenance expenses for personnel, materials and equipment. This project has been completed for numerous years. The operating and maintenance expense impacts are reflected in the actual expenses over recent years.

**18. GSP I/C 41 Improvements**

- i. **Location:** Atlantic County
- ii. **Description:** At Interchange 41, local traffic previously accessed the Parkway through a service road to the Atlantic Service Area from Jimmie Leeds Road. This project provided a full interchange to allow Parkway access at Jimmie Leeds Road to and from the south.
- iii. **Status:** Design and construction completed and opened to traffic – August 2015
- iv. **Impact on Operating Budget:** This project added two lane miles of new pavement which increased operating and maintenance expenses. This project has been completed for numerous years. The operating and maintenance expense impacts are reflected in the actual expenses over recent years.

**19. GSP I/C 44 Improvements**

- i. **Location:** Atlantic County
- ii. **Description:** Interchange 44 previously provided access to the Parkway to and from the north only. This project completed the interchange to provide two additional ramps to allow access to and from the south.
- iii. **Status:** Design and construction completed and opened to traffic – August 2015
- iv. **Impact on Operating Budget:** This project adds two lane miles of new pavement which increases operating and maintenance expenses. This project has been completed for numerous years. The operating and maintenance expense impacts are reflected in the actual expenses over recent years.

**20. GSP I/C 88 Improvements**

- i. **Location:** Ocean County
- ii. **Description:** This project provided missing ramp movements at this partial interchange along with modifications to the existing ramp movements to and from the north. The project also included reconstruction of two mainline bridges, construction of two new bridges over NJ Route 70, construction of a new collector/distributor roadway between Interchange 88 and Interchange 89, and relocation and consolidation of ramp toll collection facilities.
- iii. **Status:** Design and construction completed and opened to traffic – July 2015
- iv. **Impact on Operating Budget:** This project added 15 lane miles of new pavement which increased operating and maintenance expenses. This project has been completed for numerous years. The operating and maintenance expense impacts are reflected in the actual expenses over recent years.

**21. GSP I/C 9, 10 & 11 Improvements**

- i. **Location:** Cape May County

- ii. **Description:** There were three traffic signals on the Parkway in Cape May County at Interchanges 9, 10 and 11. This project eliminated the traffic signals by providing three bridges to carry the Parkway over the local streets at each interchange. This project also provided for full access to the Parkway northbound and southbound at each interchange.
- iii. **Status:** Design and construction substantially completed and opened to traffic – April 2016
- iv. **Impact on Operating Budget:** This project added approximately four lane miles of new pavement which increases operating and maintenance expenses. This project has been completed for a number of years. The operating and maintenance expense impacts are reflected in the actual expenses over recent years.

## 22. GSP I/C 91 Improvements

- i. **Location:** Ocean County
- ii. **Description:** This project was a joint cooperative project between the Authority and Ocean County that provided missing ramp movements at this partial interchange. The project also includes the construction of two extended service roads and County road improvements that eliminated the complex traffic pattern at the interchange, relieved congestion on local roads, and enhanced safety. The project was funded by Ocean County and the Authority. The project cost represents the Authority's share of the overall cost of the project.
- iii. **Status:** Design and construction completed – September 2017.
- iv. **Impact on Operating Budget:** This project adds two lane miles of new pavement which increases operating and maintenance expenses. This project has been completed for numerous years. The operating and maintenance expense impacts are reflected in the actual expenses over recent years.

## 23. I/C Improvements

- i. **Location:** Various Counties
- ii. **Description:** This project includes improvements to interchanges on the Turnpike and Parkway. Interchange locations include Turnpike Interchanges 9, 10, 15W, 16W, and Parkway Interchanges 0, 105, 109, 145, 163.
- iii. **Status:** Design and construction is on-going
- iv. **Impact on Operating Budget:** This group of projects will clear numerous operational and maintenance issues and reduce the need for intermittent repairs which results in minor reductions in routine maintenance costs. These minor reductions have been incorporated into the operating budget.

## 24. TPK I/C 14A Reconstruction

- i. **Location:** Hudson County
- ii. **Description:** There were operational limitations due to constrained geometry for this existing Turnpike interchange that it is located within the cities of Bayonne and Jersey City. The proposed redevelopment of the Military Ocean Terminal in Bayonne along with Global Terminal will result in a significant increase in traffic using the Interchange 14A toll plaza. The interchange capacity was improved, and two additional toll lanes were added to the existing toll plaza to address the operational and capacity deficiencies of the existing interchange.
- iii. **Status:** Design and construction is complete – June 2020
- iv. **Impact on Operating Budget:** This project added six lane miles of new pavement which increased operating and maintenance expenses approximately 0.2% for personnel, materials and equipment. These increases in costs have been incorporated into the budget.

## 25. TPK I/C 8A to Route 130 Connector Improvements

- i. **Location:** Middlesex County
- ii. **Description:** This project will address significant traffic congestion near Interchange 8A. The project limits include a section of Route 32 between Interchange 8A and the interconnection of Route 32

with Route 130. Middlesex County has requested that the Authority undertake appropriate improvements on the basis that much of the traffic within the corridor is destined to or from the Turnpike.

- iii. **Status:** Design and construction is complete
- iv. **Impact on Operating Budget:** This project adds approximately nine lane miles of new pavement which increases operating and maintenance expenses. This project has been completed for numerous years. The operating and maintenance expense impacts are reflected in the actual expenses over recent years.

#### **Concrete Barrier**

##### **26. Median Barrier Improvements**

- i. **Location:** Various Counties
- ii. **Description:** This project included the inspection and condition assessment of concrete median barrier, and the implementation of a repair, replacement, and upgrade program along the Parkway and Turnpike mainline and interchange ramps. The project included sections of severely deteriorated concrete median barrier that required replacement between Parkway MP 141 and MP 160 as well as other locations.
- iii. **Status:** Design and construction substantially complete – July 2014
- iv. **Impact on Operating Budget:** This group of projects extended the life of the median barrier and reduced the need for intermittent repairs which results in minor reductions in routine maintenance costs. This project has been completed for numerous years. The operating and maintenance expense impacts are reflected in the actual expenses over recent years.

#### **Drainage Structures**

##### **27. Drainage Improvements**

- ix. **Location:** Various Counties
- x. **Description:** This project included design services and construction to rehabilitate or replace non-functioning and substandard drainage systems. The project also included the analysis of the condition of existing median inlets along the Authority's mainline and interchange ramp roadways and will construct recommended improvements in compliance with current environmental regulations.
- xi. **Status:** Design and construction completed 2019.
- xii. **Impact on Operating Budget:** This group of projects extended the life of the drainage systems and reduced the need for intermittent repairs which results in minor reductions in routine maintenance costs. These reductions have been incorporated into the operating budget based on actual cost savings.

#### **Other Roadway Improvements**

##### **28. GSP Mainline Shoulder Improvements**

- i. **Location:** Ocean and Monmouth Counties
- ii. **Description:** In the late 1980's, the right and left mainline shoulders from MP 80 to MP 100 on the Parkway were eliminated and the width of the travel lanes was reduced to create a third travel lane in both the northbound and southbound directions between Interchanges 80 and 91 and a fourth lane between Interchanges 91 and 98. The geometric changes were made to provide additional capacity to meet the traffic demands along this section of the Parkway. This project reconstructed the mainline roadway to provide full-width right and left shoulders and to widen the travel lanes to widths that meet current standards.
- iii. **Status:** Design and construction completed and opened to traffic - December 2015

- iv. **Impact on Operating Budget:** This project added 40 lane miles of new pavement which increased operating and maintenance expenses. The project has been completed for numerous years. The operating and maintenance expense impacts are reflected in the actual expenses over recent years.

## 29. Improvements Roadway Appurtenances

- i. **Location:** Various Counties
- ii. **Description:** This project provides for upgrading various guide rail, guide rail end treatments, and crash cushions along the Parkway and Turnpike.
- iii. **Status:** Design and construction substantially complete – 2019.
- iv. **Impact on Operating Budget:** This group of projects extends the life of the guiderail system and reduces the need for intermittent repairs which results in minor reductions in routine maintenance costs. These reductions have been incorporated into the operating budget based on actual cost savings.

## 30. Sign Replacements Phase I

- i. **Location:** Various Counties
- ii. **Description:** This project includes inspection, assessment and implementation of the remedial measures necessary to bring dated mainline and interchange guide signing into compliance with current standards. This project will upgrade existing Parkway and Turnpike guide signs and structures, along the mainline, ramps or at facilities to the current design standards. The project includes the study and assessment of current signing legends and locations along with recommendations and plans to procure the construction services necessary to bring signing into compliance with current standards.
- iii. **Status:** Design and construction completed - September 2018
- iv. **Impact on Operating Budget:** This group of projects has no significant impact on the operating budget.

## 31. Sign Replacements Phase II

- i. **Location:** Various Counties
- ii. **Description:** This project includes the deployment of 250 Variable Message Signs (VMSs) at various locations along the length of the Turnpike and the Parkway. The project provided for design and construction of VMS sign supports, provision and installation of VMS signs, and connectivity utilizing fiber optic communications networks back to the Statewide Traffic Management Center (STMS). All signs are monitored and controlled from the STMC.
- iii. **Status:** Design and construction is on-going.
- iv. **Impact on Operating Budget:** This project added 250 VMSs to the Authority facilities, which results in additional operating and maintenance expenses. These additions have been incorporated into the operating budget.

## 32. TPK/GSP SB Improvements

- i. **Location:** Various Counties
- ii. **Description:** This project provided miscellaneous improvements to the mainline and interchanges located in the southern portion of the Turnpike between Interchange 1 and Interchange 4 and on the Parkway between MP 0 and MP 48.
- iii. **Status:** Design and construction completed – June 2013
- iv. **Impact on Operating Budget:** This group of projects cleared numerous maintenance issues and reduced the need for intermittent repairs which results in minor reductions in routine maintenance costs. This project has been completed for numerous years. The operating and maintenance expense impacts are reflected in the actual expenses over recent years.



**Facilities****33. Facilities Improvements Phase I**

- i. **Location:** Various Counties
- ii. **Description:** This project replaces and rehabilitates facilities at 22 Turnpike and Parkway maintenance districts to bring 50+ year old maintenance buildings into compliance with current building codes and operational standards. The project also includes repairing/rehabilitating several Turnpike toll plazas to incorporate safety and operational improvements. Finally, four new State Police facilities will be constructed under this project.
- iii. **Status:** Design and construction is on-going
- iv. **Impact on Operating Budget:** This group of projects cleared numerous maintenance issues which reduces the need for intermittent repairs resulting in minor reductions in routine maintenance costs. In addition, new facilities were added which increase operations and maintenance costs. These minor reductions and additions have been incorporated into the operating budget.

**34. Salt Storage Facilities**

- i. **Location:** Various Counties
- ii. **Description:** This project provided new, increased salt storage capacity for the Turnpike and Parkway.
- iii. **Status:** Design and construction is completed – May 2016
- iv. **Impact on Operating Budget:** This group of projects resulted in salt storage facilities that reduce operating costs adding storage capacity and improving locations. This project has been completed for numerous years. The operating and maintenance expense impacts are reflected in the actual expenses over recent years.

## Appendices

### Appendix A: General Consulting Engineer's Approval

**HNTB Corporation**  
The HNTB Companies  
Infrastructure Solutions

9 Entin Road  
Suite 202  
Parsippany, NJ 07054

Telephone (973) 434-3100  
Facsimile (973) 434-3101  
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November 2, 2020



John M. Keller, PE  
Executive Director  
New Jersey Turnpike Authority  
One Turnpike Plaza  
Woodbridge, NJ 07095-5042

Re: Order for Professional Services No. A3584  
General Consulting Engineering Services  
Review of Final 2021 Annual Budgets

Dear Mr. Keller:

In accordance with the provisions of Section 710(a) of the Turnpike Revenue Bond Resolution, as adopted on August 20, 1991, as amended and restated on September 26, 1991 and as further amended and restated on November 22, 1991, HNTB has thoroughly reviewed the New Jersey Turnpike Authority's Final 2021 Annual Budgets. Over the last several months, HNTB has reviewed various drafts, iterations, and final versions of the proposed 2021 Annual Budgets which include annual operating expense, debt service, and general reserve budgets; revenue-funded construction budgets; and longer-term, bond-funded construction budgets.

HNTB hereby approves the New Jersey Turnpike Authority's Final 2021 Annual Budgets. The Final 2021 Annual Budgets include:

#### Annual Budgets

- |  |               |
|--|---------------|
| • Operating Expense Budget             | \$622,324,000 |
| • Debt Service Budget                  | \$920,757,000 |
| • General Reserve Fund Spending Budget | \$395,841,000 |

#### Revenue-Funded Construction Budgets

- |  |               |
|--|---------------|
| • Maintenance Reserve Fund Spending Budget     | \$185,292,000 |
| • Special Project Reserve Fund Spending Budget | \$73,912,000  |
| • Supplemental Capital Fund Spending Budget    | \$73,380,000  |

#### Bond-Funded Construction Budgets

- |   |               |
|---|---------------|
| • 2008 \$7 Billion Capital Improvement Program    | \$146,034,000 |
| • 2019 \$500 Million Capital Improvement Program  | \$268,135,000 |
| • 2020 Rolling 5-Year Capital Improvement Program | \$227,356,000 |

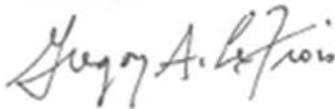
John M. Keller, PE  
November 2, 2020  
Page 2 of 2

In addition, the Final 2021 Annual Budgets include the following deposits:

- |                                 |               |
|---------------------------------|---------------|
| • Maintenance Reserve Fund      | \$160,000,000 |
| • Special Projects Reserve Fund | \$50,000,000  |
| • General Reserve Fund          | \$396,387,000 |

We appreciate being of service to you in this regard. Should you have any questions or comments related to our review of the 2021 Annual Budgets, please contact us.

Sincerely,



Gregory A. Le Frois, PE  
Senior Vice President  
Project Manager

Copy: Donna Manuelli, CFO, NJTA  
Robert J. Fischer, PE, NJTA  
J. Lawrence Williams, PE, NJTA  
Mukta Puranik, NJTA  
Joseph McCarthy, NJTA

GAL/sb

## Appendix B: Schedule of Revenue, Operating and Non-Operating Expenses

### NEW JERSEY TURNPIKE AUTHORITY Schedule of Revenue, Operating and Non-Operating Expenses Reconciliation of Bond Resolution to GAAP

(In thousands)

	2019 Actual	2020 Budget	2021 Budget
Operating revenues:			
Toll revenue	\$ 1,612,268	1,633,298	1,920,741
E-ZPass fees	80,329	80,050	84,500
Concession revenue	33,104	35,557	31,000
Miscellaneous revenue	17,539	11,790	11,976
Total operating revenues	1,743,240	1,760,695	2,048,217
Operating expenses:			
Maintenance of roadway, buildings, and equipment	247,260	343,806	322,611
Toll collection	159,423	187,748	196,982
State police and traffic control	96,091	114,401	109,270
Technology	20,703	34,994	35,805
General administrative costs	52,233	68,956	59,871
Depreciation	381,389	390,000	433,850
Total operating expenses	957,099	1,139,905	1,158,389
Nonoperating revenues (expenses):			
Build America Bonds subsidy	76,725	76,847	77,010
Federal and State reimbursements	1,006	—	—
Payments to the State of New Jersey	(179,500)	(178,500)	(289,000)
Interest expense, Turnpike Revenue Bonds	(548,426)	(548,937)	(599,704)
Other bond expenses	(1,306)	(1,000)	(1,000)
Loss on disposal of capital assets	—	—	—
Investment income	51,416	30,000	22,000
Arts Center	4,690	3,401	4,241
Total nonoperating (expenses), net	(595,395)	(618,189)	(786,453)
Capital contributions	200	—	200
Change in Net Position	190,946	2,601	103,575

## Notes:

The Budget does not include depreciation and other non-cash expenses resulting from GASB implementation.

The non-cash expenses include Pollution Remediation (GASB 49), Pension (GASB 68) and Other Postemployment Benefits (GASB 75).

Figure 179: Schedule of Revenue, Operating and Non-Operating Expenses

## NEW JERSEY TURNPIKE AUTHORITY

Schedule of Revenue, Operating and Non-Operating Expenses - Reconciliation of Bond Resolution to GAAP  
2019 Actual  
(in thousands)

	Revenue	Construction	Maintenance reserve	Special project reserve	General reserve	Debt service	Debt reserve	Total bond resolution	GAAP adjustments*	Total 2019 GAAP Financials
Operating revenues:										
Toll revenue	\$ 1,612,268	-	-	-	-	-	-	1,612,268	-	1,612,268
E-Z Pass Fees	80,329	-	-	-	-	-	-	80,329	-	80,329
Concession revenue	33,104	-	-	-	-	-	-	33,104	-	33,104
Miscellaneous revenue	16,117	-	-	-	-	-	-	16,117	1,422	17,539
Total operating revenues	1,741,818	-	-	-	-	-	-	1,741,818	1,422	1,743,240
Operating expenses:										
Maintenance of roadway, buildings and equipment	215,506	-	-	9,629	24,113	-	-	249,248	(1,988)	247,260
Toll Collection	156,309	-	-	-	4,409	-	-	160,718	(1,295)	159,423
State Police and Traffic Control	94,802	-	-	883	810	-	-	96,495	(404)	96,091
Technology	19,460	-	-	1,088	563	-	-	21,111	(408)	20,703
General administrative costs	44,858	-	-	307	5,888	-	-	51,053	1,180	52,233
Depreciation	-	313,565	44,506	10,652	12,666	-	-	381,389	-	381,389
Total operating expenses	530,935	313,565	44,506	22,559	48,449	-	-	960,014	(2,915)	957,099
Nonoperating revenues (expenses):										
Build America Bonds subsidy	76,725	-	-	-	-	-	-	76,725	-	76,725
Federal and State reimbursements	1,006	-	-	-	-	-	-	1,006	-	1,006
Payments to the State of New Jersey	-	-	-	-	(179,500)	-	-	(179,500)	-	(179,500)
Interest expense, Turnpike Revenue Bonds	-	56,386	-	-	-	(596,076)	-	(539,690)	(8,736)	(548,426)
Other bond expense	-	(1,306)	-	-	-	-	-	(1,306)	-	(1,306)
Loss on disposal of capital assets	-	-	-	-	-	-	-	-	-	-
Investment income (loss)	4,155	13,430	2,540	2,139	10,360	5,927	12,865	51,416	-	51,416
Arts Center	4,690	-	-	-	-	-	-	4,690	-	4,690
Total nonoperating revenues (expenses), net	86,576	68,510	2,540	2,139	(169,140)	(590,149)	12,865	(586,659)	(8,736)	(595,395)
Capital contributions	-	35,766	-	-	200	-	-	35,966	(35,766)	200
Change in Net Position	1,297,459	(209,289)	(41,966)	(20,420)	(217,389)	(590,149)	12,865	231,111	(40,165)	190,946

\* GAAP Adjustments fund includes the non-cash expenses related to GASB 49, GASB 68 and GASB 75

Figure 180: Schedule of Revenue, Operating and Non-Operating Expenses - Reconciliation of Bond Resolution to GAAP 2019 Actuals

## NEW JERSEY TURNPIKE AUTHORITY

Schedule of Revenue, Operating and Non-Operating Expenses - Reconciliation of Bond Resolution to GAAP  
2020 Budget  
(in thousands)

	Revenue	Construction	Maintenance reserve	Special project reserve	General reserve	Debt service	Debt reserve	Total bond resolution	GAAP adjustments *	Total 2020 GAAP Financials
Operating revenues:										
Toll revenue	\$ 1,633,298	-	-	-	-	-	-	1,633,298	-	1,633,298
E-Z Pass Fees	80,050	-	-	-	-	-	-	80,050	-	80,050
Concession revenue	35,557	-	-	-	-	-	-	35,557	-	35,557
Miscellaneous revenue	11,790	-	-	-	-	-	-	11,790	-	11,790
Total operating revenues	1,760,695	-	-	-	-	-	-	1,760,695	-	1,760,695
Operating expenses:										
Maintenance of roadway, buildings and equipment										
Toll Collection	250,577	3,990	-	17,112	50,738	-	-	322,417	21,389	343,806
State Police and Traffic Control	169,995	-	-	-	4,321	-	-	174,316	13,432	187,748
Technology	103,058	-	-	4,027	5,203	-	-	112,288	2,113	114,401
General administrative costs	24,445	4,812	-	3,585	629	-	-	33,471	1,523	34,994
Depreciation #	50,896	-	-	2,945	10,954	-	-	64,795	4,161	68,956
Total operating expenses	598,971	311,845	51,868	16,266	18,823	-	-	390,000	-	390,000
Nonoperating revenues (expenses), net										
Build America Bonds subsidy	76,847	-	-	-	-	-	-	76,847	-	76,847
Federal and State reimbursements	-	-	-	-	-	-	-	-	-	-
Payments to the State of New Jersey	-	-	-	-	(178,500)	-	-	(178,500)	-	(178,500)
Interest expense, Turnpike Revenue Bonds	-	52,949	-	-	-	(593,304)	-	(540,355)	(8,582)	(548,937)
Other bond expense	-	-	-	-	(1,000)	-	-	(1,000)	-	(1,000)
Loss on disposal of capital assets	-	-	-	-	-	-	-	-	-	-
Investment income (loss)	24,000	6,000	-	-	-	-	-	30,000	-	30,000
Arts Center	3,401	-	-	-	-	-	-	3,401	-	3,401
Total nonoperating revenues (expenses), net	104,248	58,949	-	-	(179,500)	(593,304)	-	(609,607)	(8,582)	(618,189)
Capital contributions										
Change in Net Position	1,265,972	(252,896)	(51,868)	(43,935)	(270,168)	(593,304)	-	53,801	(51,200)	2,601
Operating revenue, operating and non-operating expenses for each fund match to expense budget except depreciation.										
GAAP Adjustments fund includes the non-cash expenses related to GASB 49, GASB 68 and GASB 75										

Figure 181: Schedule of Revenue, Operating and Non-Operating Expenses - Reconciliation of Bond Resolution to GAAP: 2020 Budget

## NEW JERSEY TURNPIKE AUTHORITY

Schedule of Revenue, Operating and Non-Operating Expenses - Reconciliation of Bond Resolution to GAAP  
2021 Budget  
(in thousands)

	Revenue	Construction	Maintenance reserve	Special project reserve	General reserve	Debt service	Debt reserve	Total bond resolution	GAAP adjustments*	Total 2021 GAAP Financials
Operating revenues:										
Toll revenue	\$ 1,920,741	-	-	-	-	-	-	1,920,741	-	1,920,741
E-Z Pass Fees	84,500	-	-	-	-	-	-	84,500	-	84,500
Concession revenue	31,000	-	-	-	-	-	-	31,000	-	31,000
Miscellaneous revenue	11,976	-	-	-	-	-	-	11,976	-	11,976
Total operating revenues	2,048,217	-	-	-	-	-	-	2,048,217	-	2,048,217
Operating expenses:										
Maintenance of roadway, buildings and equipment	260,940	41	-	1,492	42,251	-	-	304,724	17,887	322,611
Toll Collection	180,137	-	-	-	5,720	-	-	185,857	11,125	196,982
State Police and Traffic Control	105,302	-	-	1,250	968	-	-	107,520	1,750	109,270
Technology	24,035	1,737	-	7,953	818	-	-	34,543	1,262	35,805
General Administrative Costs	51,910	-	-	1,500	2,588	-	-	55,998	3,873	59,871
Depreciation #	-	351,477	67,774	14,599	-	-	-	433,850	-	433,850
Total operating expenses	622,324	353,255	67,774	26,794	52,345	-	-	1,122,492	35,887	1,158,389
Nonoperating revenues (expenses), net										
Build America Bonds subsidy	77,010	-	-	-	-	-	-	77,010	-	77,010
Federal and State reimbursements	-	-	-	-	-	-	-	-	-	-
Payments to the State of New Jersey	-	-	-	-	(289,000)	-	-	(289,000)	-	(289,000)
Interest expense, Turnpike Revenue Bonds	-	51,211	-	-	-	(642,057)	-	(590,846)	(8,858)	(599,704)
Other bond expense	-	-	-	-	(1,000)	-	-	(1,000)	-	(1,000)
Loss on disposal of capital assets	-	-	-	-	-	-	-	-	-	-
Investment income (loss)	20,000	2,000	-	-	-	-	-	22,000	-	22,000
Arts Center	4,241	-	-	-	-	-	-	4,241	-	4,241
Total nonoperating revenues (expenses), net	101,251	53,211	-	-	(290,000)	(642,057)	-	(777,595)	(8,858)	(786,453)
Capital contributions	-	-	-	-	200	-	-	200	-	200
Change in Net Position	1,527,144	(300,044)	(67,774)	(26,794)	(342,145)	(642,057)	-	148,330	(44,755)	103,575

# Operating revenue, Operating and non-operating expenses for each fund match to expense budget except depreciation.  
GAAP Adjustments fund includes the non-cash expenses related to GASB 49, GASB 68 and GASB 75

Figure 182: Schedule of Revenue, Operating and Non-Operating Expenses - Reconciliation of Bond Resolution to GAAP 2021 Budget

## Appendix C: Financial Policies

### Financial Management Principles and Guidelines

#### I. INTRODUCTION

##### **A. Purpose of Financial Management Principles and Guidelines**

These Financial Management Principles and Guidelines are intended to serve as a management tool to enable the New Jersey Turnpike Authority (the “Authority”) to communicate the Authority’s commitment to a sound financial decision-making process and affirm to investors and the credit rating agencies management’s commitment to the long term financial viability of the Authority and repayment of its bonds. These Financial Management Principles and Guidelines are also intended to serve as guidance for management of the Authority with respect to:

- i. the issuance and management of Authority debt in appropriate amounts and types with the goals of achieving the lowest possible costs of capital within prudent risk parameters and ensuring ongoing access to the capital markets; and
- ii. compliance by the Authority with all provisions of the Act (as hereinafter defined) relating to bonds, notes or other obligations of the Authority, as well as all provisions of the Authority’s Bond Resolution (as hereinafter defined).

These Financial Management Principles and Guidelines will be reviewed by the Authority no less than once every two (2) years and any changes to these Financial Management Principles and Guidelines will be presented to and approved by the Authority’s Board of Commissioners. These Financial Management Principles and Guidelines will also be made available on the Authority’s website (<http://www.state.nj.us/turnpike>)\*.

##### **B. Best Interests of the Authority**

While adherence to these Financial Management Principles and Guidelines is desirable, deviations from these Financial Management Principles and Guidelines may be appropriate from time to time to address: (i) changing financial goals; (ii) emerging financial products/debt structures; and (iii) unique market opportunities. As a result, the general best interests of the Authority shall supersede any provision of these Financial Management Principles and Guidelines.

##### **C. The Authority**

The Authority is a public body corporate and politic of the State of New Jersey created under and by virtue of the New Jersey Turnpike Authority Act of 1948, constituting Chapter 454 of the Laws of New Jersey of 1948, as amended and supplemented (the “Act”). Pursuant to the Act, the Authority is authorized and empowered to issue and incur its bonds, notes and other obligations for the purposes and on the terms and conditions set forth in the Act. All currently issued and outstanding bonds of the Authority, and all future bonds, notes or other obligations of the Authority, have been or will be issued and incurred under and pursuant to, and/or in accordance with, the terms and provisions of the Act and a resolution of the Authority adopted on August 20, 1991 and entitled, “Turnpike Revenue Bond Resolution”, as amended and restated on September 26, 1991, and as further amended and restated on November 22, 1991, as the same has been and will be further amended, restated and supplemented from time to time (the “Bond Resolution”). Capitalized terms used herein which are not otherwise defined shall have the meaning given to such terms in the Bond Resolution.

\*Effective October 2017, Authority website is <http://www.njta.com>



**II. FINANCIAL MANAGEMENT PRINCIPLES AND GUIDELINES**

- A. Management will conduct Authority business in a manner that is in compliance with the requirements of the Act and the Bond Resolution, as well as all other applicable federal and state laws, rules and regulations.
- B. Revenues and bond proceeds will be used to improve and/or maintain safe and efficient roadways.
- C. The Authority will employ a Traffic Engineer to develop conservative toll revenue growth projections and establish toll rate schedules.
- D. The Authority will manage operating expenses within its available annual authorized operating budget, with a goal of reducing operating expenses while maintaining the quality of its roads and services.
- E. The Authority will adequately fund its Maintenance Reserve Fund, Special Project Reserve Fund, and other capital budgets in compliance with the provisions of the Bond Resolution and the recommendations of its Consulting Engineer.
- F. The Authority will manage its cash flow and total expenditure levels such that it maintains average unrestricted cash balances in the General Reserve Fund equal to at least:
  - (1) one hundred and twenty-five million dollars (\$125,000,000) as of December 31, 2017;
  - (2) one hundred and fifty million dollars (\$150,000,000) as of December 31, 2018;
  - (3) one hundred and seventy-five million dollars (\$175,000,000) as of December 31, 2019; and
  - (4) ten (10) percent of total annual revenue as of December 31, 2020 and each December 31st thereafter, based on that year's budgeted total annual revenue.
- G. The Authority will continue to fund its approved Capital Improvement Program with the lowest possible cost of capital. The Capital Improvement Program will be reviewed on an annual basis. Management will establish a Capital Improvement Program Reserve within the Capital Improvement Program budget to protect against risk.
- H. The Authority will prepare, at a minimum, a 5-year financial plan and update this plan on a regular basis as assumptions change.
- I. The Authority shall invest all of its funds (including the proceeds received from the sale of its bonds, notes or other obligations) which are not immediately needed for the purposes of the Authority in Investment Securities as provided in the Bond Resolution. The Authority shall invest all of its funds in a manner that allows such funds to be available when needed to be applied for their intended purposes. Funds will be invested in a manner consistent with the Investment Plan to be hereafter adopted by the Authority in accordance with Paragraph S below, with the goals of safety, liquidity and then yield in that order of priority.
- J. The Authority will prepare its books, records, and accounts according to General Accepted Accounting Principles applicable to governmental entities in the United States of America and cause

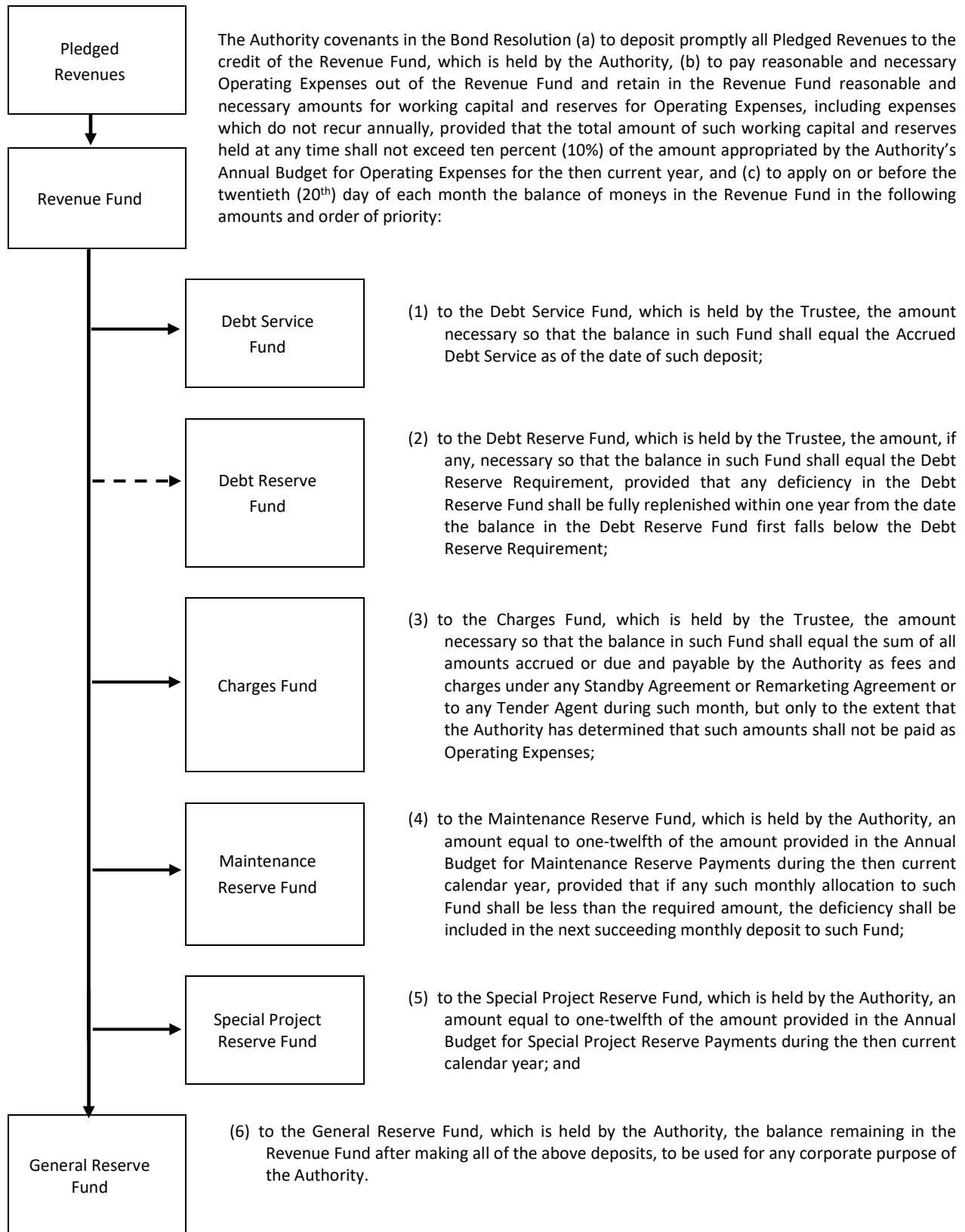
such books, records and accounts to be annually audited by a nationally recognized firm of Certified Public Accountants. The Authority shall record all transactions consistent with the provisions of the Bond Resolution, including the provisions relating to all Funds and Accounts established under the Bond Resolution.

- K. The Authority will maintain current and meaningful financial and other information on its website for the benefit of investors, credit enhancement providers, and credit rating agencies.
- L. The Authority shall strive to maintain or improve the credit ratings for its debt without adversely affecting the levels or types of debt that may be issued by the Authority to finance its essential capital activities. The Authority will strive to communicate regularly with the rating agencies. To the extent possible and/or necessary, the Authority will forward periodic financial and other information to the rating agencies, update the rating agencies upon the occurrence of any significant financial developments and communicate with the rating agencies prior to each Authority debt issuance.
- M. The Authority will manage its toll rates, expense budget, and debt issuance program to achieve a minimum senior debt service coverage of 1.4x, and a total requirements coverage of 1.2x, although compliance with the Net Revenue Requirement under the Bond Resolution only requires the Authority to generate Net Revenues in each calendar year in an amount equal to the greater of (i) the sum of Aggregate Debt Service, required payments into the Maintenance Reserve Fund, required payments into the Special Project Reserve Fund and the payments, if any, into the Charges Fund for such year, or (ii) 1.2x the Aggregate Debt Service for such year. Furthermore, although the Bond Resolution permits the Authority to include amounts which are withdrawn from the Construction Fund, the Special Project Reserve Fund, and the General Reserve Fund and deposited into the Revenue Fund as part of the Pledged Revenues for purposes calculating compliance with the Net Revenue Requirement, the Authority shall not, in any calendar year, set its toll rates and/or adopt an annual budget which in any manner expressly relies, in whole or in part, upon any such withdrawals and deposits into the Revenue Fund as a means for achieving compliance with the Net Revenue Requirement or any other higher debt service or other coverage level which the Authority has established as its goal.
- N. Bonds, notes, and other obligations will be issued by the Authority solely for the purposes of financing its essential capital activities or refunding outstanding debt. Debt will not be issued by the Authority to fund, in whole or in part, operation and maintenance costs of the Turnpike System or capital assets with remaining useful lives shorter than the final maturity date of the associated debt. All bonds, notes and other obligations issued by the Authority will comply with the requirements of the Act and the Bond Resolution, as well as all other applicable federal and state laws, rules and regulations.
- O. The Authority will structure its new money debt maturities to achieve either an overall level debt service structure or a standalone level debt service structure. The Authority will continue to issue its bonds with maturities up to thirty (30) years from date of issuance to finance essential capital activities for the Turnpike System, including the acquisition, construction and rehabilitation of major capital assets for and/or additions to the New Jersey Turnpike, the Garden State Parkway and any other component of the Turnpike System.

- P. During the financing of the Authority's currently approved Capital Improvement Program, the Authority does not intend to increase its overall variable rate debt in an amount greater than 20% of its overall debt.
- Q. During the financing of the currently approved Capital Improvement Program, the Authority does not intend to increase the overall aggregate notional amount of its currently outstanding interest rate swap agreements and will look to reduce its outstanding interest rate swaps as economic opportunities to do so arise. Over the long-term, the Authority will not enter into interest rate swaps in an aggregate notional amount greater than 20% of its overall debt outstanding. If additional swaps are entered into, the Authority will have a goal to achieve a diversified (no more than 25% with any single counterparty) and highly rated (A1/A+ or better) group of counterparties. The Authority will require appropriate collateral provisions from such counterparties if their ratings decline below A2/A. The Authority will not provide collateral or termination rights to the counterparty unless the Authority's ratings decline below Baa2/BBB or lower. Any additional interest rate swap agreements will be entered into by the Authority in a manner consistent with the Interest Rate Swap Management Plan to be hereafter adopted by the Authority in accordance with Paragraph S below.
- R. When identifying potential refunding candidates for economic refundings, the Authority will generally seek a minimum per transaction present value savings threshold of 3%. Notwithstanding the above, the 3% savings threshold shall not apply for debt with a call date between one (1) and three (3) years from their stated maturity, or for small principal maturities and bonds that produce significant negative arbitrage. In certain instances, it may be advantageous for the Authority to issue refunding debt that does not produce positive economic savings but serves to restructure existing debt or retire debt in order to remove undesirable debt covenants. Prior to issuing non-economic refunding debt, the Authority will evaluate the benefits (both intangible and tangible) of issuing such debt as well as the economic cost of such debt.
- S. The Authority will hereafter adopt a formal Debt Management Plan, an Interest Rate Swap Management Plan and an Investment Plan, all of which shall be consistent with the provisions of the Act, the Bond Resolution and these Financial Management Principles and Guidelines.

### III. BOND RESOLUTION FLOW OF FUNDS:

The Bond Resolution creates and establishes various Funds and provides that the Pledged Revenues shall be deposited into such Funds in the amounts and in the order of priority set forth in the Bond Resolution. The Authority will at all times comply with the provisions of the Bond Resolution in connection with the deposit and application of the Pledged Revenues. The following chart illustrates and generally describes the provisions of the Bond Resolution governing the deposit and application of the Pledged Revenues to the various Funds created and established under the Bond Resolution:



**IV. STATUTORY PROVISIONS AND CONSIDERATIONS****A. General**

Bonds, notes or other obligations issued by the Authority are revenue obligations of the Authority and are not a debt or liability of the State of New Jersey or any political subdivision thereof (other than the Authority). Neither the faith and credit nor the taxing power of the State of New Jersey or of any political subdivision thereof is pledged to the payment of the Authority's bonds, notes or other obligations. The Authority has no taxing power.

**B. Approvals of Governor and State Treasurer**

Pursuant to Section 3(F) of the Act (N.J.S.A. 27:23-3(F)), no resolution or other action of the Authority providing for the issuance of bonds, refunding bonds or other obligations or the fixing, revising or adjusting of tolls for the use of the Turnpike System shall be adopted or otherwise made effective by the Authority without the prior written approval of the Governor and the State Treasurer. Section 3(F) of the Act further provides that the powers conferred upon the Governor and the State Treasurer pursuant to such Section shall be exercised with due regard of the rights of the holders of the Authority's bonds at any time outstanding and nothing in such Section shall in any limit, restrict or alter the obligation or powers of the Authority to carry out and perform each and every covenant, agreement or contract at any time made or enter into by or on behalf of the Authority with respect to its bonds or for the benefit, protection and security of the holders thereof.

**C. State Non-Impairment Agreement**

Pursuant to Section 7 of the Act (N.J.S.A. 27:23-7), the State of New Jersey has pledged and agreed with the holders of the Authority's bonds that it will not limit or restrict the rights vested in the Authority to acquire, maintain, construct, improve, manage, repair, reconstruct and operate the Turnpike System, or to establish and collect such charges and tolls as may be convenient or necessary to produce sufficient revenue to meet the expenses of maintenance and operation thereof and to fulfill the terms of any agreements made with the holders of the Authority's bonds or in any way impair the rights and remedies of the holders of such bonds until the bonds, together with interest thereon, are fully paid and discharged.

## Debt Management Policy

### I. INTRODUCTION

#### **A. Purpose of Policy**

This Debt Management Policy is intended to serve as a management tool to enable the New Jersey Turnpike Authority (the "Authority") to identify circumstances and transactions under which the Authority can issue and manage its bonds, notes and other obligations in the most efficient manner and provide for the full and timely repayment thereof. This policy is also intended to serve as guidance for management of the Authority with respect to:

- (i) the issuance and incurrence of Authority debt in appropriate amounts and types with the goals of achieving the lowest possible costs of capital within prudent risk parameters and ensuring ongoing access to the capital markets;
- (ii) compliance by the Authority with all provisions of the Act (as hereinafter defined) relating to bonds, notes or other obligations of the Authority, as well as all provisions of the Authority's Bond Resolution (as hereinafter defined);
- (iii) preservation of financial flexibility to maintain appropriate resources and funding capacity for present and future capital needs;
- (iv) management of interest rate risk exposure to promote the appropriate diversification within the debt portfolio to balance risk and liquidity and promote and maintain an acceptable balance between interest rate risk and the long-term cost of capital; and
- (v) securing of highly qualified professional services firms to assist with debt issuance in an open and competitive process.

#### **B. The Authority**

The Authority is a public body corporate and politic of the State of New Jersey created under and by virtue of the New Jersey Turnpike Authority Act of 1948, constituting Chapter 454 of the Laws of New Jersey of 1948, as amended and supplemented (the "Act").

#### **C. Review**

This Policy will be reviewed by the Authority no less than once every (2) two years and any changes to this Policy will be presented to and approved by the Authority's Board of Commissioners. This Policy will also be made available on the Authority's website (<http://www.state.nj.us/turnpike>)\*.

#### **D. Best Interests of the Authority**

Although adherence to this policy is desirable, deviations from the policy may be appropriate at times to address: (i) changing financial goals; (ii) emerging financial products/debt structures; and/or (iii) unique market opportunities. Consequently, the general best interests of the Authority shall supersede any provision of the policy.

\*Effective October 2017, Authority website is <http://www.njta.com>

## II. TURNPIKE REVENUE BONDS

### **A. Legal Authority**

Pursuant to the Act, the Authority is authorized and empowered to issue and incur its bonds, notes and other obligations for the purposes and on the terms and conditions set forth in the Act. All currently issued and outstanding bonds of the Authority, and all future bonds, notes or other obligations of the Authority, have been or will be issued and incurred under and pursuant to, and/or in accordance with, the terms and provisions of the Act and a resolution of the Authority adopted on August 20, 1991 and entitled, "Turnpike Revenue Bond Resolution", as amended and restated on September 26, 1991, and as further amended and restated on November 22, 1991, as the same has been and will be further amended, restated and supplemented from time to time (the "Bond Resolution") (Capitalized terms used herein which are not otherwise defined shall have the meaning given to such terms in the Bond Resolution).

### **B. Approvals of Governor and State Treasurer**

Pursuant to Section 3(F) of the Act (N.J.S.A. 27:23-3(F)), no resolution or other action of the Authority providing for the issuance of bonds, refunding bonds or other obligations or the fixing, revising or adjusting of tolls for the use of the Turnpike System shall be adopted or otherwise made effective by the Authority without the prior written approval of the Governor and the State Treasurer. Section 3(F) of the Act further provides that the powers conferred upon the Governor and the State Treasurer pursuant to such Section shall be exercised with due regard of the rights of the holders of the Authority's bonds at any time outstanding and nothing in such Section shall in any way limit, restrict or alter the obligation or powers of the Authority to carry out and perform each and every covenant, agreement or contract at any time made or enter into by or on behalf of the Authority with respect to its bonds or for the benefit, protection and security of the holders thereof.

### **C. Use of Debt Proceeds**

As more fully described in this Policy, bonds, notes and other obligations will be issued by the Authority solely for the purposes of financing its essential capital activities or refunding outstanding debt. Debt will not be issued by the Authority to fund, in whole or in part, operation and maintenance costs of the Turnpike System or capital assets with average useful lives which are shorter than the average maturity of the associated debt. All bonds, notes and other obligations issued by the Authority will comply with the requirements of the Act and the Bond Resolution, as well as all other applicable federal and state laws, rules and regulations.

### **D. Types of Debt**

Under the Bond Resolution, the Authority is authorized to issue Turnpike Revenue Bonds payable from and secured by a lien on and pledge of the Pledged Revenues of the Turnpike System on a parity with all Bonds Outstanding under the Bond Resolution from time to time and the reimbursement and payment obligations under certain Credit Facilities and Qualified Swap (as such terms are defined in the Bond Resolution). Specific types of debt that can be issued are as follows:

- (i) Long-Term Debt: Although the Statute and Bond Resolution allow debt to be issued up to forty (40) years, the Authority will limit its maturities to up to thirty (30) years from date of issuance to finance essential capital activities for the Turnpike System, including the acquisition, construction, and rehabilitation of major capital assets for and/or additions to the New Jersey Turnpike, the Garden State Parkway, and any other component of the Turnpike System.
- (ii) Short-Term Debt: Short-term debt with maturities of two (2) years or shorter may be used to provide interim financing for the acquisition, construction, and rehabilitation of capital assets for and/or additions to the Turnpike System and/or to reduce or hedge interest rate costs. Short-term debt

obligations may include bond anticipation notes and variable rate bonds or notes, as well as any other appropriate instrument(s).

- (iii) Variable Rate Debt: In addition to fixed rate debt, the Authority may issue bonds/notes with a variable interest rate to: (i) diversify its debt portfolio; (ii) reduce interest costs; (iii) improve its match of assets to liabilities; and/or (iv) provide budgetary relief. Pursuant to and in accordance with the provisions of the Bond Resolution and its Interest Rate Swap Management Plan, the Authority may also enter Qualified Swap Agreements and/or Exchange Agreements to hedge its interest rate risk on variable rate debt where appropriate.

#### **E. Purposes**

The Authority may issue debt for either new money or refunding purposes.

- (i) New Money: New money debt may be issued by the Authority to provide funding for essential capital activities as described in the Section entitled "Types of Debt" above.
- (ii) Economic Refunding: The Authority may issue refunding debt to achieve debt service savings on its outstanding debt by redeeming outstanding debt with lower interest rate debt. The Authority may structure the savings from these refunding issues on a level, accelerated or deferred basis depending on the Authority's financing goals.
- (iii) Non-Economic Refunding: In certain instances, it may be advantageous for the Authority to issue refunding debt that does not produce positive economic savings but serves to restructure existing debt or retire debt in order to remove undesirable debt covenants. Prior to issuing non-economic refunding debt, the Authority will evaluate the benefits (both intangible and tangible) of issuing such debt as well as the economic cost of such debt.

#### **F. Debt Limit**

The amount of bonds to be issued is limited by the following in the Bond Resolution:

- (i) Additional Bonds Test - New Money Purposes: In accordance with Section 203 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 twenty-four (24) 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.

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 on all outstanding Authority bonds, the Maintenance Reserve



Payments, the Special Project Reserve Payment and all deposits to the Charges Fund in such year; or (ii) 1.20 times the Aggregate Debt Service on all outstanding Authority bonds in such year.

- (ii) Additional Bonds Test - Refunding: In accordance with Section 204 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 (i) 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 (ii) satisfy both of the tests described in clauses (a) and (b) of the preceding subsection of this policy entitled "Additional Bonds Test – New Money Purposes".

#### **G. State Non-Impairment Agreement**

Pursuant to Section 7 of the Act (N.J.S.A. 27:23-7), the State of New Jersey has pledged and agreed with the holders of the Authority's bonds that it will not limit or restrict the rights vested in the Authority to acquire, maintain, construct, improve, manage, repair, reconstruct and operate the Turnpike System, or to establish and collect such charges and tolls as may be convenient or necessary to produce sufficient revenue to meet the expenses of maintenance and operation thereof and to fulfill the terms of any agreements made with the holders of the Authority's bonds or in any way impair the rights and remedies of the holders of such bonds until the bonds, together with interest thereon, are fully paid and discharged.

### **III. DEBT STRUCTURING**

#### **A. Maximum Term**

The Authority will limit its maturities to a maximum of thirty (30) years from date of issuance. The average maturity of the Authority's bonds may not exceed the average remaining useful life of the assets being financed or the limitations set forth in the Act.

#### **B. Bond and Debt Service Structure**

Turnpike Revenue Bonds can be structured using discount, par, or premium coupons or any combination, utilizing the coupon structure, which produces the lowest True Interest Cost (TIC), taking into consideration the call option value of any callable maturities. When comparing yields associated with callable premium bonds and callable discount bonds of the same maturity, the yield-to-maturity should be evaluated in addition to the yield-to-call date. The use of capital appreciation bonds or zero-coupon bonds should be used only when necessary to meet minimum Net Revenue Requirement targets or minimum General Reserve Fund target balances as specified in the Authority's Financial Management Principles and Guidelines, or if they produce the lowest TIC compared to other structures. The Authority will structure its new money debt maturities to achieve either an overall level debt service structure for its debt portfolio or a standalone level debt service structure. The determination of debt service structure will consider Net Revenue Requirement targeted levels and minimum General Reserve Fund balance target levels as specified in the Authority's Financial Management Principles and Guidelines, as well as the TIC for various debt service structures to achieve the optimum structure.

#### **C. Maturities**

Bonds or notes may be serial bonds or notes, or term bonds or notes, or any combination thereof.

#### **D. Composition of Debt**

The aggregate amount of the Authority's long-term variable rate debt should not exceed 20% of its outstanding long-term debt.

**E. Credit Enhancement**

The Authority may secure credit and/or liquidity enhancement for all or a portion of each debt issuance, which may be in the form of municipal bond insurance, a letter/line of credit or a standby purchase arrangement. The Executive Director and the Chief Financial Officer shall make the final recommendation to use bond insurance for a particular debt issuance after taking into account such factors as the economic benefit of the enhancement, the Authority's available insurance capacity with the insurance community, and future secondary market trading conditions. The Authority will not secure credit enhancement through the final maturity date of a particular debt issuance unless it meets the minimum threshold of providing a net economic benefit to the transaction, assuming the debt remains outstanding until its final maturity date. With respect to bond insurance or any other form of credit enhancement which is paid for with an upfront premium, the Authority will analyze the economic benefit both to the final maturity date of the debt and to the first optional redemption date of the debt.

The Authority may also use a letter/line of credit and/or a standby purchase arrangement (collectively, a "Credit/Liquidity Facility") to provide credit and/or liquidity support for its debt. The Authority shall consider the following criteria when selecting the provider of a Credit/Liquidity Facility: (i) the long-term ratings of the provider, which shall be at least equal to or better than the Authority's long-term ratings; (ii) the short-term ratings of the provider, which shall be at least P-1/A-1; (iii) the legal and business terms and conditions of the agreement with the provider, which shall be acceptable to the Authority; (iv) a representative list of clients similar to the Authority for whom the provider has provided credit and/or liquidity support; (v) the costs to the Authority associated with the proposed Credit/Liquidity Facility, including the cost of the Credit/Liquidity Facility itself, the fees associated with any drawings on the Credit/Liquidity Facility, the fees and expenses of counsel to the provider and any other administrative costs associated with the Credit/Liquidity Facility, and (vi) the trading differential cost between the Authority's debt which is supported by the proposed Credit/Liquidity Facility and its unenhanced debt.

**F. Capitalized Interest**

Capitalized Interest may be used if needed for new money bonds but is limited to two (2) years.

**G. Derivative Agreements**

The Authority shall maintain an Interest Rate Swap Management Plan and the time to time use by the Authority of any Qualified Swap Agreements, Exchange Agreements, and other derivative agreements and instruments in connection with its debt shall comply with the terms of its Interest Rate Swap Management Plan as in effect. The Authority shall consult with its Bond Counsel and Financial/Swap Advisor in the event that the Authority is considering entering into any Qualified Swap Agreement, Exchange Agreement, and other derivative agreement or instrument in connection with any debt.

**H. Call Provisions**

Long-term fixed rate tax-exempt debt should generally be callable in ten (10) years. This provides flexibility to refund bonds if interest rates decline. An analysis should be performed to determine the economic benefit of utilizing call provisions shorter than ten (10) years.

**I. Tax Status**

The Authority may issue debt on a taxable or tax-exempt basis. The Authority has a preference for issuing debt on a tax-exempt basis to take advantage of the expected interest costs savings compared to issuing taxable debt.

#### IV. DEBT ISSUANCE

##### **A. Sale of Bonds**

The Authority shall determine the method of sale of its bonds (competitive versus negotiated) by evaluating the benefits that are associated with each method of sale, in addition to examining financial and market conditions. Due to the size and complexity of the Authority's debt issues, bonds are normally sold on a negotiated basis. Underwriters shall be selected through a Request For Proposal (RFP) process and the Authority will encourage the participation of minority-owned and women-owned business enterprises, and will take into consideration an applicant's presence in New Jersey. The RFP process will be in compliance with the Authority's procurement policies and Executive Order 37 (Corzine). The Authority will use the services of a financial advisor and bond counsel, each of which will be selected through an RFP process.

In accordance with Article IX of the Bond Resolution, the Authority shall appoint a Trustee, Paying Agent, and Registrar for the new bond series. All Fiduciaries shall accept all responsibilities as outlined in Article IX of the Bond Resolution.

##### **B. Credit Ratings**

The Authority shall have a ratings strategy that is guided by achieving the best economic results for the Authority, including attaining a proper balance between minimizing borrowing costs and maximizing financial flexibility for the Authority's debt program. The Authority shall strive to maintain or improve the credit ratings for its debt without adversely affecting the levels or types of debt that may be issued by the Authority to finance its essential capital activities, including the acquisition, construction and rehabilitation of major capital assets for and/or additions to the Turnpike System. The Authority recognizes and acknowledges, however, that as market conditions and financing needs change and evolve, so should the Authority's credit ratings strategy. The Authority may accept a lower credit rating or downgrade to its existing ratings (and thus incur a modest financing cost differential) in order to gain the flexibility needed to effect significant policy initiatives. The Authority will periodically review its credit rating strategy to assess whether market or capital plan developments warrant a revision in the Authority's approach to its ratings.

As of January 2014, the Authority is rated A3\* by Moody's Investors Services, A+ by Standard and Poor's Ratings Services, and A by Fitch Ratings Inc. The Authority will receive ratings from at least two (2) of the four (4) nationally recognized credit rating agencies, which are currently Moody's Investors Services, Standard and Poor's Rating Services, Fitch Ratings Inc., and Kroll Bond Rating Agency. Selection of the ultimate number of ratings and credit rating agency will be based upon overall cost, service to the Authority, any investor requirements and the recommendation of the Authority's financial advisor.

The Authority will strive to communicate regularly and frequently with the credit rating agencies. To the extent possible and/or necessary, the Authority will forward periodic information to the credit rating agencies, arrange regular conference calls to update the rating analysts on any significant financial developments and communicate with the credit rating agencies prior to each Authority debt issuance. The Authority will also maintain periodic communication with its credit enhancement providers, updating them on financial developments as a means of facilitating future market participation with the credit enhancement community.

##### **C. Economic Refunding Criteria**

When identifying potential refunding candidates for economic refunding, the Authority will generally seek a minimum per transaction present value savings threshold of three percent (3%). Notwithstanding the above, the 3% savings threshold shall not apply for debt with a call date between one (1) and three (3) years from their stated maturity, or for small principal maturities and bonds that produce significant negative arbitrage. In addition, for an advance refunding, the Authority will consider the refunding efficiency of potential bond refunding, considering

the negative arbitrage, if any, on the refunding escrow and will seek a minimum refunding efficiency percentage of at least seventy percent (70%).

\* Effective July 2016, the Authority's credit rating was upgraded to A2. In April 2020, Fitch affirmed the positive outlook and in May 2020, after the approval of Long Range Capital Plan and associated toll increase, Moody's rated it as credit positive.

## **V. DEBT MANAGEMENT**

### **A. Investment of Funds**

The Authority shall invest all of its funds (including the proceeds received from the sale of its bonds, notes or other obligations), which are not immediately needed for the purposes of the Authority, in Investment Securities as provided in the Bond Resolution. The Authority shall invest all of its funds in a manner that allows such funds to be available when needed to be applied for their intended purposes. Investments are further governed by the terms of the Authority's Investment Policy.

### **B. Compliance with Bond Resolution**

The Bond Resolution, including specifically Article VII thereof, contains several covenants, requirements and other provisions which the Authority has agreed to comply with for the benefit, protection and security of the holders of its outstanding bonds issued from time to time under and pursuant to the Bond Resolution. The Authority shall at all times manage its debt portfolio and operate and manage the Turnpike System in a manner which results in the Authority being in compliance with all covenants, requirements, and other provisions of the Bond Resolution, including, without limitation, the Sections of the Bond Resolution more fully described below.

#### **(i) Tolls and Charges**

Pursuant to Section 713 of the Bond Resolution, the Authority has covenanted to, at all times, fix, charge and collect such tolls for the use of the Turnpike System as shall be required in order that in each calendar year the Net Revenues shall at least equal the Net Revenue Requirement for such year. Section 713 of the Bond Resolution furthers provides that, on or before December 1 in each year, the Authority shall complete a review of its financial condition for the purpose of estimating whether the Net Revenues for such year and the next succeeding year will be sufficient to meet the Net Revenue Requirement and shall by resolution of its Board of Commissioners make a determination with respect thereto. The Authority shall file a copy of its determination with the Trustee under the Bond Resolution on or before December 20 of each year. If the Authority determines that the Net Revenues may not be sufficient to meet the Net Revenue Requirement, the Authority shall cause its Traffic Engineers to make a study for the purpose of recommending a new schedule of tolls which will cause the Authority to have sufficient Net Revenues to meet the Net Revenue Requirement, and, as promptly as practicable, but by no later than the following April 1, the Authority shall adopt and place into effect the schedule of tolls recommended by the Traffic Engineers.

#### **(ii) Annual Budget**

Section 710 of the Bond Resolution contains certain covenants, agreements and provisions relating to the preparation, filing and adoption of the Authority's annual budget for each calendar year. The Authority shall at all times comply with the provisions of Section 710 in connection with the adoption of each annual budget.

(iii) **Sale, Lease or Disposal of Property**

Section 708 of the Bond Resolution provides that no part of the Turnpike System shall be sold, mortgaged, leased or otherwise disposed of, except as permitted by such Section. Among other things, Section 708 permits the Authority to sell, lease or exchange any property or facilities constituting part of the Turnpike System and not useful or necessary in the operations thereof, but any proceeds of any such transaction not used to acquire other property necessary or desirable for the safe and efficient operation of the Turnpike System shall be deposited in the Revenue Fund or the General Reserve Fund as the Authority may determine. The Authority shall at all times comply with the provisions of Section 708 of the Bond Resolution.

(iv) **Consulting and Traffic Engineers**

As required by Section 709 of the Bond Resolution, the Authority shall employ, at the times and in the manner set forth in Section 709, the services of separate, independently nationally recognized engineering firms or entities to perform the functions and duties of the Consulting Engineers and the Traffic Engineers, respectively, set forth in the Bond Resolution.

(v) **Books, Accounts, Records and Reports**

As required by Section 717 of the Bond Resolution, the Authority shall keep and maintain proper books of record and accounts in which complete and correct entries shall be made of all transactions relating to the Turnpike System and all Funds and Accounts established under the Bond Resolution. The Authority shall also prepare, or caused to be prepared, and file with the Trustee, the Consulting Engineers and, if applicable, the holders of any of the Authority's bonds, all financial and statistical reports, including its annual audited financial statements, required by the provisions of Section 717 at the times and in the manner required by the provisions of such Section. The Authority shall prepare and keep its books of record and accounts and its financial statements and reports in accordance with generally accepted accounting principles applicable to governmental entities in the United States of America. The Authority shall from time to time institute such controls as may be recommended by its independent auditor and other best practices deemed appropriate by its Chief Financial Officer.

(vi) **Debt Service Reserve Requirement**

In connection with the issuance of any bonds by the Authority, the Bond Resolution also requires that the Debt Reserve Fund created under the Bond Resolution must be funded to the Debt Reserve Requirement, which is the lesser of (i) the greatest amount of interest accruing on all outstanding bonds of the Authority any in calendar year, or (ii) the maximum amount permitted by the provisions of the Internal Revenue Code of 1986, as amended.

**C. Compliance with Financial Management Principles and Guidelines**

The Authority will comply with its Financial Management Principles and Guidelines as they pertain to the issuance, structure and management of debt.

**D. Arbitrage and Rebate**

The Authority will engage the services of an Arbitrage and Rebate Consultant to provide written reports to assist the Authority in monitoring yield on investments and calculating any rebate that may be due for all tax-exempt bonds. The consultant will provide written reports on the arbitrage liability, if any, on an annual basis. The Authority will file all required forms with the Internal Revenue Service and make any required payments when due.

**E. Continuing Disclosure Agreement**

In order to enable the underwriters of its bonds to comply with SEC Rule 15c2-12, the Authority enters into a Continuing Disclosure Agreement for each bond issue to provide for the timely filing of annual financial information, and material event notifications. Under its existing Continuing Disclosure Agreements, the Authority has agreed to provide, by May 1 of each year, its Audited Financial Statements, Annual Budget, and Financial Summary for the Twelve Months Ended December 31 and its Net Revenue Certification. A Continuing Disclosure Agreement will be executed for each bond issue.

**F. Investor Relations**

The Authority will maintain current and meaningful financial and other information on its website for the benefit of investors, credit enhancement providers and credit rating agencies. At a minimum, the Authority's investor relations website will contain traffic and revenue statistics, audited financial statements, trustee reports, and financial summaries.

**VI. POST-ISSUANCE COMPLIANCE POLICY****A. Purpose**

This Post-Issuance Compliance Policy (the "Policy") sets forth policies of the Authority designed to monitor compliance of tax-advantaged obligations ("Obligations") issued by the Authority with applicable provisions of the Internal Revenue Code of 1986 as amended (the "Code") and regulations promulgated thereunder ("Treasury Regulations").

The Policy documents existing practices and describes various procedures and systems designed to identify on a timely basis facts relevant to demonstrating compliance with the requirements that must be satisfied subsequent to the issuance of Obligations in order that the interest on such Obligations be, or continue to be, or would be but for certain provisions of the Code, excludable from gross income for Federal income tax purposes.

The Authority recognizes that compliance with applicable provisions of law is an ongoing process, necessary during the entire term of the Obligations. Accordingly, analysis of information and implementation of this Policy will require continual monitoring and likely, ongoing consultation with bond counsel. Further policies and procedures may be identified from time to time by Authority staff in consultation with bond counsel and the arbitrage and rebate consultant.

**B. Policy Statement**

After Obligations are issued, the compliance process includes a focus on use and investment of proceeds of the Obligations and includes:

- Tracking bond proceeds spending for qualified and nonqualified purposes;
- Maintaining detailed records of expenditures and investments;
- Ensuring that the facilities financed are used in a manner consistent with legal and tax requirements;
- Providing necessary disclosure information regarding financial and operating status;
- Maintaining adequate records.

**C. Organizational Responsibility**

The Executive Director has overall responsibility for post-issuance compliance for Obligations issued by the Authority and may delegate such responsibilities to a "Compliance Officer," who will have primary responsibility for post-issuance compliance to ensure and monitor post-issuance matters with respect to Obligations. The

Executive Director shall be responsible for assuring an adequate succession plan for transferring post-issuance compliance responsibility when changes in staff occur.

In the case of Obligations for which the Authority must review and approve requisitions, the Authority's Finance Department shall review requisitions to assure that proceeds are expended on projects as authorized in the applicable bond documents, that reimbursement of pre-issuance costs are permissible, and to determine when projects are completed and/or placed in service, including for Build America Bonds. The Chief Financial Officer, or designee, shall direct investment of proceeds, review monthly bank statements from trustees or custodians and engage an Arbitrage and Rebate Consultant for each issue of Authority Obligations. The Chief Financial Officer, or designee, shall consult with the Authority's Bond Counsel if questions should arise.

#### **D. Tracking Expenditures and Investment Earnings**

The Authority shall maintain detailed records regarding the use and allocation of bond proceeds, including investment earnings, throughout the term of the bonds to ensure compliance with covenants and restrictions set forth in the Tax Certificate relating to the Bonds. The Authority's Accounting System will maintain copies of approved requisitions and invoices for expenditures, as well as investment earnings records, including bank statements. The Finance Department will maintain copies of bank statements if electronic statements are not available.

The Authority's Compliance Officer will monitor the application and use of bond proceeds on an ongoing basis and inform the Executive Director and bond counsel of events relating to use of bond proceeds which may result in issues which must be analyzed for compliance with Federal tax laws.

#### **E. Records Retention**

The Authority will maintain the following documents for the term of each issue of bonds plus at least three (3) years:

- The bond transcript of proceedings;
- All resolutions, including reimbursement resolutions, and minutes pertaining to the projects financed, if not included in the bond transcript;
- All surveys, feasibility or demand studies and any publications, brochures and newspaper articles with respect to the bonds, if not included in the bond transcript;
- All bond yield computations including supporting certificates and investment records, including trustee records, pertaining to the issue price of the bonds, proceeds of the bonds, investment agreements and related bidding documents, credit enhancement and liquidity documents, swap documents, rebate reports and rebate payments;
- All documents pertaining to the expenditure or granting of bond proceeds for the acquisition, construction or renovation of bond financed property including any trustee records, requisitions, reimbursements, draw schedules, draw requests, construction contracts, invoices, bills, land/project related appraisals, payment records, requisition statements, reimbursement records, cancelled checks, a final schedule of property financed by the bonds and final allocations of bond proceeds;
- All formal elections made for the bond financing (e.g., an election to employ an accounting methodology other than specific tracing);
- All records of trade or business use, purchase, lease, sublease or sale of bond financed property including any leasehold improvement contracts and ownership documentations such as joint venture arrangements, limited liability corporation arrangements or partnership arrangements;
- All management contracts and other service agreements, research contracts, and naming rights contracts;
- All accounting audits for bond financed property;
- All information reports filed for the bonds;
- All documentation pertaining to any prior IRS examination of Authority and/or tax-exempt bonds; and
- All correspondence related to the above including faxes, emails, and letters.

The Authority, in the Tax Certificate and/or other documents pertaining to the bonds that are finalized in connection with the issuance of the bonds, shall designate an employee responsible for retaining the records listed above. Records may be retained in electronic format.

**F. Arbitrage and Rebate**

The Authority will engage the services of an Arbitrage and Rebate Consultant to provide written reports to assist the Authority in monitoring yield on investments and calculating any rebate that may be due. The Consultant will work with the Chief Financial Officer to review the yield on investments to determine if there is a possible rebate liability. If the Consultant provides a written report that rebate is due, the Authority will make any required payments to the IRS and any required filings.

**G. Credit Enhancement or Other Agreements Relating to Bonds**

The Compliance Officer will monitor any extension or alteration of any credit enhancement relating to the Authority's tax-exempt debt or of any changes to other agreements relating to Authority Obligations such as guaranteed investment contracts or derivative products to assure that any changes meet post-issuance compliance requirements. The Compliance Officer will also monitor information relating to the ratings of counterparties to such agreements to assure that provisions of such agreements are fulfilled. The Compliance Officer will report any questions or issues to bond counsel.

**H. Disclosures and Filings**

The Authority will, according to the bond documents, enter into Continuing Disclosure Agreements with the trustee for the applicable Obligations and to comply with continuing disclosure requirements. In addition, the Authority will provide bond documents, as applicable, and copies of reports sent to credit providers and insurance companies and other parties to transactions, as well as financial information. The Authority's bond counsel will be responsible for completing any necessary material event notice filings.

**I. Continuity and Training**

The Compliance Officer will receive periodic training regarding the tax and other requirements applicable to Obligations and provide periodic training to staff with responsibilities relating to the procedures set forth above. Such training will cover the purposes and importance of these procedures. Training may be provided by bond counsel and shall include a review of the IRS Code and the IRS's web site established for the use of the tax-exempt bond community located at: <http://www.irs.gov/taxexemptbond/index.html?navmenu=menu1> \*.

To provide for continuity of compliance with post-issuance debt requirements, the Authority will periodically review this policy but no less frequent than once every two (2) years, to assure that it comports with current law.

**J. Remedial Action**

Should the Authority become aware of events which may affect the permissible use and investment of bond proceeds the Authority will take steps, with advice from bond counsel, to seek remedial action with respect to such events.

\*As of September 2020, this link is no longer valid. New link is <https://www.irs.gov/tax-exempt-bonds>



## Interest Rate Swap Management Plan

### 1. PURPOSE

This Interest Rate Swap Management Plan sets forth the manner of execution of interest rate swaps and related agreements, provides for security and payment provisions, and sets forth certain other provisions related to interest rate swap agreements between the New Jersey Turnpike Authority ("Authority") and qualified swap counterparties. The Interest Rate Swap Management Plan also outlines procedures to be followed to ensure compliance with all applicable federal and state laws. This Interest Rate Swap Management Plan will be reviewed by the Authority no less than once every two (2) years and any changes to this Interest Rate Swap Management Plan will be presented to the Authority's Board of Commissioners for approval. This Interest Rate Swap Management Plan will be made available on the Authority's website, <http://www.state.nj.us/turnpike>.\*

### 2. BEST INTERESTS OF THE AUTHORITY

Although adherence to this Interest Rate Swap Management Plan ("Plan") is desirable, deviations from this Plan may be appropriate from time to time to address: (i) changing financial goals; (ii) emerging financial products/debt structures; and (iii) unique market opportunities. As a result, the general best interests of the Authority shall supersede any provision of this Swap Management Plan.

### 3. THE AUTHORITY

The Authority is a public body corporate and politic of the State Of New Jersey operated under and by virtue of the New Jersey Turnpike Authority Act of 1948, constituting Chapter 454 of the Laws of New Jersey of 1948, as amended and supplemented (the "Act"). Pursuant to Section 5 of the Act, and Section 201 of the General Bond Resolution, the Authority is authorized to enter into interest rate swap transactions as it deems fit in order to obtain lower costs of capital or other advantages associated with this financing technique. The Authority may only enter into a swap transaction in connection with a specifically identified series of Authority bonds issued under its senior lien General Bond Resolution.

### 4. INTEREST RATE SWAP MANAGEMENT GOALS

The Authority intends to execute interest rate swaps if the transaction can be expected to result in the following:

- A. Hedging to reduced exposure to changes in interest rates on a particular financial transaction;
- B. Reduction in interest rate risk in order to maintain from the Authority's overall asset/liability balance;
- C. Obtain a lower net cost of borrowing with respect to the Authority's debt; and
- D. Manage variable interest rate exposure consistent with prudent debt practices.

The Authority shall not enter into interest rate swaps for speculative purposes or not in connection with a specified bond issue.

\*Effective October 2017, Authority website is <http://www.njta.com>

## 5. PROCUREMENT OF INTEREST RATE SWAP AGREEMENTS

The Authority will award interest rate swap transactions to one or more qualified counterparties (as herein defined) through competitive or negotiated procurement methods. The general method of procurement and the specific procurement process will be determined based on the prevailing market conditions at the time. Regardless of the procurement method employed, the Authority shall endeavor to obtain the best pricing and execution possible, diversify counterparty exposure and minimize aggregate counterparty risk. To that end, before entering into a transaction, the Authority, with input from its financial advisor and/or swap advisor, will evaluate the prevailing market conditions to determine the optimal procurement process and will evaluate how the proposed transaction would affect the Authority's aggregate counterparty exposure.

## 6. INTEREST RATE SWAP RISK FACTORS

The Authority recognizes that there are certain risks associated with interest rate swap transactions that it will consider prior to entering into each transaction. Such risks include:

- A. Counterparty risk** is the risk that the swap counterparty will not fulfill its obligation to honor its obligations as specified under the contracts. Failure of a counterparty could result in an unplanned change in the expected costs of funds of a particular transaction that could increase debt service costs to the Authority, depending upon the interest rate environment when this occurred.

In order to mitigate against this risk, the Authority intends to diversify its counterparties and expects that going forward, no more than 25% of its interest rate swap exposure will be with any one counterparty. An exception will be made for fully collateralized swaps or if market conditions are such that it is not economically feasible to diversify or the interest rate swap market is such that no additional counterparties exist.

In order to diversify the Authority's counterparty risk, and to limit the Authority's credit exposure to any one counterparty, limits will be established by the Executive Director based in part upon the credit rating of the counterparty as well as the relative level of risk associated with each existing interest rate swap transaction.

The Authority shall be authorized to enter into interest swap transactions only with qualified swap counterparties rated at least A1/A+, or equivalent, by any two (2) of the nationally recognized rating agencies (e.g. Moody's, Standard and Poor's, or Fitch); or a "AAA" subsidiary as rated by at least one nationally recognized credit rating agency.

- B. Termination risk** is the risk that the interest rate swap could be terminated by the counterparty due to any of several events, which may include issuer or counterparty ratings downgrade, covenant violation by either party, bankruptcy of either party, swap payment default by either party, and default events as defined in the issuer's bond indenture.

In order to mitigate against these risks the Authority will require collateral postings from counterparties if the counterparties ratings decline below A2/A and other protection measures. As a general rule, the Authority will not enter into swaps where the counterparty has any optional right of termination.

The Authority shall consider including in all interest rate swap transactions provisions granting the Authority the right to optionally terminate a swap agreement at any time over the term of the agreement. The Executive Director shall determine if it is financially advantageous for the Authority to terminate a swap agreement.

A termination payment to or from the Authority may be required in the event of termination of an interest rate swap agreement due to a default or a decrease in credit rating of either the Authority or the

counterparty. It is the intent of the Authority not to make a termination payment to a counterparty that does not meet its contractual obligations. Prior to making any such termination payment, the Executive Director shall evaluate whether it is financially advantageous for the Authority to obtain a replacement counterparty to avoid making such termination payment.

As part of any interest rate swap agreement, the Authority may require collateralization or other credit enhancement to secure any or all swap payment obligations. As appropriate, the Authority may require collateral or other credit enhancement to be posted by each swap counterparty under the following circumstances:

- i. Each counterparty to the Authority may be required to post collateral if the credit rating of the counterparty or parent falls below the A2/A category. Additional collateral for further decreases in credit ratings of each counterparty shall be posted by each counterparty in accordance with the provisions contained in the collateral support agreement to each interest rate swap agreement with the Authority.
- ii. The Collateral shall consist of cash, U.S. Treasury securities and Federal agency securities.
- iii. Collateral shall be deposited with a third party trustee, or as mutually agreed upon between the Authority and each counterparty.
- iv. A list of acceptable securities that may be posted as collateral and the valuation of such collateral will be determined and mutually agreed upon during negotiation of the swap agreement with each swap counterparty.
- v. The market value of the collateral shall be determined on at least a monthly basis.
- vi. The Authority will determine reasonable threshold limits for the initial deposit and for increments of collateral posting thereafter.

The Executive Director shall determine on a case by case basis whether other forms of credit enhancement are more beneficial to the Authority

**C. Basis risk** refers to a mismatch between the interest rate received from the interest rate swap contract and the interest actually owed on the Authority's variable rate bonds. Prior to the execution of any interest rate swap, the Authority will undertake any analysis of both the starting basis risk match and the historical basis risk match in order to select an index payment of the interest rate swap and a mode mechanic for the variable rate debt that most closely approximates a zero basis risk profile, while still maintaining the economic advantages of the interest rate swap.

**D. Tax event risk.** All issuers who issue tax-exempt variable rate bonds that trade accept risk stemming from changes in marginal income tax rates. These risks are best mitigated by limiting the amount of variable rate debt as a percentage of the Authority's total debt outstanding. The Authority does not expect to issue more than 20% of its total debt in a variable rate mode of any form.

**E. Rollover risk** is the risk that the swap contract is not coterminous with related bonds. The Executive Director shall determine the appropriate term for an interest rate swap agreement on a case-by-case basis. The slope of the interest rate swap curve, the marginal change in interest rate swap rates from year to year along the interest rate swap curve, and the impact that the term of the interest rate swap has on the overall exposure of the Authority shall be considered in determining the appropriate term of any interest rate swap agreement. In connection with the issuance or carrying of bonds, the term of the interest rate swap agreement between the Authority and a qualified interest rate swap counterparty shall not extend beyond the final maturity date of existing debt of the Authority, or in the case of a refunding

transaction, beyond the final maturity date of the refunding bonds. The Authority does not intend to execute interest rate swaps that have rollover risk.

**F. Amortization risk** represents the cost to the issuer of servicing debt or honoring interest rate swap payments due to a mismatch between bonds and the notional amount of the interest rate swap. The Authority intends to always match the principal amount of bonds with the notional amount of the interest rate swap.

**G. Liquidity risk** refers to the issuer's inability to continue or renew a liquidity facility to assist in the sale of outstanding debt. The Authority will endeavor to provide sufficient liquidity available for swapped debt.

## 7. PAYMENT OBLIGATIONS

Pursuant to Section 201 of the General Bond Resolution, the Authority's payment obligation under any qualified interest rate swap shall be made from the Debt Service Fund.

## 8. LEGAL MATTERS

Each interest rate swap executed by the Authority shall contain terms and conditions as set forth in the International Swap and Derivatives Association, Inc. ("ISDA") Master Agreement, including any schedules and confirmations. The interest rate swap agreements between the Authority and each qualified swap counterparty shall include payment, term, security, collateral, default, remedy, termination, and other terms, conditions and provisions as the Executive Director or his/her designee deems necessary or desirable. The Executive Director is authorized to sign all representations and disclosures as required.

## 9. REGULATORY COMPLIANCE

Following is a list of regulatory requirements imposed at the Federal level with which the Authority shall make every reasonable effort to comply:

**A. Dodd-Frank Compliance.** Pursuant to the authority of Section 731 of Title VII of Dodd-Frank Act, which includes amendments to the Commodity Exchange Act ("CEA") regarding over-the-counter derivative instruments, regulations were published by the Commodities Futures Trading Commission ("CFTC") that define business conduct between Swap Dealers or Major Swap Participants and their counterparties, including Swap Dealers or Major Swap Participants engaged in transactions with state and local governmental counterparties such as the Authority (referred to in the regulations as "Special Entities"). The new business conduct rules are far ranging and they can impact the Authority on several fronts as the Authority enters into or modifies transactions. The following sections are included in this Swap Management Plan in order to assist the Authority in complying with the CEA as amended by Dodd-Frank:

### (1) Qualified Independent Representative

- a) In accordance with the CEA and as amended by Dodd-Frank, the Authority shall select a QIR that meets the following enumerated criteria:
  - i. has sufficient knowledge to evaluate the transaction and risks;
  - ii. is not subject to a statutory disqualification;
  - iii. is independent of the interest rate swap provider or major interest rate swap participant. To be independent the QIR must currently not, and was not with a one-year look back, an associated person of the swap dealer; has no principal relationship with the swap dealer, provides timely

disclosures of all potential conflicts of interest, complies with procedures designed to manage and mitigate conflicts of interest, is not controlled by, in control of, or under common control with the swap dealer, and was not recommended to the issuer by the swap dealer within one year of the transaction date;

iv. undertakes a duty to act in the best interests of the Authority;

v. makes appropriate and timely disclosures to the Authority;

vi. evaluates, consistent with any guidelines provided by the Authority, fair pricing and the appropriateness of the transaction; and

vii. is subject to restrictions on certain political contributions imposed by the CFTC, the SEC, or a self-regulatory organization subject to the jurisdiction of the CFTC or the SEC.

b) At least annually, or as required by the Board of Commissioners, the Authority shall conduct a review of its QIR to ensure that the QIR still meets the above enumerated criteria. In the event that it is determined that the QIR no longer meets the enumerated criteria, then prior to the execution of any transaction the Authority shall select a replacement QIR that meets the enumerated criteria.

(2) Written Representations. In order to ensure that the Authority is in compliance with the new regulations imposed by Dodd-Frank, the Authority may, but is not required to, execute a ISDA August 2012 DF Protocol Agreement with its QIR and each Counterparty prior to executing any transactions. If the Authority elects not to execute a ISDA August 2012 DF Protocol Agreement with a counterparty, then the Authority shall provide an alternate form of written representation to such Counterparty that meets all applicable disclosure requirements as required by Dodd-Frank.

(3) Derivative Clearing Requirement.

(a) The CEA, as amended by Dodd-Frank, requires that certain derivative transactions, including those commonly entered into by state and local governmental entities, must be cleared through a derivatives clearing organization unless otherwise exempt from clearing under the "End User Exception" as specified in Section 2(h)(7) of the CEA. In order to qualify for the End User Exception to the clearing requirements of the CEA, the Special Entity must report to the CFTC on either an annual or a transaction-by-transaction basis that it:

(i) is not a financial entity;

(ii) is using swaps to hedge or mitigate commercial risk; and

(iii) will notify the CFTC, in a manner set forth by the CFTC, how it generally meets its financial obligations associated with entering into non-cleared swaps.

(b) The Authority, in consultation with its QIR, shall make its best efforts to comply with the applicable derivative clearing requirements of the CEA as amended by Dodd-Frank.

## 10. SELECTION OF QIR

The Authority will competitively procure the services of a financial advisor or a swap advisor, whose scope of work shall include swap advisory services which will allow the firm to serve as the Authority's QIR under Dodd-Frank.

**11. RECORD KEEPING**

Written records noting the status of all interest rate swap agreements will be maintained by the Authority and shall include the following information:

1. Highlights of all material changes to swap agreements or new swap agreements entered into by the Authority since the last report
2. Market value of each of the Authority's interest rate swap agreements.
3. For each counterparty, the Authority shall provide the total notional amount position, the average life of each swap agreement, the available capacity to enter into a swap transaction, and the remaining term of each swap agreement.
4. The credit rating of each swap counterparty and credit enhancer insuring swap payments
5. Actual collateral posting by swap counterparty, if any, per swap agreement and in total by swap counterparty.
6. A summary of each swap agreement, including but not limited to the type of swap, the rates paid by the Authority and received by the Authority, and other terms.
7. Results of the default, including but not limited to the financial impact to the Authority, if any.
8. A summary of any swap agreements that were terminated.

**12. COMPLIANCE WITH ACCOUNTING STANDARDS**

Any interest rate swap agreement entered into by the Authority under this Interest Rate Swap Management Plan shall be described in the Authority's annual audited financial statements in accordance with applicable accounting standards. This Interest Rate Swap Management plan shall be reviewed on an annual basis with the Authority's external auditor and any necessary changes shall be promptly implemented.

## Investment Policy

### I. INTRODUCTION

#### A. Purpose of Investment Policy

The purpose of the Investment Policy is to define guidelines and operational factors governing the investment of all funds held by the New Jersey Turnpike Authority (the "Authority") or its bond trustees. This Investment Policy is intended to show compliance with all provisions of the Act (as defined herein) relating to investment of funds of the Authority, as well as provisions of the Authority's Bond Resolution (as defined herein). The Investment Policy will be reviewed by the Authority's Chief Financial Officer no less than once every 2 years, and any changes to this document will be presented to the Authority's Board of Commissioners for approval. This Investment Policy will be made available on the Authority's website, <http://www.state.nj.us/turnpike> \*.

#### B. The Authority

The Authority is a public body corporate and politic of the State of New Jersey created under and by virtue of the New Jersey Turnpike Authority Act of 1948, constituting Chapter 454 of the Laws of New Jersey of 1948, as amended and supplemented (the "Act"). Pursuant to the Act, the Authority is authorized and empowered to, subject to any agreement with the bondholders, invest moneys of the Authority not required for immediate use, including proceeds from the sale of any bonds, in such obligations, securities and other investments as the Authority shall deem prudent. All investments that have been purchased or will be purchased under and pursuant to, and/or in accordance with, the terms and provision of the Act and a resolution of the Authority adopted on August 20, 1991 and entitled, "Turnpike Revenue Bond Resolution", as amended and restated on September 26, 1991, and as further amended and restated on November 22, 1991, as the same has been and will be further amended, restated and supplemented from time to time (the "Bond Resolution"). Capitalized terms used herein which are not otherwise defined shall have the meaning given to such terms in the Bond Resolution.

#### C. Best Interest of the Authority

Although adherence to this Investment Policy is desirable, deviations from this Policy may be appropriate from time to time to address: (i) changing financial goals; (ii) changing financial markets; and (iii) unique market opportunities. As a result, the general best interests of the Authority shall supersede any provision of this Investment Policy, provided that those provisions mandated by the Act or the Bond Resolution cannot be superseded without amendments to the Act or the Bond Resolution.

### II. INVESTMENT OBJECTIVES

#### A. All investment decisions will meet the following requirements:

1. Safeguard and preserve the principal amount of invested funds.
2. Manage and maintain adequate liquidity to meet cash flow requirements, including bond payments.
3. Maintain demand bank balances at minimum levels consistent with sound operations.
4. Maximize the total rate of return on invested funds.

\*Effective October 2017, Authority website is <http://www.njta.com>

**III. PERMITTED INVESTMENTS****A. Eligible securities are defined in the Bond Resolution and shall include:**

1. Any direct and general obligations of, or any obligations guaranteed by, the United States of America, including but not limited to interest obligations of the Resolution Funding Corporation or any successor thereto.
2. Any obligations of any state or political subdivision of a state which bonds are fully secured as to principal and interest by an irrevocable pledge of moneys or direct and general obligations of, or obligations guaranteed by the United States of America, which moneys or obligations are segregated in trust and pledged for the benefit of the holders of the bonds.
3. Certificates of ownership of the principal or interest of direct and general obligations of, or obligations guaranteed by, the United States of America, which obligations are held in trust by a commercial bank which is a member of the Federal Reserve System.
4. Bonds, debentures, notes or other evidences of indebtedness issued by any agency or instrumentality of the United States to the extent such obligations are guaranteed by the United States or by another such agency the obligations (including guarantees) of which are guaranteed by the United States.
5. Bonds, debentures, notes or other evidences of indebtedness issued by any of the following agencies:  
  
Government National Mortgage Assn. (GNMA)  
Federal Home Loan Mortgage Corp. (FHLMC)  
Federal National Mortgage Assn. (FNMA)  
Federal Home Loan Banks (FHLB)  
Federal Land Banks  
Federal Intermediate Credit Banks  
Banks for Cooperatives  
Tennessee Valley Authority  
United States Postal Service  
Farmers Home Administration  
Export-Import Bank  
Federal Financing Bank  
Student Loan Marketing Assn.(SLMA);
6. Negotiable or non-negotiable certificates of deposit issued by any bank, trust company or national banking association, which certificates of deposit shall be continuously secured or collateralized by obligations described in subparagraphs 1,2,3,4 and 5 above, which shall have a market value (exclusive of accrued interest) at all times at least equal to the principal amount of such certificates of deposit and shall be lodged with the Trustee, as custodian, by the bank, trust company or national banking association issuing such certificates of deposit.
7. Uncollateralized negotiable or non-negotiable certificates of deposit issued by any bank, trust company or national banking association, the unsecured obligations of which are rated in one of the two highest rating categories, without regard to rating sub-categories, by Moody Investors Service (Moody's) and Standard & Poor's (S&P).
8. Repurchase agreements collateralized by obligations described in subparagraphs 1,2,3,4, and 5 above with any registered broker/dealer subject to the Securities Investors Protection



Corporation jurisdiction, which has an uninsured, unsecured and unguaranteed obligation rated "Prime-1" or "A3" or better by Moody's and "A-1" or "A" or better by S&P, or any commercial bank with the above ratings provided:

- A. A master repurchase agreement or specific written repurchase agreement governs the transaction, which characterizes the transaction as a purchase and sale of securities.
  - B. The securities are held free and clear of any lien, by the Trustee or an independent third party acting solely as agent for the Trustee, and such third party is (i) a Federal Reserve Bank, (ii) a bank which is a member of the Federal Deposit Insurance Corporation and which has combined capital, surplus, and undivided profits of not less than \$75,000,000, or (iii) a bank approved in writing for such purpose by each Credit Issuer, if any, and the Trustee shall have received written confirmation from such third party that it holds such securities, free and clear of any lien, as agent for the Trustee.
  - C. A perfected first security interest under the Uniform Commercial Code, or book entry procedures prescribed at 31 CFR 306.1 et seq. or 31 CFR 350.0 et seq. or a successor provision in such securities is created for the benefit of the Trustee.
  - D. The repurchase agreement has a term of six month or less, or the Authority will value the collateral securities no less frequently than monthly and will liquidate the collateral securities if any deficiency in the required collateral percentage is not restored within two business days of such valuation.
  - E. The repurchase agreement matures on or before a debt service payment date (or other appropriate liquidation period).
  - F. The fair market value of the securities in relation to the amount of the repurchase obligation is equal to at least 100%.
9. Banker's acceptances, Eurodollar deposits and certificates of deposit (in addition to the certificates of deposit provided for by subparagraphs 6 and 7 above) of the domestic branches of foreign banks having a capital and surplus of \$1,000,000,000 or more, or any bank or trust company organized under the laws of the United States of America or Canada, or any state or province thereof, having capital and surplus, in the amount of \$1,000,000,000; provided that the aggregate maturity value of all such banker's acceptances and certificates of deposit held at any times as investment of funds under the Bond Resolution with respect to any particular bank, trust company or national association shall not exceed 5% of its capital and surplus; and provided further that any such bank, trust company, or national association shall be rated in one of the two highest rating categories, without regard to rating sub-categories, by both Moody's and S&P.
10. Other obligations of the United States of America or any agency thereof which may then be purchased with funds belonging to the State of New Jersey or which are legal investments for savings banks in the State of New Jersey.
11. Deposits in the New Jersey Cash Management Fund.
12. Obligations of any state, commonwealth or possession of the United States or a political subdivision thereof or any agency or instrumentality of such a state, commonwealth, possession or political subdivision, provided that at the time of their purchase such obligations are rated in either of the two highest rating categories by both Moody's and S&P.

13. Commercial paper with a maturity date not in excess of 270 days rated A1+ and P-1 by Moody's at the time of such investment, issued by an entity incorporated under the laws of the United States or any state thereof.

#### **IV. INVESTMENT PRACTICES**

##### **A. Investment Concentration**

It is the policy of the Authority to diversify its investment portfolio. Assets held in the investment portfolio shall be diversified to eliminate the risk of loss resulting from over-concentration of assets in a specific maturity, a specific issuer or a specific class of securities. The Authority will maintain an investment concentration not to exceed the percentages noted below. The Chief Financial Officer, or designee, is authorized to approve any deviation from these limits on a case by case basis.

1. There are no limitations on investments carrying the full faith and credit of the United States Government, including repurchase agreements collateralized by such investments.
2. Investments in any single Federal Agency not carrying the full faith and credit of the United States Government are limited to 40% of the portfolio.
3. Investments in Certificates of Deposit are limited to 30% of the portfolio.
4. Investments made in Commercial Paper are limited to 30% of the total portfolio.
5. Investments in Municipal securities are limited to 30% of the total portfolio.
6. Investments in any one single issuer (excluding US Treasury and Federal Agency securities) are limited to 5% of the portfolio.

##### **B. Quality of Investments**

All investments shall be made with judgment and care, which persons of prudence, discretion and intelligence exercise in the management of their own affairs, not for speculation, but for investment, considering the probable safety of capital as well as the probable income to be derived.

All investments ratings shall be based on security ratings at the time of purchase. In the event of a downgrade in rating, the Chief Financial Officer, or designee, will determine whether to sell or hold the investment. The Authority will not make an investment in an issuer who has a negative outlook associated with their credit rating, except for US Treasury or Federal Agencies. The portfolio's average credit quality should be rated Aa3/AA- or better by Moody's/S&P.

##### **C. Maximum Maturity**

At the time of purchase, the maturity of each security in the portfolio may not exceed the following maximum timeframes for the respective fund in which the investment is made in accordance with the Bond Resolution or Authority policy. The maximum maturity will take into account any call, put, prepayment or other features that may impact maturity. All investments mature no later than necessary to provide moneys when needed for payments to be made from such funds.

- Revenue Funds – 1 year (by Bond Resolution)
- Construction Funds – 5 years (by Authority Policy)
- Maintenance Reserve Fund – 2 years (by Bond Resolution)
- Special Projects Reserve Fund – 2 years (by Bond Resolution)
- General Reserve Fund – 3 years (by Bond Resolution)
- Debt Service Fund – 1 year (by Authority Policy)
- Charges Fund – 3 months (by Authority Policy)
- Debt Reserve Fund – 5 years (by Bond Resolution)

Investments are generally purchased with the intent of holding to maturity, but the Chief Financial Officer, or designee, has the flexibility to restructure and rebalance portfolio holdings to manage risk and take advantage of market opportunities.

#### **D. Security Purchases**

All securities purchased by the Authority under this Investment Policy shall be designated as assets of the Authority and shall be conducted on a delivery-versus-payment (DVP) basis, with the securities delivered to a designated Authority custodian. The securities will be protected through the use of a third-party custodian/safekeeping agent, which may be a Trustee. A minimum of three (3) informal bids or offers will be solicited for direct purchases of securities. The award will be based on lowest cost for purchase. The Authority may use electronic trading screens to facilitate the informal bid process.

### **V. REPORTING REQUIREMENTS**

- A. On an annual basis, the Authority's Finance Department will prepare an Investment Plan, which will specify the targets for average invested balances, average maturity and average yield by fund. The report will also include concentration targets by investment type and issuer for the upcoming year considering current and projected market conditions.
- B. On a quarterly basis, the Authority's Finance Department will prepare an investment report which details actual performance compared to the Investment Plan.
- C. On a monthly basis, the Authority's Finance Department will prepare the following:
  - Schedule of Investments by fund;
  - Detailed purchases, maturities, sales of investments by fund;
  - Investments by Issuer;
  - Credit ratings by Issuer;
  - Average invested balances, maturity and yield by fund.

## Appendix D: Statistical Data

## New Jersey State Highway System

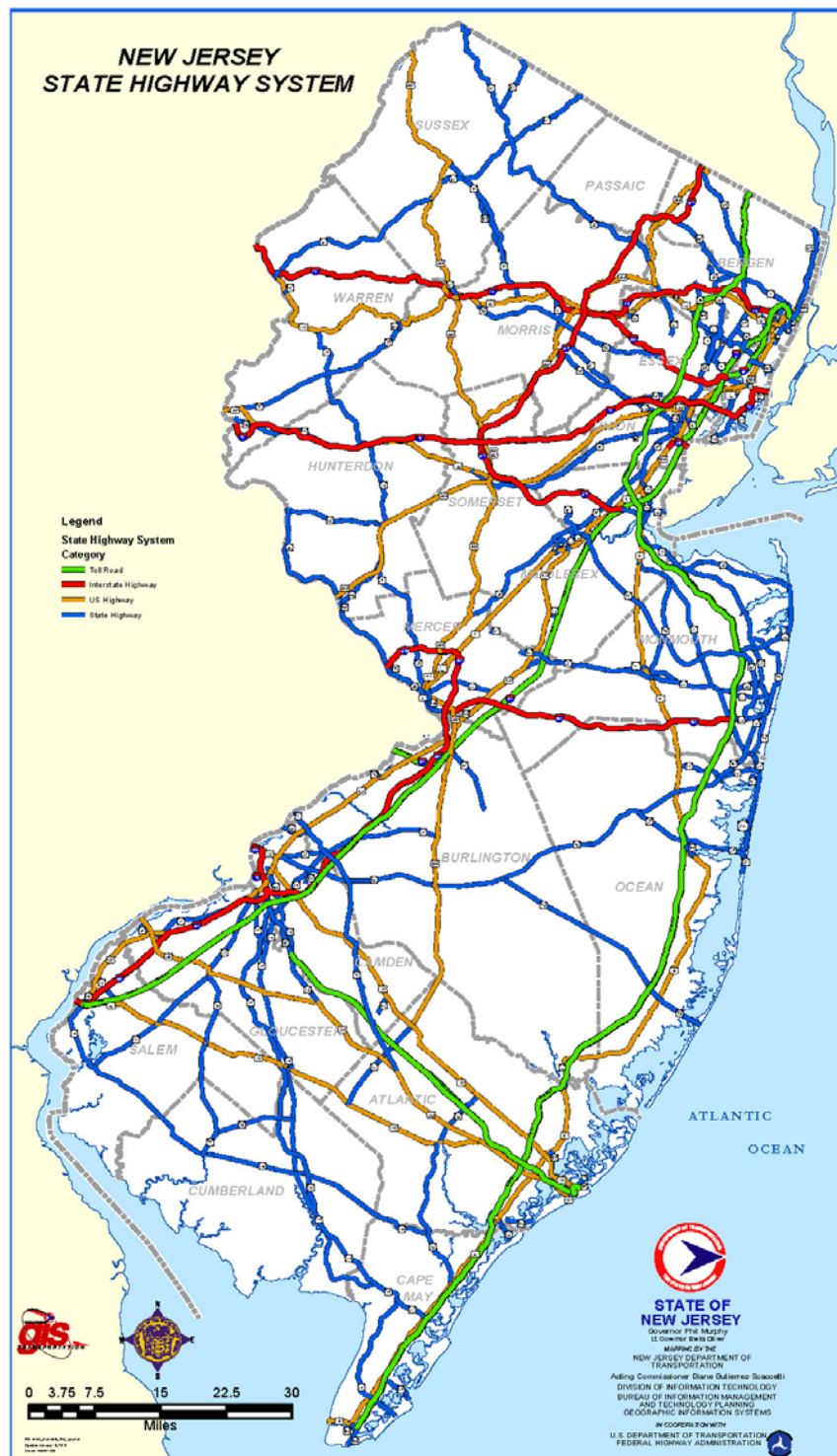


Figure 183: Map of New Jersey State Highway System

### New Jersey Turnpike Authority

The Authority is a body of corporate and politic of the State of New Jersey organized and existing by virtue of the New Jersey Turnpike Act of 1948, and is a public instrumentality exercising essential governmental functions. The Authority is empowered to acquire, construct, maintain, repair, and operate projects at locations established by law, to fix and establish tolls for use of the turnpike system, and to issue revenue bonds for its purposes. The Authority operates the State's two busiest toll roads, two of the busiest in the United States -- the New Jersey Turnpike and the Garden State Parkway. These two roadways run through 15 of New Jersey's 21 counties. The two Roadways intersect in Woodbridge Township, Middlesex County and intersect with every interstate and many major roadways across the State. The highways effectively serve as links for the entire State, Air and Sea Ports, and the Northeast Corridor.

### New Jersey Turnpike

The Turnpike was the first toll road in New Jersey and the third in the nation when it opened in 1951. It has grown over time from 118 linear miles to 148 linear miles with the addition of the Newark Bay Hudson County Extension (1956), the Pearl Harbor Memorial Turnpike Extension (1956), the Western Spur (1970) and the I-95 Extension (1992). The road has also grown wider over the years. Originally, it was four lanes for its full length. Today, it is as wide as 14 lanes in some areas and as of October 2020 includes approximately 2,427 lane miles. There are 28 toll interchanges and 375 toll lanes -145 entry lanes and 230 exit lanes.

This roadway serves as a major corridor for I-95 linking travel:

- 1) Between four states -- New Jersey, New York, Pennsylvania and Delaware;
- 2) Two major cities -- New York and Philadelphia;
- 3) Military roadway use for Joint Base McGuire-Dix-Lakehurst; and
- 4) Access to the port of New Jersey for use in transporting goods for global trade along the east coast.

### Garden State Parkway

The Parkway, which opened to traffic in 1954, passes through 10 counties between the Cape May-Lewes Ferry in Cape May County and the New York State Thruway at the New York State line in Bergen County. Originally four lanes wide, the Parkway is now 12 lanes at its widest point in Monmouth and Middlesex counties and has approximately 2,050 lane miles. The Parkway has a total of 359 exit and entrance points.

The Parkway is a major commuter highway throughout the year and during the summer months is the principal travel route to the Jersey Shore. It also provides access to the Delmarva Peninsula via the Cape May – Lewes Ferry.

## Population

The two roadways pass through Atlantic, Bergen, Burlington, Camden, Cape May, Essex, Gloucester, Hudson, Mercer, Middlesex, Monmouth, Ocean, Passaic, Salem and Union counties. Population growth serves as one indicator of roadway usage. The chart below provides the official United States Census Bureau statistics from April 1, 2010 and its estimate as of July 1, 2019, the latest data published. While the State has seen a population growth of 1.0% over the time measured, the counties served by the Authority experienced above average growth rates with the counties that either roadway passes through increased in population by an average of 2.1%. Whereas counties that neither roadway passes through decreased by an average of 1.4%. These statistics demonstrate the importance of the roadways to the State's overall economic well-being.

<b>Population by County</b>				
<b>County</b>	<b>2019 Population</b>	<b>2010 Population</b>	<b>Increase (Decrease)</b>	<b>% Change</b>
Cumberland	149,527	156,898	(7,371)	-4.7%
Hunterdon	124,371	128,349	(3,978)	-3.1%
Morris	491,845	492,276	(431)	-0.1%
Somerset	328,934	323,444	5,490	1.7%
Sussex	140,488	149,265	(8,777)	-5.9%
Warren	105,267	108,692	(3,425)	-3.2%
<b>Counties Not Served by Either Roadway</b>	<b>1,340,432</b>	<b>1,358,924</b>	<b>(18,492)</b>	<b>-1.4%</b>
Atlantic	263,670	274,549	(10,879)	-4.0%
Cape May	92,039	97,265	(5,226)	-5.4%
Monmouth	618,795	630,380	(11,585)	-1.8%
Ocean	607,186	576,567	30,619	5.3%
Passaic	501,826	501,226	600	0.1%
<b>Counties Served by Parkway Only</b>	<b>2,083,516</b>	<b>2,079,987</b>	<b>3,529</b>	<b>0.2%</b>
Camden	506,471	513,657	(7,186)	-1.4%
Gloucester	291,636	288,288	3,348	1.2%
Hudson	672,391	634,266	38,125	6.0%
Mercer	367,430	366,513	917	0.3%
Salem	62,385	66,083	(3,698)	-5.6%
<b>Counties Served by Turnpike Only</b>	<b>1,900,313</b>	<b>1,868,807</b>	<b>31,506</b>	<b>1.7%</b>
Bergen	932,202	905,116	27,086	3.0%
Burlington	445,349	448,734	(3,385)	-0.8%
Essex	798,975	783,969	15,006	1.9%
Middlesex	825,062	809,858	15,204	1.9%
Union	556,341	536,499	19,842	3.7%
<b>Counties Served by Both Roadways</b>	<b>3,557,929</b>	<b>3,484,176</b>	<b>73,753</b>	<b>2.1%</b>
<b>All Counties Served by Parkway</b>	<b>5,641,445</b>	<b>5,564,163</b>	<b>77,282</b>	<b>1.4%</b>
<b>All Counties Served by Turnpike</b>	<b>5,458,242</b>	<b>5,352,983</b>	<b>105,259</b>	<b>2.0%</b>
<b>Total</b>	<b>8,882,190</b>	<b>8,791,894</b>	<b>90,296</b>	<b>1.0%</b>

Figure 184: New Jersey Population by County

## Employment

Employment growth is a key indicator of economic growth. The total number of residents who live and work in New Jersey is 3,617,927 and the number of residents who commute to work out of state is 572,611. According to the New Jersey Department of Labor and Workforce Development, Bergen, Essex, Hudson, Monmouth and Union counties have shown an increase in employment.

The importance of the Authority's roadways in providing key connections to neighboring states is highlighted by the percentage of residents who work out of state. The chart below indicates the 2011-2015 five-year average of where the residences of each county are employed as reported by the New Jersey State Data Center. Overall, 14% of New Jersey state workers are employed out of state while more than 86% of employees working out of state are living in counties served by the New Jersey Turnpike. Further, only 7.3% of employees residing in counties that are not directly served by either roadway work out of state.

<b>Employment by County</b>				
<b>County</b>	<b>In State</b>	<b>Out of State</b>	<b>% in State</b>	<b>% Out of State</b>
Cumberland	59,515	1,848	97.0%	3.0%
Hunterdon	59,499	4,870	92.4%	7.6%
Morris	232,419	20,383	91.9%	8.1%
Somerset	155,109	12,103	92.8%	7.2%
Sussex	68,455	5,504	92.6%	7.4%
Warren	47,818	4,527	91.4%	8.6%
<b>Counties Not Served by Either Roadway</b>	<b>622,815</b>	<b>49,235</b>	<b>92.7%</b>	<b>7.3%</b>
Atlantic	120,593	4,258	96.6%	3.4%
Cape May	40,250	2,082	95.1%	4.9%
Monmouth	266,258	34,709	88.5%	11.5%
Ocean	230,408	9,510	96.0%	4.0%
Passaic	206,938	18,319	91.9%	8.1%
<b>Counties Served by Parkway Only</b>	<b>864,447</b>	<b>68,878</b>	<b>92.6%</b>	<b>7.4%</b>
Camden	190,660	44,903	80.9%	19.1%
Gloucester	111,746	27,246	80.4%	19.6%
Hudson	229,559	102,922	69.0%	31.0%
Mercer	156,385	17,355	90.0%	10.0%
Salem	23,868	4,852	83.1%	16.9%
<b>Counties Served by Turnpike Only</b>	<b>712,218</b>	<b>197,278</b>	<b>78.3%</b>	<b>21.7%</b>
Bergen	345,160	104,840	76.7%	23.3%
Burlington	189,062	31,352	85.8%	14.2%
Essex	301,679	47,870	86.3%	13.7%
Middlesex	349,730	44,686	88.7%	11.3%
Union	232,816	28,472	89.1%	10.9%
<b>Counties Served by Both Roadways</b>	<b>1,418,447</b>	<b>257,220</b>	<b>84.6%</b>	<b>15.4%</b>
<b>All Counties Served by Parkway</b>	<b>2,282,894</b>	<b>326,098</b>	<b>87.5%</b>	<b>12.5%</b>
<b>All Counties Served by Turnpike</b>	<b>2,130,665</b>	<b>454,498</b>	<b>82.4%</b>	<b>17.6%</b>
<b>Total</b>	<b>3,617,927</b>	<b>572,611</b>	<b>86.3%</b>	<b>13.7%</b>

Figure 185: New Jersey In/Out of State Employment by County

The State had experienced a steady decline in unemployment since 2012, but beginning in April 2020, unemployment levels began to rise due to the ongoing Coronavirus pandemic.

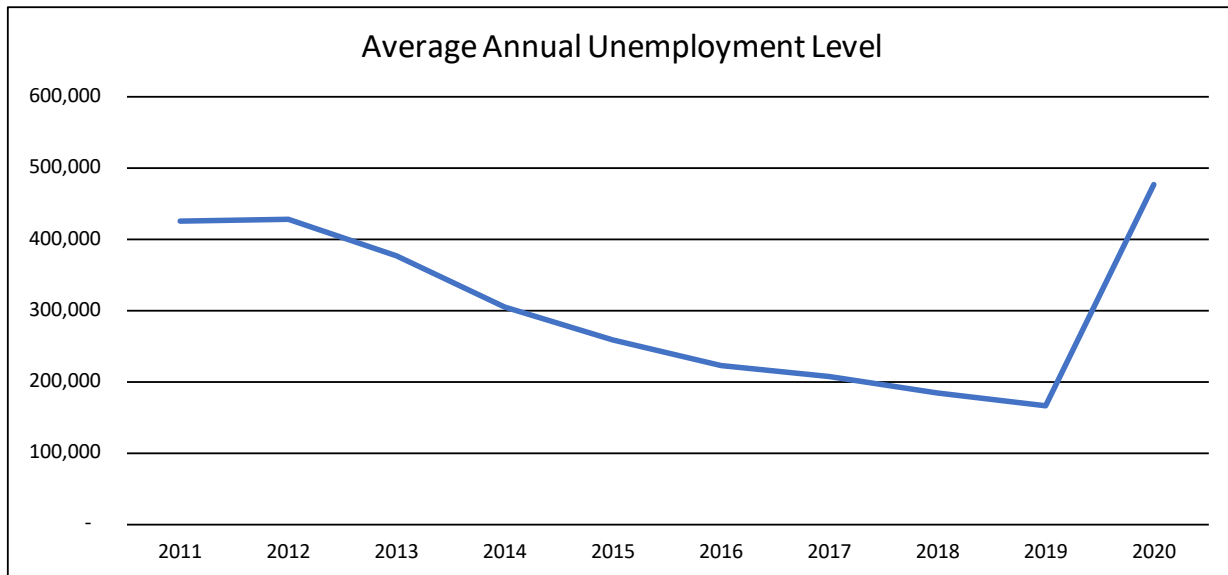


Figure 186: New Jersey Employment Totals (2010-2020)

Employment in the 21 counties in New Jersey increased by 211,700 and unemployment decreased by 274,100 between 2010 and 2019. The county reporting the largest increase in employment was Middlesex, which reported an increase of 39,400 jobs. Atlantic was followed by Hudson and Ocean at 30,200 and 27,600, respectively. The top 3 counties reporting a decrease in unemployment were Essex, which reported a decrease of 25,000 unemployed, followed by Middlesex and Bergen at 24,400 and 24,300, respectively.

New Jersey Employment by County						
County	2010 Employed	2019 Employed	Change	2010 Unemployed	2019 Unemployed	Change
Atlantic	123,300	114,600	(8,700)	17,300	6,100	(11,200)
Bergen	440,500	467,900	27,400	38,400	14,100	(24,300)
Burlington	215,800	223,000	7,200	21,300	7,500	(13,800)
Camden	235,900	242,800	6,900	29,000	10,200	(18,800)
Cape May	43,200	42,700	(500)	7,000	3,300	(3,700)
Cumberland	63,200	61,500	(1,700)	9,400	3,600	(5,800)
Essex	340,600	352,300	11,700	41,400	16,400	(25,000)
Gloucester	137,000	144,200	7,200	15,600	5,500	(10,100)
Hudson	319,200	349,400	30,200	33,800	11,800	(22,000)
Hunterdon	63,200	62,700	(500)	5,000	1,800	(3,200)
Mercer	176,600	196,500	19,900	16,100	6,400	(9,700)
Middlesex	386,100	425,500	39,400	38,000	13,600	(24,400)
Monmouth	301,300	318,200	16,900	28,900	10,400	(18,500)
Morris	245,200	249,500	4,300	19,600	7,200	(12,400)
Ocean	237,300	264,900	27,600	27,100	10,200	(16,900)
Passaic	224,600	231,800	7,200	28,800	10,400	(18,400)
Salem	28,400	27,800	(600)	3,700	1,400	(2,300)
Somerset	160,300	166,200	5,900	13,200	5,200	(8,000)
Sussex	74,500	71,400	(3,100)	7,800	2,500	(5,300)
Union	252,500	266,200	13,700	26,600	10,200	(16,400)
Warren	52,900	54,200	1,300	5,800	1,900	(3,900)
<b>Total</b>	<b>4,121,600</b>	<b>4,333,300</b>	<b>211,700</b>	<b>433,800</b>	<b>159,700</b>	<b>(274,100)</b>

Figure 187: New Jersey Employment by County



### Economic Indicators

The latest estimates of state and national GDP growth released by the Bureau of Economic Analysis are for 2019. New Jersey has now seen eight consecutive years of growth in the state's gross domestic product since contractions in 2011. However, New Jersey's GDP growth continues to lag behind that at the national level since emerging from the 2008 recession at the end of 2009.

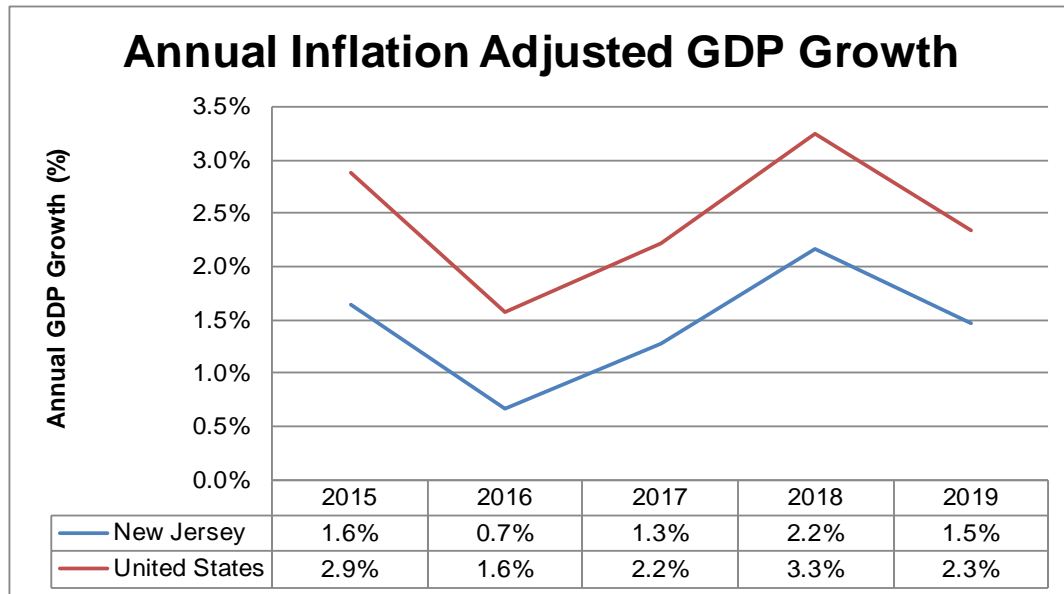


Figure 188: Annual Inflation Adjusted GDP Growth (2015-2019)

The average price for regular grade gasoline reached a 10 year low in 2016. According to projections from the U.S. Energy Information Administration (EIA) the average annual price for regular grade gas will decline to an average of \$2.28 per gallon in 2020 (data as of August) from an average of \$2.65 in 2019. New Jersey is included in the EIA's Central Atlantic Region (PADD 1B), where gas prices have closely tracked the national average for the past 10 years.

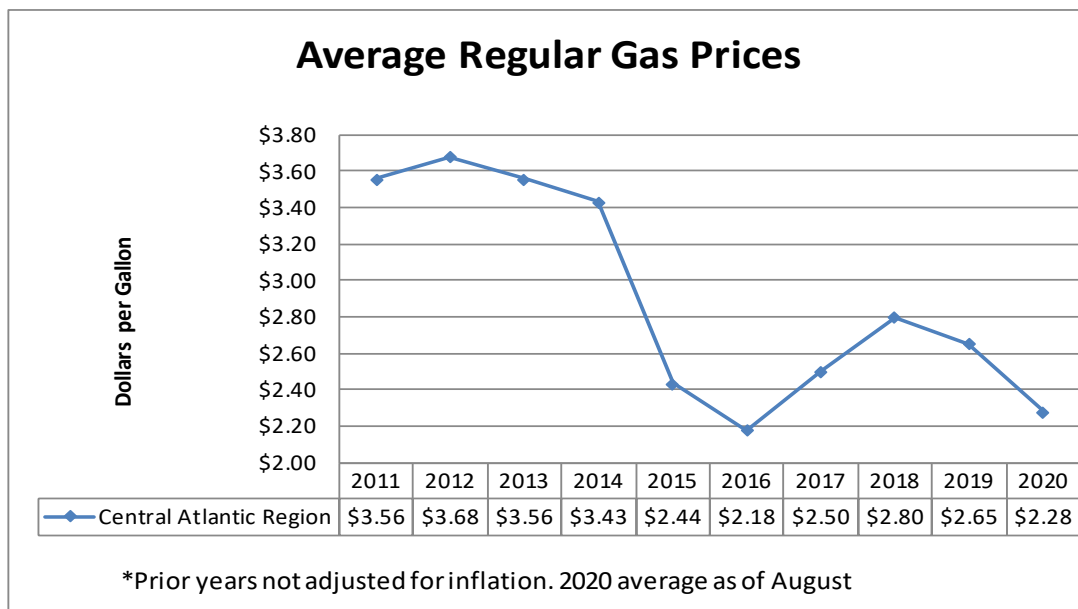
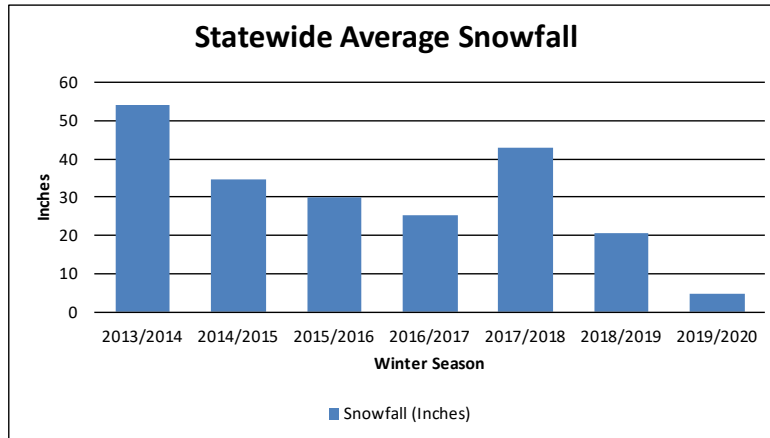


Figure 189: Average Annual Regular Gasoline Prices (2010-2020)

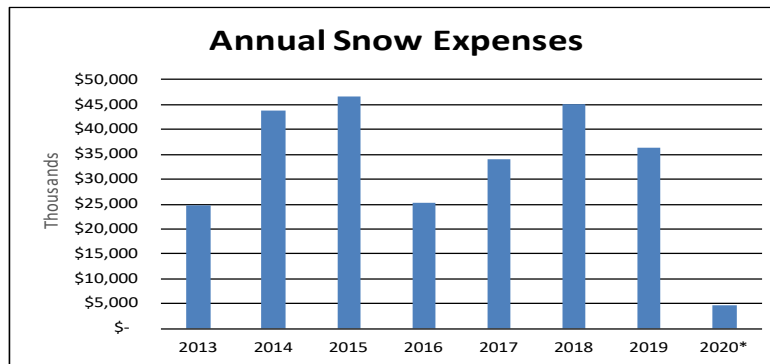
## Weather

In 2020, the Authority spent approximately \$5 million on snow removal through August. Spending of \$46 million in 2015 was the highest amount in Authority history, while snow removal costs for 2020 are 89% lower. The 2019-2020 winter season had an average temperature of 42.2° and was the least snowy season since 2012/2013. According to annual snowfall totals compiled by the New Jersey State Climatologist, snowfall has varied wildly over the previous six winter seasons.



\*2020 data through September

Figure 190: Statewide Average Snowfall by Season (2012-2020)



\*2020 costs are through September

Figure 191: Snow Expenses by Calendar Year

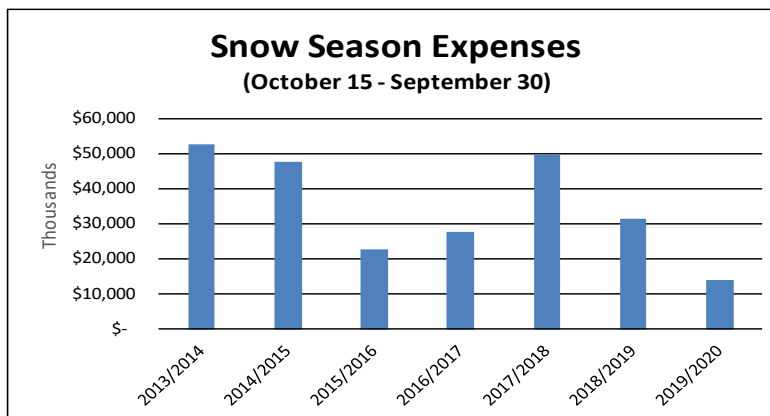


Figure 192: Snow Expenses by Season

## Appendix E: Additional Financial Resources

### New Jersey Turnpike Authority Financial Resource Websites

**New Jersey Turnpike Authority** – The New Jersey Turnpike Authority website.

<https://www.njta.com/>

**Key Metrics & Financial Policies** – The website provides additional information on The Authority’s Key Metrics, as well as Financial Policy documents.

[About Investor Relations | NJTA](#)

**Bond Documents** - The website provides further information on some of the Authority’s current Bond Series.

<https://www.njta.com/investor-relations/bond-documents>

**Traffic Statistics & Revenue** – The website provides the latest data on the New Jersey Turnpike & Garden State Parkway Traffic & Revenue, and E-ZPass Usage Rates.

<https://www.njta.com/investor-relations/traffic-revenue>

**Capital Plan** – The website provides the Authority’s Strategic Plan & Consulting Engineers latest quarterly report.

<https://www.njta.com/investor-relations/capital-plan>

## Glossary

ACCRETION – Accumulation of capital gains on discount bonds.

ACCRUAL BASIS – Accounting practice in which expenses and income are accounted for as they are earned or incurred.

AMORTIZATION – Gradual repayment of debt over a period of time.

ANNUAL BUDGET – Includes the Authority's Revenue Budget, Operating Budget, Debt Service Fund budget, Charges Fund Budget, Maintenance Reserve Fund Budget, Special Project Reserve Fund Budget, General Reserve Fund Budget, and Supplemental Capital Fund Budget.

ANNUAL PROCUREMENT PLAN – Active document listing all of the Authority's procurement contracts necessitating board approval for the current fiscal year.

APPROPRIATIONS – A sum of money or total of assets devoted to a specific purpose.

ARBITRAGE – The simultaneous purchase and sale of an asset in order to profit from a difference in price.

AUCTION AGENT – A financial institution responsible for conducting the auction used in connection with the periodic interest rate reset and remarketing of the Authority's bonds.

AUDITED YEAR-END FINANCIAL STATEMENTS – The Authority's end of fiscal year financial statements reviewed and audited by an independent auditor.

BASIS OF ACCOUNTING – The method of accounting used to track and report revenues and expenses, for example, cash or accrual.

BONDS – A written guarantee to pay a principal amount and/or interest at a specified date or dates known as the maturity date(s).

BOND COVENANTS – The Authority's contractual obligations set forth in issued bond contracts.

BOND INSURANCE – Insurance purchased by a bond issuer that guarantees the repayment of principal and all associated interest payments to the bondholders in the event of a default.

BOND RATING – An assessment of the credit risk with respect to a specific bond issue.

BOND RESOLUTION – The agreement that defines the Authority's obligations and requirements when issuing new-money bonds.

BROKER/DEALER – A financial institution responsible for both buying and selling securities for the Authority.

BUDGET – Plan of coordinating estimated expenses and income for a given period of time.

CALL – An option contract giving the owner the right to buy a specified amount of an underlying security at a specified price within a specified time.

CALL OPTION VALUE – The present value of a call option in light of present market conditions.

**CAPITAL ASSETS** – Land and improvements, easements, building and improvements, vehicles, machinery, equipment, infrastructure, and all other tangible and intangible assets that are used in operations and that have initial useful lives extending beyond a single reporting period.

**CAPITAL EXPENDITURE** – The costs in the acquisition of fixed assets and the non-recurring expenditures for the preservation, replacement, repair, renewal, reconstruction, modification or expansion of the roadway.

**CAPITAL IMPROVEMENT PROGRAM** – An account within the Construction Fund, funded by the issuance of Turnpike Revenue Bonds, used for construction of projects focused on increasing capacity, maintaining a state of good repair, and improving safety and security. The current Capital Improvement Programs are the \$7 Billion Capital Improvement Program and the 2019 Capital Improvement Program.

**CAPITALIZED INTEREST** – A portion of the proceeds from the issue of Turnpike Revenue Bonds set aside to pay interest on those bonds for a set period of time.

**CAPITALIZATION** – Recordation of a cost as an asset, rather than an expense. This approach is used when a cost is not expected to be entirely consumed in the current period, but rather over an extended period of time. The asset is recorded on the Authority's balance sheet and depreciated over its useful life.

**CAPITALIZATION POLICY** – The Authority's policy on allowable levels of asset capitalization.

**CASH FLOW** – The net amount of cash and cash-equivalents moving into and out of the Authority.

**CHARGES FUND** – Fund held for the purpose of paying accrued fees and charges of any credit issuer, remarketing agent, and tender agent not otherwise paid as an operating expense.

**COMMISSIONERS** – The eight members of the Authority's governing Board of Commissioners. Commissioners are appointed by the Governor of New Jersey.

**CONSTRUCTION FUND** – Fund created for the purpose of paying all costs of acquiring or constructing new projects and for the capital improvements of the roadway.

**COUPONS** – The interest rate stated on a bond when it is issued.

**CREDIT QUALITY** – An assessment of the credit risk with respect to a specific investment.

**CREDIT RATING AGENCY** – A company that assigns credit ratings for debt financed securities, assessing their credit quality.

**CURRENT PAY INTEREST BOND** – A bond that pays interest at regular intervals.

**DEBT COVERAGE COVENANTS** – The Authority's debt coverage obligations as defined by its Bond Resolution.

**DEBT FINANCING** – Raising money for working capital or capital expenditures by selling bonds.

**DEBT ISSUANCE** – The process of raising funds through the issue of bonds.

**DEBT RESERVE FUND** – Fund created to hold an amount equal to the greatest amount of interest accruing on all outstanding bonds in a calendar year to ensure full and timely payments to bond holders.

**DEBT RESERVE REQUIREMENT** – The amount required to be held in the Debt Reserve Fund under the Authority's Bond Resolution.

DEBT SERVICE – Payment of principal, interest and other obligations associated with the retirement of debt.

DEBT SERVICE BUDGET – Amounts held to pay the principal and accrued interest due on all outstanding bonds.

DEBT SERVICE COVERAGE RATIO – A measure of the Authority's cash flow available to pay current debt obligations; the ratio of cash available for debt servicing to interest, principal and lease payments.

DEPARTMENT – A major administrative division of the Authority that has overall management responsibility for an operation or group of related operations within a functional area.

DEPARTMENTAL REQUEST – This request represents the various departmental budgets to be presented to the budget section of the Finance Department.

DEPRECIATION – Allocation of the cost of a tangible asset over its useful life.

ELECTRONIC TOLL COLLECTION – An electronic means for motorists to pay toll charges without using coins or currency. Motorists attach an electronic signal device, known as a transponder, on their windshield to automatically deduct the toll charge as they drive through a toll plaza.

ENTERPRISE FUND – A government-owned fund that sells goods and services to the general public.

E-ZPASS – Brand name by which the New Jersey Turnpike Authority collects toll electronically.

FAIR MARKET VALUE – The accurate valuation or assessment of an asset's worth.

FEDERAL SUBSIDY FOR BUILD AMERICA BONDS – A federal subsidy of payable interest on bonds issued by state or local government agencies to raise necessary capital to pursue infrastructure improvements.

FIDUCIARIES – A party legally appointed and authorized to hold assets in a trust for another party.

FISCAL YEAR – The New Jersey Turnpike's fiscal year is January 1 through December 31. This is the period used for the annual operating budget and the reporting of financial position and results of operations of the Authority. The State of New Jersey's fiscal year is July 1 through June 30.

FIXED CREDIT SPREAD – The fixed spread between a benchmark interest rate and floating rate notes.

FIXED RATE – An interest rate that does not change over the life of a credit security.

FIXED SWAP RATE – The fixed rate that the receiver of floating rate notes demands in an interest rate swap.

FLOATING RATE NOTES – A debt instrument with a variable interest rate tied to a benchmark interest rate.

FULL-TIME EMPLOYEE – A full-time employee's work is based on a 35 hour or a 40-hour work week for 52 weeks depending on job title and function.

FUND – An account established to hold money for specific programs, activities or objectives.

FUND BALANCE – Represents the difference between fund assets and fund liabilities at year-end. For budgetary presentation purposes, fund balance excludes capitalized assets.

GENERAL RESERVE FUND – Used to make payments under any agreements with the State of New Jersey or for any other corporate purpose. The General Reserve Fund includes the Supplemental Capital Fund, which was established only for budgetary purposes.

GOVERNMENTAL ACCOUNTING STANDARDS BOARD – The source of generally accepted accounting principles used by State and Local governments in the United States.

INELASTIC – Insensitive to changes in price or income.

INFRASTRUCTURE – The roads and facilities needed for daily operation.

INTERCHANGE– A road junction that uses one or more ramps to allow traffic on one highway to pass through a junction without directly crossing any other traffic stream.

INTEREST INCOME – The Authority’s income from interest and investments.

INTEREST RATE SWAP – An agreement between two parties where one stream of future interest payments is exchanged for another based on a specified principal amount.

LANE MILES – The total length of a road multiplied by the number of lanes. For example, a 6-lane road that is 10 miles long has a total of 60 lane miles.

LIMITED ACCESS TOLL ROAD – A toll highway system in which the user pays tolls at plazas along the toll road.

MAINTENANCE RESERVE FUND – Used to pay for the cost of major resurfacing, replacement or reconstruction of the Turnpike System and major or extraordinary repairs, renewals or replacements of the Turnpike System necessary to restore or prevent physical damage to the Turnpike System, for the safe and efficient operation of the Turnpike system or to prevent loss of Pledged Revenues.

MILE POSTS – A marker set up to indicate a distance from a particular point.

NET REVENUE REQUIREMENT – The minimum net revenue level allowed under the Authority’s Bond Resolution.

NET REVENUE – The Authority’s total revenue less its operating expenses for the fiscal year, interest paid, depreciation and taxes.

NEW JERSEY TURNPIKE AUTHORITY ACT – 1948 Act enacted by the State of New Jersey creating the New Jersey Turnpike Authority and bestowing ownership and operational authority over the New Jersey Turnpike upon the Authority.

OPERATING BUDGET – The Authority’s Operating Budget consists of funds for Maintenance, Engineering, Toll Collection, State Police and Traffic Control operations, Integrated Technology Services, and General and Administrative Services.

OTHER POSTEMPLOYMENT BENEFITS – are benefits (other than pensions) that the Authority provides to retired employees. These benefits principally involve health care benefits.

OUTSTANDING DEBT – The as-of-yet unpaid portion of the Authority’s previously issued Turnpike Revenue Bonds.

PAYING AGENT – An agent who accepts payment from the Authority and then distributes those payments to the holders of the Authority’s bonds.

PLEDGED REVENUES – Includes, among other things, all toll revenues, fees, rents, charges and other income and receipts derived from the operation of the Turnpike System.

Position – A statement or description of the number of employees for a specific time period in each department.

PNC BANK ARTS CENTER – an outdoor amphitheater in Holmdel, NJ. Owned by the Authority, and leased and operated by Live Nation.

POLLUTION REMEDIATION LIABILITY RESERVE – Fund maintained to meet the obligations of the Government Accounting Standards Board’s pollution remediation policy.

PRELIMINARY BUDGET – The draft of the Authority’s fiscal year budget of operating expenses and reserves submitted to the Trustee for examination and approval.

PROCUREMENT – The buying of supplies and materials as needed for project completion.

REGISTRAR – An institution responsible for keeping records of the Authority’s bondholders.

REMARKETING – A formal underwriting of the Authority’s Revenue Bonds for which the form or structure is being changed.

RESERVE – Funds set aside to pay future liabilities.

REVENUE FUND – General operating fund of the Authority. The fund is used to account for all pledged revenues and operating expenses.

REVENUE REQUIREMENT – Requirement under the Authority’s Bond Resolution establishing Net Revenue Requirements.

REVENUES – All tolls, fees, charges, rents and other income and receipts derived from the operation of the Turnpike and Parkway. Revenues also include investment income from any monies or securities and the Federal Subsidy for Build America Bonds.

SERIAL BONDS – A bond issue in which a portion of the outstanding bonds matures at regular intervals until eventually all the bonds eventually mature.

SHORT TERM INTEREST RATES – The interest rates on loan contract or other debt instruments with a maturity of less than one year.

SPECIAL PROJECT RESERVE FUND – Used to pay for any major resurfacing, renewals or replacements of the Turnpike System and for studies, surveys, estimates and investigations.

STANDBY AGREEMENT – An agreement between the Authority and its Revenue Bond underwriters that the underwriters are responsible for any unsold portion of a bond issue.

SUBORDINATE BOND ANTICIPATION NOTES – A short-term interest-bearing security issued by the Authority in advance of a larger bond issue.

SUPPLEMENTAL CAPITAL FUND – 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.

SWAP DEALER – An individual who acts as a counterparty in a swap agreement for a fee.

TENDER AGENT – The financial institution responsible for coordinating the process of soliciting bondholders for the issue of the Authority’s bonds.



TERMINUS – The end of the roadway.

TOLL – A fee for usage or passage over a toll roadway.

TOLL BOOTH – A booth on a highway where tolls are taken.

TOLL COLLECTOR – An employee hired to take tolls manually from customers.

TOLL REVENUE – The revenue from the tolls collected by the Authority. It is the main source of revenue for the Authority.

TOLL TRANSACTION – A passenger or commercial vehicle that passes through a toll plaza causing a toll to be collected.

TOTAL DEBT SERVICE – The total cash amount required to repay the interest and principal due on the Authority's issued bonds for the fiscal year.

TOTAL REQUIREMENTS COVERAGE RATIO – A measure of the Authority's cash flow available to meet all financial requirements for the fiscal year, including debt service, debt reserve and revenue requirements.

TOTAL REVENUE – Includes the Authority's Toll Revenue, E-Z Pass Fees, Concessions Revenue, Miscellaneous Revenue, Federal Subsidies, Interest Income, and Arts Center Revenues.

TRANSPONDER – An electronic device placed in a vehicle to communicate through radio signals with the toll plaza collection equipment as the vehicle passes through the lane, making a record of a paid toll.

TRUE INTEREST COST – The actual cost of issuing a bond including all ancillary fees and costs.

TRUSTEE – The Authority's Trustee is Bank of New York Mellon. The Authority's Co-Trustee is US Bank.

USEFUL LIFE – The period of time for which the asset will be economically feasible for use.

VARIABLE RATE DEBT – A tax-exempt short-term investment instrument based on the Authority's long-term bonds.

## Acronyms

**AASHTO** American Association of State Highway and Transportation Officials  
**ACM** Automatic Coin Machine  
**AET** All-Electronic tolling  
**AIX** Advanced Interactive Executive  
**ALPR** Automated License Plate Recognition  
**APD** Annual Pavement Distress  
**ARC** Annual Required Contribution  
**ATMP** Advanced Traffic Management Program  
**ATMS** Active Traffic Management Systems  
**AVC** Automatic Vehicle Classification  
**AVI** Automatic Vehicle Identification  
**BDA** Bi-Directional Amplifier  
**CADS** Computer Aided Design Software  
**CAFR** Comprehensive Annual Report  
**CAPEX** Capital Expenditure  
**CEA** Commodity Exchange Act  
**CFTC** Commodities Futures Trading Commission  
**CIP** Capital Improvement Program  
**CIMU** Construction/Incident Management Unit  
**CM** Construction Management  
**CMS** Changeable Message Signs  
**CNW** Complex to North on Westerly  
**CO** Certificate of Occupancy  
**CRMS** Customer Relationship Management System  
**CSC** Customer Service Center  
**CVI** Commercial Vehicle Inspection  
**DCA** Department of Community Affairs  
**DED** Deputy Executive Director  
**DF** Dodd-Frank Act  
**DVP** Delivery Versus Payment  
**EAM** Enterprise Asset Management  
**EEO** Equal Employment Opportunity  
**EGIS** Enterprise Geographic Information System  
**EIA** Energy Information System  
**EN** Entrance  
**EOL** End of Life  
**ERP** Enterprise Resource Planning  
**ETC** Electronic Toll Collection  
**FEMA** Federal Emergency Management Agency  
**FHWA** Federal Highway Administration  
**FTE** Full Time Employees  
**GAAP** Generally Accepted Accounting Principles

**GASB** Government Accounting Standards Board  
**GDP** Gross Domestic Product  
**GFOA** Government Finance Officers Association  
**GIS** Geospatial Information System  
**GSAC** Garden State Arts Center  
**GSP** Garden State Parkway  
**GWB** George Washington Bridge  
**HAER** Historic American Engineering Record  
**HCM** Human Capital Management  
**HMS** Host Marriot Services  
**HQ** Headquarters  
**HR** Human Resources  
**HVAC** Heating, Ventilation, and Cooling  
**I/C** Interchange  
**IP** Internet Phone  
**IR** Immediate Repair  
**IRI** International Roughness Index  
**IRS** Internal Revenue Service  
**ISDA** International Swap and Derivatives Association  
**ITS** Information Technology Services  
**KPI** Key Performance Indicators  
**LAN** Local Area Network  
**LEC** Lane Electronic Cabinet  
**LED** Light Emitting Diode  
**LIBOR** London Inter-bank Offered Rate  
**MLT** Manual Lane Toll Terminals  
**MP** Milepost  
**MPT** Maintenance and Protection of Traffic  
**MS** Microsoft  
**MSE** Mechanical Stabilized Earth  
**MUB** Mixed-Use Building  
**MVM** Million Vehicle Miles  
**NB** North Bound  
**ND** Northern Division  
**NO** Notice of Completion  
**NBHCE** Newark Bay Hudson County Extension  
**NCGAS** National Council on Governmental Accounting Statements  
**NJDEP** New Jersey Department of Environmental Protection  
**NJDOT** New Jersey Department of Transportation  
**NJSP** New Jersey State Police  
**NJTA** New Jersey Turnpike Authority  
**NJHA** New Jersey Highway Authority  
**NOS** Numbers  
**NSE** North South Easterly

**NSO** North to South Outer  
**NWC** North on Westerly to Complex  
**OCIP** Owner Controlled Insurance Program  
**ODU** Operational Dispatch Unit  
**OPEB** Other Post-Employment Benefits  
**OPRA** Open Public Records Act  
**OPS** Order for Professional Services  
**OSHA** Occupational Safety and Health Administration  
**PANYNJ** Port Authority of New York and New Jersey  
**PDQ** Portable Dock Scissor Lift  
**PERS** Public Employees Retirement System  
**PFD** Patron Fare Display  
**PMD** Parkway Maintenance District  
**PMM** Procurement and Materials Management  
**POTS** Plain Old Telephone Service  
**PNC** Pittsburgh National Corporation  
**PSFin** Peoplesoft Financial  
**PSFSCM92** Peoplesoft Financial Supply Chain Management  
**PTC** Pennsylvania Turnpike Commission  
**QIR** Qualified Independent Representative  
**QPL** Quality Products List  
**RFP** Request for Proposal  
**RMA** Return Materials Authorization  
**ROW** Right of Way  
**RTTM** Real Time Traffic Management  
**RWIS** Road Weather Information System  
**SA** Service Area  
**SB** South Bound  
**SBE** Small Business Enterprise  
**SBR** Sequencing Batch Reactor  
**SDI** Surface Distress Index  
**SEC** Securities and Exchange Commission  
**SN** South to North  
**SNE** South North Easterly  
**SNL** South to North on Local  
**SNW** South to North Westerly  
**SNX** South to North on Express  
**SOSA** South Outer to Service Area  
**SQL** Structured Query Language  
**STMC** Statewide Traffic Management Center  
**STR** Structure  
**TBD** To Be Determined  
**TD** Turnpike District  
**TIC** True Interest Cost

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**TCO** Total Cost of Ownership  
**TMC** Transportation Management Center  
**TMD** Turnpike Maintenance District  
**TPA** Third Party Administrator  
**TPK** Turnpike  
**TSO** Toll to South Outer  
**TTF** Transportation Trust Fund  
**UPS** Uninterruptible Power Supply  
**UST** Underground Storage Tanks  
**VES** Violation Enforcement System  
**VMS** Variable Messaging System  
**VoIP** Voice over Internet Protocol  
**VRLA** Valve-Regulated Lead-Acid  
**WMS** Warehouse Management System  
**XBL** Exclusive Bus Lane