PRIVATE PLACEMENT MEMORANDUM

Book-Entry Only **See "RATINGS" herein**

On August 30, 2023, the issue date of the Series 2023 A Bonds, McManimon, Scotland & Baumann, LLC, Bond Counsel, issued its legal opinion stating (i) assuming continuing compliance by the Authority with certain tax covenants described herein, under existing law, interest on the Series 2023 A Bonds is excluded from gross income of the owners thereof for federal income tax purposes pursuant to Section 103 of the Internal Revenue Code of 1986, as amended (the "Code"), and interest on the Series 2023 A Bonds is not an item of tax preference under Section 57 of the Code for purposes of computing alternative minimum tax; however, for tax years beginning after December 31, 2022, interest on the Series 2023 A Bonds is included in the "adjusted financial statement income" of certain corporations that are subject to alternative minimum tax under Section 55 of the Code, and (ii) based upon existing law, interest on the Series 2023 A Bonds and any gain on the sale thereof are not included in gross income under the New Jersey Gross Income Tax Act. For a more complete discussion, see "TAX MATTERS" herein.

$107,305,000
NEW JERSEY TURNPIKE AUTHORITY
Turnpike Revenue Bonds, Series 2023 A

Dated: August 30, 2023 **Due: January 1, as shown on the inside front cover**

This Private Placement Memorandum has been prepared to provide information relating to the issuance by the New Jersey Turnpike Authority (the "Authority") of its $107,305,000 aggregate principal amount of Turnpike Revenue Bonds, Series 2023 A (the "Series 2023 A Bonds"). Pursuant to a Bondholder Agreement, dated as of August 16, 2023, by and between the Authority and Barclays Capital Inc. (the "Purchaser"), on August 30, 2023, the Authority issued and delivered the Series 2023 A Bonds to the Purchaser. The Bank of New York Mellon, Woodland Park, New Jersey, serves as the Trustee, Paying Agent and Registrar for the Series 2023 A Bonds.

The Series 2023 A Bonds were issued in fully registered form without coupons and were registered in the name of Cede & Co., as nominee of The Depository Trust Company ("DTC"). DTC acts as securities depository for the Series 2023 A Bonds, as more fully described herein.

Interest on the Series 2023 A Bonds accrues from August 30, 2023 and is payable semiannually on each January 1 and July 1, commencing on January 1, 2024. Interest on the Series 2023 A Bonds is calculated on the basis of a 360-day year consisting of twelve 30-day months. The Series 2023 A Bonds bear interest at the interest rates per annum set forth on the inside front cover page of this Private Placement Memorandum.

The Series 2023 A Bonds were issued under and pursuant to the New Jersey Turnpike Authority Act of 1948 (Chapter 454 of the Laws of New Jersey of 1948), as amended and supplemented (the "Act"), the Turnpike Revenue Bond Resolution adopted by the Authority on August 20, 1991, as amended, restated and supplemented (the "General Bond Resolution"), including as supplemented by the Series 2023 Turnpike Revenue Refunding Bond Resolution adopted by the Authority on July 25, 2023 (the "Series 2023 Resolution"), and a Certificate of Determination, dated August 16, 2023, executed by the Executive Director of the Authority (the "Certificate of Determination" and, together with the General Bond Resolution and the Series 2023 Resolution, the "Resolution"). The Series 2023 A Bonds are 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 Resolution from time to time, and the Authority's reimbursement and payment obligations under certain Credit Facilities and Qualified Swaps (as such terms are defined in the Resolution).

The Series 2023 A Bonds are subject to mandatory tender for purchase and redemption prior to maturity at such prices and pursuant to such terms as are described herein. See "THE SERIES 2023 A BONDS – Mandatory Purchase" and "THE SERIES 2023 A BONDS – Redemption Prior to Maturity" herein.

The Authority issued and delivered the Series 2023 A Bonds to the Purchaser in exchange for a portion of the Authority's then outstanding Turnpike Revenue Bonds, Series 2020 C (Federally Taxable) in the aggregate principal amount of $135,230,000 (the "Refunded Series 2020 C Bonds"), which were owned by the Purchaser and delivered by the Purchaser to the Authority. Simultaneously with the issuance and delivery of the Series 2023 A Bonds, the Authority caused the Refunded Series 2020 C Bonds to be canceled and extinguished and, as a result, the Refunded Series 2020 C Bonds are no longer outstanding under the Resolution. See "THE SERIES 2023 A BONDS" and "THE REFUNDING PLAN" herein.

THE SERIES 2023 A BONDS ARE REVENUE OBLIGATIONS OF THE AUTHORITY. THE SERIES 2023 A BONDS ARE NOT A DEBT OR LIABILITY OF THE STATE OF NEW JERSEY OR OF ANY POLITICAL SUBDIVISION THEREOF (OTHER THAN THE AUTHORITY), AND 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 SERIES 2023 A BONDS. THE AUTHORITY HAS NO TAXING POWER.

All legal matters incident to the authorization, issuance, sale and delivery of the Series 2023 A Bonds were approved by McManimon, Scotland & Baumann, LLC, Roseland, New Jersey, Bond Counsel to the Authority. Certain legal matters were also passed upon for the Authority by Ann Christine Monica, Esq., Acting Director of Law of the Authority. The Series 2023 A Bonds were issued and delivered by the Authority to the Purchaser through the facilities of DTC on August 30, 2023.

Dated: October 18, 2023

$107,305,000

NEW JERSEY TURNPIKE AUTHORITY
Turnpike Revenue Bonds, Series 2023 A

Maturity (January 1)	Principal Amount	Interest Rate	Yield	CUSIP**
2029	$ 5,940,000	5.00%	3.09%	646140FE8
2030	21,575,000	5.00	3.06	646140FF5
2031	25,695,000	5.00	3.06	646140FG3
2032	26,950,000	5.00	3.07	646140FH1
2033	15,370,000	5.00	3.12	646140FJ7
2034	3,085,000	5.00	3.16*	646140FK4
2035	8,690,000	5.00	3.25*	646140FL2

All of the Series 2023 A Bonds will bear interest at the rate of five percent (5.00%) per annum; provided, however, that during the Amortization Period (as defined in the Certificate of Determination), the Series 2023 A Bonds owned by the Purchaser, any affiliate or other party related to the Purchaser or a funding entity or other special purpose arrangement established by the Purchaser or an affiliate of the Purchaser as more fully described in the Certificate of Determination, will bear interest at the rate of seven and one-half percent (7.50%) per annum.

* Yield to first optional redemption date of July 1, 2033.

** CUSIP is a registered trademark of the American Bankers Association. CUSIP numbers have been provided by CUSIP Global Services, which is operated on behalf of the American Bankers Association by FactSet Research Systems Inc. The CUSIP numbers are being provided solely for the convenience of the holders of the Series 2023 A Bonds only and the Authority does not make any representation with respect to such numbers or undertake any responsibility for their accuracy. The CUSIP numbers are subject to being changed after the issuance of the Series 2023 A Bonds as a result of various subsequent actions including, but not limited to, a refunding in whole or in part of the Series 2023 A Bonds.

NEW JERSEY TURNPIKE AUTHORITY

The Series 2023 A Bonds have not been registered under the Securities Act of 1933, as amended, and the Resolution has not been qualified under the Trust Indenture Act of 1939, as amended, in reliance upon certain exemptions contained in such Federal laws. In making an investment decision, investors must rely upon their own examination of the Series 2023 A Bonds and the security therefor, including an analysis of the risks involved. The Series 2023 A Bonds have not been recommended by any Federal or state securities commission or regulatory authority. The registration, qualification or exemption of the Series 2023 A Bonds in accordance with applicable provisions of securities laws of the various jurisdictions in which the Series 2023 A Bonds have been registered, qualified or exempted cannot be regarded as a recommendation thereof. Neither such jurisdictions nor any of their agencies have passed upon the merits of the Series 2023 A Bonds or the adequacy, accuracy or completeness of this Private Placement Memorandum. Any representation to the contrary may be a criminal offense.

References in this Private Placement Memorandum to statutes, laws, rules, regulations, resolutions, agreements, reports and documents do not purport to be comprehensive or definitive, and all such references are qualified in their entirety by reference to the particular document, the full text of which may contain qualifications of and exceptions to statements made herein. This Private Placement Memorandum is distributed in connection with the sale of the Series 2023 A Bonds referred to herein and may not be reproduced or used, in whole or in part, for any other purpose.

References to website addresses presented herein are for informational purposes only and may be in the form of a hyperlink solely for the reader's convenience. Unless specified otherwise, such websites and the information or links contained therein are not incorporated into, and are not part of, this Private Placement Memorandum.

The order and placement of materials in this Private Placement Memorandum, including the Appendices, are not to be deemed to be a determination of relevance, materiality or importance, and this Private Placement Memorandum, including the Appendices, must be considered in its entirety.

The information and expressions of opinion herein are subject to change without notice and neither the delivery of this Private Placement Memorandum nor any sale made hereunder shall, under any circumstance, create any implication that there has been no change in the affairs of the Authority since the date hereof.

Certain statements included or incorporated by reference in this Private Placement Memorandum constitute projections or estimates of future events, generally known as forward-looking statements. These statements are generally identifiable by the terminology used such as "anticipate" "plan," "expect," "estimate," "budget" or other similar words. The achievement of certain results or other expectations contained in such forward-looking statements involves known and unknown risks, uncertainties and other factors which may cause actual results, performance or achievements to be materially different from any future results, performance or achievements described in or expressed or implied by such forward-looking statements. Other than as may be required by law, the Authority does not plan to issue any updates or revisions to any such forward-looking statements if or when its expectations are realized or not realized, or when the events, conditions or circumstances on which such statements are based, occur.

TABLE OF CONTENTS

PRIVATE PLACEMENT MEMORANDUM

of the

NEW JERSEY TURNPIKE AUTHORITY

relating to

$107,305,000
Turnpike Revenue Bonds,
Series 2023 A

INTRODUCTION

This Private Placement Memorandum has been prepared to provide information relating to the issuance by the New Jersey Turnpike Authority (the "Authority") of its $107,305,000 Turnpike Revenue Bonds, Series 2023 A (the "Series 2023 A Bonds"). The Bank of New York Mellon, Woodland Park, New Jersey, serves as Trustee, Paying Agent and Registrar (the "Trustee", "Registrar" and "Paying Agent") for the Series 2023 A Bonds.

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" and, together with the Turnpike, the "Turnpike System"). 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. See "THE AUTHORITY" herein.

The Series 2023 A Bonds were issued by Authority on August 30, 2023 under and pursuant to the Act and the Turnpike Revenue Bond Resolution adopted by the Authority on August 20, 1991, as amended, restated and supplemented (the "General Bond Resolution"), including as supplemented by the Series 2023 Turnpike Revenue Refunding Bond Resolution adopted by the Authority on July 25, 2023 (the "Series 2023 Resolution"), and a Certificate of Determination, dated August 16, 2023, executed by the Executive Director of the Authority (the "Certificate of Determination" and, together with the General Bond Resolution and the Series 2023 Resolution, the "Resolution"). The Series 2023 A Bonds and any other Outstanding Bonds (as hereinafter defined) under the Resolution are referred to herein as the "Bonds". All capitalized terms used herein and not otherwise defined in this Private Placement Memorandum will have the meanings ascribed to them in the Resolution. See "APPENDIX D – SUMMARY OF GENERAL BOND RESOLUTION AND CERTAIN DEFINITIONS" and "APPENDIX E – COPY OF THE CERTIFICATE OF DETERMINATION" attached to this Private Placement Memorandum.

The Series 2023 A Bonds are 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 Resolution from time to time, and the Authority's reimbursement and payment obligations under certain Credit Facilities and Qualified Swaps. See "SECURITY FOR THE BONDS" herein.

On August 30, 2023, the Authority issued and delivered the Series 2023 A Bonds to Barclays Capital Inc. (the "Purchaser") in exchange for a portion of the Authority's then outstanding Turnpike Revenue Bonds, Series 2020 C (Federally Taxable) in the aggregate principal amount of $135,230,000 (the "Refunded Series 2020 C Bonds"), which were owned by the Purchaser and delivered by the Purchaser to the Authority. Simultaneously with the issuance and delivery of the Series 2023 A Bonds, the Authority caused the Refunded Series 2020 C Bonds to be canceled and extinguished and, as a result, the Refunded Series 2020 C Bonds are no longer Outstanding under the Resolution. See "THE SERIES 2023 A BONDS" and "THE REFUNDING PLAN" herein.

The Authority and the Purchaser agreed to exchange the Series 2023 A Bonds for the Refunded Series 2020 C Bonds pursuant to and in accordance with the provisions a Bondholder Agreement, dated August 16, 2023, by and between the Authority and the Purchaser (the "Bondholder Agreement"), a copy of which is attached to this Private Placement Memorandum as Appendix F. **As provided in Section 9.10(a) of the Bondholder Agreement, any subsequent holder or beneficial owner of the Series 2023 A Bonds which has purchased all or a portion of the Series 2023 A Bonds from the Purchaser and which is not one of the Purchaser Entities (as defined in the Certificate of Determination) will not be entitled to any of the rights or benefits granted to the Purchaser under the Bondholder Agreement, including, without limitation, the mandatory purchase provisions relating to the Series 2023 A Bonds set forth in Section 2.03 of the Bondholder Agreement.** See "THE SERIES 2023 A BONDS – Mandatory Purchase" herein and APPENDIX F – "COPY OF THE BONDHOLDER AGREEMENT" attached hereto.

In May 2020, the Board of Commissioners of the Authority adopted a long-range capital plan for the Turnpike and the Parkway (the "2020 Long-Range Capital Plan") which contains projects geared toward enhancing safety, repairing degraded infrastructure and ensuring roadway resiliency and sustainability to enhance mobility. The costs of the projects listed in the 2020 Long-Range Capital Plan were originally estimated at $24 billion. The Authority anticipates adopting a series of 5-year rolling capital improvement programs, including the 2023-2027 CIP (as defined below), which will include projects derived from the 2020 Long-Range Capital Plan.

The Authority has developed a capital improvement program (the "2023-2027 CIP") which includes projects identified in the 2020 Long-Range Capital Plan focused primarily on capacity enhancements on both the Turnpike and the Parkway, bridge preservation and security, and drainage, roadway lighting and other improvements, including non-roadway technology improvements. The 2023-2027 CIP has a rolling five-year total spending plan of $4,709,210,000 with an average annual spending of $942,000,000. As of the date of this Private Placement Memorandum, approximately 15% of the amounts budgeted for the 2023-2027 CIP have been spent or committed. See "THE AUTHORITY – Capital Improvement Programs" herein.

In April 2019, the Authority adopted a capital improvement program (the "2019 CIP") which consists of the design, supervision and construction of multiple capital improvement projects on both the Turnpike and the Parkway. The significant projects that are part of the 2019 CIP include several bridge deck improvements on both roadways, shoulder expansion and reconstruction on a portion of the Parkway, the replacement of the hybrid changeable message signs on the Turnpike, the rehabilitation of major bridges crossing the Passaic River on both the Turnpike and the Parkway, and various improvements to service areas on both the Turnpike and the Parkway. As of the date of this Private Placement Memorandum, approximately 96% of the amounts budgeted for the 2019 CIP have been spent or committed. See "THE AUTHORITY – Capital Improvement Programs" herein.

In October 2008, the Authority adopted a $7,000,000,000 capital improvement program (the "2008 CIP"), which includes numerous projects focused on major capacity and other roadway improvements to both the Turnpike and the Parkway, bridge construction and improvements, interchange improvements and other facilities improvements. As of the date of this Private Placement Memorandum, the 2008 CIP is approximately 99% completed and 99% of the amounts budgeted for the projects that are part of the 2008 CIP have been spent or committed. See "THE AUTHORITY – Capital Improvement Programs" herein.

Effective as of September 13, 2020, the Authority increased toll rates by 36% on the Turnpike and 27% on the Parkway, which were the first toll increases on the Turnpike or the Parkway since 2012. The Authority's resolution approving those toll increases also contains an annual indexing provision providing that, commencing on January 1, 2022 and continuing annually thereafter, the tolls on the Turnpike and the

Parkway shall be further increased in an amount to be determined annually, provided that any such increase shall not exceed three percent (3%) per year. Accordingly, the toll rates on the Turnpike and the Parkway were increased by 3% on January 1, 2022 and by an additional 3% on January 1, 2023. The increased toll rates that became effective on the Turnpike and the Parkway on September 13, 2020, January 1, 2022 and January 1, 2023, together with the annual indexing provision, are designed to provide the Authority with sufficient Net Revenues to permit the Authority to issue additional Bonds under the Resolution to fund the projects identified in the 2020 Long-Range Capital Plan. The projected toll revenues in the New Jersey Turnpike System 2023 Traffic and Toll Revenue Forecast Study of the Traffic Engineer included in Appendix B to this Private Placement Memorandum (the "2023 Study"), the Authority's Long-Range Financial Plan (through 2028) set forth in the Authority's 2023 Annual Budget and the table of Projected Revenues, Expenditures and Debt Service Coverage on page [73] of this Private Placement Memorandum assume that, commencing on January 1, 2024, the tolls on the Turnpike and the Parkway will be increased annually by 3% pursuant to the annual indexing provision of the above-mentioned resolution. See "SECURITY FOR THE BONDS – Toll Covenant", "THE AUTHORITY – Certain Powers", "THE AUTHORITY – Capital Improvement Programs" and "THE AUTHORITY – Existing Toll Rates and Schedule" herein and APPENDIX B – "2023 TRAFFIC AND TOLL REVENUE FORECAST STUDY" attached to this Private Placement Memorandum.

The Series 2023 A Bonds were issued in fully registered form without coupons and registered in the name of Cede & Co., as nominee of The Depository Trust Company ("DTC"). DTC acts as securities depository for the Series 2023 A Bonds, as more fully described herein. Individual purchases of the Series 2023 A Bonds can be made in book-entry form only, in denominations of $100,000 or any integral multiple of $5,000 in excess thereof. Purchasers of the Series 2023 A Bonds will not receive certificates representing their interest therein. See "BOOK-ENTRY ONLY SYSTEM" herein.

For a complete description of the Series 2023 A Bonds, including the redemption provisions thereof, see "THE SERIES 2023 A BONDS" herein.

THE SERIES 2023 A BONDS

General

The Series 2023 A Bonds are dated August 30, 2023 and bear interest from such date, payable on January 1 and July 1 of each year, commencing on January 1, 2024 (each, an "Interest Payment Date"), until their maturity date or prior redemption. Interest on the Series 2023 A Bonds is calculated on the basis of a 360-day year consisting of twelve (12) 30-day months. The Series 2023 A Bonds bear interest at the interest rates per annum set forth on the inside cover page of this Private Placement Memorandum; provided, however, that during the Amortization Period (as defined in the Certificate of Determination), the Series 2023 A Bonds owned by the Purchaser Entities will bear interest at the rate of seven and one-half percent (7.50%) per annum.

The Series 2023 A Bonds mature on January 1 in each of the years and in the amounts shown on the inside front cover page of this Private Placement Memorandum. The Series 2023 A Bonds are subject to mandatory purchase and optional and mandatory redemption prior to maturity. See "THE SERIES 2023 A BONDS – Mandatory Purchase" and "THE SERIES 2032 A BONDS – Redemption Prior to Maturity" herein.

The Series 2023 A Bonds were issued and delivered in fully registered form only in denominations of $100,000 or any integral multiple of $5,000 in excess thereof (the "Authorized Denominations"), and registered in the name of Cede & Co., as nominee of DTC. DTC acts as securities depository for the Series 2023 A Bonds. So long as the Series 2023 A Bonds are held in DTC's book-entry only system, DTC (or a successor securities depository) or its nominee will be the registered owner of the Series 2023 A Bonds for all purposes of the Resolution, the Series 2023 A Bonds and this Private Placement Memorandum, and payments of principal and interest with respect to the Series 2023 A Bonds will be made solely through the facilities of DTC. See "BOOK-ENTRY ONLY SYSTEM" herein.

Principal of the Series 2023 A Bonds is payable upon surrender of the Series 2023 A Bonds at the corporate trust office of the Paying Agent. Interest on the Series 2023 A Bonds will be paid by check or draft mailed by the Paying Agent to the registered holders at their addresses as they appear in the registry books of the Trustee as of the regular record date, which shall be the fifteenth (15^{th}) day (whether or not a Business Day) of the calendar month next preceding an Interest Payment Date. Any interest not paid on an Interest Payment Date shall be paid to the persons in whose names Series 2023 A Bonds are registered as of a special record date established by notice mailed by or on behalf of the Authority not less than ten (10) days prior to such date to the persons in whose names Series 2023 A Bonds are registered at the close of business on the fifth day prior to such mailing.

The Series 2023 A Bonds are transferable in accordance with the provisions of the Resolution. The Trustee may charge an amount sufficient to reimburse it for any tax, fee or other governmental charge required to be paid in connection with any such transfer, registration, conversion or exchange.

The Resolution and all provisions thereof are incorporated by reference in the text of the Series 2023 A Bonds, and the Series 2023 A Bonds provide that each registered owner, beneficial owner, DTC Participant or Indirect Participant (as such terms are hereinafter defined) in DTC, by acceptance of a Series 2023 A Bond (including receipt of a book-entry credit evidencing an interest therein) assents to all of such provisions as an explicit and material portion of the consideration running to the Authority to induce it to issue such Series 2023 A Bond.

Mandatory Purchase

Upon the occurrence of a Mandatory Purchase Event (as defined in the Certificate of Determination), the Series 2023 A Bonds owned by the Purchaser Entities shall be subject to mandatory purchase by the Authority from the Purchaser Entities on the Mandatory Purchase Date (as defined in the Certificate of Determination) at a purchase price equal to 100% of the aggregate principal amount of such Series 2023 A Bonds Outstanding on the Mandatory Purchase Date multiplied by the percentage set forth on Schedule B attached to the Certificate of Determination for the Mandatory Purchase Date or, if the Mandatory Purchase Date shall not be a date set forth on such Schedule B, the date set forth on such Schedule B that is immediately prior to the Mandatory Purchase Date, plus accrued interest to the Mandatory Purchase Date (unless the Mandatory Purchase Date is an Interest Payment Date, in which case the purchase price shall not include accrued interest, which shall be paid in the normal course). Any Series 2023 A Bonds owned by the Purchaser Entities that are not purchased by the Authority on the Mandatory Purchase Date shall be subject to mandatory redemption as provided in the Resolution as described below. **Notwithstanding anything in the Resolution, including the Certificate of Determination, to the contrary, any Series 2023 A Bonds which are not owned by the Purchaser Entities shall not be subject to mandatory purchase by the Authority as described above and the Authority shall have no obligation to purchase any such Series 2023 A Bonds as described above.**

Redemption Prior to Maturity

Optional Redemption

The Series 2023 A Bonds are subject to optional redemption by the Authority, in whole or in part, on any date on or after July 1, 2033, at a Redemption Price equal to the principal amount of the Series 2023 A Bonds being redeemed, without premium, plus accrued interest to the redemption date.

Mandatory Redemption Upon Failure to Purchase

If all of the Outstanding Series 2023 A Bonds owned by the Purchaser Entities are not purchased on the Mandatory Purchase Date as provided in the Resolution, the Series 2023 A Bonds that are not purchased on the Mandatory Purchase Date shall be subject to mandatory redemption in the following amounts and on the following dates (each such date, a "Redemption Date"): (i) 50% of the aggregate principal amount of such Outstanding Series 2023 A Bonds that were not purchased on the Mandatory Purchase Date shall be subject to mandatory redemption by the Authority on the date that is one year after the commencement of the Amortization Period at a Redemption Price equal to 100% of the aggregate principal amount of such Series 2023 A Bonds to be redeemed multiplied by the percentage set forth on Schedule B attached to the Certificate of Determination for such Redemption Date or, if such Redemption Date shall not be a date set forth on such Schedule B, the date set forth on such Schedule B that is immediately prior to such Redemption Date, plus, in each case, accrued interest to such Redemption Date; and (ii) the entire remaining aggregate principal amount of such Outstanding Series 2023 A Bonds shall be subject to mandatory redemption by the Authority on the Amortization End Date (as defined in the Certificate of Determination) at a Redemption Price equal to 100% of the aggregate principal amount of such Outstanding Series 2023 A Bonds multiplied by the percentage set forth on Schedule B attached to the Certificate of Determination for such Redemption Date or, if such Redemption Date shall not be a date set forth on such Schedule B, the date set forth on such Schedule B that is immediately prior to such Redemption Date, plus, in each case, accrued interest to such Redemption Date.

Selection of Series 2023 A Bonds for Redemption

If less than all of the Series 2023 A Bonds are to be redeemed at the option of the Authority and paid prior to maturity, the specific maturity or maturities of the Series 2023 A Bonds to be redeemed shall be selected by the Authority, and then within each such maturity, (a) if the Series 2023 A Bonds are in book-entry form at the time of such redemption, the Paying Agent shall instruct DTC to instruct the DTC Participants to select the specific Series 2023 A Bonds within such maturity for redemption by lot among such Series 2023 A Bonds, and neither the Authority nor the Paying Agent shall have any responsibility to insure that DTC or its Participants properly select such Series 2023 A Bonds for redemption, and (b) if the Series 2023 A Bonds are not then in book-entry form at the time of such redemption, on each redemption date the Paying Agent shall select the specific Series 2023 A Bonds within such maturity for redemption by lot among such Series 2023 A Bonds.

In the case of a partial redemption of the Series 2023 A Bonds when Series 2023 A Bonds of denominations greater than the minimum applicable Authorized Denomination are then Outstanding, for all purposes in connection with such redemption, each principal amount equal to the minimum Authorized Denomination shall be treated as though it were a separate Series 2023 A Bond for purposes of selecting the specific Series 2023 A Bonds to be redeemed, provided that no Series 2023 A Bond shall be redeemed in part if the principal amount to be Outstanding following such partial redemption is not an applicable Authorized Denomination.

Notice of Redemption

In the event of any redemption of Series 2023 A Bonds, either in whole or in part, notice of such redemption shall be sent by first class mail mailed, postage prepaid, at least thirty (30) days, but not more than sixty (60) days prior to the redemption date to the registered owners of any Series 2023 A Bonds or portions of Series 2023 A Bonds to be redeemed at their registered addresses and to S&P Global Ratings, acting through Standard & Poor’s Financial Services LLC, and Moody’s Investors Service or their respective successors, if any, in the manner and under the terms and conditions provided in the Resolution. As long as DTC remains the sole registered owner of the Series 2023 A Bonds, notice of redemption shall be sent to DTC as provided in the Resolution. Such mailing shall not be a condition precedent to such redemption and failure to mail any such notice shall not affect the validity of the proceedings for the redemption of the Series 2023 A Bonds. Notice of redemption having been given as aforesaid, the Series 2023 A Bonds or portions thereof so called for redemption shall become due and payable at the applicable redemption price herein provided, and from and after the date so fixed for redemption, interest on the Series 2023 A Bonds or portions thereof so called for redemption shall cease to accrue and become payable. Any failure of DTC to advise any DTC Participant, or of any DTC Participant or Indirect Participant to notify the beneficial owner of any such notice and its content or effect will not affect the validity of the redemption of the Series 2023 A Bonds called for redemption or of any other action premised on such notice. See "BOOK-ENTRY ONLY SYSTEM" herein.

BOOK-ENTRY ONLY SYSTEM

The information in this section has been obtained from DTC. DTC will act as securities depository for the Series 2023 A Bonds. The Series 2023 A Bonds will be issued as fully-registered securities registered in the name of Cede & Co. (DTC's partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully registered certificate will be issued for each maturity and, if applicable, interest rate within a maturity of the Series 2023 A Bonds in the aggregate principal amount of each such maturity and, if applicable, interest rate within the Series 2023 A Bonds, and will be deposited with DTC.

DTC, the world's largest securities depository, is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments (from over 100 countries) that DTC's participants ("Direct Participants") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants"). DTC has Standard & Poor's rating of AA+. The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission.

Purchases of Series 2023 A Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Series 2023 A Bonds on DTC's records. The ownership interest of each actual purchaser of each Series 2023 A Bond ("Beneficial Owner") is in turn to be recorded on the Direct and Indirect Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct Participant or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the Series 2023 A Bonds are to be accomplished by entries made on the books of Direct Participants and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in Series 2023 A Bonds, except in the event that use of the book-entry system for the Series 2023 A Bonds is discontinued.

To facilitate subsequent transfers, all Series 2023 A Bonds deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of Series 2023 A Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not affect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Series 2023 A Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such Series 2023 A Bonds are credited, which may or may not be the Beneficial Owners. The Direct Participants and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial Owners of the Series 2023 A Bonds may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the Series 2023 A Bonds, such as tenders, defaults and proposed amendments to the Series 2023 A Bonds documents. For example, Beneficial Owners of the Series 2023 A Bonds may wish to ascertain that the nominee holding the Series 2023 A Bonds for their benefit has agreed to obtain and transmit notices to the Beneficial Owners. In the alternative, Beneficial Owners may wish to provide their names and addresses to the Trustee and request that copies of notices be provided directly to them.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to Series 2023 A Bonds unless authorized by a Direct Participant in accordance with DTC's Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the Authority as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts Series 2023 A Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Principal and interest payments on the Series 2023 A Bonds will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts upon DTC's receipt of funds and corresponding detail information from the Authority or the Trustee, on the payable date in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC, the Trustee, or the Authority, subject to any statutory or regulatory requirements as may be in effect from time to time. Principal and interest payments to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the Authority or the Trustee, disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of Direct and Indirect Participants.

DTC may discontinue providing its services as securities depository with respect to the Series 2023 A Bonds at any time by giving reasonable notice to the Authority or the Trustee. Under such circumstances, in the event that a successor securities depository is not obtained, Series 2023 A Bond certificates are required to be printed and delivered.

The Authority may decide to discontinue use of the system of book-entry only transfers through DTC (or a successor securities depository). In that event, Series 2023 A Bond certificates will be printed and delivered to DTC.

The information in this section concerning DTC and DTC's book-entry system has been obtained from sources that the Authority believes to be reliable, but the Authority takes no responsibility for the accuracy thereof.

NONE OF THE AUTHORITY, THE TRUSTEE OR THE PAYING AGENT WILL HAVE ANY RESPONSIBILITY OR OBLIGATION, EITHER SINGULARLY OR JOINTLY, TO DTC PARTICIPANTS, TO INDIRECT PARTICIPANTS, OR TO ANY BENEFICIAL OWNER WITH RESPECT TO (I) THE ACCURACY OF ANY RECORDS MAINTAINED BY DTC, ANY DTC

PARTICIPANT, OR ANY INDIRECT PARTICIPANT; (II) ANY NOTICE THAT IS PERMITTED OR REQUIRED TO BE GIVEN TO THE HOLDERS OF THE SERIES 2023 A BONDS UNDER THE RESOLUTION; (III) THE PAYMENT BY DTC OR ANY DTC PARTICIPANT OR INDIRECT PARTICIPANT OF ANY AMOUNT WITH RESPECT TO THE PRINCIPAL OR INTEREST DUE WITH RESPECT TO THE SERIES 2023 A BONDS; (IV) ANY CONSENT GIVEN OR OTHER ACTION TAKEN BY DTC AS THE HOLDER OF THE SERIES 2023 A BONDS; OR (V) ANY OTHER MATTER.

THE AUTHORITY CANNOT AND DOES NOT GIVE ANY ASSURANCES THAT DTC OR DIRECT PARTICIPANTS OR INDIRECT PARTICIPANTS OF DTC WILL DISTRIBUTE TO THE BENEFICIAL OWNERS OF THE SERIES 2023 A BONDS: (1) PAYMENTS OF PRINCIPAL OF OR INTEREST ON THE SERIES 2023 A BONDS; (2) CONFIRMATIONS OF THEIR OWNERSHIP INTERESTS IN THE SERIES 2023 A BONDS; OR (3) NOTICES SENT TO DTC OR CEDE & CO., ITS NOMINEE, AS THE REGISTERED OWNER OF THE SERIES 2023 A BONDS, OR THAT THEY WILL DO SO ON A TIMELY BASIS. THE AUTHORITY CANNOT AND DOES NOT GIVE ANY ASSURANCES THAT DTC, DIRECT PARTICIPANTS OR INDIRECT PARTICIPANTS WILL SERVE AND ACT IN THE MANNER DESCRIBED IN THIS PRIVATE PLACEMENT MEMORANDUM.

THE INFORMATION CONTAINED IN THIS PRIVATE PLACEMENT MEMORANDUM CONCERNING DTC AND ITS BOOK-ENTRY SYSTEM HAS BEEN OBTAINED FROM DTC, AND THE AUTHORITY MAKES NO REPRESENTATIONS AS TO THE COMPLETENESS OR THE ACCURACY OF SUCH INFORMATION OR AS TO THE ABSENCE OF MATERIAL ADVERSE CHANGES IN SUCH INFORMATION SUBSEQUENT TO THE DATE HEREOF.

SECURITY FOR THE BONDS

General

The Series 2023 A Bonds will be entitled to the benefit and security of the Resolution.

The Series 2023 A Bonds will be on parity as to payment and security with all other currently Outstanding Bonds and any other Bonds hereafter issued under the Resolution, and with the Authority's reimbursement and payment obligations under certain Credit Facilities and Qualified Swaps, and will be secured by a lien on and pledge of Pledged Revenues under the Resolution.

Pledge of Revenues and Funds

The Resolution pledges to the payment of all Bonds (including the Series 2023 A Bonds) and any provider under a Credit Facility and a Qualified Swap Agreement, (i) the proceeds of the sale of the Bonds (including the Series 2023 A Bonds), (ii) all Pledged Revenues, and (iii) all amounts on deposit in Funds established by the Resolution (other than amounts derived from any Federal or State grants and certain other grants and except as otherwise provided in the Resolution). The pledge and lien created may be modified by a Series Resolution or Supplemental Resolution to provide for a pledge of amounts on deposit in certain funds and accounts, which amounts are provided from proceeds of Bonds issued pursuant to such Series Resolution or Supplemental Resolution, superior to the pledge of such funds and accounts and such proceeds for other Bonds. For purposes of the Resolution, Pledged Revenues include (i) all tolls, revenues, fees, rents, charges and other income and receipts derived from the operation of the Turnpike System; (ii) the proceeds of business interruption insurance relating to the Turnpike System and other insurance which insures against loss of Turnpike Revenues; (iii) amounts deposited in the Revenue Fund derived from amounts in the Construction Fund, Special Project Reserve Fund or General Reserve Fund; (iv) other revenues of the Authority, including, but not limited to, payments under Qualified Swap Agreements to the extent specifically pledged pursuant to one or more Series Resolutions, and the cash subsidy payments to be received by the Authority from the United States Treasury in connection with the interest payable on the Build America Bonds (collectively, the "Subsidy Payments"); and (v) investment income on amounts in the funds and accounts held under the Resolution and deposited in the Revenue Fund.

Toll Covenant

The Authority has covenanted in the General Bond Resolution to fix, charge and collect tolls for the use of the Turnpike System in amounts so that, in each calendar year, the Net Revenues shall at least equal the Net Revenue Requirement for such year.

For purposes of the Resolution, Net Revenues (calculated for any period of time) are defined as Pledged Revenues for such period less Operating Expenses for such period, and the Net Revenue Requirement (calculated for any period of time) 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 sum of the Aggregate Debt Service for such period (excluding, for purposes of clause (ii) only, any payments due and payable by the Authority under any Qualified Swap Agreement upon an early termination thereof). Aggregate Debt Service is, for any calendar year, the sum of interest (net of any capitalized interest) and Principal Installments (which include Sinking Fund Installments) for the Bonds and all payments due by the Authority under Qualified Swap Agreements for such period.

On or before December 1 of each year, the Authority is required to review its financial condition in order to estimate and determine whether the Net Revenue Requirement for such year and for the following year can be satisfied. The Authority is required to file with the Trustee on or before December 20 of each year a certified copy of its resolution making such determination, together with a statement of the actual and estimated Pledged Revenues, Operating Expenses, Aggregate Debt Service, Maintenance Reserve Payments and Special Project Reserve Payments and the other estimates and assumptions upon which such determination was based, which must take into consideration the cost of completion of any uncompleted Projects and the issuance of future Series of Bonds, if necessary, to finance the completion of such Projects. If the Authority determines that Pledged Revenues may be insufficient, the Authority is required to (i) cause its Traffic Engineer to make a study for the purpose of recommending a schedule of tolls which, in the opinion of the Traffic Engineer, will cause sufficient Pledged Revenues to be collected in the following year to comply with the toll covenant and will provide additional Pledged Revenues to be collected in such following year and later years to eliminate any deficiency at the earliest practicable time, and (ii) as promptly as practicable but no later than the next April 1, adopt and place in effect the schedule of tolls recommended by the Traffic Engineer.

Failure to comply with the toll covenant described above will not constitute an Event of Default under the Resolution if the Traffic Engineer is of the opinion that a toll schedule that will comply with such toll covenant is impracticable at that time, and the Authority establishes a schedule of tolls which is recommended by the Traffic Engineer to comply as nearly as practicable with the toll covenant.

Pursuant to the Act, whenever the Authority desires to increase the tolls on the Turnpike and/or the Parkway, it is required to hold a public hearing on such toll increase at least 45 days prior to the date on which such toll increase is proposed to become effective. In addition, the resolution or other action of the Authority authorizing such toll increase cannot be adopted or otherwise made effective without the prior written approval of the Governor and the Treasurer of the State and the Governor has the right to veto such resolution or other action of the Authority within a 10-day period (exclusive of Saturdays, Sundays and public holidays) after the minutes of the Authority meeting at which such resolution was adopted or other action taken are delivered to the Governor. The Act further provides that the powers conferred upon the Governor and the Treasurer of the State described above shall be exercised with due regard for the rights of the holders of bonds of the Authority at any time outstanding, and nothing in, or done pursuant to, the Act shall in any way limit, restrict or alter the obligation or powers of the Authority or any representative or officer of the Authority to carry out and perform in every detail each and every covenant, agreement or contract at any time made or entered into by or on behalf of the Authority with respect to its bonds or for the benefit, protection or security of the holders thereof. See “THE AUTHORITY – Certain Powers” herein.

The Authority has increased tolls on the Turnpike ten times since its opening in 1951. The effective dates of those increases were March 23, 1975, April 1, 1980, March 17, 1991, September 30, 2000, January 1, 2003, December 1, 2008, January 1, 2012, September 13, 2020, January 1, 2022 and January 1, 2023. Tolls on the Parkway have increased six times since its opening in 1950. The effective dates of those increases were April 15, 1989, December 1, 2008, January 1, 2012, September 13, 2020, January 1, 2022 and January 1, 2023. The Authority’s resolution approving the toll increases on the Turnpike and the Parkway that became effective on September 13, 2020 also contains an annual indexing provision providing that, commencing on January 1, 2022 and continuing annually on each January 1 thereafter, the tolls on the Turnpike and the Parkway shall be further increased in an amount to be determined annually, provided that any such increase shall not exceed three percent (3%) per year. See “THE AUTHORITY – Certain Powers” and “THE AUTHORITY – Existing Toll Rates and Schedule” herein.

As permitted by the Resolution, the Authority may withdraw amounts from the General Reserve Fund and deposit such amounts in the Revenue Fund in order to comply with the toll covenant described above. While the Authority has done this from time to time in the past, it has not been done since fiscal year 2008.

Flow of Funds

The General 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 General Bond Resolution. The following chart illustrates and generally describes the provisions of the General Bond Resolution governing the deposit and application of the Pledged Revenues to the various Funds created and established under the General Bond Resolution.

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Pledged Revenues

Revenue Fund

The Authority covenants in the General Bond Resolution (a) to deposit promptly all Pledged Revenues to the credit of the Revenue Fund, which is held by the Authority, (b) to pay reasonable and necessary Operating Expenses out of the Revenue Fund and retain in the Revenue Fund reasonable and necessary amounts for working capital and reserves for Operating Expenses, including expenses which do not recur annually, provided that the total amount of such working capital and reserves held at any time shall not exceed ten percent (10%) of the amount appropriated by the Authority's Annual Budget for Operating Expenses for the then current year, and (c) to apply on or before the twentieth (20th) day of each month the balance of moneys in the Revenue Fund in the following amounts and order of priority:

Debt Service Fund

(1) to the Debt Service Fund, which is held by the Trustee, the amount necessary so that the balance in such Fund shall equal the Accrued Debt Service as of the date of such deposit;

Debt Reserve Fund

(2) to the Debt Reserve Fund, which is held by the Trustee, the amount, if any, necessary so that the balance in such Fund shall equal the Debt Reserve Requirement, provided that any deficiency in the Debt Reserve Fund shall be fully replenished within one year from the date the balance in the Debt Reserve Fund first falls below the Debt Reserve Requirement;

Charges Fund

(3) to the Charges Fund, which is held by the Authority, the amount necessary so that the balance in such Fund shall equal the sum of all amounts accrued or due and payable by the Authority as fees and charges under any Standby Agreement or Remarketing Agreement or to any Tender Agent during such month, but only to the extent that the Authority has determined that such amounts shall not be paid as Operating Expenses;

Maintenance Reserve Fund

(4) to the Maintenance Reserve Fund, which is held by the Authority, an amount equal to one-twelfth of the amount provided in the Annual Budget for Maintenance Reserve Payments during the then current calendar year, provided that if any such monthly allocation to such Fund shall be less than the required amount, the deficiency shall be included in the next succeeding monthly deposit to such Fund;

Special Project Reserve Fund

(5) to the Special Project Reserve Fund, which is held by the Authority, an amount equal to one-twelfth of the amount provided in the Annual Budget for Special Project Reserve Payments during the then current calendar year; and

General Reserve Fund

(6) to the General Reserve Fund, which is held by the Authority, the balance remaining in the Revenue Fund after making all of the above deposits, to be used for any corporate purpose of the Authority. See "SECURITY FOR THE BONDS – Agreements with the State," "Feeder Road Payments" and "Potential Future Authority Payments for Non-Turnpike System Purposes" herein.

Debt Reserve Fund

The Resolution establishes a Debt Reserve Fund for all Bonds issued thereunder, including the Series 2023 A Bonds, and for the benefit of the provider of any Credit Facility or any Qualified Swap Agreement. There is required to be on deposit in the Debt Reserve Fund an amount equal to the Debt Reserve Requirement for all Bonds then Outstanding under the Resolution (including the Series 2023 A Bonds), provided that any deficiency in the Debt Reserve Fund shall be fully replenished within one year from the date the balance in the Debt Reserve Fund first falls below the Debt Reserve Requirement.

For purposes of the Resolution, the Debt Reserve Requirement is equal to the maximum amount of interest accruing on Bonds Outstanding in the then current or any future calendar year (including, for these purposes, the incremental accreted value for any such year for capital appreciation Bonds and interest calculated at the fixed rate established in the Resolution for any Bonds bearing interest at a variable rate). The Debt Reserve Requirement is calculated without consideration of any Subsidy Payments the Authority may receive from the United States Treasury in connection with the Build America Bonds. In calculating the Debt Reserve Requirement, interest on variable rate Bonds swapped to a fixed rate is assumed to be paid at the applicable fixed swap rate and the spreads over the variable rate index used to determine the interest rate on such variable rate Bonds are not included in the calculation of the interest accruing on such Bonds. In addition, in calculating the Debt Reserve Requirement, interest on the $5,000,000 unhedged portion of the Authority's Outstanding Turnpike Revenue Bonds, Series 2015 A, is calculated at the Maximum Rate under the Resolution, which is 12%.

As a result of the issuance of the Series 2023 A Bonds, the Debt Reserve Requirement is currently $590,839,361. The amounts currently on deposit in the Debt Reserve Fund exceed the Debt Reserve Requirement resulting from the issuance of the Series 2023 A Bonds. Accordingly, no deposit to the Debt Reserve Fund was required to be made in connection with the issuance of the Series 2023 A Bonds. The entire amount of the Debt Reserve Requirement has been funded with proceeds of various Authority Bond issuances and other available funds of the Authority.

Agreements with the State

The Authority and the State have three separate agreements in effect, one dated as of March 27, 2000 (the "2000 State Agreement"), another dated June 22, 2021 (the "2021 State Agreement") and one dated as of January 1, 2023 (the "2023 State Agreement" and, collectively with the 2000 State Agreement and the 2021 State Agreement, the "State Agreements") pursuant to which the Authority has agreed to make payments to the State. The obligation of the Authority to make any such payments under the State Agreements is limited to the amounts on deposit in the General Reserve Fund which are legally available to be used by the Authority for such purposes and is subject and subordinate in all respects to the pledge created under the Resolution.

Pursuant to the 2000 State Agreement, the Authority has agreed to make annual payments to the State in the amount of $22,000,000 until all of the obligations of the New Jersey Transportation Trust Fund Authority as set forth in the New Jersey Transportation Trust Fund Authority Act, constituting Chapter 108 of the Laws of New Jersey of 1995, are paid or such payment has been provided for. Payments made by the Authority pursuant to the 2000 State Agreement are to be used by the State to provide for the development of State transportation projects.

Pursuant to the 2021 State Agreement, the Authority has agreed to make quarterly payments to the State which are required to be used to support the role of New Jersey Transit Corporation ("NJ Transit") in providing continuing improvements to the State's integrated transportation network to the benefit of the public served by its various transportation components. The 2021 State Agreement obligates the Authority to make payments to the State, commencing on July 1, 2021, in the amount of $175,000,000 for the six months ending December 31, 2021, $548,000,000 in year 2022, $605,500,000 in year 2023, $472,500,000 in year 2024, $487,500,000 in year 2025, $502,500,000 in year 2026, $517,500,000 in year 2027 and

$262,500,000 for the six months ending June 30, 2028. The payments made by the Authority under the 2021 State Agreement are inclusive of all payments required to be made by the Authority under a predecessor funding agreement between the Authority and the State to fund a portion of the costs of construction of a new Portal North Bridge to be undertaken by NJ Transit. The 2021 State Agreement provides that, commencing on July 1, 2028, the Authority shall continue to make quarterly payments in the amount of $131,250,000 to the State until such time as NJ Transit has fully eliminated its capital budget to operating budget transfer and can maintain financial stability with a lesser or zero amount.

Pursuant to the 2023 State Agreement, beginning on or about January 1, 2023, the Authority has agreed, subject to the provisions of the 2023 State Agreement, to make monthly payments to the State in the amount of $1,666,667 for the purpose of supporting the operations of Gateway Development Commission, a bi-state commission created by the States of New York and New Jersey (the "GDC"), which is responsible for, among other projects, the planning, designing, financing, development and management of the rehabilitation of the existing train tunnel that runs under the Hudson River from New Jersey to Penn Station in New York City, as well as, the building of a new rail tunnel to provide redundancy and avoid delays and shutdowns on both Amtrak and New Jersey Transit rail service (the "Hudson Tunnel Project"). See "SECURITY FOR THE BONDS – Hudson Tunnel Project" herein. The obligation of the Authority to make such monthly payments to the State shall continue until such time as the construction of the Hudson Tunnel Project is complete. Pursuant to the 2023 State Agreement, upon completion of construction of the Hudson Tunnel Project in or about 2033 and acceptance of the Hudson Tunnel Project by the GDC, the Authority has agreed, subject to the provisions of the 2023 State Agreement, to commence making payments to the State on a quarterly basis (i.e., March 31, June 30, September 30 and December 31 of each year) in an amount not to exceed $124 million annually, to be utilized for the payment of the State's share of the costs of the Hudson Tunnel Project. If the amount of the State's share of the costs of the Hudson Tunnel Project increases due to an increase in costs of the Hudson Tunnel Project, the Authority shall, by January 10 of each year, certify to the Treasurer of the State the amount necessary to pay for the State's share of the increased costs of the Hudson Tunnel Project, and the Treasurer of the State shall submit a request for an appropriation of the amount necessary to pay for the State's share of the increased costs of the Hudson Tunnel Project to the Governor to include a proposed appropriation for such increased costs of the Hudson Tunnel Project in the Governor's Budget Message to the Legislature. The Authority's obligation under the 2023 State Agreement to make monthly payments to the State in the amount of $1,666,667 for the purpose of supporting the operations of GDC terminates upon the earlier of (i) completion of construction of the Hudson Tunnel Project, or (ii) abandonment of construction of the Hudson Tunnel Project. The Authority's obligation under the 2023 State Agreement to make quarterly payments to the State in an amount not to exceed $124 million annually terminates upon the earlier of (i) satisfaction in full of the State's share of the costs of the Hudson Tunnel Project, or (ii) assumption by another of the State's share of the costs of the Hudson Tunnel Project.

There can be no assurance that the Authority will not be requested to modify, accelerate and/or make additional payments to the State before or after the expiration of the State Agreements. Any such payments to the State would only be payable from legally available amounts on deposit in the General Reserve Fund and will be subject and subordinate in all respects to the pledge created under the Resolution.

As of the date of this Private Placement Memorandum, the Authority has made all required payments under the State Agreements.

Hudson Tunnel Project

The State of New Jersey along with the State of New York, the Port Authority of New York and New Jersey and Amtrak are in the process of making application to the United States Department of Transportation for a Railroad Rehabilitation and Improvement Financing (RRIF) direct loan from the Federal government to fund the costs of the Hudson Tunnel Project, which consists of the rehabilitation of the existing train tunnel that runs under the Hudson River from New Jersey to Penn Station in New York

City, as well as, the building of a new rail tunnel to provide redundancy and avoid delays and shutdowns on both Amtrak and New Jersey Transit rail service. The Hudson Tunnel Project is being coordinated and administered by the GDC.

The current estimated cost of the Hudson Tunnel Project is $16.1 billion of which 52.9% ($8.52 billion) is expected to be funded from the RRIF loan, with the State of New Jersey's share of the RRIF loan (25.45%) being $2.169 billion. The construction period for the project is expected to be 10 years from the time of construction commencement. The RRIF loan is projected to be at a 4.5% interest rate. The loan has not yet been approved by the United States Department of Transportation.

The Authority and the State of New Jersey have entered into the 2023 State Agreement which obligates the Authority to make payments to the State to fund the State's share of the costs of the Hudson Tunnel Project. See "SECURITY FOR THE BONDS – Agreements with the State" herein.

Feeder Road Payments

The Authority previously entered into an agreement with the New Jersey Department of Transportation ("DOT" or "NJDOT") (the "Feeder Road Maintenance Agreement") whereby the Authority made certain payments (the "Feeder Road O&M Payments") to the DOT to reimburse the DOT for the costs of reconstruction, maintenance and repair of certain roadways which the DOT owns and operates and which constitute "feeder roads" to the Turnpike System for purposes of the Act and the Resolution. Pursuant to the Feeder Road Maintenance Agreement, the DOT agreed to maintain the feeder roads in a state of good repair sufficient to support the safe and efficient access and egress onto the Turnpike and the Parkway. The term of the Feeder Road Maintenance Agreement commenced on July 1, 2016 and ended on June 30, 2023. Pursuant to the Feeder Road Maintenance Agreement, the Authority made Feeder Road O&M Payments in the aggregate amounts of $4,000,000 for the six months ending December 31, 2016, $6,500,000 in year 2017, $4,500,000 in year 2018, $3,500,000 in year 2019, $2,500,000 for each of the years 2020 through 2022 and $1,250,000 for the six months ending June 30, 2023. The obligation of the Authority to make the Feeder Road O&M Payments to the DOT was limited to the amounts on deposit in the General Reserve Fund which were legally available to be used by the Authority for such purposes and was subject and subordinate in all respects to the pledge created under the Resolution.

Although the Feeder Road Maintenance Agreement terminated on June 30, 2023 in accordance with its terms and the Authority currently has no obligation to make any further Feeder Road O&M Payments to the DOT, the Authority expects that it will be required to make additional Feeder Road O&M Payments to the DOT in the future and that the obligation of the Authority to make such future Feeder Road O&M Payments will be limited to the amounts on deposit in the General Reserve Fund which are legally available to be used by the Authority for such purposes and will be subject and subordinate in all respects to the pledge created under the Resolution.

Potential Future Authority Payments for Non-Turnpike System Purposes

There can be no assurance that the Authority will not be requested to make future additional payments to the State in connection with State transportation purposes. Any such payments to the State would be paid from legally available amounts on deposit in the General Reserve Fund and would be subject and subordinate in all respects to the pledge created under the Resolution.

Additional Indebtedness

The Authority may issue Non-Refunding Bonds and Refunding Bonds under the General Bond Resolution on parity with Outstanding Bonds and the Authority's obligations under any Qualified Swap Agreement and Credit Facility upon satisfaction of the requirements described below and in Appendix D hereto under the captions "Issuance of Non-Refunding Bonds" and "Issuance of Refunding Bonds".

Issuance of Non-Refunding Bonds

One or more Series of Non-Refunding Bonds may be issued for the purpose of (i) paying the Costs of Construction of a Project, and (ii) raising funds to complete any Project for which Non-Refunding Bonds were issued pursuant to clause (i) above, subject to the following conditions and tests, among others:

(1) The Net Revenues for any period of twelve (12) consecutive calendar months (reflecting any adjustment in toll rates made at any time during such period as if such toll rates were effective since the beginning of such period) out of the preceding twenty-four (24) calendar months equal or exceed the Net Revenue Requirement for such twelve (12) months without regard to the Bonds to be issued;

(2) The estimated Net Revenues for the then current and each future calendar year to and including the fifth full calendar year after the estimated date when the Project will be placed in service equal or exceed the Net Revenue Requirement for each such year and Net Revenues in the fifth such calendar year equal or exceed future maximum Aggregate Debt Service in any year; and

(3) There will be deposited (i) in the Debt Reserve Fund the amount, if any, necessary so that the balance in such fund equals the Debt Reserve Requirement, calculated immediately after delivery of such Non-Refunding Bonds, (ii) in any other Fund the amount required by the Resolution, and (iii) in the Construction Fund for the Project specified by the applicable Series Resolution the remaining balance.

For the purposes of the above tests, the estimated Net Revenues are to be based on estimates by the Traffic Engineer of Turnpike Revenues and estimates by the Consulting Engineer of Operating Expenses and are to give effect to the construction of the Project for which such Bonds are being issued and any other uncompleted Project. The estimates of the Traffic Engineer are to reflect the effect of the construction, improvement or acquisition of any highway or other facility which any Federal, State or other agency is then projecting or planning and which, in its opinion, may be materially competitive with any part of the Turnpike System.

Issuance of Refunding Bonds

One or more Series of Refunding Bonds may be issued to refund (i) any or all Outstanding Bonds of one or more Series or maturities within a Series or Bonds within a maturity, or (ii) any Variable Rate Debt, Commercial Paper or Subordinated Indebtedness.

Bonds may be issued to refund Outstanding Bonds only if, among other conditions, (i) either the Authority meets the tests described above under "Issuance of Non-Refunding Bonds" or Aggregate Debt Service is not increased for any calendar year as a result of such refunding, and (ii) there shall be in effect a Qualified Swap with respect to the Bonds to be refunded and such Qualified Swap shall be terminated upon the date such Refunding Bonds are issued, and moneys in an amount sufficient to make the payment, if any, due by the Authority under such Qualified Swap upon such termination are deposited with the Trustee.

The issuance of Bonds to refund Variable Rate Debt, Commercial Paper or Subordinated Indebtedness is subject to substantially the same conditions and tests referred to above under "Issuance of Non-Refunding Bonds".

The Series 2023 Resolution authorizes, among other things, the issuance of an amount not exceeding $2,000,000,000 of Refunding Bonds in one or more Series to refund all or a portion of the Authority's Outstanding Turnpike Revenue Bonds, Series 2012 A, Series 2013 F, Series 2014A, Series 2014 C, Series 2015 E, Series 2016 A, Series 2017 A, Series 2017 B, Series 2017 E, Series 2017 F, Series 2017 G, Series 2020 B, Series 2020 C and Series 2021 B. On August 30, 2023, the Authority issued and delivered the Series 2023 A Bonds to the Purchaser in exchange for the Refunded Series 2020 C Bonds, which were owned by the Purchaser and delivered by the Purchaser to the Authority. Simultaneously with the issuance and delivery of the Series 2023 A Bonds, the Authority caused the Refunded Series 2020 C Bonds to be canceled and extinguished and, as a result, the Refunded Series 2020 C Bonds are no longer Outstanding under the Resolution. The Series 2023 A Bonds are the first Series of Refunding Bonds issued by the Authority pursuant to the Series 2023 Resolution.

The remaining Refunding Bonds authorized by the Series 2023 Resolution may be issued by the Authority at any time in the future depending upon market conditions and other relevant factors.

The Authority and Barclays Capital Inc. ("Barclays") have entered a Forward Delivery Direct Bond Purchase Agreement, dated December 17, 2021 (the "Series 2024 A Purchase Agreement"), pursuant to which the Authority and Barclays have agreed that, assuming certain conditions to closing set forth in the Series 2024 A Purchase Agreement are satisfied, on July 1, 2024 the Authority will issue and sell to Barclays and Barclays will purchase from the Authority, all, but not less than all, of the $849,000,000 aggregate principal amount of the Authority's Turnpike Revenue Bonds, Series 2024 A (the "Series 2024 A Bonds"). The Series 2024 A Bonds will be issued under and pursuant to the Act and the General Bond Resolution, as supplemented by the Series 2020 Turnpike Revenue Bond Resolution adopted by the Authority on January 28, 2020 and a Certificate of Determination to be executed by the Executive Director of the Authority prior to the issuance of the Series 2024 A Bonds. The Series 2024 A Bonds will be issued by the Authority for the purpose of providing sufficient moneys to pay the principal of a portion of the Authority's Outstanding Turnpike Revenue Bonds, Series 2014 A, which will be refunded and redeemed by the Authority on July 1, 2024. If issued by the Authority, the Series 2024 A Bonds will either bear interest at a floating rate determined weekly or at fixed interest rates to maturity. See "INTEREST RATE SWAP AGREEMENTS – Potential Series 2024 A Swap Agreement" herein.

Subordinated Indebtedness

The Authority is also authorized to incur Subordinated Indebtedness under the General Bond Resolution. Such Subordinated Indebtedness is a special and limited obligation of the Authority, subject, subordinated and junior in all respects to the lien and pledge created by the Resolution in favor of all Bonds, certain Credit Facilities and Qualified Swaps. Subordinated Indebtedness is payable under the Resolution solely from amounts on deposit in the General Reserve Fund established under the Resolution that may be available from time to time to pay principal of and/or interest on Subordinated Indebtedness.

INTEREST RATE SWAP AGREEMENTS

Authority Payment Obligations under Qualified Swap Agreements

The Authority's respective fixed and termination payment obligations under its current Qualified Swap Agreements described below are secured by the pledge under the Resolution and are payable from amounts deposited in the Debt Service Fund equally and ratably and on parity with the payment of principal of and interest on Bonds and certain Credit Facilities.

Based upon the current ratings of the applicable Bonds, the Authority is currently not required to post collateral under any of its Qualified Swap Agreements. With respect to all Qualified Swap Agreements, other than the Series 2017 D-2, D-3 and D-4 Swap Agreement (as hereinafter defined) with Citibank, N.A., the rating on the applicable Bonds would have to drop below either Baa2 from Moody's (as hereinafter defined) or below BBB from S&P (as hereinafter defined), for any collateral posting requirements to be imposed upon the Authority under such agreements. With respect to the Series 2017 D-2, D-3 and D-4 Swap Agreement with Citibank, N.A., the rating on the Outstanding Series 2017 D-2, D-3 and D-4 Bonds would have to drop below A2 from Moody's, below A from S&P and below A from Fitch (as hereinafter defined) for any collateral posting requirements to be imposed upon the Authority under such agreements.

Each of the Authority's current Qualified Swap Agreements provides that an automatic, immediate termination of such Agreement shall take place upon the occurrence of the dissolution, bankruptcy, insolvency, liquidation or any similar related events involving or related to the Authority's counterparty (the "Counterparty") under such Agreement. If a Qualified Swap Agreement is automatically and immediately terminated as a result of any such event and the fair value of such Qualified Swap Agreement is negative to the Authority on the date of such automatic immediate termination, the Authority could be obligated to make a substantial termination payment to the Counterparty.

In connection with each of its Qualified Swap Agreements, the Authority has the option to terminate all or part of such Qualified Swap Agreements at any time. In the event that any Qualified Swap Agreement terminates prior to its stated termination date (including any optional termination by the Authority), either the Authority or the respective Counterparty will be required to make a termination payment to the other party. The party required to make such payment and the amount thereof will be determined by market conditions at the time of such early termination.

No financial or other information has been authorized to be provided herein with respect to any Counterparty. There can be no assurance that any Counterparty will pay or perform its obligations under its respective Qualified Swap Agreement in accordance with the terms thereof, or that such Counterparty will be able to pay any termination payment which it may be required to pay upon the occurrence of certain events of default or termination events under its respective Qualified Swap Agreement.

The following chart summarizes some of the material provisions of each of the Authority's current Qualified Swap Agreements. It is not intended to be a complete description of all of the material terms and provisions of each of those Agreements. See "APPENDIX A – FINANCIAL STATEMENTS OF THE AUTHORITY AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021 WITH INDEPENDENT AUDITORS' REPORT THEREON – "Management's Discussion and Analysis – Debt Administration" and "Notes to Financial Statements – Note 7" for additional information about the Authority's Qualified Swap Agreements and the status of such Qualified Swap Agreements.

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Swap Agreement/ Related Series of Bonds	Notional Amount	Termination Date	Rate Paid by Authority	Rate Received by Authority	Counterparty	Fair Value[1] (as of September 29, 2023)
Series 2015 A	3,825,000	1/1/2024	2.9800	Receive 67% * 1-month LIBOR ISDA Fallback	U.S. Bank National Association[2]	$ 7,584
Series 2015 A	3,825,000	1/1/2024	2.9800	Receive 67% * 1-month LIBOR ISDA Fallback	U.S. Bank National Association[2]	7,584
Series 2015 C	3,825,000	1/1/2024	3.2488	Receive 67% * 1-month LIBOR ISDA Fallback	Barclays Bank PLC	5,014
Series 2015 D	3,825,000	1/1/2024	3.2525	Receive 67% * 1-month LIBOR ISDA Fallback	Barclays Bank PLC	4,978
Series 2015 G	8,625,000	1/1/2024	3.3500	Receive 67% * 1-month LIBOR ISDA Fallback	Wells Fargo Bank, N.A.[3]	9,073
Series 2016 D	17,250,000	1/1/2024	3.3500	Receive 67% * 1-month LIBOR ISDA Fallback	Wells Fargo Bank, N.A.[3]	18,147
Series 2017 C	14,590,000	1/1/2024	4.1720	Receive 70% * 1-month LIBOR ISDA Fallback	Wells Fargo Bank, N.A. [3]	(8,845)
Series 2017 C	21,885,000	1/1/2024	4.1720	Receive 70% * 1-month LIBOR ISDA Fallback	Wells Fargo Bank, N.A. [4]	(13,267)
Series 2017 D-1	51,750,000	1/1/2024	3.4486	Receive 73.2% * 1-month LIBOR ISDA Fallback	Wells Fargo Bank, N.A.[4]	39,000
Series 2017 D-1	77,625,000	1/1/2024	3.4486	Receive 73.2% * 1-month LIBOR ISDA Fallback	Wells Fargo Bank, N.A.[3]	130,254
Series 2017 D-2, D-3 and D-4[5]	17,250,000	1/1/2024	3.3500	Receive 67% * 1-month LIBOR ISDA Fallback	Citibank, N.A.	17,863
Series 2020 A	4,375,000	1/1/2024	3.3975	Receive 80% * 1-month LIBOR ISDA Fallback	Barclays Bank PLC	12,116

(1) Provided by the Authority's Financial Advisor; includes accrued interest.

(2) Former Counterparty was Morgan Stanley Capital Services LLC. Swap Agreement was novated to U.S. Bank National Association in 2016.

(3) Former Counterparty was Morgan Stanley Capital Services LLC. Swap Agreement was novated to Wells Fargo Bank, N.A. in 2015.

(4) Former Counterparty was UBS AG. Swap Agreement was novated to Wells Fargo Bank, N.A. in 2013.

(5) Series 2017 D-2 Bonds and Series 2017 D-3 Bonds matured on 1/1/2022 and 1/1/2023, respectively.

Series 2015 A Swap Agreements

In connection with the issuance of its $92,500,000 Turnpike Revenue Bonds, Series 2015 A (the "Series 2015 A Bonds"), the Authority re-identified two then-existing Interest Rate Swap Agreements with Morgan Stanley Capital Services LLC (guaranteed by Morgan Stanley) in order to hedge the interest rate on those Bonds (collectively, the "Series 2015 A Swap Agreements"). In 2016, the Series 2015 A Swap Agreements were novated to U.S. Bank National Association. The Series 2015 A Swap Agreements currently have the following notional amounts:

Counterparty	Notional Amount
U.S. Bank National Association (A-1)	$ 3,825,000
U.S. Bank National Association (A-2)	3,825,000
	$ 7,650,000

The method of determining the floating interest rate payable in any period by the Counterparty under the Series 2015 A Swap Agreements is meant to closely approximate the method of determining the floating interest rate payable in such period by the Authority for the Series 2015 A Bonds. However, there can be no assurance that the floating amounts received in any period by the Authority under the Series 2015 A Swap Agreements will be sufficient to pay the interest accruing on the Series 2015 A Bonds during such period.

The Series 2015 A Swap Agreements will terminate on January 1, 2024 (the final maturity date of the Series 2015 A Bonds), unless terminated sooner in accordance with its terms. As calculated by the Authority's Financial Advisor, as of September 29, 2023, the Series 2015 A-1 Swap Agreement had a positive fair value (including accrued interest) to the Authority of $7,584. As calculated by the Authority's Financial Advisor, as of September 29, 2023, the Series 2015 A-2 Swap Agreement had a positive fair value (including accrued interest) to the Authority of $7,584.

Series 2015 C Swap Agreement

In connection with the issuance of its $43,750,000 Turnpike Revenue Bonds, Series 2015 C (the "Series 2015 C Bonds"), the Authority re-identified a then-existing Interest Rate Swap Agreement with Barclay's Bank PLC in order to hedge the interest rate on those Bonds (the "Series 2015 C Swap Agreement"). The Series 2015 C Swap Agreement currently has a notional amount of $3,825,000.

The method of determining the floating interest rate payable in any period by the Counterparty under the Series 2015 C Swap Agreement is meant to closely approximate the method of determining the floating interest rate payable in such period by the Authority for the Series 2015 C Bonds. However, there can be no assurance that the floating amounts received in any period by the Authority under the Series 2015 C Swap Agreement will be sufficient to pay the interest accruing on the Series 2015 C Bonds during such period.

The Series 2015 C Swap Agreement will terminate on January 1, 2024 (the final maturity date of the Series 2015 C Bonds), unless terminated sooner in accordance with its terms. As calculated by the Authority's Financial Advisor, as of September 29, 2023, the Series 2015 C Swap Agreement had a positive fair value (including accrued interest) to the Authority of $5,014.

Series 2015 D Swap Agreement

In connection with the issuance of its $43,750,000 Turnpike Revenue Bonds, Series 2015 D (the "Series 2015 D Bonds"), the Authority re-identified a then-existing Interest Rate Swap Agreement with Barclay's Bank PLC in order to hedge the interest rate on those Bonds (the "Series 2015 D Swap Agreement"). The Series 2015 D Swap Agreement currently has a notional amount of $3,825,000.

The method of determining the floating interest rate payable in any period by the Counterparty under the Series 2015 D Swap Agreement is meant to closely approximate the method of determining the floating interest rate payable in such period by the Authority for the Series 2015 D Bonds. However, there can be no assurance that the floating amounts received in any period by the Authority under the Series 2015 D Swap Agreement will be sufficient to pay the interest accruing on the Series 2015 D Bonds during such period.

The Series 2015 D Swap Agreement will terminate on January 1, 2024 (the final maturity date of the Series 2015 D Bonds), unless terminated sooner in accordance with its terms. As calculated by the Authority's Financial Advisor, as of September 29, 2023, the Series 2015 D Swap Agreement had a positive fair value (including accrued interest) to the Authority of $4,978.

Series 2015 G Swap Agreement

In connection with the issuance of its $25,000,000 Turnpike Revenue Bonds, Series 2015 G (the "Series 2015 G Bonds"), the Authority re-identified a portion of a then-existing Interest Rate Swap Agreement with Wells Fargo Bank, N.A. in the notional amount of $25,000,000 in order to hedge the interest rate on those Bonds (the "Series 2015 G Swap Agreement"). The Series 2015 G Swap Agreement currently has a notional amount of $8,625,000.

The method of determining the floating interest rate payable in any period by the Counterparty under the Series 2015 G Swap Agreement is meant to closely approximate the method of determining the floating interest rate payable in such period by the Authority for the Series 2015 G Bonds. However, there can be no assurance that the floating amounts received in any period by the Authority under the Series 2015 G Swap Agreement will be sufficient to pay the interest accruing on the Series 2015 G Bonds during such period.

The Series 2015 G Swap Agreement will terminate on January 1, 2024 (the final maturity date of the Series 2015 G Bonds), unless terminated sooner in accordance with its terms. As calculated by the Authority's Financial Advisor, as of September 29, 2023, the Series 2015 G Swap Agreement had a positive fair value (including accrued interest) to the Authority of $9,073.

Series 2016 D Swap Agreement

In connection with the issuance of its $50,000,000 Turnpike Revenue Bonds, Series 2016 D (the "Series 2016 D Bonds"), the Authority re-identified a portion of a then-existing Interest Rate Swap Agreement with Wells Fargo Bank, N.A. in the notional amount of $50,000,000 in order to hedge the interest rate on those Bonds (the "Series 2016 D Swap Agreement"). The Series 2016 D Swap Agreement currently has a notional amount of $17,250,000.

The method of determining the floating interest rate payable in any period by the Counterparty under the Series 2016 D Swap Agreement is meant to closely approximate the method of determining the floating interest rate payable in such period by the Authority for the Series 2016 D Bonds. However, there can be no assurance that the floating amounts received in any period by the Authority under the Series 2016

D Swap Agreement will be sufficient to pay the interest accruing on the Series 2016 D Bonds during such period.

The Series 2016 D Swap Agreement will terminate on January 1, 2024 (the final maturity date of the Series 2016 D Bonds), unless terminated sooner in accordance with its terms. As calculated by the Authority's Financial Advisor, as of September 29, 2023, the Series 2016 D Swap Agreement had a positive fair value (including accrued interest) to the Authority of $18,147.

Series 2017 C Swap Agreements

In connection with the issuance of its $400,000,000 Turnpike Revenue Bonds, Series 2017 C (the "Series 2017 C Bonds"), the Authority re-identified two then-existing Interest Rate Swap Agreements with Wells Fargo Bank, N.A. in order to hedge the interest rate on those Bonds (collectively, the "Series 2017 C Swap Agreements"). The Series 2017 C Swap Agreements currently have the following notional amounts:

Counterparty	Notional Amount
Wells Fargo Bank, N.A.	$ 14,590,000
Wells Fargo Bank, N.A.	21,885,000
	$ 36,475,000

The method of determining the floating interest rates payable in any period by the Counterparty under the Series 2017 C Swap Agreements is meant to closely approximate the methods of determining the floating interest rate payable in such period by the Authority for the Series 2017 C Bonds. However, there can be no assurance that the floating amounts received in any period by the Authority under the Series 2017 C Swap Agreements will be sufficient to pay the interest accruing on the Series 2017 C Bonds during such period.

The Series 2017 C Swap Agreements will terminate on January 1, 2024 (the final maturity date of the Series 2017 C Bonds), unless terminated sooner in accordance with their respective terms. As calculated by the Authority's Financial Advisor, as of September 29, 2023, the Series 2017 C Swap Agreement with a notional amount of $14,590,000 had a negative fair value (including accrued interest) to the Authority of $8,845. As calculated by the Authority's Financial Advisor, as of September 29, 2023, the Series 2017 C Swap Agreement with a notional value of $21,885,000 had a negative fair value (including accrued interest) to the Authority of $13,267.

Series 2017 D-1 Swap Agreements

In connection with the issuance of its $129,375,000 Turnpike Revenue Bonds, Series 2017 D-1 (the "Series 2017 D-1 Bonds"), the Authority re-identified two then-existing Interest Rate Swap Agreements with Wells Fargo Bank, N.A. in order to hedge the interest rate on those Bonds (collectively, the "Series 2017 D-1 Swap Agreements"). The Series 2017 D-1 Swap Agreements currently have the following notional amounts:

Counterparty	Notional Amount
Wells Fargo Bank, N.A.	$ 77,625,000
Wells Fargo Bank, N.A.	51,750,000
	$ 129,375,000

The method of determining the floating interest rates payable in any period by the Counterparty under the Series 2017 D-1 Swap Agreements is meant to closely approximate the methods of determining the floating interest rate payable in such period by the Authority for the Series 2017 D-1 Bonds. However, there can be no assurance that the floating amounts received in any period by the Authority under the Series 2017 D-1 Swap Agreements will be sufficient to pay the interest accruing on the Series 2017 D-1 Bonds during such period.

The Series 2017 D-1 Swap Agreements will terminate on January 1, 2024 (the final maturity date of the Series 2017 D-1 Bonds), unless terminated sooner in accordance with their respective terms. As calculated by the Authority's Financial Advisor, as of September 29, 2023, the Series 2017 D-1 Swap Agreement with a notional amount of $77,625,000 had a positive fair value (including accrued interest) to the Authority of $130,254. As calculated by the Authority's Financial Advisor, as of September 29, 2023, the Series 2017 D-1 Swap Agreement with a notional value of $51,750,000 had a positive fair value (including accrued interest) to the Authority of $39,000.

Series 2017 D-2, D-3 and D-4 Swap Agreement

In connection with the issuance of its $16,075,000 Turnpike Revenue Bonds, Series 2017 D-2, its $16,675,000 Turnpike Revenue Bonds, Series 2017 D-3, and its $17,250,000 Turnpike Revenue Bonds, Series 2017 D-4 (collectively, the "Series 2017 D-2, D-3 and D-4 Bonds"), the Authority re-identified a then-existing Interest Rate Swap Agreement with Citibank, N.A. in the notional amount of $50,000,000 in order to hedge the interest rate on those Bonds (the "Series 2017 D-2, D-3 and D-4 Swap Agreement"). The Series 2017 D-2, D-3 and D-4 Swap Agreement currently has a notional amount of $17,250,000. As the Series 2017 D-2 Bonds and the Series 2017 D-3 Bonds matured in accordance with their terms on January 1, 2022 and January 1, 2023, respectively, the Series 2017 D-2, D-3 and D-4 Swap Agreement currently only hedges the interest rate on the Series 2017 D-4 Bonds.

The method of determining the floating interest rate payable in any period by the Counterparty under the Series 2017 D-2, D-3 and D-4 Swap Agreement is meant to closely approximate the method of determining the floating interest rates payable in such period by the Authority for the Series 2017 D-2, D-3 and D-4 Bonds. However, there can be no assurance that the floating amounts received in any period by the Authority under the Series 2017 D-2, D-3 and D-4 Swap Agreement will be sufficient to pay the interest accruing on the Series 2017 D-2, D-3 and D-4 Bonds during such period.

The Series 2017 D-2, D-3 and D-4 Swap Agreement will terminate on January 1, 2024 (the final maturity date of the Series 2017 D-4 Bonds), unless terminated sooner in accordance with its terms. As calculated by the Authority's Financial Advisor, as of September 29, 2023, the Series 2017 D-2, D-3 and D-4 Swap Agreement had a positive fair value (including accrued interest) to the Authority of $17,863.

Series 2020 A Swap Agreement

In connection with the issuance of its $33,875,000 Turnpike Revenue Bonds, Series 2020 A (the "Series 2020 A Bonds"), the Authority amended and re-identified a then-existing Interest Rate Swap

Agreement with Barclay's Bank PLC in the notional amount of $33,875,000 in order to hedge the interest rate on those Bonds (the "Series 2020 A Swap Agreement"). The Series 2020 A Swap Agreement currently has a notional amount of $4,375,000.

The method of determining the floating interest rate payable in any period by the Counterparty under the Series 2020 A Swap Agreement is meant to closely approximate the method of determining the floating interest rate payable in such period by the Authority for the Series 2020 A Bonds. However, there can be no assurance that the floating amounts received in any period by the Authority under the Series 2020 A Swap Agreement will be sufficient to pay the interest accruing on the Series 2020 A Bonds during such period.

The Series 2020 A Swap Agreement will terminate on January 1, 2024 (the final maturity date of the Series 2020 A Bonds), unless terminated sooner in accordance with its terms. As calculated by the Authority's Financial Advisor, as of September 29, 2023, the Series 2020 A Swap Agreement had positive fair value (including accrued interest) to the Authority of $12,116.

Potential Series 2024 A Swap Agreement

Simultaneously with the execution and delivery of the Series 2024 A Purchase Agreement, the Authority and Barclays Bank PLC (the "Bank") entered into a "swaption" transaction (the "Swaption") relating to the Series 2024 A Bonds. Pursuant to the Swaption, the Bank purchased an option from the Authority, exercisable on May 17, 2024, to require the Authority to enter into an interest rate swap transaction with the Bank which will be used by the Authority to hedge its interest rate risk with respect to the Series 2024 A Bonds. If the Bank exercises the option, (i) the Series 2024 A Bonds will be issued by the Authority bearing interest at a weekly floating rate equal to the sum of USD-SIFMA Municipal Swap Index plus 0.60%, and (ii) the underlying interest rate swap agreement will require the Authority to make fixed rate payments to the Bank at varying rates set forth in the interest rate swap agreement and the Authority will receive floating rate payments from the Bank in an amount equal to the sum of USD-SIFMA Municipal Swap Index plus 0.60%. If the Bank does not exercise its option, no interest rate swap transaction will be entered into by the Authority with the Bank, and Barclays Capital Inc., as the purchaser of the Series 2024 A Bonds, will elect to either (i) have the Authority issue the Series 2024 A Bonds with all of the maturities thereof bearing a fixed interest rate to maturity of 5.00%, other than the Series 2024 A Bonds maturing on January 1, 2035, which will bear interest at a fixed rate to maturity of 4.00%, or (ii) not purchase, accept delivery of or pay the purchase price of the Series 2024 A Bonds, in which case the Series 2024 A Bonds will not be issued by the Authority.

DIRECT PURCHASE TRANSACTIONS

The following table summarizes the terms of the Authority's direct purchase transactions as of the date of this Private Placement Memorandum (other than the potential direct purchase of the Series 2024 A Bonds by Barclays). The Series 2015 A Bonds, the Series 2015 C Bonds, the Series 2015 D Bonds, the Series 2015 G Bonds, the Series 2016 D Bonds, the Series 2020 A Bonds, the Series 2020 B Bonds, the Series 2020 C Bonds, the Series 2020 D Bonds, the Series 2022 A Bonds and the Series 2023 A Bonds are on parity with all other Bonds Outstanding under the Resolution from time to time and the Authority's reimbursement and payment obligations under certain Credit Facilities and Qualified Swaps. See "SECURITY FOR THE BONDS" herein.

Series of Bonds	Direct Purchaser	Tax-Exempt or Federally Taxable	Final Maturity Date	Par Amount	Fixed or Floating Rate[(1)]	Interest Rate Reset
2015 A	DNT Asset Trust	Tax-Exempt	01/01/2024	$12,650,000	67% * (Adjusted Daily Simple SOFR) + 0.78%	Adjusted Daily Simple SOFR
2015 C	DNT Asset Trust	Tax-Exempt	01/01/2024	3,825,000	67% * (Adjusted Daily Simple SOFR) + 0.78%	Adjusted Daily Simple SOFR
2015 D	DNT Asset Trust	Tax-Exempt	01/01/2024	3,825,000	67% * (Adjusted Daily Simple SOFR) + 0.78%	Adjusted Daily Simple SOFR
2015 G	TD Bank, N.A.	Tax-Exempt	01/01/2024	8,625,000	69.75% * (Daily Simple SOFR) + (0.66975% - 0.10%)	Daily Simple SOFR
2016 D	TD Bank, N.A.	Tax-Exempt	01/01/2024	17,250,000	70% * (Daily Simple SOFR) + 0.71%	Daily Simple SOFR
2020 A	DNT Asset Trust	Tax-Exempt	01/01/2024	4,375,000	80% * (Adjusted Daily Simple SOFR) + 0.30%	Adjusted Daily Simple SOFR
2020 B	JPMorgan Chase Bank, N.A	Federally Taxable	01/01/2028	24,935,000	2.500%	N/A
2020 C	Barclays Capital Inc.	Federally Taxable	01/01/2035	28,000,000	3.223%	N/A
2020 D	Barclays Capital Inc.	Tax-Exempt	01/01/2028	149,440,000	5.000%	N/A
2022 A	Barclays Capital Inc.	Tax-Exempt	01/01/2043	100,000,000	4.000%	N/A
2023 A	Barclays Capital Inc.	Tax-Exempt	01/01/2035	107,305,000	5.000%	N/A

[(1)] The floating rates are subject to increase under certain circumstances as provided in the respective certificates of determination executed by the Authority in connection with each Series of the applicable Direct Purchase Bonds; provided, however, that in no event shall the floating rate exceed the Maximum Rate (the lesser of 12% or the highest rate allowed by applicable law).

Each Series of the above-described Bonds (collectively, the “Direct Purchase Bonds”) is subject to mandatory tender for purchase at the option of the holder of such Series of Direct Purchase Bonds upon the occurrence of an Extraordinary Mandatory Purchase Event. In addition to the failure of the Authority to pay the debt service on any Bond or other parity obligation of the Authority, when due, and the occurrence of an Event of Default under the Resolution, the Extraordinary Mandatory Purchase Events generally include (i) the rating on the Bonds is reduced to or below BBB by Fitch or S&P or Baa2 by Moody’s, or removed, suspended or withdrawn, (ii) the occurrence of a determination of taxability with respect to the applicable Series of tax-exempt Direct Purchase Bonds, (iii) a judgment in the amount of $10,000,000 or more is entered against the Authority which is not covered by insurance and which is not discharged, stayed or bonded within 45 days after the entry of such judgment, (iv) any court or other governmental authority shall rule that any provision of the Resolution relating to payment and security of the Bonds or any provision of the applicable Bondholder Agreement entered into by and between the Authority and the purchaser of each Series of the Direct Purchase Bonds is not valid and binding on the Authority, (v) the Authority, or any person on its behalf, shall contest the validity or enforceability any provision of the Resolution relating to payment and security of the Bonds or any provision of the applicable Bondholder Agreement, (vi) if, for any other reason, any provision of the Resolution relating to payment and security of the Bonds or any provision of the applicable Bondholder Agreement shall cease be to valid and binding on the Authority, (vii) the failure of the Authority to pay, when due, any Subordinated Indebtedness in an aggregate outstanding principal amount of $5,000,000 or more, or the occurrence of any event of default by the Authority under any agreement or instrument relating to such Subordinated Indebtedness, and (viii) the occurrence of an event of default under the applicable Bondholder Agreement. In the event that the Authority cannot pay the purchase price for all or a portion of such Series of Bonds on any such extraordinary mandatory purchase date, (i) 50% of the principal amount of any unpurchased Bonds will be subject to mandatory redemption on the date that is one year after such extraordinary mandatory purchase date, at a Redemption Price equal to 100% of the principal amount of such Direct Purchase Bonds to be redeemed plus accrued interest to the redemption date, and (ii) the entire remaining aggregate principal amount of such unpurchased Bonds will be subject to mandatory redemption on the date that is two years after such extraordinary mandatory purchase date, at a Redemption Price equal to 100% of the principal amount of such Direct Purchase Bonds to be redeemed plus accrued interest to the redemption date. A copy of each Bondholder Agreement has been filed with, and is available to be viewed on, the Electronic Municipal Market Access ("EMMA") system of the Municipal Securities Rulemaking Board located at www.emma.msrb.org.

THE REFUNDING PLAN

On August 30, 2023, the Authority issued and delivered the Series 2023 A Bonds to the Purchaser in exchange for the Refunded Series 2020 C Bonds, which were owned by the Purchaser and delivered by the Purchaser to the Authority. Simultaneously with the issuance and delivery of the Series 2023 A Bonds, the Authority caused the Refunded Series 2020 C Bonds to be canceled and extinguished and, as a result, the Refunded Series 2020 C Bonds are no longer Outstanding under the Resolution. The Authority did not receive any cash or other monetary compensation from the Purchaser in connection with the issuance and delivery of the Series 2023 A Bonds. The only consideration received by the Authority in connection with the issuance and delivery of the Series 2023 A Bonds was the delivery by the Purchaser of the Refunded Series 2020 C Bonds to the Authority and the cancellation and extinguishment of the Refunded Series 2020 C Bonds and all obligations of the Authority with respect thereto.

The Authority and the Purchaser agreed to exchange the Series 2023 A Bonds for the Refunded Series 2020 C Bonds pursuant to and in accordance with the provisions the Bondholder Agreement, a copy of which is attached to this Private Placement Memorandum as Appendix G. See APPENDIX G – COPY OF THE BONDHOLDER AGREEMENT attached hereto.

AGGREGATE BOND DEBT SERVICE REQUIREMENTS

The table below shows debt service after the issuance of the Series 2023 A Bonds. The debt service requirements shown in the table below do not include the debt service requirements on the Series 2024 A Bonds expected to be issued by the Authority on July 1, 2024 and includes the debt service on the portion of the Outstanding Series 2014 A Bonds which will be redeemed and retired upon the issuance of the Series 2024 A Bonds.

Fiscal Year Ending December 31	Debt Service on Outstanding Bonds(1),(2),(3)(4)	Series 2023 A Bonds(1)		Total Debt Service After Issuance of Series 2023 A Bonds
		Principal	Interest	
2022	$ 858,925,863	-	-	$ 858,925,863
2023	873,202,666	-	$ 1,803,320	875,005,986
2024	917,138,036	-	5,365,250	922,503,286
2025	932,002,797	-	5,365,250	937,368,047
2026	962,703,456	-	5,365,250	968,068,706
2027	960,413,761	-	5,365,250	965,779,011
2028	942,085,657	$ 5,940,000	5,365,250	953,390,907
2029	926,670,925	21,575,000	5,068,250	953,314,175
2030	926,640,066	25,695,000	3,989,500	956,324,566
2031	926,644,347	26,950,000	2,704,750	956,299,097
2032	939,535,298	15,370,000	1,357,250	956,262,548
2033	952,562,109	3,085,000	588,750	956,235,859
2034	912,866,721	8,690,000	434,500	921,991,221
2035	895,439,677	-	-	895,439,677
2036	876,882,008	-	-	876,882,008
2037	881,540,044	-	-	881,540,044
2038	874,778,849	-	-	874,778,849
2039	874,754,974	-	-	874,754,974
2040	926,716,615	-	-	926,716,615
2041	585,427,075	-	-	585,427,075
2042	325,431,475	-	-	325,431,475
2043	242,051,963	-	-	242,051,963
2044	242,048,213	-	-	242,048,213
2045	242,051,863	-	-	242,051,863
2046	242,052,913	-	-	242,052,913
2047	242,051,138	-	-	242,051,138
2048	175,416,888	-	-	175,416,888
2049	175,419,225	-	-	175,419,225
2050	175,417,438	-	-	175,417,438
2051	84,431,550	-	-	84,431,550
TOTAL*	**$ 20,093,303,610**	**$ 107,305,000**	**$ 42,772,570**	**$ 20,243,381,180**

* Totals may not add up due to rounding.

(1) Debt service payable on January 1 of each year is included in the debt service for the prior fiscal year.

(2) Interest assumed to be paid at the fixed swap rate for any variable rate bonds swapped to fixed rate and does not include fees such as those for letters of credit, standby agreements, remarketing fees, or any potential mismatch between the bond variable rate and swap variable rate. Spreads over the variable rate index on variable rate bonds are included in the calculation of the interest accruing on such bonds and are assumed to be constant through final maturity of the associated variable rate bonds.

(3) Interest on the $5,000,000 unhedged portion of the Outstanding Turnpike Revenue Bonds, Series 2015 A, is calculated at the Maximum Rate of 12%.

(4) Debt service excludes capitalized interest on the Series 2022 B Bonds through and including November 1, 2025.

THE AUTHORITY

General

The Authority is a body corporate and politic of the State organized and existing by virtue of the Act 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 the use of the Turnpike System, and to issue revenue bonds for its purposes.

Pursuant to the Act, the Authority has owned and operated the Turnpike since the time the Turnpike opened for traffic in 1951. In July 2003, the Highway Authority was abolished and the Authority assumed all powers, rights, obligations, assets, debts, liabilities, and statutory responsibilities and duties of the Highway Authority, including the ownership and operation of 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.

Certain Powers

The Act authorizes the Authority to acquire, improve, construct, maintain, repair, manage, and operate transportation projects or any part thereof at such locations as established by law or by the Authority and to exercise the power of eminent domain in connection with any of its corporate purposes.

The Act also authorizes the Authority to issue revenue bonds maturing not later than forty (40) years from their date or dates for any of its corporate purposes, payable solely from or secured by a pledge of tolls, other revenues of transportation projects, and the proceeds of such bonds. The Act provides that such bonds shall not be deemed to constitute a debt or liability of the State or of any political subdivision thereof, or a pledge of the faith, credit or taxing power of the State or of any such political subdivision, but that such bonds shall be payable from funds pledged or available for their payment as authorized in the Act. The Authority is also empowered to issue notes for any of its corporate purposes in the same manner as bonds are issued under the Act.

In addition, the Authority has the power, by resolution, to fix and revise from time to time and charge and collect tolls, fees, licenses, rents, concessions, and other charges for each transportation project or part thereof constructed or acquired by it; and, subject to any agreement with bondholders, to 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. Pursuant to the Act, whenever the Authority desires to increase any existing toll or establish any new toll for the use of any highway project, including the Turnpike and/or the Parkway, it is required to hold a public hearing on such proposed toll at least 45 days prior to the date on which such toll is proposed to become effective.

The Act provides that no resolution or other action of the Authority providing for the issuance of bonds, refunding bonds or other obligations or for the fixing, revising or adjusting of tolls for the use of the Turnpike System or any parts or sections thereof shall be adopted or otherwise made effective by the Authority without the prior approval in writing of the Governor and the Treasurer of the State. In addition, the Act requires that a true copy of the minutes of every meeting of the Authority shall be forthwith delivered to the Governor and that no action taken at such meeting by the Authority shall have force or effect until 10 days, exclusive of Saturdays, Sundays and public holidays, after such copy of the minutes shall have been so delivered. If, during such 10-day period, the Governor returns such copy of the minutes with a veto of any action taken by the Authority, or any member thereof, at such meeting, such action shall be null and of no effect. The Act permits the Governor to approve all or part of the action taken at such meeting prior to the expiration of such 10-day period. The Act further provides that the powers conferred upon the Governor and the Treasurer of the State described above shall be exercised with due regard for the rights of the holders of bonds of the Authority at any time outstanding, and nothing in, or done pursuant to, the Act shall in any way limit, restrict or alter the obligation or powers of the Authority or any representative or officer of the Authority to carry out and perform in every detail each and every covenant, agreement or contract at any time made or entered into by or on behalf of the Authority with respect to its bonds or for the benefit, protection or security of the holders thereof.

Governance

The Act provides that the Board of Commissioners of the Authority shall consist of eight members as follows: the Commissioner of the New Jersey Department of Transportation, ex officio, or his/her designee; five members appointed by the Governor with the advice and consent of the Senate; one member appointed by the Governor upon recommendation of the President of the Senate; and one member appointed by the Governor upon recommendation of the Speaker of the General Assembly. Members of the Authority (other than the Commissioner of Transportation) sit for a term of five years and until a successor is appointed and has been confirmed. Five members of the Authority constitute a quorum and the vote of five members is necessary for any action taken by the Authority. The Governor designates the chairman and vice chairman, who serve in these positions at the pleasure of the Governor and until their successors have been designated. The Authority selects its secretary and treasurer, neither of whom need be members. All Authority members serve without compensation but are reimbursed for actual expenses incurred in the performance of duties.

The current members of the Authority are as follows:

DIANE GUTIERREZ-SCACCETTI (Commissioner; Chair). Ms. Gutierrez-Scaccetti is the Commissioner of the New Jersey Department of Transportation. She began serving in an acting capacity on January 16, 2018 and was confirmed by the State Senate on June 7, 2018. As NJDOT Commissioner, Ms. Gutierrez-Scaccetti serves ex-officio as a Commissioner of the Authority and by gubernatorial designation as Chair of the Authority's Board. She is a native of New Jersey and a career transportation professional. Ms. Gutierrez-Scaccetti worked for six and a half years as Executive Director and CEO of Florida's Turnpike Enterprise before returning to New Jersey in 2018. Previously, she worked for more than 20 years in various management positions at the Authority, including serving as Executive Director from 2008 to 2010. She holds a B.S. from the University of Connecticut and an M.S. from Rutgers University. While continuing to serve as the Commissioner of the New Jersey Department of Transportation, as of October 2, 2023, Ms. Gutierrez-Scaccetti also began serving as the Chief of Staff to Governor Philip D. Murphy. She is expected to continue to serve as the Commissioner of the New Jersey Department of Transportation (and as the Chair of the Authority's Board of Commissioners) until January 2024, at which time a successor to her as the Commissioner of the New Jersey Department of Transportation is expected to be named.

ULISES E. DIAZ (Commissioner; Vice Chairman). Mr. Diaz is employed at Horizon Blue Cross Blue Shield of New Jersey, where he is responsible for the development of government affairs activities and legislative programs for New Jersey. He previously was employed in a similar capacity at Verizon Communications. Mr. Diaz also worked at United Water New Jersey for several years, where he was responsible for all external affairs activities, including government and public affairs, communications and business development. He holds a B.A. in Business Administration from Rutgers University. Mr. Diaz's term expired in November 2018, and he is currently serving in a hold-over capacity.

MICHAEL R. DuPONT (Commissioner; Treasurer). Mr. DuPont is a partner in the law firm McKenna, DuPont, Higgins & Stone. He has worked on the transition teams of Governor Jon S. Corzine and former Governor James E. McGreevey. He serves as President of the Garden State Arts Foundation. Mr. DuPont earned a B.A. in Political Science and Business Administration from Loyola University and a J.D. from the John Marshall Law School. Mr. DuPont's term expired in February 2013, and he is currently serving in a hold-over capacity.

RONALD GRAVINO (Commissioner). Mr. Gravino is Vice President for finance and human resources at Invidi Technologies Corp. in Princeton, which he joined after many years as a financial/turnaround consultant. He serves as chairman of the Newark Liberty International Airport Advisory Board and on the boards of the Transportation Finance Review Commission and the Garden State Arts Foundation. He served for six years as a commissioner of the former New Jersey Highway Authority, including a term as chairman. Mr. Gravino earned a B.A. in Accountancy from Charter Oak College in Hartford, Connecticut. Mr. Gravino's term expired in February 2022 and he is currently serving in a hold-over capacity.

JOHN D. MINELLA (Commissioner). Mr. Minella is the Executive Director of the Hudson County Democratic Organization. He retired from the Authority in 2011 after more than 25 years of service. For most of his tenure, he served as Assistant Superintendent of Garden State Parkway Roadway Maintenance. Mr. Minella also previously worked as Management Specialist for the Office of the Mayor, Jersey City, and Real Estate Manager and Assistant Director of Public Service Employment, Jersey City Office of Employment and Training. He is the First Vice President of the Bayonne Chapter U.N.I.C.O., a member of the Loyal Order of Moose Lodge #266, and he has been a member of the Madeline Fiadini LoRe Foundation for Cancer Prevention since it was founded in 2008. He formerly served as a member of the Jersey City Board of Education and the Jersey City Municipal Utilities Authority, and as Chair of the Jersey City Sewerage Authority. He is a graduate of St. Peters College, Jersey City. Mr. Minella's term expired in July 2018, and he is currently serving in a hold-over capacity.

RAPHAEL SALERMO (Commissioner). Mr. Salermo is a Managing Partner of the MAR Acquisition Group LLC. He has held leadership positions in several civic organizations including the Greater Elizabeth Chamber of Commerce, the Elizabeth Development Corporation, the YMCA of Eastern Union County, the Elizabeth Avenue Partnership and the Union County Workforce Investment Board. Mr. Salermo's term expired in February 2019, and he is currently serving in a hold-over capacity.

FRANCISCO MALDONADO (Commissioner). Mr. Maldonado is the Senior Counsel for Policy and External Affairs at the New Jersey Laborers-Employers Cooperative and Education Trust (New Jersey LECET). Previously, he held senior staff positions in the Majority offices of the New Jersey Senate and Assembly, served in policy roles on the campaign of former Gov. Jon Corzine and the transition team of Gov. Phil Murphy, practiced voting rights law for the non-profit Advancement Project, and served as a law clerk in the U.S. District Court for the District of Puerto Rico. Mr. Maldonado's term expires in February 2026.

There is currently one vacancy on the Board of Commissioners of the Authority.

The Authority is empowered to appoint such officers, employees and agents as may be necessary in its judgment. The Commissioners have created the executive staff positions of Executive Director, Deputy Executive Director and Chief Financial Officer, among others. The Authority's executive staff currently includes:

JAMES D. CARONE (Executive Director). Mr. Carone, a Certified Public Accountant, was named Executive Director of the Authority in July 2023 after serving more than five years as the Deputy Executive Director of the Authority. He began working as a Staff Auditor at the New Jersey Highway Authority in 1977, and during his 26 years with that agency held the positions of Senior Auditor, Audit Manager, and Assistant Chief Auditor. When the Highway Authority and the New Jersey Turnpike Authority were consolidated in 2003, Mr. Carone was named Director of Internal Audit. He served in that position until his appointment as Deputy Executive Director of the Authority in April 2018. Mr. Carone is a 1976 graduate of Lycoming College in Williamsport, Pennsylvania.

DONNA MANUELLI (Chief Financial Officer). Ms. Manuelli was promoted to Chief Financial Officer in December 2010. She has served the Authority for the past twenty-eight years, holding various positions of increasing responsibility in the organization. She previously served as Comptroller from 2005 – 2010 and as Assistant Comptroller from 1999 – 2005. Prior to joining the Authority, Ms. Manuelli was a Vice President at Midlantic National Bank, where she spent ten years in credit analysis and asset based lending. Ms. Manuelli currently serves on the Finance Committee of the E-ZPass Group, an organization of toll roads and bridges throughout the United States, and was Chairperson for three years. Ms. Manuelli received a B.S. degree in Business Administration with a concentration in Finance from Villanova University where she graduated Cum Laude and has taken graduate level courses at Rutgers University.

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 north of Interchange 105. The Parkway is now as wide as 15 lanes in some areas.

Capital Improvement Programs

2020 Long-Range Capital Plan

At its May 27, 2020 meeting, the Board of Commissioners of the Authority adopted the 2020 Long-Range Capital Plan. The 2020 Long-Range Capital Plan contains projects geared toward enhancing safety, repairing degraded infrastructure and ensuring roadway resiliency and sustainability to enhance mobility. The costs of the projects listed in the 2020 Long-Range Capital Plan were originally estimated at $24 billion. The Authority anticipates adopting a series of 5-year rolling capital improvement programs, including the 2023-2027 CIP, which will include projects derived from the 2020 Long-Range Capital Plan.

2023-2027 Capital Improvement Program

The Authority has developed the 2023-2027 CIP which includes projects identified in the 2020 Long-Range Capital Plan focused primarily on capacity enhancements on both the Turnpike and the Parkway, bridge preservation and security, and drainage, roadway lighting and other improvements, including non-roadway technology improvements. The 2023-2027 CIP has a rolling five-year total spending plan of $4,709,210,000 with an average annual spending of $942,000,000. As the 2023-2027 CIP develops further, it is expected that the average annual spending will increase to $1,000,000,000. The significant projects that are part of the 2023-2027 CIP include capacity enhancements to the Newark Bay Hudson County Extension on the Turnpike and between Interchanges 1 and 4 on the Turnpike. The estimated total cost of the 2023-2027 CIP and the estimated cost of each individual project included in the 2023-2027 CIP are subject to change based upon varying economic conditions and other factors which may occur during the term of the 2023-2027 CIP. In addition, the projects included in the 2023-2027 CIP are also subject to change at the discretion of the Authority. As of the date of this Private Placement Memorandum, approximately 15% of the amounts budgeted for the 2023-2027 CIP have been spent or committed.

2019 Capital Improvement Program

In April 2019, the Authority adopted the 2019 CIP which consists of the design, supervision and construction of multiple capital improvement projects on both the Turnpike and the Parkway. The significant projects that are part of the 2019 CIP include several bridge deck improvements on both roadways, the shoulder expansion and reconstruction of the Parkway between mileposts 30 and 35, the replacement of the hybrid changeable message signs on the Turnpike, the rehabilitation of major bridges crossing the Passaic River on both the Turnpike and the Parkway, and various improvements to service areas located on both the Turnpike and the Parkway. As of the date of this Private Placement Memorandum, approximately 96% of the amounts budgeted for the 2019 CIP have been spent or committed.

2008 Capital Improvement Program

In October 2008, the Authority adopted the $7,000,000,000 2008 CIP, which includes numerous projects focused on major capacity and other roadway improvements to both the Turnpike and the Parkway, bridge construction and improvements, interchange improvements and other facilities improvements. In September 2018, the Authority amended the 2008 CIP to extend its end date to December 31, 2020. Savings resulting from lower than anticipated construction costs allowed the Authority to increase the number of projects included in the 2008 CIP to 39 from an originally authorized amount of 34 projects. The work remaining to be completed as part of the 2008 CIP includes the Newark Bay Hudson Extension bridge rehabilitation, facilities improvements, interchange improvements and bridge deck reconstruction. As of the date of this Private Placement Memorandum, the 2008 CIP is approximately 99% completed and 99% of the amounts budgeted for the 2008 CIP have been spent or committed.

Funding of Capital Improvement Programs

The Authority anticipates issuing one or more additional Series of Non-Refunding Bonds under the Resolution from time to time to fund the Costs of Construction of various Projects for the Turnpike System, including the projects in the 2023-2027 CIP, and the other projects identified in the 2020 Long-Range Capital Plan. See “SECURITY FOR THE BONDS – Additional Indebtedness” herein. The increased toll rates which became effective on both the Turnpike and the Parkway on January 1, 2023, together with the annual indexing provision, are designed to provide the Authority with sufficient Net Revenues to permit the Authority to issue additional Bonds under the Resolution to fund the projects in the 2023-2027 CIP and the other projects identified in the 2020 Long-Range Capital Plan. See “SECURITY FOR THE BONDS – Toll Covenant”, “SECURITY FOR THE BONDS – Additional Indebtedness”, “THE AUTHORITY – Certain Powers” and “THE AUTHORITY – Existing Toll Rates and Schedule” herein and APPENDIX B – “2023 TRAFFIC AND TOLL REVENUE FORECAST STUDY” hereto.

Summary of Historical Operations

The Turnpike

Table 1(a) below sets forth the annual traffic usage for passenger car, commercial, and non-revenue vehicles on the Turnpike for the 10 year period ending in 2022. Table 1(b) below sets forth the monthly traffic usage for passenger cars and commercial vehicles on the Turnpike during the period from January 1, 2023 to July 31, 2023. Table 1(c) below details the annual toll revenues from passenger cars and commercial vehicles on the Turnpike during the 10 year period ending in 2022. Table 1(d) below details the toll revenues from passenger cars and commercial vehicles on the Turnpike during the period from January 1, 2023 to July 31, 2023.

Table 1(a) – Turnpike – Number of Vehicles (000s)

Year	Passenger Cars	Commercial Vehicles(1)	Non-Revenue Vehicles(2)	Total Vehicles*
2013	195,208	29,278	1,504	225,990
2014	202,347	29,895	1,517	233,759
2015	215,358	31,239	1,558	248,155
2016	223,634	31,859	1,571	257,064
2017	227,978	32,687	1,559	262,224
2018	230,497	34,251	1,556	266,304
2019	233,454	34,318	1,333	269,105
2020	166,320	32,348	874	199,542
2021	205,819	35,690	705	242,214
2022	215,522	37,933	783	252,672

* Totals may not add up due to rounding.

(1) Commercial vehicles include non-commuter buses.

(2) Non-revenue vehicles include commuter buses traveling during peak hours, towing operations, police, first aid responding to emergencies and employees traveling to and from work.

Table 1(b) – Turnpike – Number of Vehicles (000s)
January 1, 2023 – July 31, 2023

Month	Passenger Cars	Commercial Vehicles(1)	Total Vehicles*
January	16,693	2,946	19,639
February	15,671	2,674	18,345
March	18,074	3,126	21,200
April	18,411	2,817	21,229
May	19,796	3,146	22,942
June	19,541	3,110	22,651
July	19,843	2,918	22,761

* Totals may not add up due to rounding.

(1) Commercial vehicles include non-commuter buses.

Table 1(c) – Turnpike – Toll Revenues ($000s)

Year	Passenger Car Revenues	Commercial Vehicle Revenues[1]	Total Toll Revenues*
2013	672,828	333,893	1,006,721
2014	695,130	342,614	1,037,744
2015	745,007	361,261	1,106,268
2016	776,337	368,221	1,144,558
2017	800,478	351,260	1,151,738
2018	808,960	370,364	1,179,324
2019	816,271	360,205	1,176,476
2020[2]	633,478	381,379	1,014,857
2021	985,132	508,450	1,493,581
2022[3]	1,050,933	546,707	1,597,640

* Totals may not add up due to rounding.

(1) Commercial vehicles include non-commuter buses.

(2) Reflects a 36 percent toll increase on the Turnpike beginning September 13, 2020.

(3) Reflects 3% annual toll rate indexing beginning on January 1, 2022.

Table 1(d) – Turnpike – Toll Revenues ($000s)
January 1, 2023 – July 31, 2023

Month	Passenger Car Revenues	Commercial Vehicle Revenues[1]	Total Toll Revenues*
January	81,005	44,189	125,193
February	75,283	39,961	115,244
March	87,208	46,734	133,942
April	92,210	42,297	134,507
May	97,846	47,022	144,868
June	97,504	46,388	143,892
July	102,270	43,991	146,260

* Totals may not add up due to rounding.

(1) Commercial vehicles include non-commuter buses.

The Parkway

Table 2(a) below sets forth the annual number of transactions for passenger car, commercial and non-revenue vehicles on the Parkway for the 10 years ending in 2022. Table 2(b) below sets forth the monthly number of transactions for passenger cars and commercial vehicles on the Parkway during the period from January 1, 2023 to July 31, 2023. Table 2(c) below sets forth the annual toll revenues from the Parkway for the 10 years ending in 2022. Table 2(d) below sets forth the monthly toll revenues from the Parkway during the period from January 1, 2023 to July 31, 2023. Because tolls are collected solely at barriers and ramps, only the number of transactions is tracked; the number of vehicles is not.

Table 2(a) – Parkway – Number of Transactions (000s)

Year	Passenger Cars	Commercial Vehicles(1)	Non-Revenue Vehicles(2)	Total Vehicles*
2013	363,863	5,054	1,543	370,460
2014	365,337	5,012	1,497	371,846
2015	374,092	5,192	1,476	380,760
2016	384,586	5,024	1,458	391,068
2017	387,787	5,109	1,532	394,428
2018(3)	384,509	5,282	1,566	391,357
2019	381,110	5,640	1,575	388,325
2020	303,172	5,313	1,426	309,911
2021	347,005	5,957	1,583	354,545
2022	354,608	6,152	1,710	360,759

* Totals may not add up due to rounding.

(1) Trucks are only allowed below Exit 105 (Eatontown) on the Parkway.

(2) Non-revenue vehicles include towing operations, police, first aid responding to emergencies and employees traveling to and from work. The amounts shown above represent non-revenue transactions recorded through E-ZPass only; non-revenue tickets were issued prior to 2006.

(3) Reflects conversion to one-way tolling at Interchange 145 in July 2018.

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Table 2(b) – Parkway – Number of Transactions (000s)
January 1, 2023 – July 31, 2023

Month	Passenger Cars	Commercial Vehicles(1)	Total Vehicles*
January	27,186	443	27,629
February	25,435	419	25,854
March	29,409	508	29,917
April	29,257	494	29,750
May	32,562	604	33,166
June	32,852	584	33,436
July	34,674	563	35,237

* Totals may not add up due to rounding.

(1) Trucks are only allowed below Exit 105 (Eatontown) on the Parkway.

Table 2(c) – Parkway – Toll Revenues ($000s)

Year	Passenger Cars	Commercial Vehicles(1)	Total Revenues*
2013	390,296	16,746	407,042
2014	392,777	15,227	408,004
2015	400,910	15,955	416,865
2016	410,567	15,537	426,104
2017	412,423	15,735	428,158
2018	416,632	16,370	433,002
2019	418,854	16,938	435,792
2020(2)	356,187	16,348	372,535
2021	484,282	20,962	505,244
2022(3)	506,840	21,547	528,388

* Totals may not add up due to rounding.

(1) Truck traffic is only allowed below Exit 105 (Eatontown) on the Parkway.

(2) Reflects a 27 percent toll increase on the Parkway beginning September 13, 2020.

(3) Reflects 3% annual toll rate indexing beginning on January 1, 2022.

Table 2(d) – Parkway – Toll Revenues ($000s)
January 1, 2023 – July 31, 2023

Month	Passenger Cars	Commercial Vehicles[1]	Total Revenues*
January	40,021	1,510	41,531
February	37,374	1,431	38,805
March	43,285	1,751	45,036
April	43,171	1,783	44,953
May	48,096	2,184	50,280
June	48,877	2,154	51,031
July	51,733	2,116	53,849

* Totals may not add up due to rounding.

[1] Truck traffic is only allowed below Exit 105 (Eatontown) on the Parkway.

Service Areas and Concessions

There are twelve service areas on the Turnpike. Six of them are accessible by only southbound traffic, five by only northbound traffic and one by both north and southbound traffic. The service areas, which are open 24 hours a day, offer food, fuel and minor repair services, along with travel information, restrooms, automated teller machines and other conveniences. In addition, there are nine service areas on the Parkway where food, fuel and conveniences are sold. Six of the Parkway service areas are accessible to north and southbound traffic, while two service areas are available northbound only and one service area is available southbound only. There is also a total of 76 charging stations on the Authority's roadways; 70 at various Turnpike Service areas and 6 at various Parkway Service areas.

At its September 12, 2017 meeting, the Board of Commissioners of the Authority approved a contract with HMS Host, Inc. ("HMS" or "HMS Host") relating to its operation of the food services facilities at the service areas on both the Turnpike and the Parkway (the "HMS Agreement"). The term of the HMS Agreement commenced on September 12, 2017 and will expire on September 11, 2044. HMS will provide food services at 17 of the Authority's 21 service areas. Pursuant to the HMS Agreement, HMS is required to invest at least $125,000,000 during the first seven years of the HMS Agreement to construct eight new restaurant buildings and refurbish and remodel six other existing restaurant buildings located at various service areas on the Turnpike and the Parkway. Additionally, HMS is also required to make a capital contribution of $1,000,000 per year for 25 years for the purpose of ongoing maintenance and capital improvements to the restaurant facilities at the service areas on the Turnpike and the Parkway. Under the first amendment to HMS Agreement, the Authority receives an annual fee from HMS that is the greater of: (i) a percentage of gross sales which begins at 12.75% and rises to 14.0% over the term of the HMS Agreement; or (ii) a minimum annual guaranteed fee, which is the greater of 88% of the rent in the previous year or a floor of $12,000,000. The effective date of the first amendment was December 31, 2019.

On May 24, 2021, the Authority entered into an agreement whereby HMS assigned all rights and obligations of HMS under the HMS Agreement to Iris Buyer, LLC ("Iris"). Iris is presently comprised of a consortium of Applegreen Ltd ("Applegreen") and Blackstone Infrastructure Partners. The Authority consented to this assignment and at closing was paid all amounts due from HMS. Other terms of the Authority's consent included a performance guarantee from Iris, an updated construction schedule for certain service areas, adding Vauxhall and Brookdale South service areas to the service areas to be reconstructed and an agreement to maintain the working relationship with Sunoco for gasoline operations.

In August 2022, the Authority entered into an amendment to the agreement between the Authority and Applegreen which provides for the reconstruction of the Vauxhall and Brookdale South service areas and the inclusion of those services areas in the service areas to be operated by Applegreen. Pursuant to the amendment, Applegreen is responsible for the demolition of the existing facilities and rebuilding of the new facilities and the Authority is required to make a contribution of $7,000,000 towards the estimated $14,500,000 costs of the curb-in work, with Applegreen being responsible for all remaining costs. Additionally, the parties agreed to bring premium brands including Shake Shack and Chick-Fil-A to the service areas. Finally, the amendment also requires that Applegreen pay the Authority a percentage of the sales revenues from food, beverage, and convenience store in the Vauxhall and Brookdale South service areas.

Sunoco, Inc. ("Sunoco") provides gasoline, diesel fuel and minor repair services at all Turnpike service areas and the nine (9) Authority owned Parkway service areas. At its September 12, 2017 meeting, the Board of Commissioners of the Authority approved a contract with Sunoco relating to its operations at service areas on both the Turnpike and the Parkway (the "Sunoco Agreement"). The term of the Sunoco Agreement commenced on September 12, 2017 and will expire on December 31, 2042. Pursuant to the Sunoco Agreement, Sunoco is required to invest at least $90,000,000 during the first seven years of the Sunoco Agreement to, among other things, build two new convenience stores, refurbish its fuel service facilities, and refurbish and remodel all of its existing convenience stores located at various service areas on the Turnpike and the Parkway. Additionally, Sunoco is also required to make a capital contribution of $500,000 per year for 25 years for the purpose of ongoing maintenance and capital improvements to the fuel service and convenience store facilities at the service areas on the Turnpike and the Parkway. Under the Sunoco Agreement, the Authority receives an annual fee from Sunoco which is the greater of: (i) $0.1025 per gallon of fuel sold; or (ii) a minimum annual guaranteed fee which is $14,000,000 in the first five years of the agreement and increases to approximately $18,000,000 during the final five years of the Sunoco Agreement.

The remodeling and refurbishing of the service areas is being done in phases. The first phase was successfully completed in summer of 2019, which included the Thomas Edison, Monmouth, Alexander Hamilton and Brookdale North services areas. The second phase was started in September 2019 and was successfully opened to public in the summer of 2020. This phase included remodeling of the Vince Lombardi, Forked River and Richard Stockton services areas. After a temporary suspension in 2020 of all work due to the COVID-19 pandemic, phase three work at the Woodrow Wilson and Molly Pitcher service areas began in September 2021. The work at those services areas involving the Authority included curb-out asphalt paving and replacement, improvements to sidewalks, curbs and other concrete surfaces, and electrical improvements. In accordance with the Agreement, Applegreen handled the remodeling and refurbishing of the buildings. The service areas were successfully opened to the public in July 2022. The work at all the remaining service areas is expected to be completed by December 31, 2024.

In addition to the Authority owned service areas, PMG New Jersey II ("PMG") operates one fueling station and convenience store on its property in Colonia, New Jersey, which abuts the Parkway northbound at approximately milepost 133.6, and one fueling station and convenience store on its property in Iselin, New Jersey, which abuts the Parkway southbound at approximately milepost 132.7. On June 18, 2014, the Authority and PMG entered into an agreement whereby PMG remits to the Authority fifteen thousand dollars ($15,000) per month related to PMG's operation of its facilities that have direct access to the Parkway. The initial term of the agreement ended on December 31, 2016 and it renews automatically every three (3) years thereafter for consecutive three (3) year renewal terms. The first renewal term began on

January 1, 2017, as neither party terminated the agreement for cause. During each renewal term, the monthly fee increases by three percent (3%) over the fee due in the initial term or prior renewal term, as applicable.

133 Colonia, L.L.C. operates one fueling station on its property in Colonia, New Jersey, which abuts the Parkway northbound at approximately milepost 133.6. 82 Iselin, L.L.C., operates one fueling station on its property in Iselin, New Jersey, which abuts the Parkway southbound at approximately milepost 132.7. On July 23, 2015, the Authority entered into an agreement with 133 Colonia, L.L.C. and 82 Iselin, L.L.C. to operate a convenience store on each of their properties. The initial term of the agreement ends on the last day of the 96th month after the Authority begins receiving the fees which are due and payable to the Authority under the terms of the agreement. The agreement renews automatically every eight (8) years thereafter as provided in the agreement. Pursuant to the agreement, 133 Colonia, L.L.C. and 82 Iselin, L.L.C. will each pay the Authority $5,000 per month when the stores are operational. The store owned by 133 Colonia, L.L.C. opened in January 2019 and the Authority began receiving payment of its fees in May 2019. The store owned by 82 Iselin, L.L.C. opened in May 2018 and the Authority began receiving payment of its fees in January 2019. During each renewal term, the monthly fee increases by six percent (6%) over the fee due in the initial term or prior renewal term, as applicable.

On July 27, 2021, the Authority entered into a Memoranda of Understanding (MOU) with the Foundation of the New Jersey Hall of Fame (the "Foundation") for the naming of nine services areas on the Parkway honoring New Jersey Hall of Fame Inductees. The Foundation currently operates as a 501(c)(3) charitable foundation. The Foundation has agreed to contribute up to $1,000,000 of the total cost of the project. In addition, the Foundation will create exhibits and/or displays at each service area which will consist of a wall display, artifacts and digital interactive activities. The Authority will be required to make the necessary site preparation steps for the Foundation to install the display exhibits. The Authority will also need to replace all roadway signage in the parking area and exterior of each service area facility. As of the date of this Private Placement Memorandum, the renaming of eight of the service areas on the Parkway and the work related thereto has been completed.

Gross revenues received by the Authority from all Turnpike service areas in 2022 were $28,779,000. Gross revenues received by the Authority during 2022 from all service areas on the Parkway were $7,794,000.

E-ZPass Fees

The Authority utilizes an electronic toll collection system to collect a majority of its toll revenue. The Authority is part of the New Jersey E-ZPass Group (the "NJ E-ZPass Group"), which includes the Authority, the South Jersey Transportation Authority, the Delaware River Port Authority, the Delaware River & Bay Authority, the Burlington County Bridge Commission, and the Delaware River Joint Toll Bridge Commission. On December 6, 2016, the NJ E-ZPass Memorandum of Agreement ("MOA") became effective. The First Amendment to the MOA adds Cape May County Bridge Commission as a party to the MOA and became effective January 18, 2018. The MOA is an agreement between the agencies above clarifying their rights and responsibilities with respect to the terms and conditions of the contract with Conduent State & Local Solutions, Inc., formerly Xerox State & Local Solutions, Inc. relating to the operation of the E-ZPass electronic toll collection system in the State. See "THE AUTHORITY – Electronic Toll Collection" herein. The NJ E-ZPass Group shares a main Customer Service Center (the "NJ CSC") located in Newark, New Jersey, in addition to smaller satellite service centers that are a part of the NJ CSC. The Authority is the lead agency for the NJ E-ZPass Group and is primarily responsible for the group's financial and operational decisions. The NJ E-ZPass Group is part of the regional E-ZPass Group which currently extends from Maine to Florida and as far west as Minnesota. In 2022, over 91.5% of the Turnpike's transactions and over 89.7% of the Parkway's transactions were processed electronically. Customers of the NJ CSC can use their E-ZPass account anywhere E-ZPass is accepted.

The Authority receives fees and other related income from the operation of the E-ZPass system on the Turnpike and the Parkway. In 2022, total fee revenue was $139,356,000, as further discussed below.

Monthly membership fees of $1.00 are assessed on account holders to help offset the cost of operations. In 2022, the Authority's portion of the membership fees was approximately $27,241,000. Included with the account, customers receive account statements every other month. The NJ CSC also allows customers to receive monthly statements for a fee of $6.00 per year. In 2022, the Authority received $2,702,000 in statement fees.

Vehicles passing through a toll lane without paying the full toll due are considered violators and, in addition to the toll due, are assessed an administrative fee designed to offset the increased collection costs. The current Administrative Fee is $50.00 per violation on the Turnpike. Up to four violations can be included on notices sent to Parkway violators for the same $50.00 fee. The Authority collected administrative fees of $106,655,000 in 2022.

Several parking authorities accept E-ZPass transponders as payment. The NJ CSC charges these authorities transaction fees to offset the costs of maintaining the customer accounts for this convenience. In 2022 the Authority recorded $490,000 in parking fee revenue.

Other fees associated with the E-ZPass system include tag sales to business customers, bad check fees, interest income on deposits and damaged and returned tag fees. These fees amounted to $2,268,000 in 2022.

Miscellaneous Revenues

Miscellaneous revenues of the Authority include rentals of cell tower sites, fiber lease revenue, towing zone fees, park and ride commissions, revenues from the Arts Center (as hereinafter defined) and other revenues.

The Authority maintains contracts with several major telecommunications carriers that permit the carriers to construct, install, operate and maintain cellular towers at various locations along the Authority's right-of-way. This provides state of the art communications capability for the Authority, its patrons and others. The Authority may install its own radio transmitting and receiving equipment in the same locations. In 2022, the Authority received rent of $5,555,000 for these sites.

The Authority and the South Jersey Transportation Authority (SJTA) own, operate, and maintain a fiber system on their respective rights-of-way. The Authority's fiber system runs along the Turnpike and the Parkway. SJTA's fiber system runs along the Atlantic City Expressway. The fiber system is used to transmit radio, voice, video and data, supporting day-to-day operations. The excess capacity of this network is leased to various commercial enterprises. In 2022, the Authority received $1,851,000 from these leases.

A separate fiber optic network is located along the Parkway right-of-way. The excess capacity of this network is leased to various communications companies. The revenue produced from these leases in 2022 was $1,550,000.

Under an agreement between the Authority and NJ Transit, NJ Transit operates the park/ride facility at the Vince Lombardi Service Area on the Turnpike in Ridgefield Park. The Authority also contracts with Academy Bus to operate the park/ride facility off Interchange 8A on the Turnpike in Cranbury and a parking lot at the Arts Center. In 2022, the Authority recorded revenues totaling $845,000 for these parking facilities in accordance with the applicable operating agreements.

The Authority allows billboards to be operated at several locations along the Turnpike and Parkway. In April 2010, the Authority awarded a contract to Allvision Inc. to manage the Authority's billboard assets. Pursuant to this award, Allvision Inc. is marketing the Authority's billboard assets and upgrading several sites to digital billboards. In 2022, the Authority received rent payments of $1,217,000 for the sites located along the roadways.

In 2022, the Authority received $1,813,000 in disaster recovery funds from the Federal Emergency Management Agency (FEMA) related to emergency protective measures for the COVID-19 pandemic and Tropical Storm Isaias (2020).

The PNC Bank Arts Center (the "Arts Center") is an entertainment facility located in the Telegraph Hill Nature Area, a 400-acre recreational tract along the Parkway in Holmdel. The facility, which opened in 1968, plays host to major touring performers. The Arts Center is owned by the Authority and leased to a private operator, Live Nation Worldwide, Inc. ("Live Nation"). The term of the Authority's current lease agreement with Live Nation (the "Lease") commenced on January 1, 2018 and ends on December 31, 2042. The annual rent payable to the Authority by Live Nation under the Lease is the greater of (i) 10.5% of the gross revenues of the operation of the Arts Center, or (ii) a minimum annual guaranteed rent of $2,940,507, which amount increases by 2.5% every four years, commencing in the 5th year of the Lease, and ultimately rises to $3,326,914 during the final five years of the Lease. The Lease also requires Live Nation and the Authority to each contribute $11,000,000 to reconstruct and renovate the Arts Center, with Live Nation making its contribution in four equal annual installments of $2,750,000 by no later than March 1 in each of the years 2018 through 2021. On August 27, 2019, the agreement was amended. As per the amended agreement, the tenant makes an additional contribution of $4,000,000 payable in equal installments of $2,000,000 on September 1, 2019 and September 1, 2020. The $15,000,000 payments by Live Nation are considered advanced payments of rent revenue and are being recognized over the life of the lease. To the extent that the costs of reconstructing and renovating the Arts Center exceed $30,000,000, the Authority is responsible to pay the first $500,000 of such costs overages, with all costs overages above $500,000 being shared equally between the Authority and Live Nation. In addition to Live Nation's $15,000,000 contribution to reconstruct and renovate the Arts Center, the Lease also requires Live Nation to make annual deposits of the lesser of $300,000 or 0.5% of annual gross revenues into a capital improvement fund, which shall be used to fund capital improvements to the Arts Center. All amounts remaining in the capital improvement fund at the end of the term of the Lease will belong to the Authority. Under the Lease, the Authority and Live Nation agree to share equally (50% each) the proceeds to be received from any future naming/sponsorship agreement relating to the Arts Center.

In April 2020, the Authority and Live Nation amended the Lease to defer a rental payment from March 2020 to December 2020 and to increase the minimum percentage rent from 10.5% to 13.5% for 2020, up to a maximum not to exceed amount of $1,176,203. The amendment to the Lease also provides that after 2020, the Lease shall revert to the original financial terms for the minimum percentage rental amount set forth in the Lease, subject to the approval of the Authority's Board of Commissioners.

Under a separate agreement (the "Sponsorship Agreement"), which was restated in December 2020, PNC Bank, National Association ("PNC Bank") pays the Authority $1,316,236 per year for the naming and marketing rights to the Arts Center. Furthermore, PNC Bank is also required to pay a Cultural Activity Contribution of $75,000 for each year of the agreement. This agreement has a five year term ending on October 31, 2025, with an additional 1-year renewal period. Prior to the expiration of the agreement, PNC Bank and the Authority are obligated to commence a 180-day exclusivity period to negotiate a new Sponsorship Agreement, in accordance with the current renewal terms of the agreement.

The Authority received $4,338,000 in gross revenues from the Arts Center in 2022.

Organization

The Authority budgeted for 2,170 full-time employees for 2023. In addition to the full-time workforce, the Authority also employs part-time and temporary employees. As of August 31, 2023, the Authority had 2,005 full-time, 316 part-time and 34 temporary/seasonal employees.

There are eight negotiating units representing different classifications of full-time Authority employees. These eight unions represent approximately 98% of the Authority's full-time workforce. The labor contracts for seven of the unions expired on June 30, 2023 and one contract expired on September 30, 2023. Under New Jersey public sector labor law, union employees are not permitted to strike but all terms and conditions of expired collective negotiations agreements remain in place until new agreements are agreed upon. In addition, there are two negotiating units representing different classifications of part-time toll collectors. Each of these two contracts expired on June 30, 2023. The bargaining units, along with the status of their collective negotiation agreements, are as follows:

- Local 97 Teamsters Industrial and Allied Workers Union, AFL/CIO represents office, clerical, and technical employees in the Administrative departments and in Parkway maintenance and Parkway tolls. The term of this agreement is July 1, 2019 through June 30, 2023.

- Local 193 International Federation of Professional and Technical Engineers ("IFPTE") represents Parkway Toll Supervisors. The term of this agreement is October 1, 2019 through September 30, 2023.

- Local 193C IFPTE represents Parkway Crew Supervisors. The term of this agreement is July 1, 2019 through June 30, 2023.

- Local 194 IFPTE represents Turnpike toll collection and Turnpike maintenance employees. Local 194 IFPTE also represents office, clerical and technical employees in Administrative departments and in Turnpike maintenance and Turnpike tolls. The term of this agreement is from July 1, 2019 through June 30, 2023.

- Local 194 IFPTE Part-Time Toll Collectors represents Turnpike part-time toll collectors. The term of this agreement is from July 1, 2019 through June 30, 2023.

- Local 196 Chapter 1 IFPTE represents Parkway toll collectors and Parkway maintenance employees. The term of this agreement is from July 1, 2019 through June 30, 2023.

- Local 196, Chapter 12 IFPTE represents Parkway Craftspersons. The term of this agreement is from July 1, 2019 through June 30, 2023.

- Local 196 IFPTE Part-Time Toll Collectors represents Parkway part-time toll collectors. The term of this agreement is from July 1, 2019 through June 30, 2023.

- Local 200 IFPTE represents Turnpike Toll and Turnpike Maintenance supervisory employees as well as administrative supervisory employees. The term of this agreement is from July 1, 2019 through June 30, 2023.

- Local 3914, American Federation of State, County and Municipal Employees represents low to mid-level managers and the attorneys in the Law Department of the Authority. The term of this agreement is from July 1, 2019 through June 30, 2023.

Pension and OPEB Obligations

Authority employees belong to the Public Employees' Retirement System ("PERS"), an actuarially funded pension system operated by the State of New Jersey. Each employee contributes to PERS based on a percentage of the employee's salary. Employees are enrolled in PERS upon commencement of employment with the Authority. The Authority makes an annual contribution to PERS in an amount determined by the New Jersey Division of Pensions and Benefits. In 2022, the amount billed to local employers was 100% of the Actuarially Determined Contribution (ADC) as determined by the New Jersey Division of Pensions and Benefits actuaries.

The current employee contribution rate to PERS is 7.5% of annual compensation as of July 1, 2023. The payment of automatic cost-of-living adjustments (the "COLA") additional increases to current and future retirees and beneficiaries is currently suspended, but may be reactivated at a future date as permitted by law. Please see Note 11 in the audited financial statements of the Authority as of and for the year ended December 31, 2021 for additional information regarding pension benefits. Set forth below are the contractually required contributions made by the employees of the Authority and the Authority itself during the fiscal years ending December 31, 2018 through and including December 31, 2022:

	2018	2019	2020	2021	2022
Employee Contributions	$ 9,745,000	$ 10,498,000	$ 10,475,000	$10,489,000[(1)]	$ 10,687,000
Employer Contributions	18,469,000	17,789,000	20,966,000	22,278,000	23,659,000
Total Contributions	$ 28,214,000	$ 28,287,000	$ 31,441,000	$32,767,000[(2)]	$ 34,346,000

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(1) Restated Employee Contributions, originally $10,601,000
(2) Restated Total Contributions, originally $32,879,000

The Authority provides medical, prescription drug, vision, dental and Medicare Part B reimbursement to retirees and their covered dependents, in accordance with the terms of the applicable collective bargaining agreements or Authority personnel policies for non-bargaining unit members. The Authority maintains a single-employer, self-funded health plan administered by third party claims administrators. All active employees who retire from the Authority and meet the eligibility criteria will receive these benefits. As required by P.L. 2011, c.78 mandated by the State, retirees with less than twenty years of service as of June 28, 2011 will contribute towards health benefits in retirement.

The Authority currently funds for the cost to provide postemployment benefits on a pay-as-you-go basis. The Authority establishes and has the power to amend benefits and contribution obligations, subject to collective bargaining agreements to the extent they do not conflict with P.L. 2011, c.78 mandated by the State. While the Authority funds for the cost to provide postemployment benefits on a pay-as-you-go basis, accrued expenses and liabilities are recorded for the cost of the Authority's unfunded pension benefits.

The following table shows the changes in the total OPEB liability as of December 31, 2021 and December 31, 2022:

	2022	2021
	(In Thousands)	
Balance at January 1	$ 1,977,246	$ 1,753,972
Changes for the year:		
Service Cost	56,100	47,698
Interest	42,627	48,779
Difference between expected and actual experience in the total OPEB liability	12,369	(1,137)
Changes in assumptions or other inputs	(37,722)	171,025
Benefit payments, including refunds of member contributions	(45,474)	(43,091)
Net changes	27,900	223,274
Balance at December 31	$ 2,005,146	$ 1,977,246

The Authority has received a final actuarial report regarding its estimated OPEB liabilities as of December 31, 2022 from its actuary. The actuarial report estimates an increase in the Authority's unfunded OPEB liability at December 31, 2022 of approximately 13%, as compared to December 31, 2021. The increase is primarily due to a change in the discount rate from 2.12% to 2.06%. This is partially offset by a decrease in obligations due to revising the valuation-year per capita health costs and future trend on such costs.

Please see Note 12 in the financial statements of the Authority as of and for the years ended December 31, 2022 and 2021 included as Appendix A to this Private Placement Memorandum for additional information regarding the Authority's postemployment benefits.

Public Safety

Patrol services for the Authority are provided by up to 408 troopers who are members of Troop D of the New Jersey State Police. The members of Troop D are employees of the State. The Authority makes payments to the State for the patrol services they provide under an agreement between the Authority, New Jersey State Police and the State of New Jersey. The Authority pays for the compensation and the maintenance of the troopers, the pension and FICA taxes, other reimbursable costs as well as other fringe benefits which includes payments for health benefits, worker's compensation and unemployment. The amount paid to the State for those services in 2022 was $98,338,000. In addition to these direct payments, the Authority is also responsible for the purchase of vehicles and equipment used by the Troop D members. Starting 2020, the troopers are also provided with the body cameras by the Authority.

Budget Procedures

The Authority's annual budget provides the basis for expenditures during the year. The Authority operates on a calendar-year basis. Not fewer than 40 days before the end of the year, the Authority must submit a preliminary budget of operating expenses and reserves, among other items, to the Trustee as required by the Resolution. The preliminary operating budget is only submitted if the annual budget has not been submitted prior to 40 days before the end of the year. 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 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.

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 under the Authority's adopted procedure 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.

The preliminary operating budget, the annual budget, and any amendments to the annual budget are required to be posted to the Municipal Securities Rulemaking Board's EMMA website. The annual budget in effect for any calendar year must be published to EMMA prior to May 1st of each year, as prescribed in the Authority's continuing disclosure agreements for each publicly offered bond issue.

Electronic Toll Collection

An electronic toll collection system (the "ETC System") became operational on the Parkway in December 1999 and on the Turnpike in September 2000. The ETC System allows users to pay tolls at toll collection facilities without stopping to exchange tickets or money. The ETC System uses various electronic sensors and other equipment to automatically detect, profile and classify a vehicle. With the use of onboard vehicle transponders linked to customer accounts and readers in toll lanes, this system allows the Authority to seamlessly record and charge toll transactions, making errors less likely while allowing for real-time traffic management. The Authority is one of many tolling agencies in 18 states from Maine to Florida and as far west as Minnesota. E-ZPass Group members use similar technology and standardized protocols allowing them to accept other members' customers under the E-ZPass brand of Electronic Toll Collection. For the fiscal year ended December 31, 2022, approximately 91.5% of the toll transactions on the Turnpike and approximately 89.7% of the toll transactions on the Parkway were processed through the ETC System.

At its September 29, 2015 meeting, the Board of Commissioners of the Authority along with the South Jersey Transportation Authority ("SJTA"), the Delaware River Port Authority ("DRPA"), the Delaware River & Bay Authority ("DRBA"), the Delaware River Joint Toll Bridge Commission ("DRJTBC") and the Burlington County Bridge Commission ("BCBC") awarded a contract (the "Current E-ZPass Agreement") to Xerox State & Local Solutions (Xerox) based upon its proposal submitted in response to an RFP issued in January 2015. The First Addendum to the Current E-ZPass Agreement clarified the invoicing process under the Current E-ZPass Agreement. The Second Addendum to the Current E-ZPass Agreement extended the cut-over date of implementing certain upgrades to the customer service center from February 1, 2017 to July 17, 2017. This Second Addendum also provided for Xerox to provide payment and credit card processing. The Third Addendum to the Current E-ZPass Agreement extended the cut-over date to October 16, 2017. The Fourth Addendum to the Current E-ZPass Agreement clarified the responsibilities of the contractor to meet certain timelines and performance goals and prescribed penalties for failing to achieve the goals. The Fifth Addendum to the Current E-ZPass Agreement includes Cape May County Bridge Commission ("CMCBC") in the term "Agencies" and includes the newly added agency in the invoicing allocations outline in the First Addendum. On January 3, 2017, Xerox split into two separate companies. The contract to operate the New Jersey E-ZPass was assigned to Xerox State & Local Solutions D/B/A Conduent ("Conduent"). As of the Third Addendum to the Current E-ZPass Agreement, the "Contractor" is referred to as Conduent State & Local Solutions, Inc. (Formerly Xerox State & Local Solutions, Inc.). The Current E-ZPass Agreement with Conduent has an operating period of eight (8) years beginning February 1, 2017 with an option to extend the contract and the operating period for one, 2-year term at the Authority's discretion.

Relative to the E-ZPass contract with Conduent, in 2016, the Authority and the other agencies (SJTA, DRPA, DRBA, DRJTBC and BCBC) forming the New Jersey E-ZPass Group entered into a Memorandum of Agreement (the "MOA") which established the rights and responsibilities of each agency and designated the New Jersey Turnpike Authority as the lead agency. In 2018, a First Amendment to such Memorandum of Agreement was entered into which admitted CMCBC into the New Jersey E-ZPass Group.

The Authority and the other agencies in the New Jersey E-ZPass Group are each individually responsible for paying 100% of the costs due and owing to Conduent under the Current E-ZPass Agreement which are associated with transactions specifically identifiable as being for the benefit of the Authority or each such other agency. All other costs and expenses under the under the Current E-ZPass Agreement are shared among the Authority and the other members of the New Jersey E-ZPass Group based upon a percentage formula that is adjusted annually in accordance with the terms of the MOA. Currently, the Authority is responsible for paying approximately 77% of such shared costs and expenses due and owing to Conduent under the Current E-ZPass Agreement and the remaining 23% is shared by SJTA, DRPA, DRBA, DRJTBC, BCBC and CMCBC. Payments required to be made by the Authority under the Current E-ZPass Agreement constitute Operating Expenses of the Turnpike System under the Resolution and are payable from Pledged Revenues prior to the deposit of Pledged Revenues into the Debt Service Fund to pay Debt Service on the Bonds.

At is meeting on September 27, 2022, the Board of Commissioners of the Authority approved the awarding of a contract to TransCore LP ("TransCore"), in an amount not to exceed $914,058,630 over the eight-year term of the contract, which will require TransCore to design, develop, install, test, operate and maintain a fully functional turnkey all-electronic toll collection system on both the Turnpike and the Parkway. The Authority is currently working on an implementation strategy and timeline for an all-electronic toll collection system.

Manual Toll Collection

The Toll Collection Department of the Authority manages the collection of cash tolls on both the Turnpike and the Parkway. Administrative personnel in the Toll Collection Department include eight directors or managers, four supervisors and three support staff/clerical. The administrative staff is responsible for developing procedures for collecting toll revenues and ensuring that the toll plazas are safe for motorists and for the Authority's field staff.

The Turnpike

The Turnpike has 30 interchanges connecting the roadway with major traffic arteries, cities and transportation centers. Toll collection at the interchanges is managed and operated by 188 full-time and 248 part-time toll collectors (173 – 16 hour toll collectors and 75 – 20 hour toll collectors), 91 supervisors, 8 interchange managers, 2 assistant division managers, 1 Field Operations Manager and 4 clerks. The Authority's Integrated Technology Services Department is responsible for maintaining the Turnpike's manual toll equipment.

Except for two cash toll barriers (at Interchanges 6A and 17) and a cashless tolling system gantry (Interchange 19W), toll collection on the Turnpike is done through a closed system; drivers take tickets when they enter the roadway and return the tickets with their payment when they exit. All tickets are processed through a computerized toll system that imprints them with interchange number, date, time of entry, lane number, class of vehicle, and toll collector identification information. This is accomplished when drivers enter the Turnpike. As they exit the roadway, the patron hands the ticket to the toll collector who inserts it into the system to have the exit time imprinted on it. The axle count, tickets, revenues, and automatic vehicle classifications are reconciled daily by the Finance and Budget Department of the Authority. The State Legislature has directed that tolls are not to be collected on the I-95 extension; thus, that section of the roadway is not part of the closed toll system.

The Parkway

Cash toll collection along the Parkway's 49 barriers and ramps is managed and operated by 128 full-time and 70 part-time toll collectors, 60 plaza and assistant plaza supervisors and 5 area managers. The Authority's Integrated Technology Services Department is responsible for maintaining the Parkway's manual toll equipment and automatic coin machines.

The collection of cash tolls on the Parkway is done through an "open" system: drivers pay a set toll at barriers and ramps along the roadway. The tolls vary by vehicle class determined by the number of axles. Automatic coin machines are also used to collect cash tolls at Parkway ramps.

Control Procedures

The Authority's Finance Department audits manual, automatic coin machine (ACM), and E-ZPass transactions to ensure the proper credit and handling of funds. Toll collectors, ACMs and Electronic Toll Collection (ETC) lanes are monitored for variances in vehicle classification, axle count, transaction count, and expected revenue.

The actual revenue received for manual and automatic lanes, currency and/or coin, is picked up by armored car, delivered to a contracted Money Counting Facility (MCF), counted by the MCF and deposited to a designated toll revenue bank account. The Authority's Finance Department audits the variances in classification, axle count, transaction count and actual versus expected revenue.

Collector variances over a certain threshold are reported to senior Toll Collection management and/or the Internal Audit Department for possible re-training, counseling, discipline, or legal action. Additionally, bank errors or shortages are reported to the bank to ensure proper credit of funds. Either periodically, or upon request from the Authority's Finance Department, the Internal Audit Department makes a site visit to the MCF to monitor and review coin and currency counting control procedures.

For electronic toll transactions, all transactions are sent to the NJ CSC and processed as either a valid E-ZPass transaction or a violation transaction. The Authority's Finance Department receives reports that detail the disposition of every transaction sent to the NJ CSC, records actual transactions posted and revenue received, rejected transactions, reasons for rejected transactions by reason type, and status of violation transactions. Thresholds are established for usual levels of rejected and violation transactions, and amounts above these levels are reported to the NJ CSC and/or the Authority's Integrated Technologies Service Department for action.

Existing Toll Rates and Schedule

Effective as of September 13, 2020, the Authority increased toll rates by 36% on the Turnpike and 27% on the Parkway, which were the first toll increases on the Turnpike or the Parkway since 2012. The Authority's resolution approving those toll increases also contains an annual indexing provision providing that, commencing on January 1, 2022 and continuing annually thereafter, the tolls on the Turnpike and the Parkway shall be further increased in an amount to be determined annually, provided that any such increase shall not exceed three percent (3%) per year. Accordingly, the toll rates on the Turnpike and the Parkway were increased by 3% on January 1, 2022 and by an additional 3% on January 1, 2023.

In connection with determining the amount of the toll increase that became effective on the Turnpike and the Parkway on January 1, 2023 in accordance with the annual indexing provision, in the course of the preparation of the annual Revenue Certification and Annual Budget for calendar year 2023, both of which are required to be prepared by the Authority in accordance with the provisions of the Bond

Resolution, the Authority staff conducted a review to determine the percentage of the toll increase (not to exceed 3%) which was required in order for the Authority to produce sufficient Net Revenues in 2023 to satisfy all of the Authority's financial obligations and covenants under the Bond Resolution. The Revenue Certification and the Annual Budget for 2023 prepared by the Authority's staff both included a recommended toll increase indexing percentage of 3% and both were subsequently presented to and approved by the Board of Commissioners of the Authority. The Authority expects that all future annual toll indexing increases will be determined and implemented in substantially the same manner as was done for the toll increase which took effect on January 1, 2023.

The increased toll rates that became effective on the Turnpike and the Parkway on September 13, 2020, January 1, 2022 and January 1, 2023, together with the annual indexing provision, are designed to provide the Authority with sufficient Net Revenues to permit the Authority to issue additional Bonds under the Resolution to fund the projects identified in the 2020 Long-Range Capital Plan. The projected toll revenues in the 2023 Study, the Authority's Long-Range Financial Plan (through 2028) set forth in the Authority's 2023 Annual Budget and the table of Projected Revenues, Expenditures and Debt Service Coverage on page [73] of this Private Placement Memorandum assume that, commencing on January 1, 2024, the tolls on the Turnpike and the Parkway will be increased annually by 3% pursuant to the annual indexing provision of the above-mentioned resolution. See "SECURITY FOR THE BONDS – Toll Covenant", "THE AUTHORITY – Certain Powers" and "THE AUTHORITY – Capital Improvement Programs" herein and APPENDIX B – "2023 TRAFFIC AND TOLL REVENUE FORECAST STUDY" attached hereto.

In connection with the toll increases that became effective on September 13, 2020, the Authority reviewed the toll discounts it provided to buses. This review and analysis was initiated by the Authority after it became aware that its current toll discount policy for buses traveling on the Parkway may not comply with the provisions of the Federal-Aid Highway Act requiring that any over-the-road bus that serves the traveling public must be provided access to the Parkway under the same toll rates, terms and conditions as public transportation buses. After completing its review and analysis, on September 13, 2020, the Authority implemented a uniform bus discount of 40 percent, called the Standard Bus Discount, which will be applicable to both private and public transportation buses traveling on the Turnpike and the Parkway. The Authority believes that this adjustment will not have a material adverse impact on its financial position.

The Turnpike

The Authority has increased tolls on the Turnpike ten times since its opening in 1951. The effective dates of those increases were March 23, 1975, April 1, 1980, March 17, 1991, September 30, 2000, January 1, 2003, December 1, 2008, January 1, 2012, September 13, 2020, January 1, 2022 and January 1, 2023. The Authority's resolution approving the toll increases on the Turnpike that became effective on September 13, 2020 also contains an annual indexing provision providing that, commencing on January 1, 2022 and continuing annually on each January 1 thereafter, the tolls on the Turnpike shall be further increased in an amount to be determined annually, provided that any such increase shall not exceed three percent (3%) per year. Additionally, a toll at the new interchange 19W on the Western Spur of the Turnpike was established in the most recent toll adjustments. With the exception of Interchanges 6A, 17 and 19W, tolls are collected by use of a closed-ticket system, with payment made at the point of exit. The toll rate is determined by distance traveled, class of vehicle, time of day, method of payment, and other factors.

As of January 1, 2023, passenger vehicles pay tolls averaging approximately 17.10 cents per mile for a full-length, peak period trip on the mainline Turnpike. The Authority offers discounted toll rates on the Turnpike based on time of travel, method of payment, type of vehicle, frequency of use, and other factors.

Table 3 depicts the current E-ZPass tolls for selected peak-period trips by class of vehicles for the Turnpike.

Table 3 – Summary of Current Toll Rates on the Turnpike — E-ZPass, Peak Period

Trip	Passenger Cars	2-Axle Dual-Tire	3-Axle	4-Axle	5-Axle	6-Axle	2-Axle Buses
Delaware Memorial Bridge (Exit 1)							
NORTH TO:							
George Washington Bridge (Exit 18E/18W)	$ 20.01	$ 37.52	$ 46.85	$ 56.29	$ 65.57	$ 74.96	$ 22.51
Lincoln Tunnel (Exit 16E/16W)	18.10	33.90	46.48	53.74	64.57	74.96	20.34
Holland Tunnel (Exit 14C)	19.21	35.65	46.85	54.97	65.57	74.96	21.39
Lincoln Tunnel (Exit 16E/16W)							
SOUTH TO:							
Newark Airport (Exit 14)	3.08	6.22	7.65	9.30	11.20	13.06	3.73
Parkway (Exit 11)	7.43	13.06	18.47	21.66	25.47	29.82	7.84
New Brunswick (Exit 9)	9.40	17.30	23.09	27.06	32.89	37.89	10.38
Pennsylvania Turnpike (Exit 6)	14.81	27.06	36.29	42.50	51.31	59.11	16.24
Philadelphia-Camden (Exit 4)	14.01	26.42	36.02	42.13	50.35	58.35	15.86
Holland Tunnel (Exit 14C)							
SOUTH TO:							
Newark Airport (Exit 14)	3.57	7.65	9.30	10.83	13.06	15.18	4.59
Parkway (Exit 11)	7.86	14.38	20.22	23.09	27.70	31.68	8.63
New Brunswick (Exit 9)	9.61	18.68	24.84	28.60	34.12	39.74	11.21
Pennsylvania Turnpike (Exit 6)	15.39	28.60	38.52	44.04	52.95	61.17	17.16
Philadelphia-Camden (Exit 4)	14.81	27.91	37.89	43.56	52.52	60.96	16.75

The Parkway

Tolls on the Parkway have increased six times since its opening in 1950. The effective dates of the increases were April 15, 1989, December 1, 2008, January 1, 2012, September 13, 2020, January 1, 2022 and January 1, 2023. The Authority's resolution approving the toll increases on the Parkway that became effective on September 13, 2020 also contains an annual indexing provision providing that, commencing on January 1, 2022 and continuing annually on each January 1 thereafter, the tolls on the Parkway shall be further increased in an amount to be determined annually, provided that any such increase shall not exceed three percent (3%) per year. As of January 1, 2023, passenger vehicles now pay tolls of approximately 6.4 cents per mile for a full-length, round trip on the Parkway.

Table 4 shows the current Parkway tolls by class of vehicle.

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Table 4 – Summary of Current Toll Rates on the Parkway

Toll Plaza	Milepost	Class 1 Passenger cars, Motorcycles, Taxis	Class 2 2-Axle Dual Tire Vehicle	Class 3 3-Axle Vehicle or Vehicle/Trailer Combination	Class 4 4-Axle Vehicle or Vehicle/Trailer Combination	Class 5 5-Axle Vehicle or Vehicle/Trailer Combination	Class 6 6-Axle Vehicle or Vehicle/Trailer Combination	Classes B2, B3 2-Axle Bus, 3-Axle Bus, Cash	Classes B2, B3 2-Axle Bus, 3-Axle Bus, E-ZPass
MAIN LINE BARRIER PLAZAS									
Pascack Valley*	166.1	$ 2.02	$ 4.04	$ 6.06	$ 8.08	$10.10	$ 12.12	$2.43	$ 3.64
Bergen NB*	160.5	2.02	4.04	6.06	8.08	10.10	12.12	2.43	3.64
Essex SB*	150.7	2.02	4.04	6.06	8.08	10.10	12.12	2.43	3.64
Union NB*	142.7	2.02	4.04	6.06	8.08	10.10	12.12	2.43	3.64
Raritan SB*	125.4	2.02	4.04	6.06	8.08	10.10	12.12	2.43	3.64
Asbury Park NB	104.0	2.02	4.04	6.06	8.08	10.10	12.12	2.43	3.64
Toms River	84.7	1.01	2.02	3.03	4.04	5.05	6.06	1.22	1.82
Barnegat SB	68.9	2.02	4.04	6.06	8.08	10.10	12.12	2.43	3.64
New Gretna NB	53.5	2.02	4.04	6.06	8.08	10.10	12.12	2.43	3.64
Great Egg SB	28.8	2.02	4.04	6.06	8.08	10.10	12.12	2.43	3.64
Cape May NB	19.4	2.02	4.04	6.06	8.08	10.10	12.12	2.43	3.64
RAMP PLAZAS									
Paramus*	164.6	.70	1.45	2.08	2.82	3.57	4.41	.87	1.25
Saddle Brook NB*	160.3	2.02	4.04	6.06	8.08	10.10	12.12	2.43	3.64
Clifton*	156.1	.70	1.45	2.08	2.82	3.57	4.41	.87	1.25
Passaic*	154.5	.70	1.45	2.08	2.82	3.57	4.41	.87	1.25
Watchung*	152.6	1.01	2.02	3.03	4.04	5.05	6.06	1.22	1.82
Bloomfield*	148.9	.70	1.45	2.08	2.82	3.57	4.41	.87	1.25
East Orange*	147.1	1.39	2.89	4.15	5.63	7.13	8.82	1.74	2.49

Table 4– Summary of Current Toll Rates on the Parkway (cont'd.)

Toll Plaza	Milepost	Class 1 Passenger cars, Motorcycles, Taxis	Class 2 2-Axle Dual Tire Vehicle	Class 3 3-Axle Vehicle or Vehicle/Trailer Combination	Class 4 4-Axle Vehicle or Vehicle/Trailer Combination	Class 5 5-Axle Vehicle or Vehicle/Trailer Combination	Class 6 6-Axle Vehicle or Vehicle/Trailer Combination	Classes B2, B3 2-Axle Bus, 3-Axle Bus, Cash	Classes B2, B3 2-Axle Bus, 3-Axle Bus, E-ZPass
RAMP PLAZAS									
Irvington*	146.1	.70	1.45	2.08	2.82	3.57	4.41	.87	1.25
Union Ramp NB*	142.8	2.02	4.04	6.06	8.08	10.10	12.12	2.43	3.64
Sayreville SB*	142.8	2.02	4.04	6.06	8.08	10.10	12.12	2.43	3.64
Matawan*	117.1	.70	1.45	2.08	2.82	3.57	4.41	.87	1.25
Keyport*	118.6	.70	1.45	2.08	2.82	3.57	4.41	.87	1.25
Holmdel*	113.6	.70	1.45	2.08	2.82	3.57	4.41	.87	1.25
Red Bank*	110.3	.70	1.45	2.08	2.82	3.57	4.41	.87	1.25
Eatontown NB*	106.5	2.02	4.04	6.06	8.08	10.10	12.12	2.43	3.64
Belmar/Wall	98.0	.70	1.45	2.08	2.82	3.57	4.41	.87	1.25
Brick	93.0	.70	1.45	2.08	2.82	3.57	4.41	.87	1.25
Lakewood	90.1	.70	1.45	2.08	2.82	3.57	4.41	.87	1.25
Berkeley	77.9	.70	1.45	2.08	2.82	3.57	4.41	.87	1.25
Lacey	75.3	.70	1.45	2.08	2.82	3.57	4.41	.87	1.25
Waretown	70.4	1.01	2.02	3.03	4.04	5.05	6.06	1.22	1.82
Somers Point SB	30.2	2.02	4.04	6.06	8.08	10.10	12.12	2.43	3.64
Wildwood	3.8	.70	1.45	2.08	2.82	3.57	4.41	.87	1.25

* Heavy trucks registered 10,000 lbs. or more (6 tires or 3 or more axles) prohibited north of Interchange 105.

* E-ZPass tolls are discounted by approximately 5% over cash tolls for vehicles in Classes 2 through 6.

Pending and Future Legislation

As is the case in every legislative session, several bills have been introduced in the New Jersey State Legislature in the current legislative session ending in January 2024, which, if enacted in their present form, would (i) modify the penalties to be charged by the Authority in connection with toll violations, (ii) prohibit the Authority from implementing automatic toll increases and increasing tolls for three years, (iii) prohibit employees of the Authority from using power tools in inclement weather to perform non-emergency roadside maintenance, require all Authority roadside maintenance operations involving the use of gas-powered landscaping equipment be performed in daylight hours except in emergency situations, and require that portable roadside light towers be used for all Authority roadside maintenance operations taking place at night, (iv) require the Authority to display the amount of the tolls paid in lanes used for New Jersey E-ZPass (this bill would result in significant expenditures by the Authority on technological modifications and toll plaza reconstruction to ensure compliance), (v) exempt New Jersey E-ZPass customers from certain fees if their motor vehicle is stolen, (vi) establish a Design-Build delivery system for the Authority that would authorize the payment of stipends to bidders, (vii) recommend an E-ZPass credit to those residents and businesses in the State affected by congestion pricing, (viii) require the Authority to extend the payment period for violations of the E-ZPass system during the COVID-19 pandemic and the related state of emergency and public health emergency, and (ix) require to the Authority to provide a toll relief credit (funded by certain appropriations made by the State Legislature to the Authority) to certain qualifying E-ZPass customers.

In the current and several of its previous legislative sessions, the State Legislature is considering or has considered several other bills that could adversely impact the Authority's revenues and/or expenses and/or require the Authority to alter the way it currently conducts its operations, including, without limitation, bills requiring that the Authority provide natural gas refueling, propane refueling, hydrogen refueling and electric vehicle recharging stations at certain rest areas on both the Turnpike and the Parkway.

The Authority is unable to predict whether the currently pending bills will be enacted into law, or whether any such previously introduced bills, or substantially similar bills, will be introduced in the current or any future session of the State Legislature or, if introduced, whether any such bills will be enacted into law. If the currently pending bills or any such future bills are enacted into law, the Authority is unable to predict whether or not such bills will have a material impact on the Authority's operations.

Financial Management Principles and Guidelines

In December 2012, the Authority adopted its “Financial Management Principles and Guidelines” (the “Guidelines”). Among the policies established, the Authority will manage its toll rates, expense budget and debt issuance program to achieve minimum senior debt service coverage of 1.4x and a total requirement coverage of 1.2x. The Guidelines also stated the Authority will manage its cash flow and total expenditure levels such that it maintains an average unrestricted cash balance in the General Reserve Fund equal to at least $75,000,000. To maintain current policies that are in the best interest of its stakeholders, the Authority conducted a review of the Guidelines in November 2015. As a result of that review, at its November 2015 meeting, the Authority’s Board of Commissioners approved a change to the Guidelines which provided that the Authority’s minimum average unrestricted cash balance in the General Reserve Fund be increased to $100,000,000. Thereafter, at the direction of the Board of Commissioners, the Authority’s staff and its financial advisor conducted a review of twenty six (26) tolling agencies, which are members of the E-ZPass Interagency Group (IAG), to determine whether other tolling agencies have General Reserve Funds and if they do, whether they have policies requiring a minimum balance for the fund. Based on this review, in January 2017, the Authority’s Board of Commissioners approved a change to the Guidelines with respect to the minimum average unrestricted cash balance in the General Reserve Fund which provides that the Authority will manage its cash flow and total expenditures levels such that it will maintain average unrestricted cash balances in the General Reserve Fund equal to at least; (i) $125,000,000 at December 31, 2017, (ii) $150,000,000 at December 31, 2018, (iii) $175,000,000 at December 31, 2019, and (iv) beginning in 2020, by December 31st of each year, an amount equal to 10% of that years’ budgeted total annual revenue.

The Guidelines were implemented at the option of the Authority and are not a legal covenant required to be maintained pursuant to the Resolution for the benefit of the Bondholders. Such Guidelines can be changed or eliminated at any time at the option of the Authority. See, however, "SUMMARY OF GENERAL BOND RESOLUTION AND CERTAIN DEFINITIONS – Toll Covenants." in Appendix D to this Private Placement Memorandum. In addition, the Authority adopted an Interest Rate Swap Management Plan in March 2013 which was also amended in November 2015, an Investment Policy in September 2013 and a Debt Management Policy in January 2014.

Strategic Plan

In September 2019, the Authority adopted is first Strategic Plan that covers a 10-year period, 2020-2029 (the "Strategic Plan"). The Strategic Plan details the Authority's vision, mission, and core values, and 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 identifies three key tenets of the Authority's philosophy:

Vision Statement - To be the premier toll road agency in the Unites States of America.

Mission Statement - To prudently manage the finances and operations of the 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 - Safety, diversity, innovation, transparency, state of good repair, customer satisfaction, resiliency and sustainability, and long-term financial stability.

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 the Authority and is a critical component of the mission statement. Ensuring safety for both customers and the Authority's workforce is a focus of every project and initiative undertaken by the Authority.

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.

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 Authority's future success.

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 Strategic Plan.

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

The Strategic Plan will be reviewed annually and updated to accurately reflect the vision, mission, and core values of the Authority and to ensure that the Authority is aligned with the most successful trends in the industry. The Strategic Plan provides clear and consistent direction to allow management and staff to all work with the same philosophy and consistency, constantly improving the Authority.

Management's Discussion of Results of Operations

The following table summarizes the Authority's Revenues, Operating Expenses, Debt Service and Net Revenues for its fiscal years 2018 through 2022. The amounts set forth in this table are presented in conformity with the requirements of the Resolution and not on the basis of generally accepted accounting principles. The audited financial statements of the Authority as of and for the years ended December 31, 2022 and December 31, 2021, prepared in conformity with generally accepted accounting principles with reconciling schedules to the Resolution, are included in Appendix A to this Private Placement Memorandum. This table should be read in conjunction with such audited financial statements.

5-Year Summary Schedule of Revenues, Operating Expenses, Debt Service and Net Revenues ($000s)*

	2018	2019	2020	2021	2022
TURNPIKE SYSTEM REVENUES					
Toll revenue	$ 1,612,326	$ 1,612,268	$ 1,387,392	$ 1,998,825	$ 2,126,027
E-ZPass Fees	84,417	80,329	93,224	131,717	139,356
Concession revenue	36,192	33,104	31,741	31,149	36,573
Earnings on investments	30,919	37,766	19,093	6,679	37,857
Build America Bonds Rebate	76,439	76,725	77,766	77,468	77,235
Miscellaneous revenue	23,903(1)	21,813(2)	16,223(3)	20,383(4)	18,486(5)
Total Revenues	1,798,500	1,864,196	1,862,005	1,625,439	2,435,534
Operating Expenses					
Maintenance of roadway, buildings and equipment	221,230	215,506	195,340	229,786	229,314
Toll Collection	162,345	156,309	152,388	179,160	189,729
State Police and Traffic Control	91,016	94,802	103,136	110,016	120,236
Technology	21,652	19,460	22,041	23,447	23,032
General Administrative Costs	45,824	44,858	47,989	45,965	50,179
Total operating expenses	508,125	542,067	530,935	520,894	612,490
Net Revenue Available for Debt Service	1,290,375	1,322,129	1,331,070	1,104,545	1,823,044
Debt Service					
Interest Expense	587,453	596,076	586,330	576,594	567,035
Principal Payments	201,025	228,205	72,870	219,785	291,050
Total Debt Service	822,984	788,478	824,281	659,200	858,085
Net Revenue After Operating Expenses and Debt Service	467,391	533,651	506,789	445,345	964,959
Interfund Transfers:					
To Charges Fund	0	0	0	0	0
To Maintenance Reserve Fund	119,086	131,468	134,097	160,000	200,000
To Special Project Reserve Fund	40,490	41,300	41,300	50,000	50,000
Excess Net Revenues	$ 310,829	$ 374,075	$ 334,021	$ 269,948	$ 714,959
Net Revenue/Total Debt Service	1.57	1.68	1.61	1.68	2.12
Net Revenue/Total Debt Service and Reserves	1.32	1.39	1.34	1.32	1.65

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* Totals may not add due to rounding.

(1) Includes $4,453 for revenue related to the Arts Center and $7 of reimbursements from the Federal Government.

(2) Includes $4,690 for revenue related to the Arts Center and $1,006 of reimbursements from the Federal Government.

(3) Includes $3,648 for revenue related to the Arts Center.

(4) Includes $4,374 for revenue related to the Arts Center and $728 of reimbursement from the Federal Government.

(5) Includes $5,590 for revenue related to the Arts Center and $1,813 of reimbursement from the Federal Government.

Management's Discussion of Unaudited Interim Results for the Eight Months Ended August 31, 2023 Compared to the 2023 Budget

For the eight months ended August 31, 2023, revenue available for operating expenses, debt service and reserves was $1,713,685,000 which was $59,045,000, or 3.6%, more than the 2023 year-to-date-budget. Toll revenue, fees, investment income, concession revenue, and miscellaneous revenue, are all above the 2023 eight-month budget.

Toll revenue for the period was $1,474,654,000, which was $11,554,000, or 0.8%, more than the 2023 year-to-date budget. The over-budget performance is primarily due to milder than expected winter weather. Gas prices averaged $0.65/gallon lower when compared to the same period in 2022, and have also positively impacted traffic on both roadways. The projected toll revenue is based on the Drawn Down letter issued by CDM Smith, the Authority's traffic engineering consultants, on July 22, 2022, updating the September 21, 2018, Toll Revenue Forecast.

Fees consist of monthly membership fees, transponder sales, return check fees, administrative fees, interest on prepaid accounts and monthly statement fees. Fee revenue for the period was $98,134,000, which was $18,134,000, or 22.7%, higher than the 2023 year-to-date budget. Fees are over budget due, in part, to more administrative fees collected from toll violators and higher interest income on pre-paid. Both items are over budget due to conservative budgeting of fees for 2023.

Concession revenue consists of revenues generated through the sale of food, gasoline and convenience store items at the service areas located along both roadways. Concession revenue for the eight months ended August 31, 2023 was $24,750,000, which was $2,750,000 or 12.5%, more than the 2023 eight-month budget. Concession revenue is above budget due to an increase in food and convenience store sales across both roadways, partially offset by declines in fuel sales and revenue received from the 50% share of the gross profit margin on diesel sales. The decrease in fuel sales on the Turnpike can be attributed in part to the closure of the Joyce Kilmer, Walt Whitman, and James Fenimore Cooper Service Areas for renovations.

Investment income was $45,048,000, which was about $18,348,000, or 68.7%, higher than the 2023 year-to-date budget due to an increase in both interest rates and average invested balances. The 2023 budget projected a lesser increase in short-term interest rates; however, rates have increased due to the Federal Reserve increasing the Fed Funds Rate in response to inflation.

The Build America Bond (BABs) subsidy is a direct payment by the U.S. Treasury to the Authority which Federal law originally established as an amount equal to 35.0% of the interest payable on the Series 2009 F Bonds and the Series 2010 A Bonds. The Budget Control Act of 2011 requires automatic spending cuts commonly referred to as sequestration which impacts the subsidy received on BABs. The percentage reduction of the subsidy for the 2023 Federal fiscal year was 5.7% and will remain the same through the 2030 Federal fiscal year. As a result, the $51,340,000 earned in the eight months ended August 31, 2023 was at the 2023 year-to-date budget amount. See "CERTAIN RISK FACTORS – Federal Subsidy on Build America Bonds" herein.

Miscellaneous revenue includes fees for cell tower rentals, towing, fiber optic leases, park & ride commissions, property rentals, the Arts Center, and other items. Revenue collected for the period was $19,759,000, which was approximately $8,259,000, or 71.8%, higher than the 2023 eight-month budget. Miscellaneous revenue was above budget due mainly to several unbudgeted items. These unbudgeted items include $2,800,000 in insurance recoveries for the Delaware River Turnpike Bridge and damage to Exit 7 bridge overpass, $2,300,000 in FEMA recoveries for COVID-19 (ongoing), Hurricane Ida (2021) and

Hurricane Sandy (2012), $2,000,000 in Arts Center rent for the 2022 Live Nation variable rent payment, $500,000 in surplus property sales, and additional cell tower billings for prior years.

Operating expenses through August 31, 2023 were $410,524,000, which was $67,494,000, or 14.1%, lower than the 2023 year-to-date budget. Operating expenses were under budget through August 2023 primarily due to lower than budgeted snow and severe weather costs, salaries, and health benefits costs. Snow and severe weather costs were approximately $31,953,000 under budget as the beginning of 2023 had milder than expected winter weather. The Authority has spent $7,622,000 on snow costs through August. The Authority conservatively budgets its snow costs and has not changed its annual budget of $38,000,000 for the past nine years. Salaries are about $10,800,000 under budget due to existing Authority-wide vacancies. The Authority has self-funded health benefit plans and has seen actual costs under budget by $7,509,000, primarily due to Authority medical plan changes as well as higher rebates due to prescription plan changes.

Debt service in total was $606,004,000 for the eight months ended August 31, 2023 and was approximately $32,769,000, or 5.1%, lower than the 2023 year-to-date budget. Debt service was lower than budget primarily because the budget assumed a $1,000,000,000 new money bond issuance in January 2023 which to date has not been required. Net debt service (funded from revenue, net of capitalized interest) was $582,782,000 for the eight months ended August 31, 2023 and was $677,000 or 0.1% above budget. Net debt service is slightly above budget due to the refunding of the Series 2022 C Bonds which occurred after the budget was approved and resulted in slightly higher principal payments. The 2023 annual debt service budget includes approximately $873,200,000 of debt service funded from revenue (net debt service), and the remaining $85,000,000 of debt service funded from bond proceeds (capitalized interest), for a total debt service budget of $958,200,000.

After providing for required funding to the Maintenance Reserve Fund and the Special Project Reserve Fund, the Authority deposited $521,362,000 into the General Reserve Fund during the eight months ended August 31, 2023.

Management's Discussion of Unaudited Interim Results for the Eight Months Ended August 31, 2023 Compared to the Eight Months Ended August 31, 2022.

For the eight months ended August 31, 2023, revenue available for operating expenses, debt service and reserves was $1,713,685,000, which was $95,345,000, or 5.9%, more than the same period of 2022. As further discussed below, the increase in revenue is largely due to an increase in toll revenue, in part due to increased travel because of unusually mild winter weather, and the 3% annual toll rate indexing effective January 1, 2023. Toll revenue, fees, concession revenue, miscellaneous revenue and investment income all increased over the same period in 2022.

Toll revenue for the period was $1,474,654,000, which was $59,756,000, or 4.2%, more than the same period of 2022. The increase in toll transactions is primarily due to mild winter weather, overall lower gas prices, and normal growth, while the increase in toll revenue is primarily due to the increase in traffic as well as the 3% annual toll rate indexing effective January 1, 2023. On the Turnpike, toll transactions increased 3.1% and revenue increased 3.0% and, on the Parkway, toll transactions increased 4.0% and revenue increased 7.9% compared to 2022. Overall, traffic has recovered to about 96.4% of pre-pandemic levels.

Fees consist of monthly membership fees, transponder sales, return check fees, administrative fees, interest on prepaid accounts and monthly statement fees. Revenue was $98,134,000, which was $11,290,000, or 13.0%, more than the same period of 2022. The increase is due, in part, to more administrative fees collected from toll violators and higher interest income on pre-paid balances and monthly membership fees. More administrative fees were collected due to volume, while the increase in interest income is due to the general increase in interest rates. Finally, the increase in monthly membership fees was due to more E-ZPass accounts open than last year.

Concession revenue consists of revenues generated through the sale of food, gasoline and convenience store items at the service areas located along both roadways. Concession revenue for the eight months ended August 31, 2022 was $24,750,000, which was $756,000 or 3.1%, more than the same period in 2022. The increase in concession sales and revenue is due to higher food and convenience store sales, partially offset by a decrease in fuel revenue received from the 50% share of the gross profit margin on diesel sales. The Authority receives 50% of the gross profit margin on all diesel fuel sold on both roadways. On the Turnpike, food sales increased 17.5%, fuel sales decreased 4.7% and convenience store sales increased by 9.9% compared to last year. On the Parkway, food sales increased 18.0%, fuel sales decreased 5.2%, and convenience store sales increased 5.8% compared to the same period in 2022. Of note, the increase in food and convenience store sales on the Turnpike is primarily due to the increased traffic, milder winter conditions, and the reopening of the Molly Pitcher and Woodrow Wilson Service Areas, while the decrease in fuel sales is mainly due to the closure of the Joyce Kilmer, Walt Whitman, and James Fenimore Cooper Service Areas for renovations. While the Joyce Kilmer Service Area remains closed, the Walt Whitman (fuel service remains closed) and James Fenimore Cooper Service Areas have reopened as of August 2023. On the Parkway, the increase in food and convenience store sales is due to mild winter weather and increased travel, while fuel sales decreased due partly to the closure of the Whitney Houston and Connie Chung Service Areas for renovations, which have since reopened as of July and August 2023.

Investment income was $45,048,000, which was about $16,712,000 or 59.0%, higher than the same period in 2022 due to an increase in interest rates and higher invested balances. Short-term interest rates have generally increased due to the Federal Reserve increasing the Federal Funds Rate in response to inflation.

The Build America Bond (BABs) subsidy is a direct payment by the U.S. Treasury to the Authority which Federal law originally established as an amount equal to 35.0% of the interest payable on the Series 2009 F Bonds and the Series 2010 A Bonds. The Budget Control Act of 2011 requires automatic spending cuts commonly referred to as sequestration which impacts the subsidy received on BABs. The percentage reduction of the subsidy for the 2022 and 2023 Federal fiscal years is 5.7%. As a result, the $51,340,000 earned in the eight months ended August 2023 was approximately the same as the $51,344,000 earned during the same period in 2022. See "CERTAIN RISK FACTORS – Federal Subsidy on Build America Bonds" herein.

Miscellaneous revenue collected for the period was $19,759,000, which was approximately $6,834,000 or 52.9% higher than over the same period in 2022. The 2023 revenue amounts include $2,800,000 in insurance recoveries for the Delaware River Turnpike Bridge and damage to the Exit 7 bridge overpass, $2,300,000 in FEMA recoveries, and a $2,000,000 variable rent payment for 2022 from LiveNation related to the PNC Arts Center.

Operating expenses through August 31, 2023 were $410,524,000, which was $10,474,000, or 2.6% higher than the comparable period last year. Operating expenses were higher through August 2023 primarily due to health benefit expenses, electronic toll collection costs, and state police costs. Health benefit expenses were $4,889,000 higher in 2023 as the Authority is self-funded for health benefits and has seen increased costs due to increased usage and medical inflation which have resulted in higher costs as well as an increase in workers compensation. Electronic toll collection costs were $2,667,000 higher than 2022 due to higher credit card processing/banking fees and violation processing costs due to increased volumes. State police costs were $1,722,000 higher than 2022 due to contractual increases in trooper compensation, fringe benefits and an increase in the number of troopers. Slightly offsetting these increases was a decrease in snow and severe weather costs. Snow and severe weather costs were $7,902,000 lower in 2023 when compared to the same period in 2022 due to less snow and winter weather events in the first half of 2023.

Debt service was $606,004,000 for the eight months ended August 31, 2023 and was approximately $33,861,000 or 5.9%, higher than the same period last year due to higher principal payments on the Series 2015 A, Series 2017 D and Series 2021 B Bonds. These higher principal payments were partially offset by the Series 2012 B, Series 2016 B and Series 2016 C Bond maturities in early 2023 which reduced interest and principal payments. Net debt service (funded from revenue, net of capitalized interest) was $582,782,000 for the eight months ended August 31, 2023.

After providing for required funding to the Maintenance Reserve Fund and the Special Project Reserve Fund, the Authority deposited $521,362,000 into the General Reserve Fund during the eight months ended August 31, 2023. Expenditures in the General Reserve Fund totaled $538,103,000 and consisted primarily of $450,487,000 for the 2021 State Agreement, $14,667,000 for the 2000 State Agreement and $13,333,000 for the 2023 State Agreement. In addition to the spending, there was $44,472,000 in net transfers from the General Reserve Fund for revenue funded supplemental capital projects.

Management's Discussion of Results for the Fiscal Years Ended December 31, 2022 through 2018

Fiscal Year 2022

Revenues available for operating expenses, debt service and reserves were $2,435,534,000 in 2022, which was $169,313,000 more than the revenues of $2,266,221,000 in 2021. Toll revenue is the principal source of revenue and in 2022 tolls constituted approximately 87.3% of total revenues. Revenues from tolls were $2,126,027,000. This represents an increase of $127,202,000 or 6.4% from the $1,998,825,000 earned in 2021. Traffic on the Turnpike increased by 4.6% and revenue increased by 7.0% while Parkway toll transactions increased by 2.2% and revenue increased by 4.6% when compared to the same period in 2021. This increase in toll revenue as compared to the prior year is due to the increase in traffic volume due to the continued return to office, increased travel, and resumption of large-scale public events after the lifting of COVID-related restrictions in mid-2021. In addition, toll revenue also increased due to the 3% annual toll rate indexing which went into effect on January 1, 2022. Traffic and revenue growth would have been even greater had there not been a significant increases in gas prices in 2022 which impacted discretionary traffic on both roadways. As of December 31, 2022, traffic is almost back to 94.0% of pre-pandemic levels on both roadways.

In 2022, fees accounted for 5.7% of the Authority's revenue. Fees increased $7,639,000, or 5.8%, to $139,356,000 from $131,717,000 in 2021. Fees consist of monthly membership fees, administrative fees, tag fees and monthly statement fees. The majority of the increase resulted from more administrative fees collected, and higher monthly membership and statement fees received. The administrative fees increased primarily due to an increase in the number of violation notices issued and enhanced collection efforts, while monthly membership and statement fees increased due to a greater number of E-ZPass accounts. E-ZPass transactions in 2022 were 91.5% of all transactions on the Turnpike and 89.7% of all toll transactions on the Parkway increasing from 89.6% and 88.2%, respectively, in 2021.

Concession revenues were $36,573,000 and constituted about 1.5% of 2022 revenues. Concession revenues increased $5,424,000 or 17.4 % from the $31,149,000 recorded in 2021. On the Turnpike, food sales increased 19.3%, fuel sales decreased 14.1% and convenience store sales increased 13.6% as compared to 2021. On the Parkway, food sales decreased 15.3%, fuel sales decreased 15.0% and convenience store sales increased 11.2% compared to the same period in 2021. The increase in food and convenience store sales on the Turnpike are primarily due to the continued recovery from the COVID-19 pandemic, while the decrease in fuel sales is mainly due to the closure of the Woodrow Wilson and Molly Pitcher Service Areas for renovations, which reopened as of July 2022, as well as the overall rise in gas prices. The increase in convenience store sales on the Parkway is due to the continued recovery from the COVID-19 pandemic, while food sales decreased mainly due to the closure of the two McDonald's locations and fuel sales decreased due partly to the rise in gas prices. The amount paid to the Authority for the food concession revenue, is the greater of the certain percentage of sales or the minimum annual guaranteed fees (MAGF). The MAGF is equal to the higher of $12,000,000 or 88% of total rent paid from previous fiscal year. Revenue increased as food sales exceeded the Minimum Annual Guaranteed Fee (MAGF) since June 2022, despite the MAGF being lower in 2022 as compared to 2021. The Authority received only the MAGF in 2021 as sales for the year did not exceed the MAGF.

Investment income in 2022 was $37,857,000 or 1.6% of the Authority's total revenue for 2022. Investment income was approximately $31,178,000, or 466.8%, higher than 2021 primarily due to an increase in interest rates as well as a $15.4 million upfront payment representing savings on the 2022A bond refunding.

The Authority issued the Series 2009 F Bonds in April 2009 and the Series 2010 A Bonds in December 2010. Both Series were issued under the Build America Bond program authorized by the American Reinvestment and Recovery Act of 2009. Prior to March 1, 2013, the Federal Government reimbursed the Authority for 35% of the interest payable on both bond issues. See "CERTAIN RISK FACTORS – Federal Subsidy on Build America Bonds." The rebate constitutes pledged revenue under the Bond Resolution and totaled $77,235,000 in 2022 which decreased $233,000 or 0.3% from $77,468,000 in 2021. The subsidy payments received for the 2022 and the 2021 interest payments were both reduced by 5.7% and will be reduced by the same rate thru 2030. While the sequestration rate remains the same, revenue in 2022 decreased as the Authority received less interest for late payments in 2022 as compared to 2021.

Miscellaneous revenue collected for the year was $18,486,000, or about 0.8% of the Authority's total revenue. The 2022 amount was approximately $1,897,000, or 9.3% lower than over the same period in 2021. Miscellaneous revenue includes rentals of cell tower sites, fiber lease revenue, towing zone fees, park and ride commissions, revenue from the Arts Center, and other revenues. The decrease is primarily due to a one-time UBS Group AG (UBS) LIBOR manipulation settlement, and fees related to the assignment of the HMS Host contract to Iris Buyer, LLC in 2021.

Operating expenses in 2022 were $612,490,000, which was $24,116,000 higher than 2021. Annual operating expenses were higher in 2022 due to an increase in toll collection costs, specifically credit card and E-ZPass transaction processing costs all due to increased volume, totaling about $10,000,000. Additionally, there was an increase in State Police costs of about $6,000,000 due to an increase in trooper pension and overtime costs. These increases were partially offset by a decrease in snow/severe weather costs.

Debt service in 2022 was $863,691,000 and was approximately $67,312,000 higher than in 2021. Debt service was higher primarily due an increase in principal payments between 2022 and 2021 due to the debt restructuring in 2020. Net debt service (funded from revenue, net of capitalized interest) was $858,085,000.

After providing for required funding to the Maintenance Reserve Fund and the Special Project Reserve Fund, the Authority deposited $711,310,000 into its General Reserve Fund in 2022. Expenses of $576,936,000 in the General Reserve Fund consisted primarily of $545,000,000 for the State Transportation Projects Funding Agreements, $22,000,000 for Transportation Trust Fund payments, $2,500,000 for feeder road maintenance payments to the State Department of Transportation, $14,424,000 on extraordinary snow costs, and $15,000,000 for the OPEB reserve. Additionally, there were net transfers of $50,000,000 for supplemental capital projects and a transfer of $10,770,000 to construction funds for salary chargebacks.

Fiscal Year 2021

Revenues available for operating expenses, debt service and reserves were $2,266,221,000 in 2021, which was $640,782,000 more than the revenues of $1,625,439,000 in 2020. Toll revenue is the principal source of revenue and in 2021 tolls constituted approximately 88.2% of total revenues. Revenues from tolls were $1,998,825,000. This represents an increase of $611,433,000 or 44.1% from the $1,387,392,000 earned in 2020. Traffic on the Turnpike increased by 21.6% and revenue increased by 47.2% while Parkway toll transactions increased by 14.4% and revenue increased by 35.6% when compared to the same period in 2020. This increase in toll revenue as compared to the prior year is due to a significant increase in traffic volume as the State of New Jersey lifted its travel advisory on May 17, 2021 and the State of Emergency on June 4, 2021. As of December 31, 2021, traffic is almost back to 90.8% of pre-pandemic levels on both roadways. In addition, it includes a full year impact of the toll rate increase effective September 13, 2020 contributing to the overall increase in the toll revenue. There was a slight adverse impact on toll revenue because of Winter Storm Orlena, Hurricanes Henri and Ida, and the October 26th Nor'easter.

In 2021, fees accounted for 5.8% of the Authority's revenue. Fees increased $38,493,000, or 41.3%, to $131,717,000 from $93,224,000 in 2020. Fees consist of monthly membership fees, administrative fees, tag fees and monthly statement fees. Most of the increase resulted from more administrative fees collected, and higher monthly membership and statement fees received. The administrative fees increased primarily due to an increase in the number of violation notices issued and enhanced collection efforts from the use of two new collection agencies. E-ZPass transactions in 2021 were 89.6% of all transactions on the Turnpike and 88.2% of all toll transactions on the Parkway increasing from 89.2% and 87.4%, respectively, in 2020.

Concession revenues were $31,149,000 and constituted about 1.4% of 2021 revenues. Concession revenues decreased $592,000 or 1.9 % from the $31,741,000 recorded in 2020. On the Turnpike, food sales increased 59.9%, fuel sales increased 20.2% and convenience store sales increased 50.9% as compared to 2020. On the Parkway, food sales increased 33.2%, fuel sales increased 15.4% and convenience store sales increased 33.2% compared to the same period in 2020. Although there is an increase in the food and the fuel sales, there is no corresponding increase in the concession revenue in 2021 as compared to 2020. This is primarily because of decline in the food concession revenue. The amount paid to the Authority for the food concession revenue, is the greater of the certain percentage of sales or the minimum annual guaranteed fees (MAGF). The MAGF is equal to the higher of $12,000,000 or 88% of total rent paid from previous fiscal year. The Authority received only the MAGF in both 2020 and 2021. The MAGF was higher in 2020 as it was based upon as the higher 2019 pre-pandemic sales/rent levels. The COVID-19 pandemic reduced service area sales which further reduced the MAGF in 2021. The decline in the amounts received based on food sales was partially offset by an increase in amounts received from convenience store sales as these sales increased significantly in 2021. There was no significant change in the fuel concession revenue.

Investment income in 2021 was $6,679,000 or 0.3% of the Authority's total revenue for 2021. Investment income was approximately $12,415,000, or 65.0%, lower than 2020 primarily due to a general decrease in short term interest rates despite of an increase in average invested balances.

The Authority issued the Series 2009 F Bonds in April 2009 and the Series 2010 A Bonds in December 2010. Both Series were issued under the Build America Bond program authorized by the American Reinvestment and Recovery Act of 2009. Prior to March 1, 2013, the Federal Government reimbursed the Authority for 35% of the interest payable on both bond issues. See "CERTAIN RISK FACTORS – Federal Subsidy on Build America Bonds." The rebate constitutes pledged revenue under the

Bond Resolution and totaled $77,468,000 in 2021 which decreased $298,000 or 0.4% from $77,766,000 in 2020. The subsidy payment received for the July 1, 2021 interest payment was reduced by 5.7% and the subsidy payment due for the January 1, 2022 interest payment was reduced by 5.7%, while in 2020 the comparable payments were reduced by 5.9% and 5.7%, respectively. While the sequestration rate effectively decreased, revenue in 2021 decreased as the Authority received more interest for late payments in 2020 as compared to 2021.

Miscellaneous revenue collected for the year was $20,383,000, or about 1.0% of the Authority's total revenue. The 2021 amount was approximately $4,160,000, or 25.6% higher than over the same period in 2020. Miscellaneous revenue includes rentals of cell tower sites, fiber lease revenue, towing zone fees, park and ride commissions, revenue from the Arts Center, and other revenues. The increase is primarily due to an increase in surplus sales, a one-time UBS Group AG (UBS) LIBOR manipulation settlement, and fees related to the assignment of the HMS Host contract to Iris Buyer, LLC for the year ended December 31, 2021.

Operating expenses in 2021 were $588,374,000, which was $67,480,000 higher than 2020. Annual operating expenses were higher in 2021 due to an increase in the snow and severe weather cost of about $33,500,000 which is approximately half the increase. Additionally, there was an increase in health benefit costs of about $10,200,000 due to an increase in medical payments due to greater usage of elective surgeries. These increases were partially offset by a decrease in salaries due to lower sick and vacation bank accruals, and lower separation bonus accruals.

Debt service in 2021 was $796,379,000 and was approximately $137,179,000 higher than in 2020. Debt service was higher primarily due an increase in principal payments between 2021 and 2020 due to the debt restructuring in 2020.

After providing for required funding to the Maintenance Reserve Fund and the Special Project Reserve Fund, the Authority deposited $671,468,000 into its General Reserve Fund in 2021. Expenses of $297,558,000 in the General Reserve Fund consisted primarily of $239,500,000 for the State Transportation Projects Funding Agreements, $22,000,000 for Transportation Trust Fund payments, $2,500,000 for feeder road maintenance payments to the State Department of Transportation, $18,527,000 on extraordinary snow costs, and $15,000,000 for the OPEB reserve. Additionally, there were net transfers of $63,380,000 for supplemental capital projects and a transfer of $11,494,000 to construction funds for salary chargebacks.

Fiscal Year 2020

Revenues available for operating expenses, debt service and reserves were $1,625,439,000 in 2020, which was $236,566,000 less than the revenues of $1,862,005,000 in 2019. Toll revenue is the principal source of revenue and in 2020 tolls constituted approximately 85.4% of total revenues. Revenues from tolls were $1,387,392,000. This represents a decrease of $224,876,000 or 13.9% from the $1,612,268,000 earned in 2019. Traffic on the Turnpike decreased by 25.8% and revenue decreased by 13.7% while Parkway toll transactions decreased by 20.2% and revenue decreased by 14.5% when compared to the same period in 2019. This decrease in toll revenue as compared to the prior year is directly attributed to the impact of the COVID-19 pandemic, the shelter in place order and non-essential business closures imposed under the declared State of Emergency. The toll revenue declines from COVID-19 impacts continued throughout the year but lessened each month since April 2020. Toll revenue increased each month since September compared to the same month in 2019 due to the toll rate increase effective September 13, 2020.

In 2020, Fees accounted for 5.7% of the Authority's revenue. Fees increased $12,895,000, or 16.1%, to $93,224,000 from $80,329,000 in 2019. Fees consist of monthly membership fees, transponder sales, lost or damaged tag fees, returned check fees, administrative fees, revoked account collection fees, interest on prepaid accounts and monthly statement fees. The increase mostly resulted from higher administrative fees collected as violation rates have increased and higher monthly membership and statement fees. The overall increase in the fees was partially offset by decrease in the damage tag fees. E-ZPass transactions in 2020 were 89.2% of all transactions on the Turnpike and 87.4% of all toll transactions on the Parkway increasing from 86.9% and 84.8%, respectively, in 2019.

Concession revenues were $31,741,000 and constituted about 2.0% of 2020 revenues. Concession revenues decreased $1,363,000 or 4.1% from the $33,104,000 recorded in 2019. On the Turnpike, food sales decreased 52.4%, fuel sales decreased 18.6% and convenience store sales increased 2.2% as compared to 2019. On the Parkway, food sales decreased 37.4%, fuel sales decreased 20.6% and convenience store sales increased 15.0% compared to the same period in 2019. The decrease in sales is due to a combination of service area closures for renovation and less travel from the COVID-19 pandemic. However, the Richard Stockton and Vince Lombardi Service Areas on the Turnpike reopened on June 17, 2020 and June 29, 2020, respectively, and the Forked River Service Area on the Parkway reopened on June 15, 2020. No additional service areas are scheduled to be closed until the fall of 2021. The revenue received by the Authority declined less than sales in part due to the receipt of the minimum annual guaranteed rent, and the receipt of 50% of the gross profit margin on all diesel fuel sold for both roadways.

Investment income in 2020 was $19,093,000 or 1.2% of the Authority's total revenue for 2020. Investment income was approximately $18,673,000, or 49.4%, lower than 2019 due to a general decrease in short term interest rates and a decrease in average invested balances.

The Authority issued the Series 2009 F Bonds in April 2009 and the Series 2010 A Bonds in December 2010. Both Series were issued under the Build America Bond program authorized by the American Reinvestment and Recovery Act of 2009. Prior to March 1, 2013, the Federal Government reimbursed the Authority for 35% of the interest payable on both bond issues. See "CERTAIN RISK FACTORS – Federal Subsidy on Build America Bonds." The rebate constitutes pledged revenue under the Bond Resolution and totaled $77,766,000 in 2020 which increased $1,041,000 or 1.4% from $76,725,000 in 2019. The increase includes additional late interest payments of $837,000 received in 2020. This reimbursement constituted about 4.8% of the Authority's 2020 revenue.

Miscellaneous revenue collected for the year was $16,223,000, or about 1.0% of the Authority's total revenue. The 2020 amount was approximately $5,590,000, or 25.6% lower than over the same period in 2019. The decline is due to lower surplus land and surplus property sales, and lower government and insurance recoveries. The amount in 2019 included a $1,000,000 FEMA recovery for Winter Storm Quinn (March 2018), a $1,200,000 receipt for the Delaware River Turnpike Bridge insurance claim and $2,700,000 in Surplus Land and Property Sales. Arts Center rent was $3,648,000 or 0.2% of total Authority revenues in 2020 and was $1,042,000 lower than 2019 due to a decrease of $988,000 in variable rent payment and a decrease of $261,000 in naming rights payment offset by an increase of $190,000 in the amortization of the advanced rent payment related to the Capital Reconstruction and Renovation Payments.

Operating expenses in 2020 were $520,894,000, which was $10,041,000 lower than 2019. Annual operating expenses were lower in 2020 due to a decrease in health benefits, maintenance and toll collection costs. The primary factors causing this decrease are lower health care costs due to fewer elective surgeries, outpatient procedures and doctor's office visits, lower snow removal and severe weather costs due to the milder winter weather and lower credit card and transaction processing fees as the volume of traffic decreased due to the COVID-19 pandemic. These savings are partially offset by an increase in the OPEB expenses based on the actuarial report issued for the year ended December 31, 2020, an increase in the pension expense based on the GASB 68 report for the year ended June 30, 2020 and an increase in violation processing cost due to higher number of violations and higher transponder expenses.

Debt service in 2020 was $659,200,000 and was approximately $165,081,000 lower than in 2019. Debt service was lower primarily due to fewer principal payments in 2020 as compared to 2019.

After providing for required funding to the Maintenance Reserve Fund and the Special Project Reserve Fund, the Authority deposited $269,948,000 into its General Reserve Fund in 2020. Expenses of $293,700,000 in the General Reserve Fund consisted primarily of $129,000,000 for the State Transportation Projects Funding Agreement, $22,000,000 for Transportation Trust Fund payments, $2,500,000 for feeder road maintenance payments to the State Department of Transportation, $7,576,000 on extraordinary snow costs, $14,800,000 for OPEB and claim settlement reserves, and a net transfer of $3,016,000 to the Construction Fund for revenue funded capital projects and $108,836,000 for supplemental capital projects.

Fiscal Year 2019

Revenues available for operating expenses, debt service and reserves were $1,862,005,000 in 2019, which was $2,191,000 less than the revenues of $1,864,196,000 in 2018. Toll revenue is the principal source of revenue and in 2019 tolls constituted approximately 86.6% of total revenues. Revenues from tolls were $1,612,268,000. This is a slight reduction of $58,000 from the $1,612,326,000 earned in 2018. Traffic on the Turnpike increased by 1.1% and revenue decreased by 0.2% while Parkway toll transactions decreased by 0.8% and revenue increased by 0.6% when compared to the same period in 2018. Toll revenue slightly decreased due to the reopening of the Pulaski Skyway, offering customers shorter and less expensive trips. Parkway toll transactions decreased due to Interchange 145 (East Orange) being converted to one-way tolling on July 26, 2018. Transactions are now only counted in one direction. When adjusting for one-way tolling, toll transactions would have increased by 1.1%.

In 2019, Fees accounted for 4.3% of the Authority's revenue. Fees decreased $4,088,000, or 4.8%, to $80,329,000 from $84,417,000 in 2018. The decrease in revenues is due to a decrease in the Authority's share of fees to 80.9% from 81.4% based on the updated revenue sharing percentage with the other NJ E-ZPass Agencies under the first amendment to the MOA dated January 18, 2018. Fees also decreased due to lower administrative fees collected from toll violators due in part to November and December 2017 violation notices mailed in late December 2017, with those payments made in early 2018. E-ZPass transactions in 2019 were 86.9% of all transactions on the Turnpike and 84.8% of all toll transactions on the Parkway increasing from 85.9% and 83.2%, respectively, in 2018.

Concession revenues were $33,104,000 and constituted about 1.8% of 2019 revenues. Concession revenues decreased $3,088,000 or 8.5% from the $36,192,000 recorded in 2018. The decrease in concession revenue is primarily due to the closure of three service areas for renovations. On the Turnpike, the Alexander Hamilton and Richard Stockton service areas closed for renovations, and on the Parkway, the Forked River service area closed for renovations. The Authority receives 50% of the gross profit margin on all diesel fuel sold on both roadways. On the Turnpike, fuel sales decreased 14.3%, food sales decreased 3.8% and convenience store sales increased 7.6% as compared to 2018. On the Parkway, fuel sales decreased 9.2%, convenience store sales increased 37.7%, Parkway food sales increased 5.4% compared to the same period in 2018.

Investment income in 2019 was $37,766,000 or 2.0% of the Authority's total revenue for 2019. Investment income was approximately $6,847,000, or 22.1%, higher than 2018 due to higher yields on investments due to short term general interest rate increases and higher invested balances in the General Reserve Fund and Maintenance Reserve Fund.

The Authority issued the Series 2009 F Bonds in April 2009 and the Series 2010 A Bonds in December 2010. Both Series were issued under the Build America Bond program authorized by the American Reinvestment and Recovery Act of 2009. Prior to March 1, 2013, the Federal Government reimbursed the Authority for 35% of the interest payable on both bond issues. See "CERTAIN RISK FACTORS – Federal Subsidy on Build America Bonds." The rebate constitutes pledged revenue under the Bond Resolution and totaled $76,725,000 in 2019 which increased $286,000 or 0.4% from $76,439,000 in 2018. This reimbursement constituted about 4.1% of the Authority's 2019 revenue.

Miscellaneous revenue collected for the year was $17,123,000, or about 0.9% of the Authority's total revenue. The 2019 amount was approximately $2,327,000, or 12.0% lower than over the same period in 2018. The amount in 2019 included a $1,000,000 FEMA recovery for Winter Strom Quinn (March 2018) and a $1,200,000 receipt for the Delaware River Turnpike Bridge insurance claim. The amount in 2018 included the receipt of $6,000,000 for the Delaware River Turnpike Bridge insurance claim and a payment from a new fiber lease agreement with PEG Bandwith LLC. Arts Center rent was $4,690,000 or 0.3% of total Authority revenues in 2019 and was $237,000 higher than 2018 due to higher variable rent payment and an increase in the amortization of the advanced rent payment related to the Capital Reconstruction and Renovation Payments.

Operating expenses in 2019 were $530,935,000, which was $11,132,000 lower than 2018. Annual operating expenses were lower in 2019 due to a decrease in maintenance, toll collection, and technology costs. The primary factors causing this decrease are lower snow removal and severe weather costs due to the milder winter weather, lower OPEB expenses based on the actuarial report issued for the year ended December 31, 2019 and lower pension expenses based on the GASB 68 report for the year ended June 30, 2019. These savings are partially offset by an increase in the payroll costs based on the union contracts and an increase in the health benefits cost based on the actual experience and claims processed.

Debt service in 2019 was $824,281,000 and was approximately $35,803,000 higher than in 2018. Debt service was high primarily due to higher principal payments in 2019 as compared to 2018.

After providing for required funding to the Maintenance Reserve Fund and the Special Project Reserve Fund, the Authority deposited $334,021,000 into its General Reserve Fund in 2019. Expenses of $308,232,000 in the General Reserve Fund consisted primarily of $154,000,000 for the State Transportation Projects Funding Agreement, $22,000,000 for Transportation Trust Fund payments, $3,500,000 for feeder road maintenance payments to the State Department of Transportation, $12,852,000 on extraordinary snow costs, $19,000,000 for OPEB and claim settlement reserves, and a net transfer of $25,000,000 to the Construction Fund for revenue funded capital projects and $69,121,000 for supplemental capital projects.

Fiscal Year 2018

Revenues available for operating expenses, debt service and reserves were $1,864,196,000 in 2018, which was $65,696,000 more than the revenues of $1,798,500,000 in 2017. Toll revenue is the principal source of revenue and in 2018 tolls constituted approximately 86.5% of total revenues. Revenues from tolls were $1,612,326,000, which was $32,430,000, or 2.1%, more than the $1,579,896,000 earned in 2017. The increase in toll revenue was due primarily to normal growth, favorable economic conditions, and strong commercial traffic. In 2018, a record level of 34.3 million commercial vehicle transactions were recorded, surpassing the previous record high in 2007 by more than 1.0 million transactions. Toll revenue increased despite the effects from winter storms Grayson (January 4-5, 2018), Quinn (March 7-8, 2018), and Toby (March 21-22, 2018), which were state of emergency events. It is estimated that without the impact of winter storms Grayson, Quinn, and Toby, 2018 toll revenue would have increased by 2.8%. Traffic on the Turnpike increased by 1.6% and revenue increased by 2.4% while Parkway toll transactions decreased by 0.8% and revenue increased by 1.1% when compared to the same period in 2017. Parkway toll transactions decreased due to Interchange 145 (East Orange) being converted to one-way tolling on July 26, 2018. Transactions are now only counted in one direction. When adjusting for one-way tolling, toll transactions would have increased by 0.6%.

In 2018, Fees accounted for 4.5% of the Authority's 2018 revenue. Fees increased $23,912,000, or 39.5%, to $84,417,000 from $60,505,000 in 2017. The increase in revenues is due to an increase in administrative fees collected from toll violators and higher interest income from increased investment yields on higher invested balances. Fees also increased due to the Authority's share of fees increasing to 81.4% from 81.3% based on the updated revenue sharing percentage with the other NJ E-ZPass Agencies under the first amendment to the MOA dated January 18, 2018. E-ZPass transactions in 2018 were 85.9% of all transactions on the Turnpike and 83.2% of all toll transactions on the Parkway increasing from 84.2% and 81.4%, respectively, in 2017.

Concession revenues were $36,192,000 and constituted about 1.9% of 2018 revenues. Concession revenues increased $601,000 or 1.7% from the $35,591,000 recorded in 2017. The increase in concession revenue is primarily due to extra payments received in 2018 based on revised terms and payment due dates in the new agreement with HMS Host and Sunoco dated September 12, 2017. The Authority receives 50% of the gross profit margin on all diesel fuel sold on the Turnpike. On the Turnpike, fuel sales decreased 10.5%, food sales increased 5.4% and convenience store sales decreased 15.7% as compared to 2017. On the Parkway, fuel sales decreased 12.5%, convenience store sales decreased 28.2%, Parkway food sales decreased 1.7% compared to the same period in 2017. The decrease in convenience store sales is due in part to the removal of cigarette sales in the gross sales calculation for 2018. When accounting for this change, sales would have only decreased 0.6% on the Turnpike and sales would have increased 7.8% on the Parkway.

Investment income in 2018 was $30,919,000 or 1.7% of the Authority's total revenue for 2018. Investment income was approximately $13,363,000, or 76.1%, higher than 2017 due to higher yields on investments due to short term general interest rate increases and higher invested balances in the General Reserve Fund and Maintenance Reserve Fund.

The Authority issued the Series 2009 F Bonds in April 2009 and the Series 2010 A Bonds in December 2010. Both Series were issued under the Build America Bond program authorized by the American Reinvestment and Recovery Act of 2009. Prior to March 1, 2013, the Federal Government reimbursed the Authority for 35% of the interest payable on both bond issues. See "CERTAIN RISK FACTORS – Federal Subsidy on Build America Bonds." The rebate constitutes pledged revenue under the Bond Resolution and totaled $76,439,000 in 2018 which increased $286,000 or 0.4% from $76,153,000 in 2017. This reimbursement constituted about 4.1% of the Authority's 2018 revenue.

Miscellaneous revenue collected for the year was $19,450,000, or about 1.0% of the Authority's total revenue. The 2018 amount was approximately $5,288,000, or 21.4% lower than over the same period in 2017. The amount in 2018 included the receipt of $6,000,000, an insurance payment for the Delaware River Turnpike Bridge insurance claim and a payment from a new fiber lease agreement with PEG Bandwith LLC. The amount in 2017 included a $5,700,000 surplus land sale, a $2,925,000 LIBOR settlement from Barclays and $2,600,000 FEMA Recovery for winter storm Jonas. Arts Center rent was $4,453,000 or 0.2% of total Authority revenues in 2018 and was $392,000 higher than 2017 due to higher variable rent payment.

Operating expenses in 2018 were $542,067,000, which was $33,942,000 higher than 2017. Annual operating expenses were higher in 2018 due to the wages, retroactive salary increase payments, additional pension and tax accruals from the settlement of union contracts. Operating expenses also increased due to higher state trooper costs because of increased deployments on the roadways and higher toll collection costs related to an increase in Fees.

Debt service in 2018 was $788,478,000 and was approximately $34,785,000 lower than in 2017. Debt service decreased primarily due to lower principal payments and lower interest expense as the Authority took advantage of market conditions and refunded several Bond issues. Interest expense is also lower due to the full maturity of the 2013B Bond Series and 2013C Bond Series.

After providing for required funding to the Maintenance Reserve Fund and the Special Project Reserve Fund, the Authority deposited $374,075,000 into its General Reserve Fund in 2018. General Reserve Fund expenses of $307,999,000 consisted primarily of $166,500,000 for the State Transportation Capital Plan, $22,000,000 for State Transportation Trust Fund payments, $4,500,000 for feeder road payments to the State Department of Transportation and $25,378,000 on extraordinary snow costs.

Summary of Projected Operations by the Traffic Engineer

On July 28, 2023, CDM Smith Inc. ("CDM Smith"), as the Traffic Engineer for the Authority, delivered to the Authority the New Jersey Turnpike System 2023 Traffic and Toll Revenue Forecast Study (the "2023 Study"), a detailed traffic and toll revenue projection study presenting its analysis and findings relative to recent trends in traffic and revenue on the Turnpike and the Parkway. See APPENDIX B – "2023 TRAFFIC AND TOLL REVENUE FORECAST STUDY" hereto.

Current professional practices and procedures were used by CDM Smith in the development of the 2023 Study. However, there is considerable uncertainty inherent in future traffic and revenue forecasts for any toll facility, including the Turnpike and the Parkway, and there may sometimes be differences, which could be material, between forecasted and actual results caused by events and circumstances beyond the control of the forecasters. Additionally, it should be recognized that the traffic and revenue forecasts contained in the 2023 Study are intended to reflect the overall estimated long-term trend and actual experience in any given year may vary due to economic conditions and other factors.

The purpose of the 2023 Study was to produce estimates through the year 2033, recognizing all improvements identified for the Authority's capital improvement programs, as well as potential impacts resulting from developments not related to the Turnpike or the Parkway. The traffic and revenue forecasts were based on a detailed analysis of the past relationship between actual Turnpike and Parkway transactions and actual socio-economic data. The development of the new forecasts relied on the most currently available information relating to the capital improvement programs, historic traffic and toll revenue trends through May 2023, and the Authority's most recent assumptions concerning toll schedules and discount programs. Also considered in the study are the long-term effects of the pandemic, such as the increased prevalence of telecommuting and post-pandemic commercial traffic corrections after high levels of growth were experienced during the pandemic. In addition, the estimated E-ZPass market share was developed for the forecast period based on historical trends and future toll schedule assumptions. Site visits and meetings with local Metropolitan Planning Organizations and other agencies were conducted to complete the analysis of the potential growth in traffic and toll revenue on the Turnpike and Parkway. Also included in the study are estimated short-term traffic and revenue impacts that would be consistent with the emergence of a mild recession later this year, which is in line with the Federal Reserve's forecast assumption.

Table 6(a) provides a summary of CDM Smith's projected traffic volume on the Turnpike through 2033 by vehicle class. As shown in Table 6(a), total passenger car traffic on the Turnpike is expected to increase from approximately 215.5 million cars in 2022 to 248.2 million cars by 2033. Total annual commercial vehicle traffic for the Turnpike is estimated to increase from approximately 37.2 million vehicles in 2022 to 40.7 million vehicles in 2033. Total vehicle traffic for the Turnpike is expected to increase from approximately 252.7 million vehicles to approximately 288.9 million vehicles between the years 2022 and 2033, representing an average annual growth of approximately 1.2%.

Table 6(a) – Projected Volume for the Turnpike – Number of Vehicles (000s)

Year	Passenger Cars	Commercial Vehicles	Total Vehicles
2022(1)(2)	215,522	37,150	252,672
2023(1)(2)	220,508	36,635	257,142
2024(2)	222,192	35,960	258,152
2025(2)	224,654	36,062	260,716
2026(2)	227,876	36,624	264,500
2027(2)	230,664	37,168	267,832
2028(2)	234,599	37,914	272,513
2029(2)	236,831	38,383	275,214
2030(2)	239,716	38,959	278,675
2031(2)	242,630	39,541	282,171
2032(2)	246,035	40,214	286,249
2033(2)	248,180	40,677	288,857

(1) Data for 2022 and through May 2023 is actual.

(2) Reflects 3% annual toll indexing applied in January of each year beginning in 2022.

Table 6(b) provides a summary of CDM Smith's estimated annual gross toll revenue from the Turnpike by vehicle class for the years 2022 through and including 2033. As shown, passenger car toll revenue is expected to increase from approximately $1.1 billion in 2022 to approximately $1.6 billion in 2033. Commercial vehicle toll revenue is estimated to increase from approximately $546.7 million to approximately $818.2 million over the same forecast period. Total annual gross toll revenue for the Turnpike is estimated to increase from approximately $1.6 billion in 2022 to approximately $2.5 billion in 2033. The average annual percent increase in total annual gross toll revenue amounts to approximately 4.3%.

Table 6(b) – Estimated Toll Revenues for the Turnpike ($000s)

Year	Passenger Car Toll Revenues	Commercial Vehicle Toll Revenues	Total Toll Revenues
2022[(1)(2)]	1,050,933	546,707	1,597,640
2023[(1)(2)]	1,092,223	548,562	1,640,785
2024[(2)(3)]	1,129,722	553,830	1,683,552
2025[(2)]	1,175,412	572,460	1,747,872
2026[(2)]	1,227,093	599,052	1,826,145
2027[(2)]	1,278,700	626,169	1,904,869
2028[(2)]	1,339,315	657,900	1,997,215
2029[(2)]	1,392,723	685,982	2,078,705
2030[(2)]	1,451,977	717,205	2,169,182
2031[(2)]	1,513,708	749,782	2,263,490
2032[(2)]	1,580,894	785,400	2,366,294
2033[(2)]	1,642,631	818,219	2,460,850

(1) Data for 2022 and through May 2023 is actual.
(2) Reflects 3% annual toll indexing applied in January of each year beginning in 2022.
(3) Reflects Turnpike Paterson Plank Ramp NJ E-ZPass toll adjustment starting January 2024.

Table 6(c) provides a summary of CDM Smith's projected toll transactions and estimated total annual gross toll revenue for the Parkway through 2033. The Parkway does not separately project the number of transactions involving commercial vehicles or the revenues therefrom since commercial vehicles are only allowed below Exit 105 and provide revenues that amount to less than 4% of total Parkway revenues.

As shown in Table 6(c), CDM Smith estimates that total toll transactions on the Parkway will increase from approximately 360.8 million transactions in 2022 to 403.7 million transactions by 2033. This represents an average annual increase in toll transactions of approximately 1.1%. As shown in Table 6(c), the total annual gross toll revenue on the Parkway is estimated by CDM Smith to increase from $528.4 million in 2022 to approximately $820.7 million in 2033. This represents an average increase in total gross toll revenue for the Parkway of approximately 4.1% per year.

Table 6(c) – Parkway – Number of Transactions and Amount of Toll Revenues ($000s)

Year	Total Toll Transactions	Total Toll Revenues
2022(1)(2)	360,759	528,388
2023(1)(2)	370,358	560,939
2024(2)	373,257	581,951
2025(2)	377,079	605,389
2026(2)	381,315	630,448
2027(2)	384,790	655,221
2028(2)	389,092	682,363
2029(2)	391,394	707,004
2030(2)	394,575	734,136
2031(2)	397,691	762,132
2032(2)	401,703	792,900
2033(2)	403,691	820,743

(1) Data for 2022 and through May 2023 is actual.

(2) Reflects 3% annual toll indexing applied in January of each year beginning in 2022.

Table 6(d) provides a summary of CDM Smith's estimated annual gross toll revenue for both the Turnpike and the Parkway during the years 2022 through and including 2023. As shown in Table 6(d), annual gross toll revenue for both the Turnpike and the Parkway is estimated to increase from approximately $2.1 billion in 2022 to approximately $3.3 billion in 2033. This represents a compound growth rate in total gross toll revenue from both the Turnpike and the Parkway of approximately 4.2% per year.

Table 6(d) – Estimated Gross Toll Revenue for both the Turnpike and the Parkway ($000s)

Year	Turnpike Toll Revenues	Parkway Toll Revenues	Total Toll Revenues
2022[(1)(2)]	1,597,640	528,388	2,126,027
2023[(1)(2)]	1,640,785	560,939	2,201,724
2024[(2)(3)]	1,683,552	581,951	2,265,503
2025[(2)]	1,747,872	605,389	2,353,261
2026[(2)]	1,826,145	630,448	2,456,593
2027[(2)]	1,904,869	655,221	2,560,090
2028[(2)]	1,997,215	682,363	2,679,578
2029[(2)]	2,078,705	707,004	2,785,709
2030[(2)]	2,169,182	734,136	2,903,318
2031[(2)]	2,263,490	762,132	3,025,622
2032[(2)]	2,366,294	792,900	3,159,194
2033[(2)]	2,460,850	820,743	3,281,593

(1) Data for 2022 and through May 2023 is actual.

(2) Reflects 3% annual toll indexing applied in January of each year beginning in 2022.

(3) Reflects Turnpike Paterson Plank Ramp NJ E-ZPass toll adjustment starting January 2024.

For a more detailed discussion of the assumptions and methodology used by CDM Smith in connection with all its forecasts summarized above, see APPENDIX B – "TRAFFIC AND TOLL REVENUE FORECAST STUDY" attached hereto.

Summary of the Report of the Consulting Engineer

HNTB Corporation ("HNTB") serves as the Consulting Engineer to the Authority. In this capacity, HNTB has prepared a report dated September 25, 2022 estimating (a) the operating expenses of the Turnpike System, which is comprised of the Turnpike and the Parkway, for the years 2022 through and including 2032, and (b) the required deposits to the Maintenance Reserve Fund and the Special Project Reserve Fund for the years 2022 through and including 2032. Amounts on deposit in the Maintenance Reserve Fund are used to provide for annual major maintenance of the roadways, bridges, building facilities, safety features such as guide rail and concrete median barrier, and appurtenances such as lighting, and drainage. The amounts on deposit in the Special Project Reserve Fund are intended to be used for engineering and traffic studies, state police facilities, maintaining equipment and fleets, technology improvements, and the annual maintenance and improvement of all other elements of the Turnpike System that in some manner contribute to the proper and efficient operation of the Turnpike and the Parkway.

With respect to the operating expenses of the Turnpike System, HNTB estimates that such expenses will be approximately $622,200,000 in 2022 and will increase to approximately $1,001,200,000 in 2032, representing an average annual increase of approximately 6.0%. The major increases in operating expenses, however, are expected to occur between 2022 and 2026 due to inflation, with annual increases after 2026 estimated to be 3.5%.

HNTB's report also estimates that deposits into the Maintenance Reserve Fund and the Special Project Reserve Fund combined should be budgeted at $250,000,000 in 2022 and should be increased to $365,800,000 by 2032.

HNTB's report also discusses the state of good repair of the Turnpike System, including the Authority's annual inspection program for the roads, bridges, buildings, toll plazas and ancillary facilities and safety devices comprising the Turnpike System, and contains a description of the technology resources the Authority utilizes in maintaining its assets. The Report also describes the pavement structure utilized on the Turnpike and the Parkway which minimizes major rehabilitation needs and allows the Authority to remove and replace only the top two inches of pavement as part of its resurfacing program for the Turnpike and the Parkway. Additionally, HNTB's Report contains a detailed description and status of the active projects included in the 2023-2027 CIP, the 2019 CIP and the 2008 CIP.

For a more detailed discussion of the assumptions and methodology used by HNTB in estimating future operating expenses of the Turnpike System and the required deposits to the Maintenance Reserve Fund and the Special Project Reserve Fund, as well as the state of good repair of the Turnpike System, the technologies utilized by the Authority for the management of its assets and the 2023-2027 CIP, the 2019 CIP and the 2008 CIP, see APPENDIX C – "REPORT OF CONSULTING ENGINEER" attached hereto.

Summary of Projected Net Revenues and Debt Service Coverage of the Turnpike System

The following table provides a summary of the Authority's projected Revenues, Operating Expenses, Debt Service and Net Revenues for its fiscal years 2022 through and including 2028 for the Turnpike System. The information contained in this table constitutes "forward-looking statements" for purposes of this Private Placement Memorandum. Accordingly, the achievement of the results and other expectations contained in this table involves known and unknown risks, uncertainties and other factors which may cause actual results, performance or achievements to be materially different from the future results and other expectations of the Authority described in or expressed or implied by the information set forth in this table.

New Jersey Turnpike Authority

Projected Revenues, Expenditures, and Debt Service Coverage ($000s)
(Based on Bond Resolution Provisions, Not in Accordance with GAAP)

Fiscal Year Ending 12/31 (In Thousands)	**Actuals 2022**	**Est Act 2023**	**Projected 2024**	**Projected 2025**	**Projected 2026**	**Projected 2027**	**Projected 2028**
Revenues							
Toll Revenues							
Turnpike Tolls (1)	$1,597,600	$1,635,200	$1,683,500	1,747,900	1,826,100	1,904,900	1,997,200
Parkway Tolls (1)	$528,400	$561,300	$582,000	605,400	630,400	655,200	682,400
Fees	139,400	143,800	125,000	127,500	130,100	132,700	135,400
Federal Subsidy for Series 2009 F and Series 2010 A Bonds (2)	77,200	77,000	77,000	77,000	77,000	77,000	77,000
Concession Revenue	36,600	35,700	33,000	33,700	34,400	35,100	35,800
Other Revenue	56,300	95,600	77,600	77,900	78,200	88,500	88,800
Total Revenues	**$2,435,500**	**$2,548,600**	**2,578,100**	**2,669,400**	**2,776,200**	**2,893,400**	**3,016,600**
Operating Expenses and Reserve (3)	**(616,000)**	**(664,900)**	**(760,100)**	**(793,800)**	**(825,200)**	**(853,700)**	**(883,600)**
Total Revenues Available for Debt Service	**$1,819,500**	**$1,883,700**	**$ 1,818,000**	**$ 1,875,600**	**$ 1,951,000**	**$ 2,039,700**	**$ 2,133,000**
Future Debt Issuance	-	500,000	1,000,000	1,000,000	1,500,000	1,300,000	2,000,000
Debt Service (4) (5)	(863,500)	(916,100)	(1,032,300)	(1,091,500)	(1,168,100)	(1,230,800)	(1,318,400)
Capitalized Interest	5,600	41,000	109,700	154,100	181,300	190,000	240,000
Net Debt Service	(857,900)	(875,100)	(922,600)	(937,400)	(986,800)	(1,040,800)	(1,078,400)
Total Revenues Available After Debt Service	**$961,600**	**1,008,600**	**895,400**	**938,200**	**964,200**	**998,900**	**1,054,600**
Maintenance Reserve Fund (6)	(200,000)	(230,000)	(240,000)	(250,000)	(260,000)	(269,100)	(278,500)
Special Project Reserve Fund (7)	(50,000)	(51,500)	(54,100)	(56,800)	(59,600)	(62,000)	(64,500)
Net Revenues Available for General Reserve Fund	**711,600**	**727,100**	**601,300**	**631,400**	**644,600**	**667,800**	**711,600**
TTF Payments	(22,000)	(22,000)	(22,000)	(22,000)	(22,000)	(22,000)	(22,000)
Feeder Road Maintenance Agreement	(2,500)	(2,500)	(2,500)	(2,500)	(2,500)	(2,500)	(2,500)
2021 State Transportation Projects Funding Agreement (8)	(523,000)	(605,500)	(472,500)	(487,500)	(502,500)	(517,500)	(525,000)
2023 State Transportation Projects Funding Agreement	-	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)
General Reserve Spending (9) (10)	(24,600)	(34,900)	(68,200)	(66,800)	(53,600)	(53,600)	(53,600)
Net Transfer to Construction Fund Account	(50,400)	(54,400)	(87,500)	(60,000)	(50,000)	(50,000)	(50,000)
Funding for Salary Chargeback Bond funded Projects	(10,800)	(10,100)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)
Net Annual General Reserve Fund Increase (Decrease)	**78,300**	**(22,300)**	**(81,400)**	**(37,400)**	**(16,000)**	**(7,800)**	**28,500**
Available Ending General Reserve Fund Balance (11)	**717,700**	**695,400**	**614,000**	**576,600**	**560,600**	**552,800**	**581,300**
Net Revenues to Debt Service Coverage Ratio	**2.12**	**2.15**	**1.97**	**2.00**	**1.98**	**1.96**	**1.98**
Net Revenues to Debt Service and Reserves Coverage Ratio	**1.64**	**1.63**	**1.49**	**1.51**	**1.49**	**1.49**	**1.50**

(1) Toll revenue from 2024 through 2028 is based upon the projections of CDM Smith contained in the 2023 Study, which includes annual toll indexing at 3% effective 1/1/2022

(2) Assumes a 5.7% reduction in BAB Subsidy throughout projection period

(3) Projected operating expenses and reserve numbers for the years 2024 through 2028 are derived from the Authority's budget and include the annual increase in the working capital reserve needed to bring the total amount of reserves in the Revenue Fund up to 10% of the annual budgeted operating expenses in accordance with Section 504(b) of the Bond Resolution

(4) In 2023, existing debt service assumes swapped debt will achieve synthetic fixed rate and includes the applicable spreads of the FRNs. The unhedged portion of the 2015A Bonds ($5,000,000) assumes a rate of 12%

(5) Debt service for year 2022 excludes interest on the Series 2022 C Bonds in the amount of $171 which accrued in 2022 and was paid on July 1, 2023

(6) From HNTB Report dated September 25, 2022

(7) Derived from the Authority's 2024 budget

(8) State Payments are based on calendar year while the State agreement is on fiscal year basis (6/30)

(9) Spending includes a reclassification of $4,176 from "Restricted under trust agreements" to "Unrestricted" as some of the escrow related to the 2008 CIP was released

(10) Includes a fair value gain of $527

(11) Beginning General Reserve Fund Balance is adjusted for non-cash interfund balances

Environmental Matters

The Turnpike

The Authority continues with the remediation of environmental contamination resulting from historical discharges from underground/above-ground storage tanks located at the service areas, maintenance districts and interchanges along the Turnpike. Progress continues to be made in addressing the contamination with Unrestricted and/or Limited Restricted Response Action Outcomes ("RAOs") and Remedial Action Permits ("RAPs") being issued at multiple locations. The Authority met the New Jersey Department of Environmental Protection ("NJDEP") Remedial Investigation deadline of May 2016 for all applicable Turnpike sites with the focus now on Remedial Action ("RA"). The Authority has submitted RA timeframe extensions for multiple sites in order to extend the regulatory and/or mandatory timeframes. The Authority and the current service area operators on the Turnpike have undertaken an aggressive remedial program, including, but not limited to, contaminated soil removal as part of the improvement program for the service areas. The final two service areas on the Turnpike will undergo remediation in late 2023 and into 2024. After completion of the remediation at those two service areas, the remediation progress will have eliminated all but one groundwater treatment system located at a single service area on the Turnpike. This single groundwater treatment system will remain in operation for the foreseeable future and will necessitate periodic monitoring, sampling and maintenance under directives issued by the NJDEP.

In the late 1980's, the NJDEP determined that residues from the processing of chromium ore were distributed as fill material on construction projects throughout Hudson County, New Jersey, and in surrounding environs. The contaminant levels at certain sites receiving chromium ore processing residue exceed the currently established standards. Seven sites owned or controlled by the Authority are included on the NJDEP's list of sites containing contamination from chromium ore processing residue above the currently established levels; however, as described below, the Authority has accepted responsibility to remediate conditions at three of the affected sites and bears no remedial responsibility for any of the additional sites.

In May 2005, the NJDEP instituted litigation against the three firms which had generated the chromium ore processing residue. The Authority was not named as a defendant in such litigation by the NJDEP. In March 2006, the Authority was named as a third-party defendant by one of the firms as a result of the Authority's ownership of certain parcels impacted by the residue. The Authority accepted responsibility to remediate conditions at three affected sites with the understanding that, by doing so, it will not have any responsibility for any additional sites. Remediation of one of those affected sites has been completed and a RAO was issued to close that site. The cost to complete the remediation of the two remaining sites is estimated to be approximately $11 million over a 30-year period. It is possible the remediation of one site will be performed in 2023-2024 pending access negotiation with Conrail. Remedial activities at the third site are delayed due to third party site operations.

The Parkway

The Authority continues with the remediation of environmental contamination resulting from historical discharges from underground/above ground storage tanks located at the service areas, toll plazas, maintenance districts, a former communication tower, and State Police barracks along the Parkway. Progress continues to be made in addressing the contamination and Unrestricted and/or Limited Restricted RAOs and RAPs have been issued at multiple locations. The Authority met the NJDEP Remedial Investigation (RI) deadline of May 2016 for all but two Parkway sites. Of these two sites, the Remedial Investigation (RI) for one site has since been completed with the focus now on Remedial Action (RA). The Authority has submitted RA timeframe extensions for multiple sites to extend the regulatory and/or mandatory timeframes. The Authority and the current service area operators will initiate an aggressive remedial program at select service areas between 2023-2025 including, but not limited to, contaminated soil removal as part of the improvement program for these select service areas.

The remediation progress has eliminated all but one groundwater treatment system located at one service area on the Parkway roadway. This groundwater treatment system will be in operation for the foreseeable future and will necessitate periodic monitoring, sampling and maintenance under directives issued by the NJDEP.

Generally

With respect to the Turnpike System generally, soil contamination, groundwater contamination and/or solid waste found on off-site properties, Authority properties, and properties for which the Authority has assumed remediation responsibility, as well as waterway contamination that is alleged to have resulted from operations conducted at Parkway facilities, have resulted in claims against the Authority and may lead to additional claims in the future. Claims for reimbursement of remediation costs and other alleged damages have been asserted or may be forthcoming from other parties responsible for undertaking remediation activities at these properties. As a result, it may be necessary for the Authority to undertake, fund or reimburse others for remediation activities at these properties. The Authority believes the ultimate resolution of these claims will not have a material adverse impact on the financial position of the Authority. As to environmental regulatory compliance expenditures, such costs are also not expected to have a material adverse impact on the financial position of the Authority.

Interstate, US and State Highways

The following is a summary of the relationship between the Turnpike or Parkway and certain Interstate, US and State highways. In certain cases, these routes serve as "feeders" of traffic to the Turnpike or Parkway, while in other cases, as indicated, the complete routes or certain segments thereof are competitive with the Turnpike or Parkway. In addition, the Turnpike and Parkway intersect each other at Interchange 11 and Interchange 129, respectively, in Woodbridge.

Interstate Route 95 (I-95). This route constitutes the principal north-south Interstate Route between Maine and Florida, and is a very heavily traveled highway. I-95 enters the State in the north via the George Washington Bridge. Just west of the bridge, I-95 becomes part of the Turnpike for a distance of approximately 70 miles to Interchange 6 and across the Pearl Harbor Memorial Turnpike Extension. Upon crossing the Delaware River, I-95 continues onto the Pennsylvania Turnpike where it meets what is now I-295.

Interstate Route 195 (I-195) and NJ Route 138. I-195 begins at I-295 just south of Trenton and extends easterly, intersecting with the Turnpike at Interchange 7A. It continues easterly through Monmouth County, terminating at NJ Route 34 just west of the Parkway. The road then continues as NJ Route 138, a divided arterial connecting with the Parkway at Interchange 98 just west of NJ Route 18. This route provides an east-west connection between Trenton and the Jersey Shore.

Interstate Route 295 (I-295). This route extends from the Delaware Memorial Bridge northeasterly in a corridor between the Turnpike and the Delaware River, to an intersection with I-195 west of Interchange 7A. The southern end of the Turnpike is at I-295 just east of the Delaware Memorial Bridge. Beyond I-195, I-295 continues northerly to an intersection with US Route 1, then continues north and west of Trenton into Pennsylvania to end at I-95. The majority of I-295, from the Delaware Memorial Bridge to I-195, is in close proximity and roughly parallel to the Turnpike, serving as a competitive route for local and regional traffic.

Interstate Route 78 (I-78). This route enters the State at the Holland Tunnel, follows the Turnpike's Newark Bay-Hudson County Extension to its intersection with the mainline Turnpike at Newark Airport

(Interchange 14) and continues westward, connecting with the Parkway in Union at Interchange 142 and then running roughly along the alignment of US Route 22 to Phillipsburg, New Jersey and Easton, Pennsylvania.

Interstate Route 278 (I-278). This route is an auxiliary Interstate Highway in New Jersey and New York. The New York segment travels throughout the five boroughs and ends at Interstate 95 in the Bronx. The New Jersey segment begins at US Route 1 & 9, traveling easterly to the Goethals Bridge and intersecting with the New Jersey Turnpike at Interchange 13.

Interstate Route 80 (I-80). I-80 is one of the principal east-west routes of the Interstate Highway System extending from the New York City area to San Francisco. It begins at I-95 in the vicinity of Ridgefield Park and crosses the State along the same general alignment as US Route 46 as far as Netcong, New Jersey, then swings along a more northerly alignment to the vicinity of the Delaware Water Gap. Crossing Pennsylvania, the route is known as the Keystone Shortway. I-80 directly connects with the Parkway in Saddle Brook at Interchange 159 and with the Turnpike/I-95 at Interchange 69.

Interstate Route 280 (I-280). I-280 branches off from I-80 in the vicinity of Parsippany-Troy Hills, Morris County, and follows a southeasterly alignment through the Oranges, Newark and Harrison, connecting to the Holland Tunnel by way of County Route 508 in Kearny. I-280 connects with the Parkway in East Orange at Interchange 145 and ends at the Turnpike at Interchange 15W, just north of the Passaic River.

Interstate Route 287 (I-287). This route is a circumferential bypass of the New York-Northern New Jersey Metropolitan Area and Interstate 95. The southern end of I-287 is at Turnpike Interchange 10, where the roadway continues east as NJ Route 440. The road proceeds westward to the area of Bound Brook, thence in a large circular pattern through Morristown and connects to NJ Route 17 and the New York State Thruway (I-87) at Suffern, New York. I-287 continues east in New York to end at I-95 near the Connecticut state line.

US Route 1. US Route 1 is a principal urban arterial route and, before the existence of the Interstate Highway System, served as the original Maine to Florida highway. In New Jersey, US Route 1 enters the State on the George Washington Bridge with I-95 and follows a generally northeast-southwest path. It closely parallels the Turnpike and can be considered a competitive route from New Brunswick north to the vicinity of Fort Lee, where it is part of US Routes 1&9. South of New Brunswick, the paths diverge as US Route 1 continues on a direct path to Trenton, competing with the use of the Turnpike to I-195 at Interchange 7A, before exiting New Jersey at the Delaware River. US Route 1 connects with the Parkway at Interchange 130. South of where US Routes 1&9 join in Woodbridge, US Route 1 is served by Turnpike Interchanges 9 and 10 (NJ Route 18 and I-287).

US Route 9. US Route 9 begins in New Jersey at the Cape May – Lewes Ferry terminal west of the southern terminus of the Parkway in Cape May County and continues north to the George Washington Bridge. US Route 9 generally parallels the Parkway along the southern half of the Parkway from Cape May to Toms River. There, US Route 9 runs west of the Parkway to Freehold and rejoins the Parkway alignment at Interchange 123 in Sayreville, just south of the Raritan River. The Parkway and US Route 9 share river crossings at Great Egg Harbor and the Mullica River, and are co-aligned in a four mile section of the Parkway in Cape May County and a three mile section in Ocean County. US Route 9 is a competitive route to the Parkway for the southernmost eighty miles of the Parkway as well as across the Raritan River. It directly connects with the Turnpike at Interchange 11 and is also competitive to the Turnpike as part of US Routes 1&9.

US Routes 1&9, US Routes 1&9T (Truck). North of New Brunswick to the George Washington Bridge, US Route 1 joins with US Route 9. From New Brunswick to Elizabeth the road is divided with three lanes in each direction with numerous signalized intersections and driveways. From NJ Route 81 (Turnpike Interchange 13A) in Elizabeth to Jersey City, the road is a freeway that serves Newark Airport, Newark and Jersey City and is a feeder road to the Holland Tunnel with its companion truck route, US Routes 1&9T. North of that point, US Routes 1&9 are a surface street that again features numerous signalized intersections and driveways. To a limited extent, particularly near the airport and east paralleling the I-78 Newark Bay-Hudson County Extension, US Routes 1&9 and US Routes 1&9T represent competitive routes to the Turnpike, notwithstanding the presence of numerous signal controlled intersections. The routes are served directly or indirectly by several Turnpike interchanges from Interchange 13 (I-278) north to Interchange 72 in Fort Lee.

US Route 9W. This route begins at the northern end of the Turnpike at Interchange 72, continuing north to the New York state line. It is a surface arterial that parallels the Palisades Interstate Parkway and is a critical connection between that freeway and the Turnpike, US Routes 1&9, US Route 46, and NJ Route 4. Interchange 72 serves local traffic using the Turnpike to the south/west and experiences daily congestion while serving traffic commuting in the Fort Lee area.

US Route 22. This route begins at US Routes 1&9 near Newark Airport and Turnpike Interchange 14, continuing west from there roughly parallel with I-78 across the state to Easton, Pennsylvania. US Route 22 interchanges with the Parkway at Interchange 140 and is a major arterial for local and subregional traffic throughout Union County, as well as serving as an alternate route for I-78 to Newark and Newark Airport. It connects indirectly with the Turnpike at its east end by way of US Routes 1&9 and I-78.

US Route 46. US Route 46 parallels I-80 throughout New Jersey, beginning in the west in Columbia and continuing east onto I-95 at the George Washington Bridge. US Route 46 varies from a rural two-lane road in the west to a divided four- to six-lane arterial in the east, typically with driveways and signalized intersections. US Route 46 intersects the Parkway at Interchanges 154, 156 and 157 and the Turnpike/I-95 at Interchanges 68 and 72.

US Route 130. The northern terminus of this highway is south of New Brunswick, where it intersects with US Route 1. The route closely parallels the Turnpike between the northern terminus and US Route 206 in Bordentown, continuing to parallel the Turnpike throughout its length to its southern terminus at the Delaware Memorial Bridge in Pennsville. From the Camden area north, this road is divided with four to six lanes and numerous signalized intersections. South of a nine-mile concurrency with I-295, the southernmost portion of the highway is rural with one lane in each direction. US Route 130 interchanges with the Pearl Harbor Memorial Turnpike Extension (I-95) between the mainline Turnpike and the Delaware River and is served by several Turnpike interchanges north from there to Interchange 9 (NJ Route 18) and may be considered competitive to the Turnpike notwithstanding numerous signal-controlled intersections.

US Route 206. US Route 206 runs essentially north-south from the Pennsylvania state line in northwest New Jersey to US Route 30 south of the Atlantic City Expressway in Hammonton. The road is divided with multiple lanes and many closely spaced signalized intersections near population centers such as Trenton, Princeton and Somerville and has more rural characteristics, such as less travel lanes and undivided cross section, along its northern and southern limits. The road intersects the Turnpike at Interchange 7 just south of where it meets US Route 130.

US Route 322. US Route 322 extends east from the Pennsylvania state line in southwest New Jersey to Hamilton Township and joins US Route 40 from there to Atlantic City, intersecting the Turnpike at Interchange 2 and with direct and indirect connections to the Parkway at Interchange 36. In the vicinity of the Turnpike, US Route 322 has one lane in each direction and widens to two lanes in each direction west of that area. US Route 322 retains that cross section to NJ Route 42 in Williamstown, where it becomes a divided arterial east to Atlantic City. Parkway Interchange 36 ramps connect to US Routes 40 and 322 by way of Fire Road and Tilton Road, which are multi-lane arterials maintained by Atlantic County.

Atlantic City Expressway. The Atlantic City Expressway is a limited access toll road operated by the South Jersey Transportation Authority. It runs northwesterly across the State from Atlantic City across the Parkway at Interchange 38 to NJ Route 42, southeast of Camden, which then crosses the Turnpike to connect to I-295 and I-76. The Atlantic City Expressway provides access to the South Jersey beach resorts from the Philadelphia/Camden area but has no direct access to the Turnpike.

NJ Route 3. NJ Route 3 is a major expressway and freeway running east-west from US Route 46 in Clifton to the NJ Route 495 Lincoln Tunnel approach in Secaucus, ending at US Routes 1&9. NJ Route 3 intersects the Parkway at Interchange 153 and both the Westerly and Easterly Alignments of the Turnpike at Interchanges 16W and 16E, connecting these highways to the Lincoln Tunnel and the Meadowlands Sports Complex.

NJ Route 4. NJ Route 4 is a major east-west arterial that runs from Fort Lee to NJ Route 20 in Paterson. For most of its length east of Fair Lawn, NJ Route 4 has two to three lanes in each direction and is divided with driveways but no traffic signals, serving as a major commercial and commuting corridor. It intersects the Parkway at Interchange 161, with remaining movements served by other routes at adjacent interchanges, and terminates into I-95 at the northern end of the Turnpike just west of the George Washington Bridge.

NJ Route 17. NJ Route 17 runs northwesterly through Bergen County from North Arlington to Mahwah, where it merges with Interstate 287. For most of its length north of NJ Route 3, NJ Route 17 is a multi-lane divided arterial with significant commercial development, and with no traffic signals north of US Route 46. This route provides a connection between the George Washington Bridge and Lincoln Tunnel to the New York State Thruway (I-87) and connects with the Parkway at Interchange 163, and may be considered competitive with the Parkway north of that point for through traffic to/from I-87 to the north. It was once considered for direct connection to the Turnpike, but traffic must now use NJ Route 3 (Interchange 16W) to connect.

NJ Route 18. The northern terminus of NJ Route 18 is located in Piscataway at Interstate Route 287. The roadway extends in a southeasterly direction and terminates at NJ Route 138 east of Interstate 195 in Wall Township. The northern portion of NJ Route 18 is a divided arterial in Piscataway and a freeway through New Brunswick, becoming a divided arterial in the area of Turnpike Interchange 9 with retail development on both sides and closely spaced traffic signals for cross streets and turning movements. South of Old Bridge the roadway again becomes a four-lane freeway, providing access to the Parkway at Interchange 105 and shore towns from the New Brunswick area. NJ Route 18 may in part be considered competitive with the Parkway, especially from Tinton Falls south to its southern terminus, since the two roads are roughly parallel for most of the length of NJ Route 18.

NJ Route 19. NJ Route 19 is a freeway connecting US Route 46 in Clifton to I-80 and downtown Paterson. Much of the traffic along the route uses the Parkway to the south by way of Interchange 155A to connect to Paterson.

NJ Route 21. NJ Route 21 is a major arterial through Newark and a freeway north of the city to its terminus in Clifton at US Route 46, where traffic can then continue on NJ Route 20 to access Paterson. Although the multi-lane roadway has numerous signals and congestion through Newark, it is parallel to the Parkway and Turnpike for its entire length and may be considered a competitive route for traffic. Several roadways connect NJ Route 21 to the Turnpike and Parkway; the south end is near Turnpike Interchange 14 and the north end is close to Parkway Interchanges 156 and 157.

NJ Route 33. NJ Route 33 begins in Trenton and continues easterly across the State until it terminates in Neptune Township. This route provides an east-west connection between Trenton and Monmouth County. The NJ Route 133 freeway connects with the Turnpike at Interchange 8 and also intersects the Parkway at Interchange 100 as it diverges with NJ Route 66. Together, NJ Routes 33 and 66 connect the Parkway to Monmouth County shore points.

NJ Route 35. NJ Route 35 begins at Island Beach State Park along the shore and continues north to NJ Route 27 in Rahway. For much of its length, NJ Route 35 closely parallels the Parkway and represents a competitive route for traffic, from the vicinity of Seaside Heights north to the Rahway River crossing. Where US Route 9 diverges from the Parkway for many miles north of Toms River, NJ Route 35 serves as the closest parallel state route. NJ Route 35 is served indirectly by several Parkway interchanges between Interchange 98 (I-195/NJ Route 138) and Interchange 127 (NJ Route 440/Perth Amboy).

NJ Route 37. NJ Route 37 is a divided principal arterial route in northern Ocean County. This route begins on Ocean County's northern barrier island in Seaside Heights and terminates to the west at NJ Route 70 in Lakehurst. NJ Route 37 serves as a collector for traffic traveling both north and south on the Parkway at Interchange 82 in Toms River and provides access to the shore area from the north, via the Parkway.

NJ Route 38. NJ Route 38 begins at US Routes 30/130 in Collingswood and continues east to Mount Holly. It is a divided principal arterial with numerous traffic signals and driveways and serves as a collector for traffic to Camden and Philadelphia. NJ Route 38 is a primary connection between Philadelphia and the Turnpike, via NJ Route 73 at Interchange 4, which contributes to high traffic demands and delays at Interchange 4.

NJ Route 49. NJ Route 49 is a principal arterial route in Salem and Cumberland Counties, running across the state from northeast to southwest, terminating at NJ Route 50 north of Parkway Interchange 20. This route meets US Route 130 and I-295 at the southern end of the Turnpike and is a feeder to the Turnpike from southern communities.

NJ Route 70. NJ Route 70 begins in southern Monmouth County, just north of the Manasquan River. It continues westerly across the State and terminates in Camden where it meets NJ Route 38. This route provides an east-west connection between Philadelphia/Camden and southern Monmouth County, intersecting with the Parkway at Interchange 89. It features a heavily traveled one lane in each direction through the center of New Jersey, widening to a multi-lane divided highway for its western and eastern segments with numerous driveways and traffic signals.

NJ Route 72. NJ Route 72 runs northwesterly from the midpoint of Long Beach Island to NJ Route 70 in Woodland/Pemberton Townships. NJ Route 72 provides access from the northern part of the State to the shore resorts in southern Ocean County via Parkway Interchange 63 and is the only connection to Long Beach Island.

NJ Route 73. NJ Route 73 is a north-south route from US Route 322 near Hammonton crossing into Pennsylvania in northern Philadelphia. NJ Route 73 serves Interchange 4 of the Turnpike and is a heavily used commuter route, one of two connections between the Turnpike and the Philadelphia region. This route generally has two lanes in each direction with a median barrier, driveways, and signalized intersections. It is used to connect the Turnpike with I-295, NJ Route 38 and other local and regional connections.

NJ Route 168. NJ Route 168 is the original alignment of what is now the NJ Route 42 freeway near Camden. NJ Route 168 serves Interchange 3 of the Turnpike and is a heavily used commuter route, one of two connections between the Turnpike and the Philadelphia region. This route has one lane in each direction with a center turn lane and is used to connect the Turnpike with I-295, NJ Route 42 and the Atlantic City Expressway.

NJ Route 440. There are two segments of NJ Route 440, one in Middlesex County and the other in Hudson County. The Middlesex County segment is a multi-lane freeway that links the Turnpike at Interchange 10 and the southerly terminus of Interstate 287 to Staten Island, New York. This segment intersects the Parkway two miles east at Interchange 127, then continues easterly to the Outerbridge Crossing in Perth Amboy. Traffic between the Outerbridge Crossing and the Parkway to the north connects at Interchange 129 by way of NJ Route 184, a four-lane surface arterial. The Hudson County segment of NJ Route 440 is a four-lane arterial with signalized intersections that runs from the Bayonne Bridge in Bayonne to US Routes 1&9 Truck in Jersey City. NJ Route 440 intersects the Turnpike at Interchange 14A in Jersey City.

NJ Route 495. NJ Route 495 is a six-lane freeway that begins at Interchanges 16E and 17 of the Turnpike Easterly Alignment and provides direct access to New York City via the Lincoln Tunnel. NJ Route 495 interchanges with NJ Route 3 just east of the Turnpike for access to the Meadowlands Sports Complex and Secaucus.

CERTAIN RISK FACTORS

The Series 2023 A Bonds are revenue obligations of the Authority which are payable solely from the Pledged Revenues and the other moneys, funds and accounts pledged to the payment thereof pursuant to the Resolution. The following is a discussion of certain risk factors that should be considered in evaluating an investment in the Series 2023 A Bonds. This discussion does not purport to be either comprehensive or definitive. The order in which risks are presented is not intended to reflect either the likelihood that a particular event will occur or the relative significance of such an event. Moreover, there may well be other risks associated with an investment in the Series 2023 A Bonds in addition to those set forth herein.

General

The financial forecasts set forth in this Private Placement Memorandum are based generally upon certain assumptions and projections as to estimated revenues and operating and maintenance expenses. See "2023 TRAFFIC AND TOLL REVENUE FORECAST STUDY" included as Appendix B to this Private Placement Memorandum. Inevitably, some underlying assumptions and projections used to develop the forecasts will not be realized, and unanticipated events and circumstances may occur. Therefore, the actual results achieved during the forecast periods will vary from the forecasts, and such differences may be material.

Forward-Looking Statements

The statements contained in this Private Placement Memorandum that are not purely historical are forward-looking statements, including statements regarding the Authority's expectations, hopes, intentions or strategies regarding the future and the projections contained in this Private Placement Memorandum and in the 2023 Study included as Appendix B to this Private Placement Memorandum. All forward-looking statements included in this Private Placement Memorandum are based on information available to the Authority on the date hereof, and the Authority assumes no obligation to update any such forward-looking statements.

The forward-looking statements herein are necessarily based on various assumptions and estimates that are inherently subject to numerous risks and uncertainties, including risks and uncertainties relating to the possible invalidity of the underlying assumptions and estimates and possible changes or developments in social, economic, business, industry, market, legal and regulatory circumstances and conditions and actions taken or omitted to be taken by third parties, including customers, suppliers, business partners and competitors, and legislative, judicial and other governmental authorities and officials. Assumptions related to the foregoing involve judgments with respect to, among other things, future economic, competitive and market conditions and future business decisions, all of which are difficult or impossible to predict accurately and, therefore, there can be no assurance that the forward-looking statements included in this Private Placement Memorandum will prove to be accurate.

Cybersecurity

The Authority relies on technology for all aspects of its daily operations. Technology is the driving factor which enables the Authority to collect tolls, manage traffic, conduct business activities, and manage employees and assets. The Authority's computing environment is complex, but redundant and stable. The Authority achieves these goals by embracing and adhering to national and state cybersecurity best practices while continuously enhancing its cybersecurity portfolio.

Cybersecurity is one of the Authority's highest priorities. The Authority constantly monitors, evaluates, and adjusts every aspect of its cybersecurity portfolio which is not limited to traditional hardware and software; such as firewalls, malware/antivirus software, vulnerability scanners, security information and event management software; but includes documentation, policies, and standards which govern the strategic vision and goals of its overall Information Technology and Internet of Things infrastructure. Items include, but are not limited to, an Information Security Plan, Business Continuity Plan, Disaster Recovery Plan, Incident Response Plan, vendor requirement forms, non-disclosure agreements, patch management guidelines, encryption policies, and a comprehensive cybersecurity insurance policy.

Furthermore, the Authority maintains a strong cybersecurity culture which extends beyond the boundaries of the Information Technology Department by advocating, throughout all layers of the organization, the importance of cybersecurity training and awareness. The Authority embraces mandatory cybersecurity training, regular phishing campaigns, and reinforcement messaging with flyers and emails.

Acknowledging a security threat can occur at any time of the day, the Authority partners with a security operations center that monitors the network for malicious behavior and network anomalies on a 24/7/365 basis. However, despite all these efforts, unfortunately the Authority's network, systems, information, and other assets are vulnerable to cybersecurity risks and threats potentially resulting in compromised data of personal identifiable information of customers, vendors, and employees; theft or manipulation of information; and operational disruptions and outages.

Compromised activities can be the consequences of employee errors or intentional malicious acts from hackers and/or terrorists. Any such event could result in unauthorized access disrupting the Authority's operations, including toll collection, traffic management, construction work, business operations, and other activities. Ultimately, a successful cybersecurity attack on the Authority's systems could have a material adverse impact on the financial condition and operations of the Authority.

Certain Matters Relating to Enforceability of Obligations

The remedies available to the holders of the Series 2023 A Bonds upon the occurrence of an Event of Default under the Resolution are, in many respects, dependent upon regulatory and judicial actions that are often subject to discretion or delay. Under existing law and judicial decisions, including specifically the United States Bankruptcy Code, the remedies specified in the Resolution may not be readily available or may be limited. In addition, enforcement of such remedies (i) may be subject to general principles of equity which may permit the exercise of judicial discretion, (ii) are subject to the exercise in the future by the State and its agencies and political subdivisions of the police power inherent in the sovereignty of the State, (iii) are subject, in part, to the provisions of the United States Bankruptcy Code and other applicable bankruptcy, insolvency, reorganization, moratorium or similar laws relating to or affecting the enforcement of creditors' rights generally, now or hereafter in effect, and (iv) are subject to the exercise by the United States of the powers delegated to it by the Constitution of the United States of America. The various legal opinions to be delivered concurrently with the delivery of the Series 2023 A Bonds will be qualified to the extent that the enforceability of certain legal rights related to the Series 2023 A Bonds is subject to limitations imposed by bankruptcy, reorganization, insolvency or other similar laws affecting the rights of creditors generally and by equitable remedies and proceedings generally.

Legislative Action

Legislation is introduced from time to time in the State Legislature which, if adopted, may affect the Authority and/or the Turnpike System. The Authority cannot predict whether or not these bills will be enacted into law or how such legislation may affect the Authority and its ability to pay debt service on the Series 2023 A Bonds.

Decline in Toll Revenues

The information provided with respect to toll revenues collected by the Authority is based on historical data. The amount of future toll revenues to be collected by the Authority depends upon a number of factors, some of which are not in the control of the Authority. Some of these factors include a decline in traffic on the Turnpike System due to general economic conditions, severe weather conditions, diversion of traffic to alternative non-toll routes, increased fuel costs, availability of alternate forms of travel and shipping, and government regulations, such as Clean Air Act requirements, increased mileage standards or higher fuel taxes, which could significantly restrict motor vehicle use. Although the Authority has covenanted in the Resolution to fix, charge and collect tolls for the use of the Turnpike System in amounts so that, in each calendar year, the Net Revenues shall at least equal the Net Revenue Requirement for such year, there can be no assurance that the traffic on the Turnpike System will continue to be sufficient for the Authority to generate the necessary revenues to meet its obligations under the Resolution.

Adverse Changes to Third Party Financial Institutions

Adverse changes in the financial condition of certain third-party financial institutions may adversely affect the Authority's financial position. Different types of investment and contractual arrangements may create exposure for the Authority to such institutions including: (i) risk to the Authority's investment portfolio due to defaults or changes in market valuation of the debt securities of such institutions; and (ii) counterparty risk related to the Qualified Swap Agreements used by the Authority to hedge its interest rate risks with respect to a portion of its Outstanding Bonds.

Failure to Pay Mandatory Purchase Price and other Market Disruptions

As described under the section entitled "DIRECT PURCHASE TRANSACTIONS" herein, in the event the Authority cannot pay the purchase price for all or a portion of its Direct Purchase Bonds on any extraordinary mandatory purchase date, such Direct Purchase Bonds will be subject to mandatory redemption in the amounts and on the dates as described under the section entitled "DIRECT PURCHASE TRANSACTIONS" herein.

The credit markets experience substantial disruption from time to time. There can be no assurance as to the timing of any disruption or the extent of any recovery that may be made by the credit markets. The Authority currently plans to raise additional funds to pay the costs of the projects identified in the 2020

Long-Range Capital Plan through the issuance of additional Series of Bonds under the Resolution. If the Authority is unable to access the credit markets as a result of any such disruption, it will likely need to delay the funding of the projects identified in the 2020 Long-Range Capital Plan through the issuance of additional Series of Bonds under the Resolution until such time as the capital markets rebound. The effect of such delays could result in increased costs for the projects identified in the 2020 Long-Range Capital Plan.

Risks Associated With Qualified Swap Agreements

Based upon the current ratings of the applicable Bonds, the Authority is currently not required to post collateral under any of its Qualified Swap Agreements. With respect to all Qualified Swap Agreements, other than the Series 2017 D-2, D-3 and D-4 Swap Agreement with Citibank, N.A., the rating on the applicable Bonds would have to drop below either Baa2 from Moody's or below BBB from S&P, for any collateral posting requirements to be imposed upon the Authority under such agreements. With respect to the Series 2017 D-2, D-3 and D-4 Swap Agreement with Citibank, N.A. only, the rating on the Series 2017 D-2, D-3 and D-4 Bonds would have to drop below A2 from Moody's, below A from S&P and below A from Fitch for any collateral posting requirements to be imposed upon the Authority under such agreements. If the Authority is required to post collateral under any such agreements, it could have a material adverse effect on the Authority's liquidity position.

The Authority is exposed to basis risk under its current Qualified Swap Agreements as the variable rate received from the counterparties under the Qualified Swap Agreements may not perfectly match the variable rate paid on the Bonds intended to be hedged by such Qualified Swap Agreements.

Each of the Authority's current Qualified Swap Agreements provides that an automatic, immediate termination of such Agreement shall take place upon the occurrence of the dissolution, bankruptcy, insolvency, liquidation or any similar related events involving or related to the Authority's counterparty under such Agreement. If a Qualified Swap Agreement is automatically and immediately terminated as a result of any such event and the fair value of such Qualified Swap Agreement is negative to the Authority on the date of such automatic immediate termination, the Authority could be obligated to make a substantial termination payment to the counterparty and the Authority's financial position could be materially adversely affected during the period in which such termination payment would be required to be paid by the Authority.

Costs of Construction of the Projects Included in the Capital Improvement Programs

In connection with the Projects included in the 2023-2027 CIP, the 2019 CIP and the 2008 CIP, there is a possibility of time delays and cost increases resulting from (i) design and construction problems and resulting change orders, (ii) environmental litigation or environmental administrative matters, (iii) the unavailability or cost of acquiring rights-of-way, (iv) archeological, historic and unidentified subsurface conditions, (v) utility relocation problems, (vi) hazardous materials, (vii) force majeure events, (viii) litigation, or (ix) inflation. As a result, there can be no assurance that the costs of completion for the 2023-2027 CIP, the 2019 CIP and/or the 2008 CIP will not exceed current estimates, or that the completion of such Projects will not be delayed beyond the scheduled completion date. Variations in cost estimates and delays in construction could be material.

There is also a possibility of insolvency or bankruptcy of the contractors during construction of one or more of the Projects included in the 2023-2027 CIP, the 2019 CIP and/or the 2008 CIP. While the contractors will be required to provide a performance bond and a payment bond, there can be no assurance that such bonds will be sufficient to assure timely completion of the Projects. Moreover, in the event that a default occurs under a construction contract by the contractor, there is a possibility of litigation between the Authority and the providers of the performance bonds and payment bonds and/or the contractor, which could further delay construction and the opening of the Projects. Any such delays and/or cost overruns could result in a substantial increase in the costs of the 2023-2027 CIP, the 2019 CIP and/or the 2008 CIP.

CDM Smith Traffic and Revenue Study

As the Traffic Engineer for the Authority, CDM Smith was requested by the Authority to prepare the 2023 Study presenting its analyses and findings relative to recent trends in traffic and revenue on the Turnpike and the Parkway. See APPENDIX B – "2023 TRAFFIC AND TOLL REVENUE FORECAST STUDY" attached to this Private Placement Memorandum. The revenue forecasts contained in the 2023 Study are based upon certain assumptions set forth or incorporated therein. The 2023 Study is not a guarantee of any future events or trends and the forecasts therein are subject to future economic and social conditions and demographic developments that cannot be predicted with certainty. Further, the estimates and assumptions in the 2023 Study are inherently subject to significant economic and competitive uncertainties and contingencies, many of which are beyond the control of the Authority. Failure to achieve or realize any of the assumptions listed in the 2023 Study may have a materially adverse effect upon the Net Revenues actually realized by the Authority.

Federal Subsidy on Build America Bonds

The Authority currently has $3,225,000,000 in principal amount of Build America Bonds outstanding and is entitled to receive approximately $81,665,325 in Federal subsidy annually through 2034 eventually declining to a final annual amount receivable in 2040 of approximately $16,898,609 with respect to such Build America Bonds. A series of automatic Federal deficit reduction spending cuts known as "sequestration" took effect on March 1, 2013. Sequestration has reduced the Federal subsidy paid to the Authority with respect to its outstanding Build America Bonds for every Federal fiscal year since 2013. The Federal subsidy payable to the Authority with respect to its Build America Bonds for Federal fiscal year 2023 will be reduced by 5.7% from the amounts anticipated at the time the Build America Bonds were issued. The Internal Revenue Service has announced that all Federal subsidy payments on Build America Bonds scheduled to be made on or after October 1, 2020 through and including September 30, 2030 will be reduced by 5.7% from the amounts anticipated at the time the Build America Bonds were issued. There can be no assurance that additional sequestration measures will not be enacted which will further reduce the amount of the subsidy the Authority receives on its Build America Bonds. The reduction in the amount of the Federal subsidy the Authority received and any future reduction in subsidy will require the Authority to use other funds to offset the loss of this subsidy. In addition, if any future shutdowns of the Federal government occur and continue or an extended period of time, the Federal subsidy payments to the Authority with respect to its Build America Bonds could be suspended or delayed.

Other Factors

Additional factors which may affect the financial condition of the Authority and the future operation of the Turnpike System include the following:

- Increased and/or unanticipated costs of operating the Turnpike System;
- Work stoppage, slowdown or action by unionized Authority employees;
- More and expanded mass transit systems;
- Complete or partial destruction or temporary closure of the Turnpike System for extended periods of time;
- Increased pension costs, unfunded healthcare and other non-pension postemployment benefits; and

- The potential for future Authority payments for non-Turnpike System purposes. See “SECURITY FOR THE BONDS – Potential Future Authority Payments for Non-Turnpike System Purposes” herein.

RATINGS

Moody’s Investors Services, Inc. (“Moody’s”) has assigned a rating of “A1” to the Series 2023 A Bonds. S&P Global Ratings, a division of Standard & Poor’s Financial Services LLC (“S&P”), has assigned a rating of “AA-” to the Series 2023 A Bonds.

Any desired explanation of the significance of such ratings should be obtained from Moody’s and S&P, respectively. Certain information and materials, including information and materials not included in this Private Placement Memorandum, were furnished by the Authority to Moody’s and S&P. Generally, Moody’s and S&P base their respective ratings on the information and materials so furnished and on their respective investigations, studies and assumptions.

There is no assurance that a particular rating will be maintained for any given period of time or that it will not be lowered, suspended or withdrawn entirely if, in the judgment of Moody’s or S&P, as the case may be, circumstances so warrant. Any such change in or withdrawal of such rating could have an adverse effect on the market price or the marketability of the Series 2023 A Bonds.

TAX MATTERS

Exclusion of Interest on the Series 2023 A Bonds from Gross Income for Federal Tax Purposes

The Internal Revenue Code of 1986, as amended (the "Code"), imposes certain requirements that must be met on a continuing basis subsequent to the issuance of the Series 2023 A Bonds in order to assure that interest on the Series 2023 A Bonds will be excluded from gross income for federal income tax purposes under Section 103 of the Code. Failure of the Authority to comply with such requirements may cause interest on the Series 2023 A Bonds to lose the exclusion from gross income for federal income tax purposes, retroactive to the date of issuance of the Series 2023 A Bonds. The Authority made certain representations and made certain covenants as to various tax requirements in its Arbitrage and Tax Certificate relating to the Series 2023 A Bonds (the “Arbitrage and Tax Certificate”) executed by the Authority as of August 30, 2023, the date of initial issuance and delivery of the Series 2023 A Bonds. Among other things, the Authority covenanted to comply with the provisions of the Code applicable to the Series 2023 A Bonds and covenanted not to take any action or fail to take any action that would cause interest on the Series 2023 A Bonds to lose the exclusion from gross income under Section 103 of the Code.

Relying upon the representations made by the Authority in the Arbitrage and Tax Certificate and assuming continuing compliance by the Authority with the above described covenants made by the Authority in the Arbitrage and Tax Certificate, on August 30, 2023, McManimon, Scotland & Baumann, LLC, Bond Counsel to the Authority ("Bond Counsel"), issued its legal opinion stating that, under existing law, interest on the Series 2023 A Bonds is excluded from gross income of the owners thereof for federal income tax purposes pursuant to Section 103 of the Code, and interest on the Series 2023 A Bonds is not an item of tax preference under Section 57 of the Code for purposes of computing alternative minimum tax; however, for tax years beginning after December 31, 2022, interest on the Series 2023 A Bonds is included in the “adjusted financial statement income” of certain corporations that are subject to alternative minimum tax under Section 55 of the Code. A copy of the opinion of Bond Counsel is attached to this Private

Placement Memorandum as Appendix G. See APPENDIX G – COPY OF THE OPINION OF BOND COUNSEL attached hereto.

The opinion of Bond Counsel was based on current legal authority and covers certain matters not directly addressed by such authority. It represents Bond Counsel's legal judgment as to exclusion of interest on the Series 2023 A Bonds from gross income for federal income tax purposes but is not a guaranty of that conclusion. The opinion is not binding on the Internal Revenue Service ("IRS") or any court. Bond Counsel expressed no opinion about (i) the effect of future changes in the Code and the applicable regulations under the Code or (ii) the interpretation and enforcement of the Code or those regulations by the IRS.

Bond Counsel's engagement with respect to the Series 2023 A Bonds ended with the issuance of the Series 2023 A Bonds, and, unless separately engaged, Bond Counsel is not obligated to defend the Authority or the owners of the Series 2023 A Bonds regarding the tax status of interest thereon in the event of an audit examination by the IRS. The IRS has a program to audit tax-exempt obligations to determine whether the interest thereon is includible in gross income for federal income tax purposes. If the IRS does audit the Series 2023 A Bonds, under current IRS procedures, the IRS will treat the Authority as the taxpayer and the beneficial owners of the Series 2023 A Bonds will have only limited rights, if any, to obtain and participate in judicial review of such audit. Any action of the IRS, including, but not limited to, selection of the Series 2023 A Bonds for audit, or the course or result of such audit, or an audit of other obligations presenting similar tax issues, may affect the market value of the Series 2023 A Bonds.

Payments of interest on tax-exempt obligations, including the Series 2023 A Bonds, are generally subject to IRS Form 1099-INT information reporting requirements. If a Series 2023 A Bond owner is subject to backup withholding under those requirements, then payments of interest will also be subject to backup withholding. Those requirements do not affect the exclusion of such interest from gross income for federal income tax purposes.

Original Issue Premium

Each maturity of the Series 2023 A Bonds was sold at an initial offering price in excess of the amount payable at the maturity date. The excess, if any, of the tax basis of the Series 2023 A Bonds to a purchaser (other than a purchaser who holds such Series 2023 A Bonds as inventory, as stock-in-trade or for sale to customers in the ordinary course of business) over the amount payable at maturity is amortizable bond premium, which is not deductible from gross income for federal income tax purposes. Amortizable bond premium, as it amortizes, will reduce the owner's tax cost of the Series 2023 A Bonds used to determine, for federal income tax purposes, the amount of gain or loss upon the sale, redemption at maturity or other disposition of the Series 2023 A Bonds. Accordingly, an owner of a Series 2023 A Bond may have taxable gain from the disposition of the Series 2023 A Bond, even though the Series 2023 A Bond is sold, or disposed of, for a price equal to the owner's original cost of acquiring the Series 2023 A Bond. Bond premium amortizes over the term of the Series 2023 A Bonds under the "constant yield method" described in regulations interpreting Section 1272 of the Code. Owners of the Series 2023 A Bonds should consult their own tax advisors with respect to the calculation of the amount of bond premium that will be treated for federal income tax purposes as having amortized for any taxable year (or portion thereof) of the owner and with respect to other federal, state and local tax consequences of owning and disposing of the Series 2023 A Bonds.

Additional Federal Income Tax Consequences of Holding the Series 2023 A Bonds

Prospective purchasers of the Series 2023 A Bonds should be aware that ownership of, accrual or receipt of interest on or disposition of tax-exempt obligations, such as the Series 2023 A Bonds, may have additional federal income tax consequences for certain taxpayers, including, without limitation, taxpayers eligible for the earned income credit, recipients of certain Social Security and certain Railroad Retirement benefits, taxpayers that may be deemed to have incurred or continued indebtedness to purchase or carry tax-exempt obligations, financial institutions, property and casualty companies, foreign corporations and certain S corporations.

Bond Counsel expressed no opinion regarding any federal tax consequences other than its opinion with regard to the exclusion of interest on the Series 2023 A Bonds from gross income pursuant to Section 103 of the Code and interest on the Series 2023 A Bonds not constituting an item of tax preference under Section 57 of the Code. Prospective purchasers of the Series 2023 A Bonds should consult their tax advisors with respect to all other tax consequences (including, but not limited to, those listed above) of holding the Series 2023 A Bonds.

Changes in Federal Tax Law Regarding the Series 2023 A Bonds

Legislation affecting tax-exempt obligations is regularly considered by the United States Congress and may also be considered by the State of New Jersey. Court proceedings may also be filed, the outcome of which could modify the tax treatment of obligations such as the Series 2023 A Bonds. There can be no assurance that legislation enacted or proposed, or actions by a court, after the date of issuance of the Series 2023 A Bonds will not have an adverse effect on the tax status of interest on the Series 2023 A Bonds or the market value or marketability of the Series 2023 A Bonds. These adverse effects could result, for example, from changes to federal or state income tax rates, changes in the structure of federal or state income taxes (including replacement with another type of tax) or repeal (or reduction in the benefit) of the exclusion of interest on the Series 2023 A Bonds from gross income for federal or state income tax purposes for all or certain taxpayers.

State Taxation

In its opinion dated August 30, 2023 relating to the Series 2023 A Bonds, Bond Counsel also stated that, based upon existing law, interest on the Series 2023 A Bonds and any gain on the sale thereof are not included in gross income under the New Jersey Gross Income Tax Act.

THE OPINIONS EXPRESSED BY BOND COUNSEL WITH RESPECT TO THE SERIES 2023 A BONDS WERE BASED UPON EXISTING LAWS AND REGULATIONS AS INTERPRETED BY RELEVANT JUDICIAL DECISIONS AND REGULATORY CHANGES AS OF AUGUST 30, 2023, AND BOND COUNSEL EXPRESSED NO OPINION WITH RESPECT TO ANY LEGISLATION, REGULATORY CHANGES OR LITIGATION ENACTED, ADOPTED OR DECIDED SUBSEQUENT THERETO. PROSPECTIVE PURCHASERS OF THE SERIES 2023 A BONDS SHOULD CONSULT THEIR OWN TAX ADVISORS REGARDING THE POTENTIAL IMPACT OF ANY PENDING OR PROPOSED FEDERAL OR STATE TAX LEGISLATION, REGULATIONS OR LITIGATION.

See Appendix G to this Private Placement Memorandum for a copy of the complete text of Bond Counsel’s opinion with respect to the Series 2023 A Bonds.

LITIGATION

There is no litigation pending or, to the knowledge of the Authority, threatened, which (i) questions the official existence of the Authority or the power of the Authority to collect and pledge revenues in accordance with the terms of the Resolution to pay the Series 2023 A Bonds or to establish and adjust tolls, or (ii) seeks to restrain or enjoin the issuance of the Series 2023 A Bonds or to question or affect the validity of the Series 2023 A Bonds or the proceedings of the Authority under which they are to be issued.

In addition to commitments in the normal course of business (which includes investigation and remediation of existing and projected action level environmental conditions), the Authority is contingently liable under pending lawsuits and claims, relating principally to construction programs and personal injury claims, in which the Authority is named a defendant. The Authority believes the aggregate liability of the Authority under such actions, if adversely determined, would not materially adversely affect the financial position of the Authority and sufficient funds are expected to be available to satisfy any payments required in connection therewith.

In 2017, a Petition for Rule Change seeking to have the Authority revoke its rule imposing an administrative fee in connection with collecting unpaid tolls from toll violators on the Turnpike and Parkway was filed with the Authority. In the Petition, the petitioners argue that the administrative fee is unreasonable and therefore not authorized by the Act. The Petition also includes a demand for a refund of the administrative fees collected by the Authority to the extent unreasonable, which amount the petitioners claim is nearly $200,000,000. After reviewing a financial analysis of the costs of processing, prosecuting and collecting unpaid tolls from toll violators, the Authority concluded that the administrative fee is reasonable and consistent with the Act and, in a written response dated October 18, 2017 (the "Final Action"), the Executive Director of the Authority denied the Petition. On December 1, 2017 the petitioners filed an appeal of that denial with the Appellate Division of the Superior Court of the State of New Jersey and oral argument occurred on February 4, 2019. On March 8, 2019, the Appellate Division issued its decision rejecting the petitioners' contention that the Authority violated the Administrative Procedures Act or notions of due process or fundamental fairness, when it initially promulgated the regulation in 2011, and in 2017, when it considered the Petition for Rule Change. However, the Appellate Division remanded the case to the lower court in Middlesex County, New Jersey, for purposes of supplementing the record. After a lengthy period of extensive additional discovery by the parties and the Authority working with experts to defend the reasonableness of the administrative fee, the lower court held an evidentiary hearing on the matter over several days in July and August of 2021. In January 2022, the lower court rendered its findings of fact and conclusions of law, rejecting the petitioners' arguments and concluding that the administrative fee was both reasonable and based on the costs associated with processing and collecting a toll violation. The parties thereafter filed supplemental briefs with the Appellate Division, which had retained jurisdiction of the matter. On May 11, 2023, the Appellate Division (i) issued an opinion adopting the lower court's findings of fact and conclusions of law, (ii) concluded the administrative fee is based upon the actual cost of processing and collecting a toll violation in compliance with the Act, and is neither arbitrary, capricious, nor unreasonable, and (iii) affirmed the Authority's Final Action. On May 31, 2023, the Petitioners filed a Notice of Petition for Certification to the Supreme Court of New Jersey. The Authority opposed the Petition for Certification. On October 3, 2023, the Supreme Court of New Jersey issued an Order denying the Petition for Certification, with costs.

On December 1, 2017, the law firm representing the petitioners also filed a class action lawsuit in the United States District Court for the District of New Jersey alleging, among other things, that the administrative fee violates the Fair Debt Collections Practices Act (FDCPA) and the Eighth Amendment to the United States Constitution. With the agreement of the parties, on January 17, 2018, the Court issued an order staying this lawsuit pending the resolution of the appeal with the Appellate Division of the Superior Court of the State of New Jersey described above. If and when this lawsuit is reactivated, the Authority intends to vigorously defend its conclusion that the administrative fee does not violate the FDCPA or the United States Constitution.

Please see "THE AUTHORITY – Environmental Matters" herein for a discussion of certain litigation involving the Authority and the potential costs and/or liabilities of the Authority associated therewith.

STATE NOT LIABLE

THE SERIES 2023 A BONDS ARE REVENUE OBLIGATIONS OF THE AUTHORITY. THE SERIES 2023 A BONDS ARE NOT A DEBT OR LIABILITY OF THE STATE OR OF ANY POLITICAL SUBDIVISION THEREOF (OTHER THAN THE AUTHORITY) AND NEITHER THE FAITH AND CREDIT NOR THE TAXING POWER OF THE STATE OR OF ANY POLITICAL SUBDIVISION THEREOF IS PLEDGED TO THE PAYMENT OF THE SERIES 2023 A BONDS. THE AUTHORITY HAS NO TAXING POWER.

COVENANT OF THE STATE

In the Act, the State pledges to and agrees with the holders of bonds of the Authority (including the holders of all Bonds issued under the Resolution) that it will not limit or restrict the rights thereby vested in the Authority to maintain, construct, reconstruct, and operate any project as defined therein, 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 bondholders or in any way impair their rights or remedies until all bonds issued by the Authority under the Act, together with interest thereon, are fully paid and discharged.

CONTINUING DISCLOSURE

In connection with the issuance of the Series 2023 A Bonds, the Authority entered into a Continuing Disclosure Agreement, dated as of August 30, 2023, with the Co-Trustees (the "Continuing Disclosure Agreement") pursuant to which the Authority agreed for the benefit of the holders of the Series 2023 A Bonds to annually provide or cause to be provided to the Municipal Securities Rulemaking Board, through the EMMA system, certain financial and operating data relating to the Authority. Pursuant to the Continuing Disclosure Agreement, the Authority agreed to provide, by no later than May 1 of each year during which any of the Series 2023 A Bonds remain Outstanding, such annual financial and operating data prepared for the respective fiscal year of the Authority ending the immediately preceding December 31 (or if the fiscal year of the Authority shall end on any date other than December 31, the Authority shall provide such annual financial and operating data not later than the first day of the fifth month next following the end of such other fiscal year). The Authority also covenanted in the Continuing Disclosure Agreement to provide notices of the occurrence of certain enumerated events. A copy of the Continuing Disclosure Agreement is included in APPENDIX H - "COPY OF THE CONTINUING DISCLOSURE AGREEMENT" attached hereto.

A failure by the Authority to comply with the provisions of the Continuing Disclosure Agreement will not constitute an Event of Default under the Resolution, and the holders and Beneficial Owners of the Series 2023 A Bonds are limited to the remedies set forth in the Continuing Disclosure Agreement.

In April 2020, the Authority became aware that the annual financial and operating data, notices of certain enumerated events and other information it was filing on EMMA in compliance with its continuing disclosure agreements for its Outstanding Bonds was inadvertently not properly linked to the CUSIP numbers for its Series 2019 A Bonds. The Authority corrected the problem promptly and has taken steps to ensure that all of its future filings on EMMA will be properly linked to the CUSIP numbers for all of its Outstanding Bonds that are the subject of a continuing disclosure agreement.

On March 30, 2022, Fitch Ratings announced an upgrade to its rating on the Authority's Outstanding Bonds. However, the third party vendor which the Authority relies upon to file event notices of any rating changes on its Bonds with EMMA failed to timely file a notice of that upgrade within 10 business days after March 30, 2022, as required by the Authority's existing continuing disclosure agreements. A notice of that rating change was subsequently filed with EMMA on May 27, 2022. The Authority and its third party vendor have implemented procedures to ensure that all event notices relating to any future rating changes on the Authority Bonds will be timely filed with EMMA.

CERTAIN LEGAL MATTERS

All legal matters incident to the authorization, issuance, sale and delivery of the Series 2023 A Bonds were approved by McManimon, Scotland & Baumann, LLC, Roseland, New Jersey, Bond Counsel. A copy of Bond Counsel's approving opinion relating to the Series 2023 A Bonds is attached hereto as Appendix G. Certain legal matters were also passed upon for the Authority by Ann Christine Monica, Esq., Acting Director of Law of the Authority.

LEGALITY FOR INVESTMENT

Under the Act, the Series 2023 A Bonds are securities in which the State and all political subdivisions of the State, their officers, boards, authorities, departments or other agencies, all banks, bankers, savings banks, trust companies, savings and loan associations, investment companies and other persons carrying on a banking business, all insurance companies, insurance associations and other persons carrying on an insurance business, and all administrators, executors, guardians, trustees and other fiduciaries, and all other persons whatsoever who may be authorized to invest in bonds or other obligations of the State, may properly and legally invest any funds, including capital belonging to them or within their control; and the Series 2023 A Bonds are securities which may properly and legally be deposited with and received by any State or municipal officers or agency of the State for any purpose for which the deposit of bonds or other obligations of the State may be authorized by law.

FINANCIAL ADVISOR

NW Financial Group, LLC served as Financial Advisor to the Authority in connection with the issuance of the Series 2023 A Bonds (the "Financial Advisor"). NW Financial Group, LLC, in its capacity as Financial Advisor, does not assume any responsibility for the information, covenants and representations contained in any of the legal documents with respect to the Federal income tax status of the Series 2023 A Bonds, or the possible impact of any present, pending or future actions taken by any legislative or judicial bodies.

The Financial Advisor to the Authority has provided the following sentence for inclusion in this Private Placement Memorandum: The Financial Advisor has reviewed the information in this Private Placement Memorandum in accordance with, and as part of, its responsibilities to the Authority and, as applicable, to investors under the Federal securities laws, as applied to the facts and circumstances of this transaction, but the Financial Advisor does not guarantee the accuracy or completeness of such information.

FIDUCIARIES

The Bank of New York Mellon, Woodland Park, New Jersey and U.S. Bank Trust Company, National Association, Edison, New Jersey serve as Co-Trustees under the Resolution. The Bank of New York Mellon serves as the Trustee, Paying Agent and Registrar for the Series 2023 A Bonds. The duties of U.S. Bank Trust Company, National Association are limited to administration of certain investments in the Debt Reserve Fund and certain other Authority funds.

INDEPENDENT AUDITORS

The financial statements of the Authority as of and for the years ended December 31, 2022 and 2021, included in Appendix A to this Private Placement Memorandum, have been audited by KPMG LLP, independent auditors, as stated in their report which appears therein.

MISCELLANEOUS

The information contained herein has been obtained from the Authority and other sources which the Authority believes to be reliable. There is no guarantee that any of the assumptions or estimates contained herein will be realized.

The references herein to the Act, the Resolution and the Series 2023 A Bonds are brief outlines of certain provisions thereof. Such outlines do not purport to be complete and accordingly, are qualified by reference to the Act, the Resolution and the Series 2023 A Bonds and are subject to the full texts thereof. The respective references herein to the Traffic Engineer and the Consulting Engineer have been approved by said engineers and consultants but do not purport to be complete in all respects, and, accordingly, are qualified by reference to the 2023 Study of the Traffic Engineer in Appendix B and to the Report of the Consulting Engineer in Appendix C, respectively, and are subject to the full texts thereof.

The authorization, agreements and covenants of the Authority are set forth in the Resolution and this Private Placement Memorandum is not to be construed as a contract with the holders of the Series 2023 A Bonds. Any statements made in this Private Placement Memorandum involving matters of opinion or of estimates, whether or not expressly so identified, are intended merely as such and not as representations of fact.

NEW JERSEY TURNPIKE AUTHORITY

By: /s/James D. Carone
JAMES D. CARONE
Executive Director

APPENDIX A

FINANCIAL STATEMENTS OF THE AUTHORITY
AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021
WITH INDEPENDENT AUDITORS' REPORT THEREON

NEW JERSEY TURNPIKE AUTHORITY

(A Component Unit of the State of New Jersey)

Financial Statements
For the Years Ended December 31, 2022 and 2021

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NEW JERSEY TURNPIKE AUTHORITY
(A Component Unit of the State of New Jersey)

Table of Contents

Schedules

NEW JERSEY TURNPIKE AUTHORITY
(A Component Unit of the State of New Jersey)

Table of Contents

KPMG LLP
New Jersey Headquarters
51 John F. Kennedy Parkway
Short Hills, NJ 07078-2702

Independent Auditors' Report

The Commissioners
New Jersey Turnpike Authority

Opinion

We have audited the financial statements of the New Jersey Turnpike Authority (the Authority), a component unit of the State of New Jersey, as of and for the years ended December 31, 2022 and 2021, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements for the years then ended as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the financial position of the Authority, as of December 31, 2022 and 2021, and the changes in its financial position and its cash flows for the years then ended in accordance with U.S. generally accepted accounting principles.

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Authority and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Emphasis of Matter

As discussed in note 2(v) to the financial statements, in 2022, the Authority adopted Governmental Accounting Standards Board (GASB) Statement No. 87, *Leases*, and GASB Statement No. 94, *Public-Private and Public-Public Partnerships and Availability Payment Arrangements*. Our opinion is not modified with respect to these matters.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with U.S. generally accepted accounting principles, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Authority's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Authority's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

Required Supplementary Information

U.S. generally accepted accounting principles require that the management's discussion and analysis, the schedules of changes in total OPEB liability and related ratios (Schedule 1) and the schedules of proportionate share, employer contributions and notes (Schedule 2) be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the GASB who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audits of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audits were conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Authority's basic financial statements. The supplementary information included in Schedules 3 through 10C is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to

KPMG

the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the supplementary information included in Schedules 3 through 10C is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Information

The other information included in Schedules 11A and 11B, as listed in the table of contents, are presented for the purposes of additional analysis and are not a required part of the basic financial statements. Such information has not been subjected to the auditing procedures applied in the audits of the basic financial statements, and accordingly, we do not express an opinion or any form of assurance thereon.

KPMG LLP

Short Hills, New Jersey
September 26, 2023

Management's Discussion and Analysis

Fiscal Years ended December 31, 2022 and 2021

The management of the New Jersey Turnpike Authority (the Authority) offers this narrative overview and analysis of the Authority's financial activities for the years ended December 31, 2022 and 2021, which should be read in conjunction with the Authority's financial statements.

Overview of the Financial Statements

This management's discussion and analysis (MD&A) is intended to present an overview of the Authority's financial performance for the years ended December 31, 2022 and 2021, with information presented as of and for the year ended December 31, 2020 for comparative purposes presented. The Authority's financial statements are prepared in accordance with Generally Accepted Accounting Principles (GAAP) as prescribed by the Governmental Accounting Standards Board (GASB). This MD&A is intended to provide an assessment of how the Authority's financial position has improved or deteriorated, and identify the factors that, in management's view, significantly affected the Authority's overall financial position. It may contain opinions, assumptions, or conclusions by the Authority's management that should not be considered a replacement for the financial statements included in this report.

The Statement of Net Position provides information about the nature and amount of investments in resources (assets) and the obligations to Authority creditors (liabilities), as well as the deferred outflows and inflows of resources, with the difference between these amounts reported as net position.

The Statement of Revenues, Expenses, and Changes in Net Position, which accounts for all the current year's revenues and expenses, measures the success of the Authority's operations over the past year and can be used to determine how the Authority has funded its costs.

The Statement of Cash Flows provides information about the Authority's cash receipts, cash payments, and net changes in cash resulting from operating, investing and financing (both capital and non-capital related) activities.

The Notes to the Financial Statements provide:

- Information that is essential to understand the basic financial statements, such as the Authority's accounting methods and policies.
- Details of contractual obligations, future commitments and contingencies of the Authority.
- Other events or developing situations that could materially affect the Authority's financial position.

The Required Supplementary Information included in Schedule 1 presents information regarding the Authority's changes in the total other postemployment benefits (OPEB) liability, related ratios and notes to the Authority's OPEB plan.

The Required Supplementary Information included in Schedule 2 presents information regarding the Authority's proportionate share, employer contributions and notes related to the pension amounts of the State of New Jersey Public Employees' Retirement System (PERS).

The Other Supplementary Information included in Schedules 3 through 11B presents information regarding the Authority's accounting and compliance with its 1991 Turnpike Revenue Bond Resolution, as amended, restated and supplemented (the Resolution), and the Authority's interpretation of such Resolution.

Operational Update

During fiscal year 2022, the Authority saw continued recovery in traffic volume on both the New Jersey Turnpike and the Garden State Parkway. Toll revenue exceeded the 2022 budget primarily due to stronger than projected commercial traffic growth on the New Jersey Turnpike. The month of August 2022 saw the most commercial traffic on the Turnpike ever recorded, as there has been an increase in tractor trailers on the roadway. On January 1, 2022, the Authority implemented the first annual toll rate indexing of 3% as approved in May 2020. The toll rate indexing is required to provide sufficient revenue to service the debt that is necessary to fund the Authority's 2020 Long-Range Capital Plan.

Traffic increased on both roadways in 2022, despite a more than 165% increase in gas prices, the highest percentage increase since 2003, and inflation levels not seen in 50 years. Gas prices averaged $0.97/gallon higher in 2022 when compared to 2021, which put a new pressure on discretionary passenger vehicle traffic, as gas prices reached a high of approximately $5.00/gallon in June 2022. While both roadways have discretionary travel, gas prices seem to have impacted the Garden State Parkway more than the New Jersey Turnpike, as toll transactions and toll revenue on the Garden State Parkway were slightly below budget. However, regular gasoline prices have decreased since the spike in June 2022. In fact, December 2022 gas prices have decreased an average of $0.38/gallon when compared to November 2022.

New Jersey Turnpike:

For the year ended December 31, 2022, traffic on the New Jersey Turnpike increased 4.6% and toll revenue increased 7.0% compared to the same period in 2021. The increase in traffic is primarily due to the continued return to office, increased travel, and resumption of large-scale public events after the lifting of COVID-related restrictions in New Jersey in mid-2021. The actual results for the twelve months ended December 31, 2022 were above CDM Smith's (the Authority's general traffic engineering consultant) projections, despite the significant increase in gas prices in 2022, which was not projected. When compared to the same period in 2019, pre-pandemic, traffic is down 5.6% but revenue is up 35.8% for the year. However, when comparing the month of December 2022 to December 2019, traffic has recovered to about 96.0% of pre-pandemic levels.

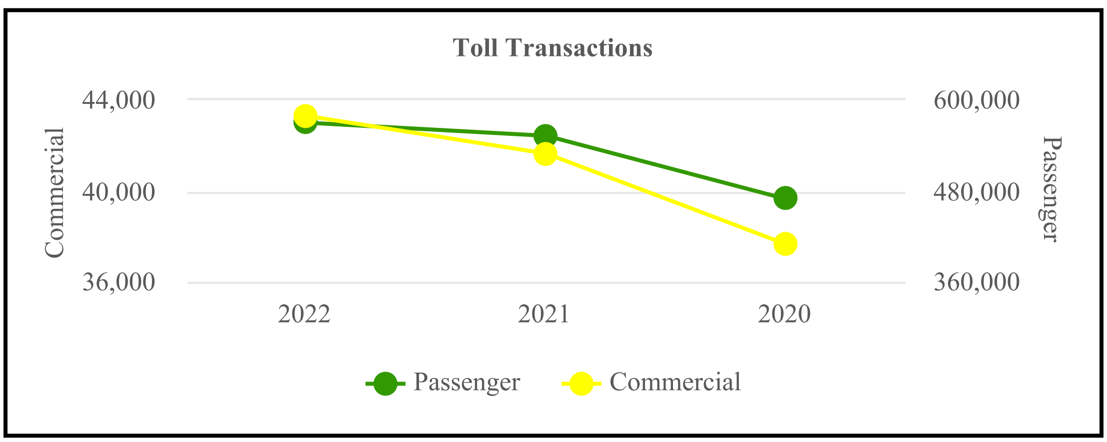
Garden State Parkway:

For the twelve months ended December 31, 2022, toll transactions on the Garden State Parkway increased 2.2% and revenue increased 4.6% when compared to the same period in 2021. The increase in toll transactions is primarily due to the increase in travel as COVID-related restrictions in New Jersey were lifted in mid-2021, while toll revenue increased mainly due to the increase in toll transactions as well as the 3% annual toll rate indexing. Increased travel during the Presidents' Day, Easter, Memorial Day, and 4th of July holiday weekends as compared to last year also positively impacted results. When compared to the same period in 2019, pre-pandemic, traffic is down 6.7% and revenue is up 21.3%. However, when comparing the month of December 2022 to December 2019, traffic has recovered to about 96.0% of pre-pandemic levels.

(Dollars shown in thousands)

Toll Transactions (2022 – 2020):

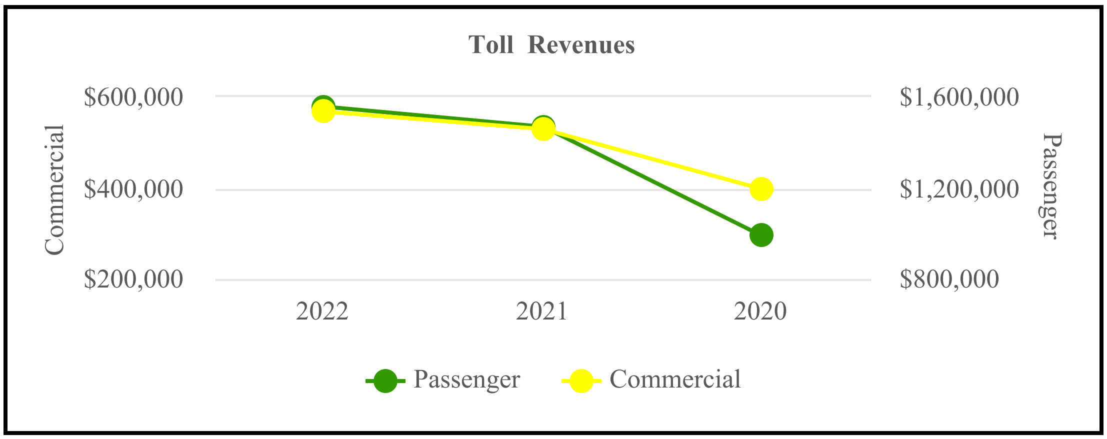
		2022	2021	2020	% Change 2022 vs 2021	% Change 2021 vs 2020
	Passenger	**215,522**	205,819	166,320	4.7 %	23.7%
	Commercial	**37,150**	35,690	32,348	4.1 %	10.3%
New Jersey Turnpike	Total	**252,672**	241,509	198,668	4.6 %	21.6%
	Passenger	**354,608**	347,005	303,172	2.2 %	14.5%
	Commercial	**6,151**	5,957	5,313	3.3 %	12.1%
Garden State Parkway	Total	**360,759**	352,962	308,485	2.2 %	14.4%
	Passenger	**570,130**	552,824	469,492	3.1 %	17.7%
	Commercial	**43,301**	41,647	37,661	4.0 %	10.6%
New Jersey Turnpike Authority	**Total**	**613,431**	594,471	507,153	3.2 %	17.2%



(Dollars shown in thousands)

Toll Revenues (2022 – 2020):

		2022	2021	2020	% Change 2022 vs 2021	% Change 2021 vs 2020
	Passenger	**1,050,933**	985,131	633,478	6.7 %	55.5%
	Commercial	**546,707**	508,450	381,379	7.5 %	33.3%
New Jersey Turnpike	Total	**1,597,640**	1,493,581	1,014,857	7.0 %	47.2%
	Passenger	**506,840**	484,282	356,187	4.7 %	36.0%
	Commercial	**21,547**	20,962	16,348	2.8 %	28.2%
Garden State Parkway	Total	**528,387**	505,244	372,535	4.6 %	35.6%
	Passenger	**1,557,773**	1,469,413	989,665	6.0 %	48.5%
	Commercial	**568,254**	529,412	397,727	7.3 %	33.1%
New Jersey Turnpike Authority	**Total**	**2,126,027**	1,998,825	1,387,392	6.4 %	44.1%



For Additional Details please refer to the Schedule of Toll Revenue

Implementation of New Accounting Standards

The Authority adopted GASB Statement No. 87, *Leases* (GASB 87). This statement supersedes GASB Statement No. 62, *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncement*s. GASB 87 establishes new requirements for calculating and reporting the Authority's lease activities.

The Authority also adopted GASB Statement No. 94, *Public-Private and Public-Public Partnerships and Availability Payment Arrangements* (GASB 94). This Statement supersedes Statement No. 60, *Accounting and Financial Reporting for Service Concession Arrangements*. GASB 94 establishes new requirements for calculating and reporting the Authority's Public-Private Partnerships (PPP).

These Statements were implemented as of January 1, 2021. Therefore, 2021 amounts have been restated and the restated amounts are reflected for MD&A purposes (note 2(v)). 2020 amounts have not been restated.

(A Component Unit of the State of New Jersey) (Dollars shown in thousands)

Condensed Summary of Net Position

	2022	2021	2020
Assets:			
Current assets	$ 2,794,199	2,493,373	1,634,927
Other noncurrent assets	1,878,626	1,670,880	823,759
Capital assets, net of accumulated depreciation	12,675,304	12,394,122	12,270,179
Total assets	17,348,129	16,558,375	14,728,865
Deferred outflows of resources	419,054	513,889	449,917
Liabilities:			
Current liabilities	1,072,803	989,425	836,805
Noncurrent liabilities	14,529,372	14,101,798	13,532,429
Total liabilities	15,602,175	15,091,223	14,369,234
Deferred inflows of resources	921,759	1,018,168	270,748
Net position:			
Net investment in capital assets	1,767,621	1,697,118	1,909,970
Restricted under trust agreements	306,105	235,381	88,541
Unrestricted	(830,477)	(969,626)	(1,459,711)
Total net position	$ 1,243,249	962,873	538,800

Discussion of Condensed Summary of Net Position

2022 vs. 2021

Total assets increased by $789,754 or 4.8%. Current and noncurrent assets, excluding the capital assets, increased by $508,572 or 12.2%.

Current and other noncurrent assets increased primarily due to an increase in investments and restricted investments. Investments and restricted investments increased mainly due to the unspent proceeds from the issuance of the Series 2022B Bonds to fund capital and construction projects. The increase in investments and restricted investments was slightly offset by a decrease in cash due to higher contractual payments to the State of New Jersey, and higher principal payments on existing debt compared to 2021.

Capital assets, net of accumulated depreciation, increased by $281,182, or 2.3%, due to continued spending on the capital and construction projects. Spending predominately increased from the 2022-2026 Capital Improvement Program on projects such as the rehabilitation and deck replacement of Turnpike bridge structures, along with superstructure and beam replacement of Parkway bridge structures.

Total liabilities increased by $510,952 or 3.4% due to an increase in both current and noncurrent liabilities. Current liabilities increased by $83,378 or 8.4% and noncurrent liabilities increased by $427,574 or 3.0%.

Current liabilities increased primarily due to an increase in the current portion of bonds payable due to a higher principal payment obligation due on January 1, 2023 as compared to the January 1, 2022 payment.

Noncurrent liabilities increased primarily because of an increase in bonds payable from the issuance of the Series 2022B Bonds (note 6), an increase in the OPEB liability (note 12) and from an increase in the net pension liability. These increases were slightly offset by a decrease in hybrid instrument borrowing and interest rate swap liabilities. Hybrid instrument borrowing decreased due to maturities on the borrowings in addition to the refunding of the Series 2017C-6 Bonds which significantly decreased the 2017C borrowing. The fair value of interest rate swaps changed to an asset in 2022 from a liability in 2021 (note 7).

Deferred outflows of resources and Deferred inflows of resources changed primarily due to deferred amounts for OPEB that were affected by the differences between the actual and expected experience and the changes of assumptions, which are not reflected in the current year's OPEB expense. Deferred outflows also decreased due to a decrease in deferred amounts on refunding and derivative instruments. Deferred inflows decreased due to a decline in the deferred amount relating to pensions.

Total net position increased by $280,376, or 29.1%, mainly due to higher operating revenues in 2022. The increase in operating revenues was partially offset by an increase in operating and nonoperating expenses. Operating revenue related to tolls has increased by $127,202 in 2022 as compared to 2021 due to the toll rate increases from the first annual toll rate indexing of 3% and the increase in the traffic volumes in 2022 as compared to 2021. Of note, unrestricted net position improved by $126,090 at December 31, 2022.

2021 vs. 2020

Total assets increased by $1,829,510 or 12.4%. Current and noncurrent assets, excluding the capital assets, increased by $1,705,567 or 69.4%.

Current assets increased due to an increase in investments resulting from the unspent proceeds from the issuance of the Series 2021A Bonds to fund capital and construction projects. In addition, due to a significant increase in the Authority's revenue and operating income, more money was available to invest during the year.

Noncurrent assets increased due to the recognition of the both the lease and PPP receivables associated with the adoption of GASB 87 and GASB 94 (note 2(v)).

Capital assets increased by $123,943, or 1.0%, due to continued spending on the capital and construction projects.

Total liabilities increased by $721,989 or 5.0% due to an increase in both current and noncurrent liabilities. Current liabilities increased by $152,620 or 18.2% and noncurrent liabilities increased by $569,369 or 4.2%.

Current liabilities increased primarily due to an increase in the current portion of bonds payable due to a higher principal payment obligation due on January 1, 2022, the increase in accounts payable due to tolls payable to away agencies, and an increase in unearned revenue mostly due to higher prepayment by the electronic toll customers. The increase in both accounts payable and unearned revenue is due to increased volume on the Authority's roadways and the away toll facilities as travel increased following the lifting of many COVID-related restrictions.

Noncurrent liabilities increased primarily because of an increase in bonds payable from the issuance of the Series 2021A Bonds (note 6), an increase in the OPEB liability (note 12) and an increase in the hybrid instrument borrowing as a result of the Authority entering into an Interest Rate Swap Agreement Option (swaption) related to the Series 2024A Forward Delivery Refunding (note 7). This increase was partially offset by a decrease in the net pension liability (note 11).

Deferred outflows of resources changed primarily related to deferred amounts for OPEB and pension which were affected by the differences between the actual and expected experience and the changes of assumptions, which are not reflected in the current year's OPEB and pension expense.

Deferred inflows of resources increased due to the recognition of the deferred inflows related to leases and PPP's associated with the adoption of GASB 87 and GASB 94 (note 2(v)).

Total net position increased $424,073, or 78.7%, mainly due to higher operating revenues in 2021 marginally offset by an increase in operating and nonoperating expenses. Operating revenue related to tolls has increased by $611,433 in 2021 as compared to 2020 due to full-year impact of the toll rate increase effective September 13, 2020 and the significant increase in the traffic volumes in 2021 as compared to 2020.

(Dollars shown in thousands)

Adjusted Net Position

	2022	2021	2020
Net position	$ 1,243,249	962,873	538,800
Other postemployment benefit liability/deferral GASB 75, net	1,720,313	1,665,156	1,603,634
Pension liability/deferral GASB 68, net	278,053	324,798	379,688
Derivatives instruments/deferrals GASB 53, net	(150,210)	(147,613)	(135,051)
Leases GASB 62, net	—	—	81,995
Leases GASB 87, net	(6,953)	(4,729)	—
PPP's GASB 94, net	112,063	84,684	—
Total Non-Cash GASB Adjustments	1,953,266	1,922,296	1,930,266
Garden State Arts Foundation	(1,277)	(1,438)	(1,182)
Net Position as Per Bond Resolution	$ 3,195,238	2,883,731	2,467,884

Shown above is the Authority's adjusted net position calculated as per the Authority's Bond Resolution. Net position as per the Bond Resolution has been calculated after adjusting certain GASB pronouncements that do not impact cash (accrual based). These are GASB Statement No. 49, *Accounting and Financial Reporting for Pollution Remediation Obligations* (GASB 49), GASB Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments* (GASB 53), GASB Statement No. 68, *Accounting and Financial Reporting for Pensions* (GASB 68) and GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* (GASB 75), which are all non-cash liabilities. Additionally, in accordance with the accounting under GASB Statement No. 87, *Leases* (GASB 87) and GASB Statement No. 94, *Public-Private Partnerships and Availability Payment Arrangements* (GASB 94), the Authority recognized significant deferred inflows and receivables associated with the lease and PPP installments as well as PPP assets. Prior to 2021, in accordance with the accounting under GASB Statement No. 62, *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements* (GASB 62) which includes leases, the Authority was required to recognize capital assets funded by the lessee and a corresponding unearned revenue. Over the past several years, the implementation of new GASB pronouncements has resulted in significant non-cash accounting reductions in the Authority's net position. Management believes that the net position as per the Bond Resolution provides an alternate view of the strength of the Authority's operations and its financial position.

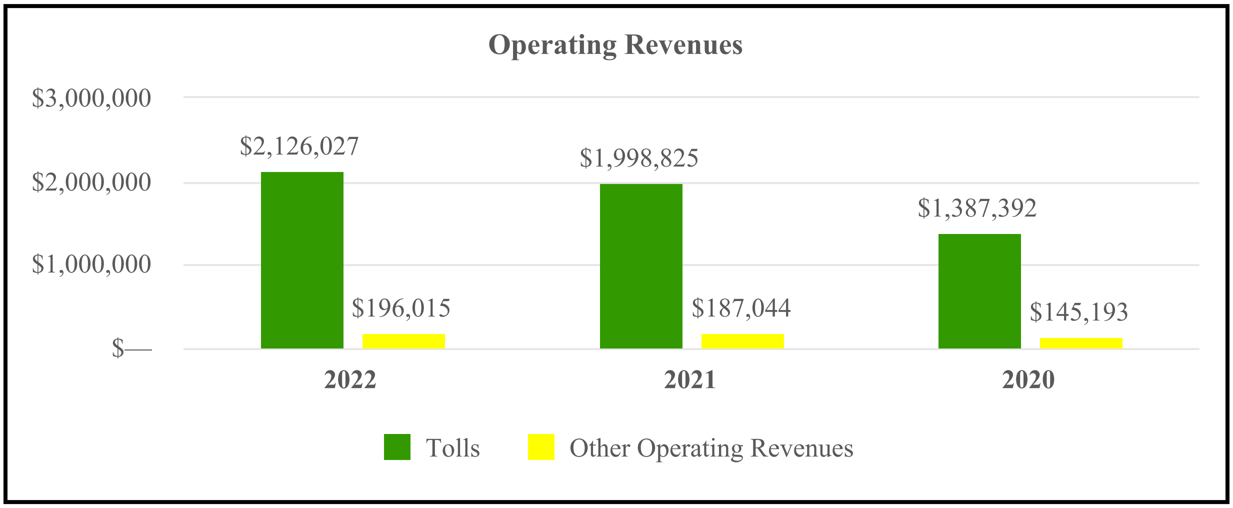
(Dollars shown in thousands)

Condensed Summary of Revenues, Expenses and Changes in Net Position

	2022	2021	2020
Operating revenues:			
Tolls	$ 2,126,027	1,998,825	1,387,392
Other operating revenues	196,015	187,044	145,193
Total operating revenues	2,322,042	2,185,869	1,532,585
Operating expenses:			
Maintenance of roadway, buildings, and equipment	(255,972)	(262,131)	(256,437)
Toll collection	(196,146)	(185,076)	(164,395)
State police and traffic control	(122,865)	(112,159)	(105,696)
Technology	(27,803)	(28,552)	(26,001)
General administrative costs	(54,409)	(49,061)	(53,869)
Operating expenses, excluding depreciation (1)	(657,195)	(636,979)	(606,398)
Net operating revenues	1,664,847	1,548,890	926,187
Depreciation expense	(412,220)	(410,099)	(391,652)
Operating income	1,252,627	1,138,791	534,535
Nonoperating revenues (expenses):			
Nonoperating revenues	106,566	91,984	103,311
Nonoperating expenses	(1,079,217)	(806,702)	(693,520)
Total nonoperating expenses, net	(972,651)	(714,718)	(590,209)
Change in net position, before capital contributions	279,976	424,073	(55,674)
Capital contributions	400	—	5,200
Change in net position	280,376	424,073	(50,474)
Net position – Beginning of period	962,873	538,800	589,274
Net position – End of period	$ 1,243,249	962,873	538,800

(1) Operating expenses include both the funded and the non-cash portion of the annual OPEB and pension cost.

Discussion of Condensed Summary of Revenues, Expenses and Changes in Net Position



Revenues

2022 vs. 2021

Operating revenues totaled $2,322,042 for the year ended December 31, 2022, representing an increase of $136,173, or 6.2%, from the year ended December 31, 2021. The principal source of revenue for the Authority is toll revenue. During 2022, toll revenue totaled $2,126,027 and constituted 91.6% of the Authority's operating revenues, as compared to $1,998,825, or 91.4%, in 2021.

Tolls

Toll revenue totaled to $2,126,027 on both roadways for the year ended December 31, 2022, which represents an increase of $127,202, or 6.4% from the year ended December 31, 2021. This increase in toll revenue as compared to the prior year is attributable to an approximately 3.2% increase in traffic, and to the first annual toll rate indexing of 3%, which was implemented on January 1, 2022. In addition, revenue also increased due to more travel during the holiday weekends of Presidents' Day, Easter, Memorial Day, and 4th of July as well as Christmas Day and New Year's Eve all compared to the same times as last year.

Other Operating Revenues

Fees totaled $139,356 and $131,717 for the years ended December 31, 2022 and 2021, respectively, representing an increase of $7,639, or 5.8%. Fees consist primarily of monthly membership fees, administrative fees, tag fees and monthly statement fees. The majority of the increase resulted from more administrative fees collected, and higher monthly membership and statement fees received. The administrative fees increased primarily due to an increase in the number of violation notices issued and enhanced collection efforts from the continued efforts of collection agencies, while the other fees increased also due to a greater number of E-ZPass accounts.

Concession revenues consist of amounts paid to the Authority based on the service area operating agreements for the sale of food, fuel and convenience store items on both roadways. Concession revenues were $34,033 in 2022, which represents an increase of $5,420, or 18.9% from $28,613 in 2021. The biggest factor contributing to the increase in concession revenues was fuel revenue. Fuel revenue increased due to higher traffic volume and an increase in the gross profit margin on diesel fuel sales at the service areas for which the Authority receives a 50% share.

Miscellaneous revenue totaled $22,626 for the year ended December 31, 2022, representing a decrease of $4,088, or 15.3%, compared to $26,714 for the year ended December 31, 2021. Miscellaneous revenue includes rentals of cell tower sites, fiber lease revenue, towing zone fees, park and ride commissions, revenue from the Arts Center, and other revenues. The decrease is primarily due to a decrease in other revenue, as two one-time revenue payments were received in 2021. These 2021 payments were related to the UBS Group AG (UBS) LIBOR manipulation settlement and fees related to the assignment of the HMS Host contract to Iris Buyer, LLC.

2021 vs. 2020

Operating revenues totaled $2,185,869 for the year ended December 31, 2021, representing an increase of $653,284, or 42.6%, from the year ended December 31, 2020. The principal source of revenue for the Authority is toll revenue. During 2021, toll revenue totaled $1,998,825 and constituted 91.4% of the Authority's operating revenues, as compared to $1,387,392, or 90.5%, in 2020.

Tolls

Toll revenue totaled to $1,998,825 on both roadways for the year ended December 31, 2021, which represents an increase of $611,433, or 44.1% from the year ended December 31, 2020. This increase in toll revenue as compared to the prior year is due to a significant increase in traffic volume as the State of New Jersey lifted its travel advisory on May 17, 2021 and the State of Emergency on June 4, 2021. As of December 31, 2021, traffic is almost back to 90.8% of pre-pandemic levels on both roadways. In addition, it includes a full year impact of the toll rate increase effective September 13, 2020 contributing to the overall increase in the toll revenue. This increase was adversely impacted by approximately $17,000 due to the effects of Winter Storm Orlena, Hurricanes Henri and Ida, and the October 26th Nor'easter.

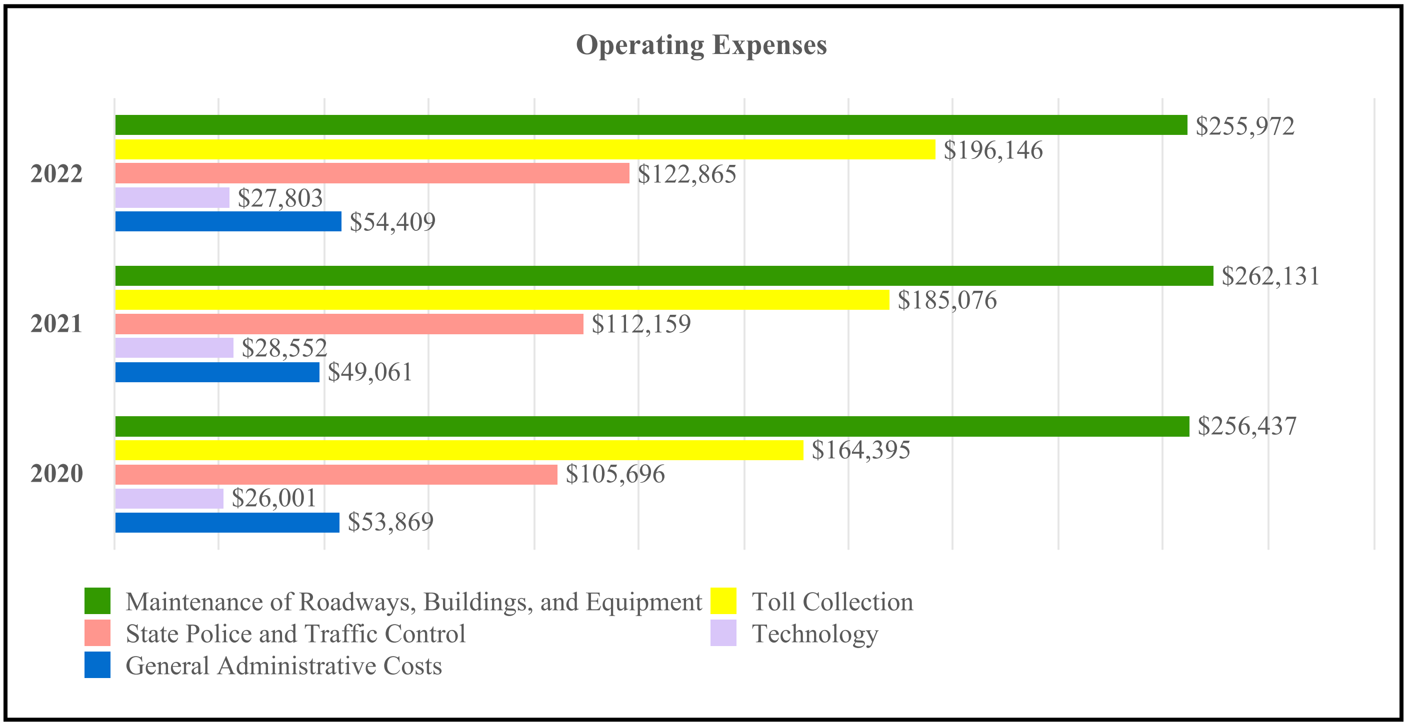
Other Operating Revenues

Fees totaled $131,717 and $93,224 for the years ended December 31, 2021 and 2020, respectively, representing an increase of $38,493, or 41.3%. Fees consist primarily of monthly membership fees, administrative fees, tag fees and monthly statement fees. The majority of the increase resulted from more administrative fees collected, and higher monthly membership and statement fees received. The administrative fees increased primarily due to an increase in the number of violation notices issued and enhanced collection efforts from the use of two new collection agencies.

Concession revenues consist of amounts paid to the Authority based on the service area operating agreements for the sale of food, fuel and convenience store items on both roadways. Concession revenues were $28,613 in 2021, which represents a decrease of $3,128, or 9.9% from $31,741 in 2020. The decrease is mostly attributable to the adoption impact of GASB 94.

Miscellaneous revenue totaled $26,714 for the year ended December 31, 2021, representing an increase of $6,486, or 32.1%, compared to $20,228 for the year ended December 31, 2020. Miscellaneous revenue includes rentals of cell tower sites, fiber lease revenue, towing zone fees, park and ride commissions, revenue from the Arts Center, and other revenues. The increase is primarily due to an increase in surplus sales, a one time UBS Group AG (UBS) LIBOR manipulation settlement, and fees related to the assignment of the HMS Host contract to Iris Buyer, LLC for the year ended December 31, 2021.

Operating Expenses



2022 vs. 2021

General operating expenses, excluding depreciation, totaled $657,195 for the year ended December 31, 2022, representing an increase of $20,216, or 3.2%, from $636,979 for the year ended December 31, 2021. The increase is primarily due to an increase in OPEB expenses of about $48,500, due to a decline in the discount rate used for the calculation, health benefits costs of approximately $6,800 mostly due to an increase in prescription payments, worker compensation costs due to higher settlement claims, and a decrease in employee health benefit contribution rates. The overall increase was partially offset by a decrease in pension expense of $46,700. These costs are allocated to all the functional categories of the operating expenses, and the net increase in these items is seen in each category discussed below.

Maintenance expenses decreased by $6,159 or 2.3% to $255,972 for the year ended December 31, 2022 from $262,131 for the year ended December 31, 2021. The overall decrease in maintenance expenses was attributable to a large decrease, approximately $10,600, in snow and severe weather expenses due to fewer significant storm events in 2022, along with decreases in overtime expense, and an increase in recoveries for damage to Authority property. The overall decrease was partially offset by increases in OPEB expenses and health benefits, increased roadway maintenance expense for guiderail repairs, and increased fuel expense due to a general rise in gas prices.

Toll collection costs increased by $11,070 or 6.0% to $196,146 for the year ended December 31, 2022 from $185,076 for the year ended December 31, 2021. This increase resulted mostly from higher banking and credit card fees which was due to an increase in traffic volume in 2022 as compared to 2021 as well as an increase in the contractual percentage owed by the Authority for shared New Jersey E-ZPass expenses. The increase was also due to higher amounts paid under the New Jersey E-ZPass contract based on a percentage of administrative fees collected due to a relative increase in the number of violations as well as a continued increase in collection efforts.

State police and traffic control costs increased by $10,706 or 9.5% to $122,865 for the year ended December 31, 2022 from $112,159 for the year ended December 31, 2021. The primary reason for this increase is higher trooper costs due to a contractual increase in the fringe benefits rates (primarily pension and health benefits) and higher trooper compensation. Trooper compensation increased as the trooper count in 2022 was higher than in 2021 and also due to more overtime due to an increase in trooper support for construction activity.

Technology costs decreased by $749 or 2.6% to $27,803 for the year ended December 31, 2022 from $28,552 for the year ended December 31, 2021. The overall decrease was due to decreased computer hardware expense, equipment and fiber optic maintenance, and services provided by temporary analysts. The decrease was partially offset by increased software licensing cost.

General administrative expenses increased by $5,348 or 10.9% to $54,409 for the year ended December 31, 2022 from $49,061 for the year ended December 31, 2021. This mainly resulted from the settlement of several cases, and in casualty insurance costs due to overall industry trends. The overall increase was partially offset by a decrease in outside counsel fees.

Depreciation expense for the year ended December 31, 2022 totaled $412,220 on the gross depreciable capital asset base of $16,619,154 as compared to $410,099 on the gross depreciable capital asset base of $16,214,413, for the year ended December 31, 2021 resulting in an increase of $2,121 or 0.5%. This increase is purely due to an increase in the gross depreciable capital asset base by $404,741 during 2022 and a full year of depreciation expense on the assets put into service during 2021. The increase in the gross depreciable capital asset base is due to the completion of projects associated with the ongoing Capital Improvement Programs.

2021 vs. 2020

General operating expenses, excluding depreciation, totaled $636,979 for the year ended December 31, 2021, representing an increase of $30,581, or 5.0%, from $606,398 for the year ended December 31, 2020. The increase is primarily due to an increase in the snow and severe weather cost of about $33,500 which accounts for approximately one third of the overall increase. Additionally, there was an increase in OPEB expenses of about $21,700, due to a decline in the discount rate used for the calculation, and the health benefits costs of about $10,200 due to an increase in medical payments due to greater usage as elective surgeries. These increases were partially offset by a decrease in salaries due to lower sick and vacation bank accruals, lower separation bonus accruals and a significant decrease in pension expense due to record level contributions to the plan by the state and local employers. These costs, except for the snow and severe weather costs, are allocated to all the functional categories of the operating expenses, and hence the net increase in these items is seen in each area for the year ended December 31, 2021 as compared to the same period of 2020.

Maintenance expenses increased by $5,694 or 2.2% to $262,131 for the year ended December 31, 2021 from $256,437 for the year ended December 31, 2020. This increase was mostly due to an increase in expenses related to snow and severe weather cost due to a harsh winter season, particularly in February 2021. Other factors contributing to the overall increase are higher utility expenses, general engineering consultant expenses for newer initiatives by the engineering department related to the new CIP, drainage and roof repair costs and bridge insurance premium. The overall increase in maintenance costs were partially offset by a decrease in garage shop equipment cost as well as roadway maintenance expense, which includes lighting repairs and guiderail repairs.

Toll collection costs increased by $20,681 or 12.6% to $185,076 for the year ended December 31, 2021 from $164,395 for the year ended December 31, 2020. This increase resulted mostly from higher credit card fees and violation collection charges, both in part due to a significant increase in traffic in 2021 as compared to 2020. The increase in credit card fees is due to higher toll revenue from increased traffic after the removal of travel restrictions and toll rate increase effective September 2020. Violation collection charges are higher due to a relative increase in the number of violations as well as an increase in collection efforts with the addition of two new collection agencies. Additionally there is a marginal increase in hardware and software cost related to toll equipment. The overall increase in the toll collection was partially offset by the decrease in costs related to the toll by mail program which was no longer needed in 2021.

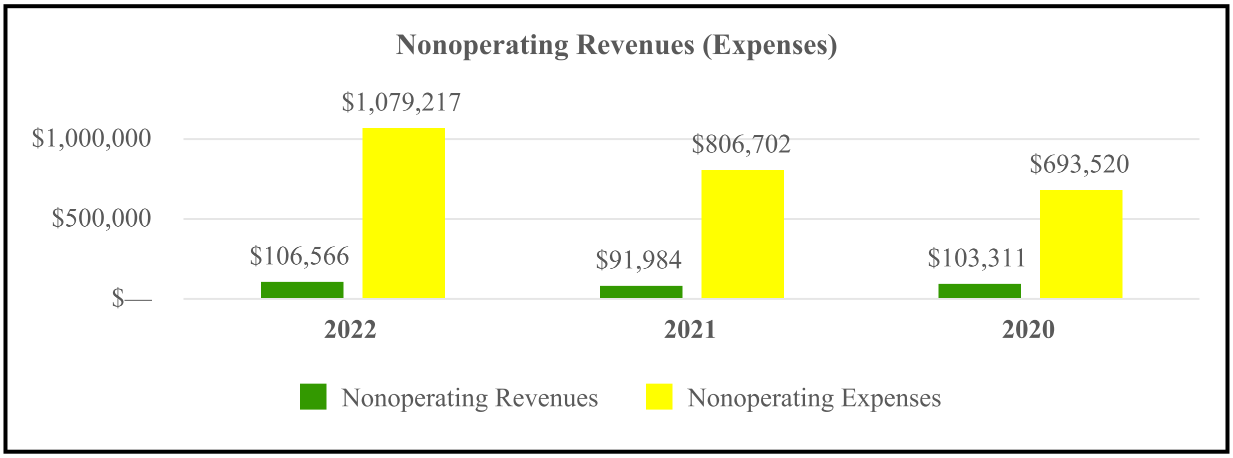
State police and traffic control costs increased by $6,463 or 6.1% to $112,159 for the year ended December 31, 2021 from $105,696 for the year ended December 31, 2020. The primary reason for this increase is higher trooper cost due to a contractual increase in the compensation and fringe benefits rates. Additionally the increase in trooper cost is also in part due to an increase in trooper support for construction activity in 2021 as compared to 2020.

Technology costs increased by $2,551 or 9.8% to $28,552 for the year ended December 31, 2021 from $26,001 for the year ended December 31, 2020. This increase mainly resulted from higher software licensing cost, equipment maintenance cost and other professional services cost related to implementation of many technology upgrades and improvement projects for the Authority.

General administrative expenses decreased by $4,808 or 8.9% to $49,061 for the year ended December 31, 2021 from $53,869 for the year ended December 31, 2020. This mainly resulted from a decrease in claims settlement expenses and in general consultant costs. The overall decrease in general administrative cost was partially offset by an increase in casualty (cyber) insurance policy premium.

Depreciation expense for the year ended December 31, 2021 totaled $410,099 on the gross depreciable capital asset base of $16,214,413 as compared to $391,787 on the gross depreciable capital asset base of $15,883,205, for the year ended December 31, 2020 resulting in an increase of $18,312 or 4.7%. This increase is purely due to an increase in the gross depreciable capital asset base by $331,208 during 2021 and a full year of depreciation expense on the assets put into service during 2020.

Nonoperating Revenues (Expenses)



2022 vs. 2021

Nonoperating expenses, net, increased by $257,933 or 36.1% to $972,651 for the year ended December 31, 2022 from $714,718 for the year ended December 31, 2021 primarily due to the increase in contractual payments to the State of New Jersey. The overall increase in net nonoperating expenses was partially offset by an increase in investment income, Federal, State and insurance reimbursements, and decrease in interest expense.

Build America Bonds subsidy in 2022 decreased by $233 or 0.3% to $77,235 in 2022 from $77,468 in 2021. While the percentage rebate paid by the Internal Revenue Service (IRS) was constant year over year, less interest was received from the IRS due to late payment of the subsidy.

Payments to the State of New Jersey increased by $283,500 or 107.4% to $547,500 in 2022 from $264,000 in 2021. This is due to the new State Public Transportation Projects Funding Agreement with the Treasurer of the State of New Jersey dated June 22, 2021. The agreement commenced on July 1, 2021 when the Authority began to make payments to the Treasurer on a quarterly basis. Payments peak in 2022 and 2023 and decline thereafter. There is no change in the payments made under the Transportation Trust Fund agreement and the Feeder Road Maintenance Agreement in 2022 as compared to 2021. Payments under all agreements are made from the General Reserve Fund and are subordinate to debt service payments on outstanding bonds and all other obligations under the Authority's General Bond Resolution (note 16).

Interest income - lessor and PPP's decreased by $380 or 3.3% to $11,209 in 2022 from $11,589 in 2021. The interest income decreased as the lease and PPP receivable balances decreased due to principal payments recognized in 2022.

Investment earnings were $11,741 in 2022 as compared to $999 in 2021 which is a 1,075.3% increase primarily due to an increase in short term interest rates in addition to an increase in invested balances. Interest income on investments generated from revenues increased to $6,534 in 2022 from $52 in 2021 primarily due to a general increase in short term interest rates. Additionally, investment earnings from unspent bond proceeds to be used for capital projects increased to $5,206 in 2022 from $1,046 in 2021, mainly due to increase in the short term interest rates.

Interest expense decreased by $9,115 to $530,030 for the year ended December 31, 2022 as compared to $539,145 for the year ended December 31, 2021. Interest expense declined primarily due to the maturity of certain existing bonds, and the 2021 forward refunding of the Series 2013A Bonds, which resulted in savings of approximately $15,000 being recognized when the refunding was completed on July 1, 2022 through the issuance of the Series 2022A Bonds. Interest expense declined despite the issuance of the Series 2022 B Bonds, which are new money bonds, in November 2022, as these bonds only accrued less than two months of interest expense.

Federal, state and insurance reimbursement totaled $6,381 in 2022. This amount included Federal Emergency Management Agency (FEMA) assistance for COVID-19 disinfection services and emergency protective measures as well as emergency protective services and debris removal due to various Tropical Storms and Hurricanes that affected the Authority's roadways. Also included were insurance reimbursements which were mostly related to property damage recoveries.

2021 vs. 2020

Nonoperating expenses, net increased by $124,509 or 21.1% to $714,718 for the year ended December 31, 2021 from $590,209 for the year ended December 31, 2020 primarily due to the increase in Payments to the State of New Jersey and decrease in investment income. The overall increase in net nonoperating expenses was partially offset by an increase in the Federal, State and insurance reimbursements.

Build America Bonds subsidy in 2021 decreased by $298 or 0.4% to $77,468 in 2021 from $77,766 in 2020 due to sequestration. The subsidy payment received for the July 1, 2021 interest payment was reduced by 5.7% and the subsidy payment due for the January 1, 2022 interest payment is reported to be reduced by 5.7%, while in 2020 the comparable payments were reduced by 5.9% and 5.7%, respectively. This was partially offset by receipt of interest on the July 2021 payment which was received in October 2021.

Payments to the State of New Jersey increased by $110,500 or 72.0% to $264,000 in 2021 from $153,500 in 2020. This is due to the new State Public Transportation Projects Funding Agreement with the Treasurer of the State of New Jersey dated June 22, 2021. The agreement commenced on July 1, 2021 where the Authority began to make payments to the Treasurer on a quarterly basis. There is no change in the payments made under the the Transportation Trust Fund agreement and the Feeder Road Maintenance Agreement in 2021 as compared to 2020. Payments under all agreements are made from the General Reserve Fund and are subordinate to debt service payments on outstanding bonds and all other obligations under the Authority's General Bond Resolution (note 16).

Interest income - lessor and PPP's increased by $11,589 due to the recognition of interest income related to the implementation of GASB 87 and GASB 94. The interest income recognized is due to interest computed on the outstanding lease and PPP receivable balances.

Investment earnings were $999 in 2021 as compared to $25,545 in 2020 which is a 96.1% decrease primarily due to a decline in short term interest rates and a negative fair market value adjustment. Interest income on investments generated from revenues decreased to $49 in 2021 from $19,910 in 2020 primarily due to a general decrease in short term interest rates despite of an increase in average invested balances. There is a negative fair market value adjustment on the long term investments which further decreased the investment income by $6,709 in 2021 as compared to a gain of $816 in 2020. Additionally, investment earnings from unspent bond proceeds to be used for capital projects decreased to $1,046 in 2021 from $5,630 in 2020, mainly due to decline in the short term interest rates.

(Dollars shown in thousands)

Interest expense decreased marginally by $40 to $539,145 for the year ended December 31, 2021 as compared to $539,185 for the year ended December 31, 2020.

Federal, state and insurance reimbursement totaled $1,928. This reimbursement includes $1,200 from a property damage insurance recovery and $728 from FEMA reimbursement related to winter storm Jonas (2017).

Adjusted Revenues, Expenses and Change in Net Position

	2022	2021	2020
Change in Net Position	$ 280,376	424,073	(50,474)
Non-cash adjustments:			
Miscellaneous revenue GASB 62	—	—	(3,490)
Lease and PPP revenue GASB 87, 94	(13,989)	(15,501)	—
Total operating expenses GASB 75, GASB 68, GASB 49	8,481	6,633	30,173
Interest expense, Turnpike Revenue Bonds GASB 53	(3,071)	25,098	(30,643)
Investment income (loss) GASB 53	473	19	—
Interfund transfers	—	(37,681)	—
Leases GASB 62, net	—	—	51,141
PPP's GASB 94 (capital contributions)	39,077	13,462	—
Total Non-Cash GASB Adjustments	30,971	(7,970)	47,181
Garden State Arts Foundation	161	(256)	(502)
Change in Net Position as per Bond Resolution	311,508	415,847	(3,795)
Add other non-cash expenses			
Depreciation	412,220	410,099	391,652
Amortization	(39,541)	(62,547)	(16,529)
Change in Net Position - Bond Resolution, before Depreciation and Amortization	$ 684,187	763,399	371,328

Shown above is the Change in Net Position as per the Bond Resolution which has been calculated by adjusting the change in Net Position for non-cash adjustments from certain GASB non-cash adjustments. The excluded GASB non-cash adjustments are from GASB 49, GASB 53, GASB 62, GASB 68, GASB 75, GASB 87, and GASB 94. The Change in Net Position – Bond Resolution, before depreciation and amortization is calculated by adding back the non-cash adjustments of depreciation and amortization of discounts and premium. Management believes that the Adjusted Change in Net Position as per Bond Resolution above, which eliminates the more significant GASB non-cash line items and depreciation and amortization, presents an alternate view of the strength of the Authority's financial results.

(Dollars shown in thousands)

Credit Ratings

Credit Rating Agency	2022 Bond Ratings	2021 Bond Ratings
Moody's Investors Service Inc	**A1 (Stable Outlook)**	A2 (Stable Outlook)
S&P Global Ratings	**AA- (Stable Outlook)**	A+ (Stable Outlook)
Fitch Ratings	**A+ (Stable Outlook)**	A (Positive Outlook)

The following revisions were made to the New Jersey Turnpike Authority credit ratings during 2022:

- On January 28, 2022, Moody's upgraded the Authority's credit rating from A2 (Stable) to A1 (Stable)
- On February 17, 2022, S&P raised the Authority's credit rating from A+ (Stable) to AA- (Stable)
- On March 30, 2022 Fitch upgraded the Authority's credit rating from A (Positive) to A+ (Stable)

The rating upgrades were due to a better-than-expected recovery from the COVID-19 pandemic, among other positive factors.

Key Performance Metrics

Toll Revenue per Lane Mile – Toll revenue per lane mile increased in 2022 due to the increase in toll revenue. The increase in toll revenue is due to increased travel and gradual return to offices since the State of New Jersey lifted its travel advisory on May 17, 2021 and to the toll rate increases from the first annual toll rate indexing of 3%, which was implemented on January 1, 2022. There is no change in the lane miles in this period. Toll revenue increased between 2021 and 2020 due to the effects of the lifting of travel restrictions put in place in March 2020 because of the COVID-19 pandemic.

	2022	2021	2020
Toll Revenue - Turnpike	$ 1,597,640	1,493,581	1,014,857
Toll Revenue - Parkway	528,387	505,244	372,535
Total Toll Revenue	$ 2,126,027	1,998,825	1,387,392
Lane Miles (actual) - Turnpike	2,428	2,428	2,427
Lane Miles (actual) - Parkway	2,050	2,050	2,050
Total Lane Miles (actual)	4,478	4,478	4,477
Revenue per Lane Mile - Turnpike	$ 658	615	418
Revenue per Lane Mile - Parkway	$ 258	246	182
Revenue per Lane Mile - Authority	$ 475	446	310

(Dollars shown in thousands)

Operating Cost per Lane Mile – Operating expenses shown below include maintenance, toll collection, state police and traffic control, technology and general administrative expenses, but excludes depreciation. From 2021 to 2022, there was an increase in the operating cost per lane mile, which can be attributed to the increase in total operating expenses in 2022 by $20,216 as compared to 2021. Lane miles remains consistent during this period. From 2020 to 2021, there was an increase in operating cost per lane mile, which can be attributed to the increase in total operating expenses in 2021 by $30,581 as compared to 2020. Detailed information can be found in the operating expense analysis as part of the discussion of the Condensed Summary of Revenues, Expenses and Changes in Net Position.

	2022	2021	2020
Total operating expenses	$ 657,195	636,979	606,398
Lane Miles (actual) - Turnpike	2,428	2,428	2,427
Lane Miles (actual) - Parkway	2,050	2,050	2,050
Total Lane Miles	4,478	4,478	4,477
Operating cost Excluding Depreciation/Lane Mile - Authority	$ 147	142	135

Financial Performance Ratios

	2022	2021	2020	Explanation
Current Ratio	2.60	2.52	1.95	The Authority's ability to meet its short-term liabilities
Debt to Asset Ratio	0.71	0.71	0.77	The Authority's ability to meet its short-term liabilities
Days Cash on Hand	1,102	1,032	756	The Authority's ability to pay its operating expenses without the generation of revenue
Cost Recovery	3.53	3.43	2.53	The Authority's ability to meet its operating expenses with its operating revenues
Toll Revenue as % of Operating Revenue	91%	91%	91%	With an average of 91% over the three-year period indicates that almost all of the Authority's revenue is earned from toll collection
Operating Margin Ratio	54%	52%	35%	This ratio increased in 2022 and 2021 due to a significant increase in operating revenue and a lesser increase in operating expenses
Debt Service Coverage Ratio	2.12	2.11	1.68	Under section 713(b) of the Turnpike Revenue Bond Resolution that in each calendar year, the Net Revenue Requirement with respect to any period of time, "an amount equal to the greater of the sum of Aggregate Debt Service, Maintenance Reserve Payments, Special Project Reserve Payments for such period or 1.20 times the Aggregate Debt Service for such period.

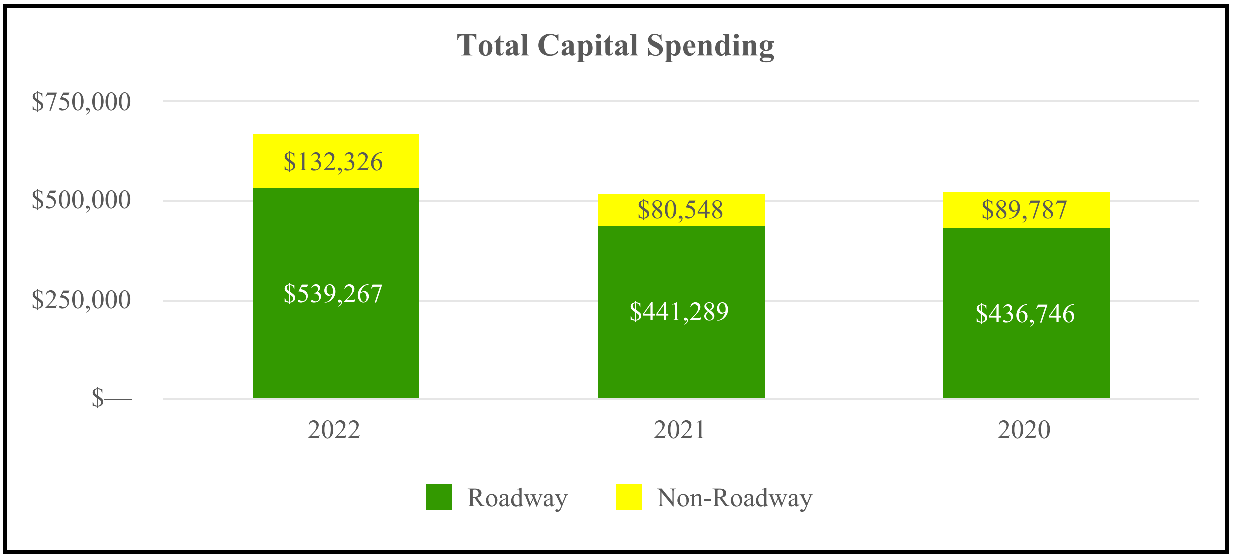
(Dollars shown in thousands)

Capital Spending Program

The Authority creates, improves and maintains its infrastructure and other capital assets with revenue and bond funded capital and construction programs. These programs focus on asset construction, preservation and security, capacity enhancements, technology acquisitions, and other necessary projects which improve safety, mobility and protect revenue. The current revenue funded capital programs include – (I) Maintenance Reserve Fund (II) Special Projects Reserve Fund and (III) Supplemental Capital Program. The active bond funded Capital Improvement Programs (CIP), recorded in the Construction Fund are (IV) the 2022-2026 CIP, (V) the 2019 CIP, and (VI) the 2008 $7 Billion CIP.

Additional information on the Authority's Capital Improvement Programs can be found in the Authority's 2022 Annual Budget. This document can be found on the Authority's website at: https://www.njta.com/investor-relations/financial-statements-and-reports.

Capital Spending by Category	2022 Actual	2021 Actual	2020 Actual
Roadway			
Bridge Construction, Preservation and Security	$ 291,773	198,373	197,148
Capacity Enhancements - Turnpike	27,286	16,564	273
Capacity Enhancements - Parkway	1	161	4,611
Concrete Barrier	9,591	17,738	6,713
Drainage Structures	45,048	17,981	12,294
Interchanges	15,653	43,339	66,841
Pavement Resurfacing	86,647	66,088	89,103
Resiliency	—	18	—
Roadway Lighting	21,523	22,982	12,940
Other Roadway Improvements	41,745	58,045	46,823
Total Roadway:	539,267	441,289	436,746
Non-Roadway			
Facilities	12,833	20,779	40,349
Fleet	9,777	6,857	11,247
Service Areas and Arts Center	48,391	13,099	27,103
Technology Improvements	61,325	39,813	11,088
Total Non-Roadway:	132,326	80,548	89,787
Total Capital Spending:	$ 671,593	521,837	526,533



Below are the major roadway and non-roadway capital projects by category.

Roadway Projects

Bridge Construction, Preservation and Security – Turnpike rehabilitation of bridge numbers W107.87, E107.88 and 84.24N&S, Passaic River bridge rehabilitation, Parkway structure 128.0A and 128.0B superstructure replacement, preservation along Turnpike milepost 35.3 to 37.9 and 74.3 to 76.5, and Newark Bay Hudson County Extension bridge redecking.

Capacity Enhancement - Parkway and Turnpike – Turnpike capacity enhancements between interchanges 1 to 4, Newark Bay Hudson County Extension capacity enhancement, and Turnpike interchange 6 to 9 widening.

Concrete Barrier – Rehabilitation and improvement of concrete median on the Parkway and Turnpike (between mileposts 89-122).

Drainage Structures – Culvert rehabilitation on the Parkway at mileposts 115, 112.7, 110.6, 116.4, and 111.5, and routine annual drainage structure repairs and improvements on both the roadways.

Interchanges – High speed E-ZPass improvement on interchange 16E and 18E on the Turnpike, and the modifications to existing interchanges on the Parkway and the Turnpike to facilitate operational improvements including widening and/or reconfiguration of existing ramps.

Pavement Resurfacing – Resurfacing on the Parkway between milepost 0 and 126, on the Turnpike between milepost 0 to 83, and the routine Parkway and Turnpike resurfacing program.

Roadway Lighting – Lighting upgrades on the Turnpike at interchanges 12 & 13, Newark Bay Hudson County Extension, 10S & 13A, and 7A, 8A, 10 & 11. Also includes Parkway lighting upgrades at interchange 117 & 118.

Other Roadway Improvements – Shoulder widening and reconstruction on the Parkway between milepost 30 and 35, Parkway service areas ramp widening, and weather guiderail replacement on the Parkway.

Non-Roadway Projects

Facilities – HVAC & boiler replacement program and toll facility repair and improvements, and the replacement and rehabilitation of old maintenance buildings (in twenty-two maintenance districts) in compliance with current building codes and operational standards.

Fleet – Purchase of State Police vehicles and scheduled fleet replacement of maintenance vehicles, including trucks, tractors, and articulated wheel loaders.

Service Areas and Arts Center – The Authority's investment in rehabilitating infrastructure outside the service area buildings which included resurfaced parking and commuter lots, updated lighting, enhanced security, landscaping, signing, and line-striping. Also included are costs related to the opening of the new facilities at the Woodrow Wilson, Molly Pitcher, and Grover Cleveland service areas. This category also includes intersection improvements at the PNC Bank Arts Center (Arts Center) exit ramps from the Parkway.

Technology Improvements – Installation of hybrid changeable message signs on the Turnpike, and toll lane system refreshes.

(A Component Unit of the State of New Jersey) (Dollars shown in thousands)

Capital Assets

	December 31		
	2022	**2021**	**2020**
Land	$ 833,761	833,761	833,761
Construction-in-progress	876,147	590,538	406,754
Roadways	4,521,915	4,494,395	4,586,572
Bridges	4,528,672	4,552,889	4,480,429
Buildings and improvements	1,011,303	990,612	990,406
Equipment	902,980	931,927	972,257
Total capital assets, net of accumulated depreciation	$ 12,674,778	12,394,122	12,270,179
Right-of-use lease assets, net	526	—	—
Total capital assets, net	$ 12,675,304	12,394,122	12,270,179

Detailed information on capital asset activity can be found in note 4.

2022 vs. 2021

Capital assets, net of accumulated depreciation, increased by $281,182 and construction in progress increased by $285,609 in 2022 primarily due to increased spending on the 2022-2026 CIP. Some of the major projects contributing to the increased spending for the 2022-2026 CIP include the Turnpike bridge rehabilitation for bridge numbers W107.87, E107.88 and 84.24 N&S, Parkway structure numbers 128.0A and 128.0B superstructure replacement, Turnpike deck reconstruction, and Parkway structure number 154.2N and 6.6S beam replacement.

Roadways increased by $27,520, or 0.6%, Bridges decreased by $24,217, or 0.5%, and Equipment decreased by $28,947, or 3.1% in 2022. Bridges and Equipment decreased as depreciation expense was higher than assets created in the period for those categories. Buildings and improvements increased, $20,691, or 2.1%, due to the completion of service area remodels and renovations.

The Authority had open commitments related to construction contracts totaling approximately $885,100 as of December 31, 2022. These construction contracts include work related to the Authority's various active capital improvement programs.

2021 vs. 2020

Capital assets, net of accumulated depreciation, increased by $123,943 and construction in progress increased by $183,784 in 2021 primarily due to increased spending on the 2019 CIP and the 2022-2026 CIP. Some of the major projects contributing to the increased spending for the 2019 CIP include shoulder widening reconstruction on the Parkway, implementation of new hybrid changeable message signs, and construction of two new express E-ZPass toll collection lanes at interchange 16E/18E toll plaza. Some of the major projects contributing to the increased spending on the 2021-2025 CIP include conceptual design for the Newark Bay-Hudson County Extension capacity enhancements and program management services for the Turnpike mainline capacity enhancements.

Buildings remained mostly unchanged in 2021. Roadways decreased by $92,177, or 2.0%, Bridges increased by $72,460, or 1.6%, and Equipment decreased by $40,330, or 4.1% in 2021. Roadways, and Equipment decreased as depreciation expense was higher than assets created in the period for those categories

The Authority had open commitments related to construction contracts totaling approximately $947,200 as of December 31, 2021. These construction contracts include work related to the Authority's various active capital improvement programs.

Financial Management Principles and Guidelines

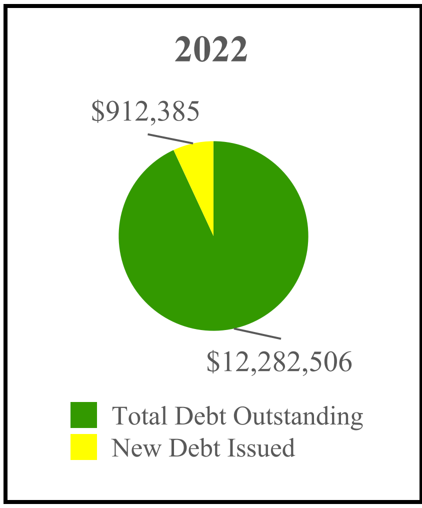
In December 2012, the Authority adopted its "Financial Management Principles and Guidelines" (the Guidelines). Among the policies established, the Authority will manage its toll rates, expense budget and debt issuance program to achieve minimum senior debt service coverage of 1.40x and total requirement coverage of 1.20x. The Authority will maintain a minimum General Reserve Fund balance equal to 10% of that year's budgeted total annual revenue, by December 31st of each year.

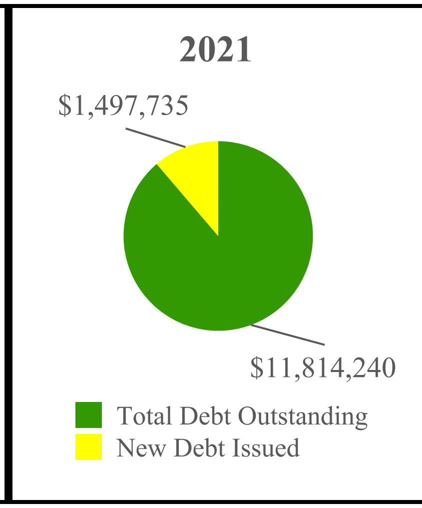
The Authority also adopted an Interest Rate Swap Management Plan in April 2013 which was amended in November 2015, an Investment Policy in September 2013, and a Debt Management Policy in January 2014. These documents may be found on the Authority's website at http://www.njta.com/investor-relations/about-investor-relations.

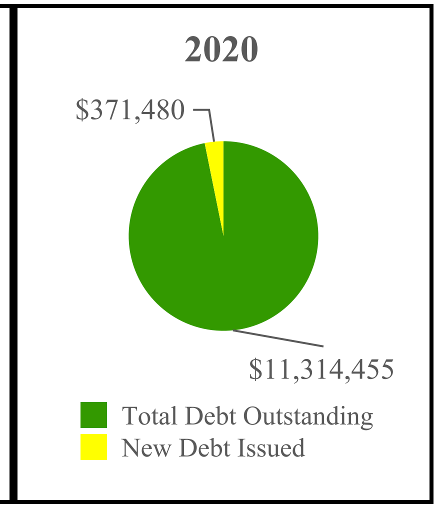
Debt Administration

The issuance of new bonds is conducted in accordance with the New Jersey Turnpike Act of 1948, constituting Chapter 454 of the Laws of New Jersey of 1948, as amended and supplemented and the Turnpike Revenue Bond Resolution adopted on August 20, 1991, as amended, restated and supplemented. The issuance of new bonds requires the approval of the Board of Commissioners and prior approval in writing from the Governor and from either or both the State Treasurer and the Director of the Division of Budget and Accounting of the Department of Treasury, payable solely from tolls and other revenues of the Authority. Detailed information on the outstanding bonds activity during 2022 and 2021 can be found in note 6.

The Authority bond indebtedness consists of the following:







Debt Portfolio

The Authority's bond portfolio at December 31, 2022 had a par value outstanding of $11,788,085 as compared to $11,310,610 at December 31, 2021 and $10,795,590 at December 31, 2020. The par value of bonds outstanding increased in 2022 as compared to 2021 due to the issuance of $100,000 of Series 2022A Bonds, $700,000 of Series 2022B Bonds, and $112,385 of Series 2022C Bonds. The percentage of fixed rate versus variable rate bonds has increased since 2015, mainly due to the Authority solely issuing fixed rate debt to finance its capital improvement programs to avoid the risks associated with variable rate debt. In addition, certain variable bonds have matured or amortized during this time, and the Authority refunded certain variable rate bonds with fixed rate debt in 2022. As of December 31, 2022, total debt includes 96% of fixed rate bonds and only 4% of variable rate bonds. As of December 31, 2021 and 2020 total debt included 93% of fixed rate bonds and 7% variable rate bonds. These percentages are well within the Authority's Guidelines, which limit variable rate bonds to 20% of total bonds outstanding

2022

On July 1, 2022, the Authority issued $100,000 of Turnpike Revenue Bonds, Series 2022A Bonds. These bonds were part of the forward refunding of Series 2013A from December 17, 2021, where the Authority locked in $15,000 in upfront savings. The Series 2022A Bonds are privately placed with Barclays, tax-exempt, and have a rate of 4%, matching the bonds they refunded. On November 3, 2022, the Authority issued $700,000 of Turnpike Revenue Bonds, Series 2022B Bonds. These bonds' primary purpose are for the Authority's ongoing capital improvement program and to pay capitalized interest on the bonds through November 1, 2025. Series 2022B Bonds are tax-exempt, have an average life of 24.6 years, and an all in True Interest Cost (TIC) of 4.72%. On December 20, 2022, the Authority issued $112,385 of Turnpike Revenue Bonds, Series 2022C Bonds. The bonds' primary purpose was to refund the Series 2017C-6 Bonds that had a mandatory tender on January 1, 2023. The Series 2022C Bonds are tax-exempt, have an average life of 6.2 years, and have an all in TIC of 4.54%.

2021

On February 4, 2021, the Authority issued $502,500 of Turnpike Revenue Bonds, Series 2021A and $995,235 of Turnpike Revenue Bonds, Series 2021B, simultaneously. The purpose of the Series 2021A Bonds is primarily to provide funds ($593,200) for the Authority's ongoing capital improvement program. The Series 2021A Bonds are tax-exempt, have a average life of 24.9 years and a TIC of 2.96%. The purpose of the Series 2021B Bonds is primarily to advance refund all or a portion of the Authority's Series 2012B, 2013A, 2013F, 2014A, and 2014C Bonds. The Series 2021B Bonds are taxable, have an average life of 8.6 years, a TIC of 1.94% and produced over $117,000 in net present value savings.

London Inter-Bank Offered Rate (LIBOR) Transition

On July 27, 2017, the Financial Conduct Authority (the "FCA") announced that it will no longer persuade or compel banks to submit rates for the calculation of the LIBOR rates after December 31, 2021. Subsequently, on November 30, 2020, the ICE Benchmark Administration Limited (commonly referred to as "ICE") announced its plan to extend the date that most U.S. LIBOR values would cease being computed and announced from December 31, 2021 to June 30, 2023. All of the Authority's Qualified Swap Agreements use a LIBOR based rate as a reference rate for determining the payment obligations of the counterparties thereunder. Additionally, several Series of the Authority's Outstanding variable rate Bonds use a LIBOR based rate as a reference rate for determining the interest rate on such Series of Bonds. On October 23, 2020, the International Swaps and Derivatives Association, Inc. published a multilateral "protocol" through which existing legacy swap contracts may be amended to incorporate provisions addressing the trigger events leading to replacement of LIBOR, as well as the replacement of LIBOR with a rate based on an adjusted version of the Secured Overnight Financing Rate (SOFR) administered by the Federal Reserve Bank of New York. This protocol became effective on January 25, 2021 and is referred to as the "ISDA 2020 IBOR Fallbacks Protocol."

The Authority is currently working with our financial advisors evaluating opportunities to transition reference rate for its variable rate debt as well as qualified swaps. There are eight bond series that will be affected including Series 2015A, Series 2015C, Series 2015D, Series 2015G, Series 2016D, Series 2017C, Series 2017D, and Series 2020A. The Authority intends to adhere to the ISDA IBOR 2020 Fallbacks Protocol for its Qualified Swap Agreements. In addition, the Authority has been in contact with the banks that directly purchased variable rate bonds. The goal is to have matching SOFR terms with variable rate debt and qualified swaps The Authority would like to have new terms in place by the end of the first quarter in 2023.

Debt Service Coverage

The Revenue Requirement under Section 713(b) of the Turnpike Revenue Bond Resolution states that in each calendar year, Net Revenues shall at least equal the Net Revenue Requirement for such year. The Net Revenue Requirement means with respect to any period of time, "an amount equal to the greater of (i) the sum of 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."

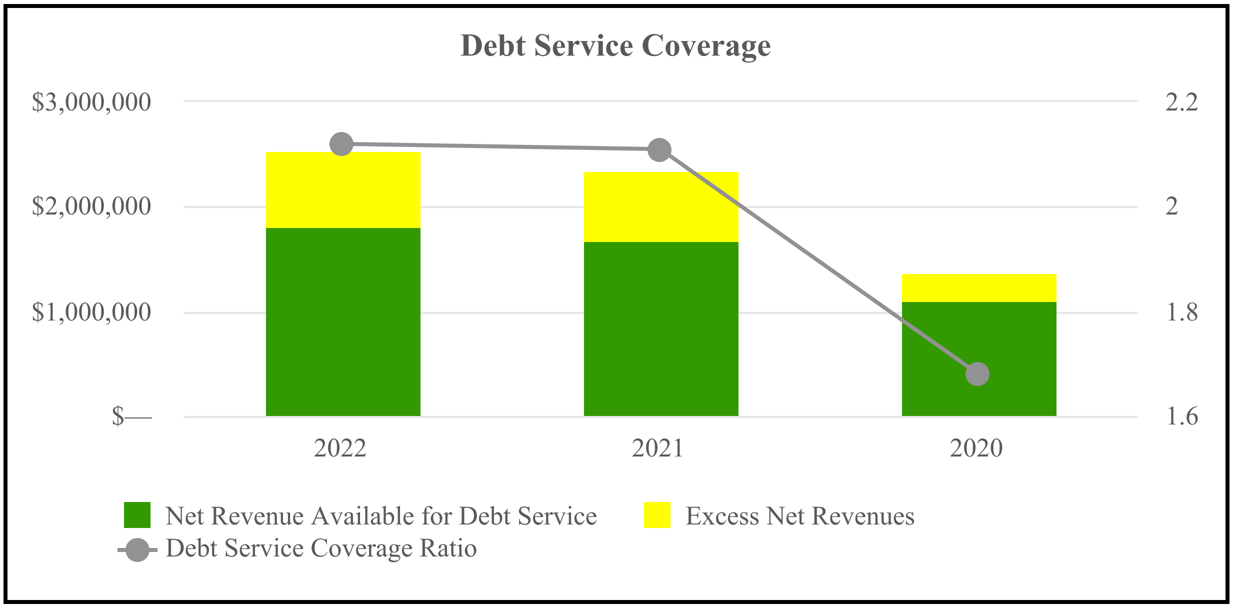
(A Component Unit of the State of New Jersey) (Dollars shown in thousands)

			2022	2021	2020
(i)	Net revenue available for debt service	$	1,823,044	1,677,847	1,104,545
	Less net revenue requirements (the sum of aggregate debt service maintenance reserve, special project reserve and charges fund payments		(1,108,085)	(1,006,379)	(834,597)
	Excess net revenues	$	714,959	671,468	269,948
(ii)	Net revenue available for debt service	$	1,823,044	1,677,847	1,104,545
	Less net revenue requirements computed under test (120% of aggregate debt service requirements)		(1,029,702)	(955,655)	(791,040)
	Excess net revenues	$	793,342	722,192	313,505
	Net revenue available for debt service	$	1,823,044	1,677,847	1,104,545
	Debt service requirements	$	858,085	796,379	659,200
	Debt service coverage ratio		2.12	2.11	1.68

The Debt Service Coverage Ratio increased to 2.12 in 2022, despite an increase of 7.7% in the debt service requirement as compared to 2021. The Debt Service Coverage Ratio increased in 2022 due to an increase in net revenue available for debt service. Net revenue available for debt service increased in 2022 by 8.7%, or $145,197 to $1,823,044 from $1,677,847 in 2021. The primary reason for this increase is an increase in operating revenue. In 2022, operating revenue increased due to an increase in toll revenue from the increase in traffic on both roadways as well as from the implementation of the 3% toll indexing on January 1, 2022. In 2021, net revenue available for debt service increased by $573,302 due to a significant increase in traffic volume as the State of New Jersey lifted its travel advisory on May 17, 2021 and the State of Emergency on June 4, 2021. In addition, 2021 included a full year impact of the toll rate increase effective September 13, 2020 contributing to the overall increase in the toll revenue.

Excess net revenues increased in 2022 by 6.5% or $43,491 to $714,959 from $671,468 in 2021. The primary reason for this increase is an increase in operating revenues which exceeded the increase in debt service requirements. In 2021, excess net revenues increased by 148.7% or $401,520 to $671,468 from $269,948 in 2020 due to a decrease in net revenue available for debt service which was partially offset by a decrease in debt service requirements.

Debt service coverage ratio increased in 2022 by 0.5% or 0.01 to 2.12 from 2.11 in 2021. The primary reason for this increase is an increase in net revenue available for debt service. In 2021, the debt service coverage ratio increased by 25.6% or 0.43 to 2.11 from 1.68 in 2020 due to a significant increase in operating revenue.



Contacting Authority's Financial Management

The purpose of this narrative and the attached exhibits was to assist the readers in obtaining a general overview of the Authority's business and finances. If there are any questions about this report, or a need for clarification on its contents, please contact the Chief Financial Officer of the New Jersey Turnpike Authority, P.O. Box 5042, Woodbridge, New Jersey 07095-5042 or via email at info@njta.com.

NEW JERSEY TURNPIKE AUTHORITY
(A Component Unit of the State of New Jersey)

Statements of Net Position

December 31, 2022 and 2021

(In thousands)

Assets		**2022**	**2021 (as restated)**
Current assets:			
Cash	$	221,620	396,130
Restricted cash		19,929	15,507
Investments		1,628,034	1,267,345
Restricted investments		735,982	637,039
Receivables, net of allowance		113,817	99,879
Lease receivable - current portion		6,523	6,861
PPP receivable - current portion		18,874	17,572
Inventory		22,965	22,384
Due from State of New Jersey		—	29
Restricted deposits		14,286	18,459
Prepaid expenses		12,169	12,168
Total current assets		2,794,199	2,493,373
Noncurrent assets:			
Restricted investments		1,233,830	1,003,649
Lease receivable - noncurrent portion		159,837	166,119
PPP receivable - noncurrent portion		478,698	497,572
Interest rate swap assets		6,261	3,540
Capital assets, net of accumulated depreciation		12,675,304	12,394,122
Total noncurrent assets		14,553,930	14,065,002
Total assets		17,348,129	16,558,375
Deferred Outflows of Resources			
Deferred outflows of resources:			
Accumulated decrease in fair value of hedging derivatives		—	9,939
Deferred amounts on refunding and derivative instruments		163,332	206,205
Deferred amount relating to pensions		34,736	27,962
Deferred amount relating to other postemployment benefit		220,986	269,783
Total deferred outflows of resources		419,054	513,889
Liabilities			
Current liabilities:			
Accounts payable and accrued expenses		256,595	240,896
Due to State of New Jersey		4,078	3,699
Accrued interest payable		278,826	274,418
Unearned revenue		219,320	224,668
Current portion of bonds payable		291,050	219,785
Current portion of hybrid instrument borrowing		5,987	11,242
Current portion of other liabilities		16,947	14,717
Total current liabilities		1,072,803	989,425
Noncurrent liabilities:			
Bonds payable, net		11,991,456	11,594,455
Hybrid instrument borrowing		124,799	159,362
Other liabilities		124,830	128,621
Other postemployment benefits liability		2,005,146	1,977,246
Interest rate swap liabilities		—	16,756
Net pension liability		283,141	225,358
Total noncurrent liabilities		14,529,372	14,101,798
Total liabilities		15,602,175	15,091,223
Deferred Inflows of Resources			
Deferred inflows of resources:			
Accumulated increase in fair value of hedging derivatives		9,175	3,540
Deferred amount relating to pensions		52,233	148,383
Deferred amount relating to other postemployment benefit		87,478	94,018
Deferred amount relating to leases		162,547	171,685
Deferred amount relating to PPP's		610,326	600,542
Total deferred inflows of resources		921,759	1,018,168
Net Position			
Net position:			
Net investment in capital assets		1,767,621	1,697,118
Restricted under trust agreements		306,105	235,381
Unrestricted		(830,477)	(969,626)
Total net position	$	1,243,249	962,873

See accompanying notes to basic financial statements.

NEW JERSEY TURNPIKE AUTHORITY
(A Component Unit of the State of New Jersey)

Statements of Revenues, Expenses, and Changes in Net Position

Years ended December 31, 2022 and 2021

(In thousands)

		2022	2021 (as restated)
Operating revenues:			
Tolls	$	2,126,027	1,998,825
Fees		139,356	131,717
Concessions		34,033	28,613
Miscellaneous		22,626	26,714
Total operating revenues		2,322,042	2,185,869
Operating expenses:			
Maintenance of roadway, buildings, and equipment		255,972	262,131
Toll collection		196,146	185,076
State police and traffic control		122,865	112,159
Technology		27,803	28,552
General administrative costs		54,409	49,061
Depreciation		412,220	410,099
Total operating expenses		1,069,415	1,047,078
Operating income		1,252,627	1,138,791
Nonoperating revenues (expenses):			
Build America Bonds subsidy		77,235	77,468
Federal, State, and insurance reimbursements		6,381	1,928
Payments to the State of New Jersey		(547,500)	(264,000)
Interest income - lessor and PPPs		11,209	11,589
Interest expense, Turnpike Revenue Bonds		(530,030)	(539,145)
Other bond expenses		(1,687)	(3,557)
Investment income		11,741	999
Total nonoperating expenses, net		(972,651)	(714,718)
Change in net position, before capital contributions		279,976	424,073
Capital contributions		400	—
Change in net position		280,376	424,073
Net position – beginning of year		962,873	538,800
Net position – end of year	$	1,243,249	962,873

See accompanying notes to basic financial statements.

NEW JERSEY TURNPIKE AUTHORITY
(A Component Unit of the State of New Jersey)

Statements of Cash Flows

Years ended December 31, 2022 and 2021

(In thousands)

		2022	2021 (as restated)
Cash flows from operating activities:			
Receipts from customers and other operating activities	$	2,337,719	2,375,167
Payments to suppliers		(351,758)	(337,553)
Payments to employees		(174,877)	(173,378)
Payments for health benefit claims		(91,902)	(84,910)
Net cash provided by operating activities		1,719,182	1,779,326
Cash flows from noncapital financing activities:			
Receipts from Federal and State reimbursements		6,381	2,071
Payments to State of New Jersey		(547,500)	(264,000)
Net cash used in noncapital financing activities		(541,119)	(261,929)
Cash flows from capital and related financing activities:			
Proceeds acquired from new capital debt		942,671	1,507,367
Purchases and sales of capital assets, net		(689,072)	(509,556)
Principal paid on capital debt		(219,785)	(72,870)
Refunded capital debt		(215,125)	(909,845)
Proceeds from Build America Bonds subsidy		77,235	77,185
Proceeds from lease interest		2,805	2,895
Amortization of lease receivables - lessor		(2,223)	(4,729)
Amortization of lease liabilities - lessee		(70)	—
Proceeds from PPP interest		8,404	8,694
Amortization of PPP receivables		(5,874)	(6,164)
Interest paid on capital debt		(568,235)	(578,066)
Payments for bond expenses		(1,687)	(3,557)
Proceeds from capital contributions		400	—
Net cash used in capital and related financing activities		(670,556)	(488,646)
Cash flows from investing activities:			
Purchases of investments		(14,968,583)	(14,251,111)
Sales and maturities of investments		14,241,781	13,316,898
Interest received		49,207	952
Net cash (used in) provided by investing activities		(677,595)	(933,261)
Net (decrease) increase in cash		(170,088)	95,490
Cash and restricted cash – beginning of year		411,637	316,147
Cash and restricted cash – end of year	$	241,549	411,637
Reconciliation of operating income to net cash provided by operating activities:			
Operating income	$	1,252,627	1,138,791
Adjustments to reconcile operating income to net cash provided by operating activities:			
Depreciation expense		412,220	410,099
Changes in assets and liabilities:			
Receivables		(13,751)	19,755
Inventory		(581)	(1,072)
Prepaid expenses		(3)	(211)
Accounts payable and accrued expenses		16,047	21,149
Unearned revenue		(4,008)	(39,749)
Hybrid instrument borrowing		—	118,829
Other liabilities		(1,605)	(1,091)
Other postemployment benefit liability		27,900	223,274
Net pension liability		57,783	(87,187)
Deferred outflows of resources related to pension		(6,775)	24,957
Deferred inflows of resources related to pension		(96,150)	8,115
Deferred outflows relating to other postemployment benefit		48,796	(110,290)
Deferred inflows relating to other postemployment benefit		(6,541)	(36,462)
Amortization of lease assets		71	—
Deferred inflows relating to PPP assets		33,254	90,847
Pollution remediation obligations		(102)	(428)
Net cash provided by operating activities	$	1,719,182	1,779,326

See accompanying notes to basic financial statements.

(1) Organization

The New Jersey Turnpike Authority (the Authority) is a body corporate and politic organized and existing 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). The Authority is a public instrumentality exercising essential governmental functions. The Act authorizes the Authority to construct, maintain, repair, and operate transportation projects at locations established by law or by the Authority. 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 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) and the PNC Bank Arts Center. As a result, the assets and liabilities of the Authority and the Highway Authority and the ongoing operations, expenses and revenues are now combined under the ownership and operation of the Authority, and the Turnpike and Parkway now constitute the Turnpike System.

The Act also authorizes the Authority to fix and establish tolls for the use of the Turnpike System, and to issue Turnpike revenue bonds or notes of the Authority, subject to prior approval in writing from the Governor and either or both the State Treasurer and the Director of the Division of Budget and Accounting of the Department of the Treasury, payable solely from tolls and other revenues of the Authority. Under the provisions of the Act, the Turnpike bonds or notes and the interest thereon shall not be deemed to constitute a debt or liability or a pledge of the faith and credit of the State or any political subdivision thereof.

The Authority has no stockholders or equity holders and all bond proceeds, revenues or other cash received must be applied for specific purposes in accordance with the provisions of the above Act and the Turnpike Revenue Bond Resolution of 1991 as amended, restated and supplemented (the Bond Resolution) for security of the bondholders. The Authority's Board of Commissioners is comprised of eight members as follows: the Commissioner of the New Jersey Department of Transportation, ex officio, or the Commissioner's designee; five members appointed by the Governor with the advice and consent of the Senate, and two members appointed by the Governor, one upon the recommendation of the President of the Senate and one upon the recommendation of the Speaker of the General Assembly. The Governor designates the chairman and vice chairman, who serve in these positions at the pleasure of the Governor and until their successors have been designated. As of December 31, 2022 and 2021, two seats and one seat were vacant, respectively.

Five members constitute a quorum and the vote of five members is necessary for any action taken by the Authority. The Act provides that the Governor shall have the right to veto any action of the Authority; however the Act prohibits the Governor or legislature from taking any actions that would impair the rights of Authority bondholders.

(2) Summary of Significant Accounting Policies

(a) Reporting Entity

The Governmental Accounting Standards Board (GASB) establishes the criteria used in determining which organizations should be included in these financial statements. The GASB's Codification of Governmental Accounting and Financial Reporting Standards, Section 2100, requires the inclusion of government organizations for which the Authority is financially accountable. Financial accountability is defined as: 1) appointment of a voting majority of the component unit's board and either (a) the ability to impose will by the primary government or (b) the possibility that the component unit will provide a financial benefit to or impose a financial burden on the primary government; or 2) fiscal dependency on the primary government.

The Garden State Arts Foundation, Inc. (the Foundation) (note 14) is included in the financial statements presented in accordance with U.S generally accepted accounting principles (GAAP) as a blended component unit. Although legally separate from the Authority, the Foundation's members include the Commissioners of the Authority, who represent a voting majority of the Foundation's members. The Authority can impose its will upon the Foundation by virtue of the fact that the entirety of the Foundation's Board is comprised solely of Authority Board members.

Additionally, the Authority is a component unit of the State of New Jersey, and its financial statements are included in the State of New Jersey's Annual Comprehensive Financial Report (Annual Report) as a discretely presented component unit.

(b) Basis of Accounting

The Authority's activities are accounted for using the flow of economic resources measurement focus and the accrual basis of accounting. All assets, liabilities, deferred outflows of resources, deferred inflows of resources, net position, revenues and expenses are accounted for as an enterprise fund with revenues recorded when earned and expenses recorded at the time liabilities are incurred.

The financial statements of the Authority have been prepared in conformity with GAAP as applied to government units. The Authority follows GAAP as prescribed by GASB. The GASB is the accepted standard-setting body for establishing governmental accounting and financial reporting principles.

(c) Capital Assets

Capitalization Policy

The cost to construct, acquire or replace an existing asset (or otherwise prolong the useful life of an existing asset) is capitalized under the Authority's capitalization policy. The capitalization threshold is $20 and includes equipment valued over $20 or any purchase related to a capital project whose project value exceeds $20.

Capital assets are reported at cost, including all ancillary charges necessary to place the assets in their intended location and condition for use. If land is purchased, the capitalized amount includes the purchase price plus costs such as legal fees, filling, and excavation costs incurred to put the land in condition for its intended use. The capitalized amounts for building include both acquisition and capital improvement costs and net construction period interest. Beginning on January 1, 2018, the Authority no longer capitalizes interest costs incurred before the end of the construction period following the implementation of GASB Statement No. 89, *Accounting for Interest Cost Incurred Before the End of a Construction Period* (GASB 89).

(Dollars shown in thousands)

An asset is deemed substantially complete when the structure or project is ready for the purpose for which it was constructed.

Upon the adoption of GASB Statement No. 87, *Leases*, as of January 1, 2021, capital assets also include right-of-use lease assets which are measured at the initial amount of the lease liability, adjusted for lease payments made at or before the lease commencement date, plus certain initial direct costs for arrangements where the Authority is a lessee. Subsequently, the lease asset is amortized on a straight-line basis over the shorter of the lease term or its useful life.

Upon the adoption of GASB Statement No. 94, *Public-Private and Public-Public Partnerships and Availability Payment Arrangements* (GASB 94), as of January 1, 2021, capital assets also includes newly constructed public-private partnership (PPP) assets for certain service areas which are measured at acquisition value when the asset is placed into service (note 19).

Depreciation Policy

In 2016, the Authority performed a study of the useful lives and revised the useful lives of certain asset categories on a prospective basis. In 2018, the Building Improvements asset subclass was added to the depreciation policy. This class represents assets that are integral to building use, but have an estimated useful life less than the building structure. Capital assets are depreciated the using straight-line method over their estimated useful lives as follows:

Roadways:	
Road Bed	100 yrs
Road Surface	10 yrs
Sound Barriers	35 yrs
Retaining Walls	75 yrs
Concrete Surfaces and Barrier Curb	40 yrs
Bridges:	
Piers and Abutments	75 yrs
Deck	40-50 yrs
Spans	40-50 yrs
Major Bridge Repairs	20 yrs
Buildings:	
Buildings	35-50 yrs
Buildings Improvements	20 yrs
Equipment	3-50 yrs

(d) Investments

Investments are reported at fair value based on quoted or published market prices or other fair value measurement methods allowed by GASB Statement No. 72, *Fair Value Measurements and Application* (GASB 72). All investment income, including changes in the fair value of investments, is reported as nonoperating revenue.

Investment Objectives

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.

Authorized Investments - Investment Policy

The investment policies of the Authority are established in conformity with the Investment Policy adopted by the Board of Commissioners on September 24, 2013, which defines investment securities to mean any of the following securities legal for investment of the Authority's funds at the time of the purchase thereof:

(a) Federal securities, which are (i) 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, (ii) 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, (iii) 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,

(b) 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,

(c) Bonds, debentures, notes or other evidences of indebtedness issued by any of the following agencies:

- Government National Mortgage Association (GNMA)
- Federal Home Loan Mortgage Corporation (FHLMC)
- Federal National Mortgage Association (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 Association (SLMA);

(d) 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 (a), (b), and (c) above, which shall have a fair 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.

(e) 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's Investors Service (Moody's) and Standard & Poor's (S&P).

(f) Repurchase agreements collateralized by obligations described in subparagraphs (a), (b), and (c) 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:

(i) a master repurchase agreement or specific written repurchase agreement governs the transaction, which characterizes the transaction as a purchase and sale of securities.

(ii) 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, 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,

(iii) 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,

(iv) 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,

(v) the repurchase agreement matures on or before a debt service payment date (or other appropriate liquidation period), and

(vi) the fair value of the securities in relation to the amount of the repurchase obligation is equal to at least 100%.

(g) Banker’s acceptances, Eurodollar deposits and certificates of deposit (in addition to the certificates of deposit provided for by subparagraphs (d) and (e) above) of the domestic branches of foreign banks having a capital and surplus of $1,000,000, 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; provided that the aggregate maturity value of all such banker’s acceptances and certificates of deposit held at an 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.

(h) 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.

(i) Deposits in the New Jersey Cash Management Fund.

(j) 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.

(k) 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.

(e) Accounts Receivable

Accounts receivable are classified into Government and non-Government, primarily for the purpose of analyzing risk. Government receivables include amounts due from other E-ZPass Group agencies, Federal Emergency Management Agency (FEMA), New Jersey E-ZPass agencies, and other. Amounts due from E-ZPass Group agencies includes toll revenue guaranteed by each agency under the E-ZPass Interagency Group Reciprocity Agreement. Amounts due from FEMA include approved reimbursement for declared disaster assistance. New Jersey E-ZPass Agency receivables include amounts for transponder purchases and other reimbursable costs under the New Jersey E-ZPass revenue and cost sharing memorandum of agreement. Other government receivables primarily include amounts due from the Internal Revenue Service for the Authority's Build America Bonds. Government accounts receivable are considered fully collectible.

Non-Government receivables include New Jersey E-ZPass pre-paid customers, postpaid E-ZPass customers property damage claims and other receivables. New Jersey E-ZPass pre-paid customer receivable includes negative balance account amounts which are less than 90 days old. Post-paid E-ZPass customer receivable include amounts that are billed to commercial companies for toll usage on the New Jersey Turnpike and Garden State Parkway and are fully collateralized by surety bonds, letters of credit or cash. Property damage claims receivable consist of amounts due primarily from insurers of customers who damage Authority property. Other receivables include amounts due from the operators of food and fuel concessions at the service plazas, prescription drug formulary rebates from CVS Caremark, and interest receivable from leases and PPP's. Arts Center receivables include amounts due from Live Nation Worldwide, Inc., and PNC Bank Corporation. A reserve for uncollectible accounts receivable is established based on specific identification.

(Dollars shown in thousands)

Accounts receivable and allowance for doubtful accounts consist of the following as of December 31, 2022 and 2021:

	December 31	
	2022	**2021**
E-ZPass Group Agencies	$ 60,103	53,020
New Jersey E-ZPass Agencies	2,444	2,033
Other Government Receivables	714	482
Total Government Receivables	$ 63,261	55,535
NJ E-ZPass Customers (1)	$ 10,507	7,805
Postpaid E-ZPass Customers (2)	16,657	13,247
Property Damage Claims	5,803	4,673
Accounts Receivable - Other	15,477	14,122
Accounts Receivable - Arts Center	4,882	6,513
Allowance for Doubtful Accounts	(2,770)	(2,016)
Total Non-Governmental Receivables, Net	50,556	44,344
Total Accounts Receivables, Net	$ 113,817	99,879

(1) New Jersey E-ZPass customer accounts receivable are collateralized by cash deposits totaling $3,079 at December 31, 2022 and $2,075 at December 31, 2021.

(2) Postpaid E-ZPass customer accounts receivable are collateralized by cash and/or surety bonds totaling $30,288 at December 31, 2022 and $30,741 at December 31, 2021.

(f) Supplies Inventory

Inventories are reported on an average cost basis. Inventories consist of rock salt/calcium chloride, operating supplies (materials to maintain the roadway and vehicles), E-ZPass transponders, and fuel (gas and diesel).

(Dollars shown in thousands)

Inventory consists of the following as of December 31, 2022 and 2021:

	December 31	
	2022	2021
Rock Salt - Calcium Chloride	$ 9,975	11,294
Operating Supplies	7,623	7,260
E-ZPass Transponders	3,830	2,957
Fuel	1,537	873
	$ 22,965	22,384

(g) ***Deposits***

Deposits consist mainly of collateral deposits for owner controlled insurance programs for general liability and workers compensation claims related to the Authority's $7 Billion Capital Improvement Program and deposits for the Authority's self-funded health insurance.

(h) ***Leases***

Lessor

The Authority is a lessor for various noncancellable leases of land, buildings, and equipment. For leases with a maximum possible term of 12 months or less at commencement, the Authority recognizes income based on the provisions of the lease contract. For all other leases (i.e. those that are not short-term), the Authority recognizes a lease receivable and an offsetting deferred inflow of resources (note 18).

At lease commencement, the Authority initially measures the lease receivable at the present value of payments expected to be received during the lease term. Subsequently, the lease receivable is reduced by the principal portion of lease payments received. The deferred inflow of resources is measured at the value of the lease receivable plus any payments received at or before the commencement of the lease term that relate to future periods. The Authority recognizes interest income on the lease receivable, and lease revenue from the deferred inflows of resources in a systematic and rational manner over the term of the lease. Variable payments are excluded from the valuations unless they are fixed in substance. For leases featuring payments tied to an index or market rate, the valuation is based on the initial index or market rate. The Authority does not have any leases subject to a residual value guarantee.

Key estimates and judgments include how the Authority determines the (i) discount rate it uses to calculate the present value of the expected lease payments to be received, (ii) lease term, and (iii) lease payments to be received.

(i) If there is no discount rate explicitly defined in the lease agreement the Authority uses its estimated incremental borrowing rate as the discount rate for leases. The Authority's incremental borrowing rates for leases were determined based on reference to market yield data from General Obligation A-Rated bonds. The yield curve is updated on a quarterly basis and the yield curve nearest to the inception of the new lease will be used when calculating the appropriate discount rate.

(ii) The lease term includes the noncancellable portion of the lease, plus any additional periods covered by either the Authority's or lessee's unilateral option to (1) extend for which it is reasonably certain to be exercised, or (2) terminate for which it is reasonably certain not to be exercised. Periods in which both the Authority and the lessee have an option to terminate are excluded from the lease term.

(iii) Lease payments to be received are evaluated by the Authority to determine if they should be included in the measurement of the lease receivable, including those payments that require a determination of whether they are reasonably certain of being received.

The Authority monitors changes in circumstances that may require remeasurement of a lease. When certain changes occur that are expected to significantly affect the amount of the lease, the receivable is remeasured and a corresponding adjustment is made to the deferred inflow of resources.

Noncurrent lease receivable is reported within the noncurrent assets section of the statement of net position, net of the short-term portion of the lease receivable reported as current assets.

Lessee

The Authority is a lessee for one noncancellable lease of equipment from an external party. For leases with a maximum possible term of 12 months or less at commencement, the Authority recognizes expense based on the provisions of the lease contract. For all other leases (i.e. those that are not short-term), the Authority recognizes a right of use lease asset and lease liability (note 4).

At lease commencement, the Authority initially measures the lease liability at the present value of payments expected to be made during the lease term. Subsequently, the lease liability is reduced by the principal portion of the lease payment made. The lease asset is measured as the initial amount of the lease liability, adjusted for lease payments made at or before the lease commencement date, plus certain initial direct costs. Subsequently, the lease asset is amortized on a straight-line basis over the shorter of the lease term or its useful life. The Authority recognizes interest expense on the lease liability using the effective interest method based on the discount rate determined at lease commencement.

Variable payments are excluded from the valuations unless they are fixed in substance. For leases featuring payments tied to an index or market rate, the valuation is based on the initial index or market rate. The Authority does not have any leases subject to a residual value guarantee.

Key estimates and judgments include how the Authority determines the (i) discount rate it uses to calculate the present value of the expected lease payments to be made, (ii) lease term, and (iii) lease payments to be made.

(i) The Authority uses the lessor's implicit interest rate as the discount rate to discount the expected lease payments to the present value. When the interest rate is not provided, the Authority uses its estimated incremental borrowing rate as the discount rate for leases (see above – Lessor).

(ii) The lease term includes the noncancellable portion of the lease, plus any additional periods covered by either the Authority's or lessor's unilateral option to (1) extend for which it is reasonably certain to be exercised, or (2) terminate for which it is reasonably certain not to be exercised. Periods in which both the Authority and the lessor have an option to terminate are excluded from the lease term.

(iii) Lease payments to be made are evaluated by the Authority to determine if they should be included in the measurement of the lease liability, including those payments that require a determination of whether they are reasonably certain of being made.

The Authority monitors changes in circumstances that may require remeasurement of a lease. When certain changes occur that are expected to significantly affect the amount of the lease, the liability is remeasured and a corresponding adjustment is made to the right of use lease asset.

Right of use lease assets are reported within capital assets and the lease liability is reported within the noncurrent liabilities section of the statement of net position, net of the current portion of the lease liability reported within current liabilities.

As of December 31, 2022 the Authority had one long-term lease for equipment with future minimum payments totaling $526.

(i) Public-Private Partnerships

The Authority is a party to certain agreements that are PPP's as defined by GASB 94. A PPP is an arrangement in which a government (the transferor) contracts with an operator (a governmental or non-governmental entity) to provide public services by conveying control of the right to operate or use a nonfinancial asset, such as infrastructure or other capital asset, for a period of time in an exchange or exchange-like transaction.

At the commencement of the PPP term, if an underlying asset is an existing asset of the Authority as a transferor, the Authority will continue to recognize the underlying asset in addition to a receivable for installment payments and a deferred inflow of resources.

In addition, if an underlying PPP asset is a new asset constructed by the operator, the Authority as a transferor recognizes as asset for improvements made by the operator to the existing underlying PPP asset of the Authority, and a deferred inflow of resources, when the improvements are placed into service. The PPP capital asset accounting follows the applicable guidance as described in note 2(c), unless the agreement stipulates that the asset must be returned in its original condition, in which case the asset will not be depreciated. The deferred inflow is recognized over the remaining term of the agreement as inflows of resources.

(j) Bonds Payable

Bonds payable consist of the total amount of outstanding bonds plus unamortized premiums and less unamortized discounts.

(k) Compensated Absences

The Authority accrues employees' unused sick leave and vacation time to be used at a later date or paid in cash upon termination or retirement from the Authority. The liability for sick leave and vacation is based on the employment date and the limits vary based on the employee's specific union contract and/or Authority policy. The liability for both amounts is calculated based on the pay and salary rates in effect at the statement of net position date.

(l) Unearned Revenue

The Authority recognizes revenue when earned. Amounts received in advance of the periods in which related services are rendered are recorded as a liability. Unearned revenue includes prepayment of tolls from New Jersey E-ZPass customers, prepayment of rent by companies for the use of the Authority's fiber optic lines and communication towers, advance rent paid by Live Nation Worldwide, Inc, as well as advance payments by the Pennsylvania Turnpike Commission for its share of maintenance work on a jointly owned facility.

(m) Deferred Outflows and Deferred Inflows of Resources

Deferred outflows of resources include deferred amount on refunding and derivative instruments, deferred amount relating to pensions, deferred amount relating to other postemployment benefit (OPEB), and change in fair value of hedging instruments. Deferred outflows of resources represent a consumption of net assets that applies to future periods.

Deferred inflows of resources include change in fair value of hedging derivatives, deferred amounts relating to pensions, deferred amount relating to other postemployment benefit (OPEB), deferred amounts relating to leases, and deferred amounts relating to PPP's. Deferred inflows of resources represent an acquisition of net assets that applies to future periods.

Change in fair value of hedging derivatives is resulting from the change due to deferred gain or loss and amortization of deferred gain or loss on interest rate swaps. Deferred amount on refunding is resulting from a loss in refinancing of debts due to a difference between the reacquisition price and the net carrying amount of the old debt and is amortized over the life of the related debt. Deferred outflows and deferred inflows of resources relating to pensions are reported for differences between expected or projected results compared to actual results related to the Authority's proportionate share in the cost sharing pension plan as well as changes in the Authority's proportion of the plan from the prior period. Deferred outflows of resources also include the portion of employer contributions subsequent to the measurement date. Deferred outflows and deferred inflows of resources related to OPEB are the result of differences between the actual and expected experience and the changes of assumptions which are not reflected in the current year's OPEB expense. Deferred outflows of resources relating to OPEB also include the payments of the retiree health benefits payments subsequent to the measurement date of the liability. Deferred inflows of resources relating to leases represent the recognition of the net present value of the lease receivable (note 2(h)). Deferred inflows of resources relating to PPP's represent the recognition of the net present value on PPP installments receivable and of the improvement costs of PPP assets constructed by the operator.

(n) Net Position

Net position is displayed in three components as follows:

Net investment in capital assets - This consists of capital assets, net of accumulated depreciation, less the outstanding balances of any bonds, notes, or other borrowings that are attributable to the acquisition, construction, or improvement of those assets.

Restricted under trust agreements - This consists of net position that is legally restricted by outside parties or by law through constitutional provisions or enabling legislation. When both restricted and unrestricted resources are available for use, generally it is the Authority’s policy to use restricted resources first, and then unrestricted resources when they are needed.

Unrestricted - This consists of net position that does not meet the definition of “restricted” or “net investment in capital assets.”

(o) Toll Revenue

Revenues from tolls are recognized in the period earned. Toll revenue is considered earned when a vehicle passes through a toll collection point and is recorded by the toll collection monitoring system. Toll revenue from transactions which are recorded as a violation by the toll collection monitoring system are recorded as an uncollected toll (reduction of toll revenue) on the day the transaction occurs. Toll revenue from the violation enforcement process can be collected through sending the patron an advisory payment request (APR) or billing the patron's E-ZPass account (when applicable). Previously uncollected toll revenue that is collected via APR is recognized as violation toll revenue on the date in which it is received. However, when the uncollected toll revenue is collected through billing a customer's E-ZPass account, it is recognized as violation toll revenue on the date in which the transaction has been posted to the customer's E-ZPass account. Pursuant to the provisions of the Bond Resolution, the Authority has covenanted to charge and collect such tolls as are required in order that in each calendar year net revenue shall at least equal the net revenue requirement under the aforementioned resolution. The Act authorizes the Authority to set tolls subject to prior approval in writing from the Governor and from either or both the State Treasurer and the Director of Budget and Accounting of the Department of the Treasury. The Act further provides that the powers conferred upon the Governor and the Treasurer of the State described shall be exercised with due regard for the rights of the holders of bonds of the Authority at any time outstanding, and nothing in, or done pursuant to, the Act shall in any way limit, restrict or alter the obligation or powers of the Authority or officer of the Authority to carry out and perform in every detail each and every covenant, agreement or contract at any time made or entered into by or on behalf of the Authority with respect to its bonds or for the benefit, protection or security of the holders thereof.

(p) Fees

Fees consist of the Authority’s share of fees and charges generated from the operation of the New Jersey E-ZPass Customer Service Center (NJ E-ZPass CSC) as well as administrative fees collected on the Authority’s behalf. The NJ E-ZPass CSC is currently operated by the NJ E-ZPass Group and Conduent, Inc. (formerly known as Xerox State and Local Solutions, Inc.). The NJ E-ZPass Group consists of the New Jersey Turnpike Authority, South Jersey Transportation Authority, Delaware River Port Authority, Delaware River Bay Authority, the Burlington County Bridge Commission, the Delaware River Joint Toll Bridge Commission, and the Cape May County Bridge Commission.

The fees and charges consist primarily of the monthly membership fee charged to New Jersey E-ZPass account holders and the administrative fee collected from toll evaders. In addition, other fees are charged to E-ZPass account holders for such items as monthly statement delivery, transponders sales, lost and stolen transponders and returned checks. Revenue is also generated from allowing certain parking lots to accept E-ZPass as payment and interest on prepaid and tag deposit account balances. For financial reporting purposes, fees and charges are recognized when earned, which is generally when a customer's E-ZPass account is charged, for all but administrative fees and parking fees, which are recognized when received.

(q) Classification of Revenues over Expenses

The Authority has classified its revenues and expenses as either operating or nonoperating.

Operating revenues include activities that have the characteristics of exchange transactions including tolls, fees, recognition of revenue associated with deferred inflows for service area lessees, and miscellaneous operating revenues. Nonoperating revenue includes activities that have the characteristics of non-exchange transactions, such as the Build America Bonds subsidy and investment income.

Operating expenses include the costs of operating and maintaining the toll roads, administrative expenses, and depreciation on capital assets. All expenses not meeting this definition, including interest expense, are reported as nonoperating expenses.

(r) Income Taxes

The Authority is exempt from federal income taxes under the Internal Revenue Code Section 115 and from state income taxes under N.J.S.A. 27:25-16. Accordingly, no provision is recorded for federal and state income taxes.

(s) Pension and Other Postemployment Benefits

GASB Statement No. 68, *Accounting and Financial Reporting for Pensions* (GASB 68), establishes standards for the measurement and reporting of the proportionate share of the net pension liability and pension expense. For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pension expense, information about the fiduciary net position of the State of New Jersey Public Employees’ Retirement System (PERS) and additions to/deductions from PERS fiduciary net position have been determined on the same basis as they are reported by PERS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments of the plan are reported at fair value (note 11).

GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* (GASB 75), establishes accounting and financial reporting for other postemployment benefits (OPEB) that are provided to the employees of state and local governmental employers. GASB 75 establishes standards for recognizing and measuring liabilities, deferred outflows of resources, deferred inflows of resources, and expenses related to OPEB in the basic financial statements. OPEB includes postemployment healthcare, as well as other forms of postemployment benefits (e.g., life insurance) when provided separately from a pension plan (note 12).

(t) Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

(u) Capital Contributions

Capital contributions include funding from outside sources, inclusive of state and local governments, agencies, authorities and private parties for highway, bridge and other capital improvement projects. The Authority recognized $400 as capital contributions from outside sources as partial funding for capital projects in 2022. No capital contributions were recognized in 2021.

(v) Adoption of Accounting Pronouncements

The Authority adopted GASB Statement No. 87, *Leases* (GASB 87). This statement supersedes GASB Statement No. 62, *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements,* and GASB 87 establishes new requirements for calculating and reporting the Authority's lease activities.

The Authority also adopted GASB Statement No. 94, *Public-Private and Public-Public Partnerships and Availability Payment Arrangements* (GASB 94). This Statement supersedes Statement No. 60, *Accounting and Financial Reporting for Service Concession Arrangements,* and GASB 94 establishes new requirements for calculating and reporting the Authority's Public-Private and Public-Public Partnerships.

The balances below were calculated using the facts and circumstances that existed at January 1, 2021, the date of adoption, as prescribed by GASB 87 and GASB 94.

(Dollars shown in thousands)

	January 1, 2021 as originally reported	GASB 87 impact	GASB 94 impact	January 1, 2021 as restated
Lease receivable - current portion	$ —	$ 8,158	$ —	$ 8,158
Lease receivable - noncurrent portion	—	172,980	—	172,980
PPP receivable - current portion	—	—	18,020	18,020
PPP receivable - noncurrent portion	—	—	515,144	515,144
Capital assets, net of accumulated depreciation	12,270,179	—	13,328	12,283,507
Unearned revenue	266,101	—	(81,995)	184,106
Deferred amount relating to leases	—	181,138	—	181,138
Deferred amount relating to PPP's	—	—	628,062	628,062
Miscellaneous	—	—	559	559
Depreciation	—	—	135	135

	December 31, 2021 as originally reported	GASB 87 impact	GASB 94 impact	December 31, 2021 as restated
Receivables, net of allowance	$ 97,411	$ 1,755	$ 713	$ 99,879
Lease receivable - current portion	—	6,861	—	6,861
Lease receivable - noncurrent portion	—	166,119	—	166,119
PPP receivable - current portion	—		17,572	17,572
PPP receivable - noncurrent portion	—		497,572	497,572
Capital assets, net of accumulated depreciation	12,381,063	—	13,059	12,394,122
Unearned revenue	304,852	(1,679)	(78,505)	224,668
Deferred amount relating to leases	—	171,685	—	171,685
Deferred amount relating to PPP's	—	—	600,542	600,542
Total net position	951,265	4,729	6,879	962,873
Operating Revenues:				
Concessions	$ 31,149	$ (5)	$ (2,531)	$ 28,613
Miscellaneous	23,755	1,839	1,120	26,714
Operating Expenses:				
Depreciation	409,695	—	404	410,099
Nonoperating revenues (expenses):				
Interest income - lessor and PPP's	—	2,895	8,694	11,589
Change in net position	412,465	4,729	6,879	424,073

(Dollars shown in thousands)

	December 31, 2021 as originally reported	GASB 87 Impact	GASB 94 Impact	December 31, 2021 as restated
Receipts from customers and other operating activities	$ 2,362,400	$ 1,834	$ 10,933	$ 2,375,167
Net cash provided by (used in) operating activities	$ 1,766,559	$ 1,834	$ 10,933	$ 1,779,326
Purchases and sales of capital assets, net	$ (496,093)	$ —	$(13,463)	$ (509,556)
Proceeds from lease interest	—	2,895	—	2,895
Amortization of lease receivables - lessor	—	(4,729)	—	(4,729)
Proceeds from PPP interest	—	—	8,694	8,694
Amortization of PPP receivables	—	—	(6,164)	(6,164)
Net cash provided by (used in) capital and related financing activities	(475,879)	(1,834)	(10,933)	(488,646)

(w) Accounting Pronouncements Issued but Not Yet Effective

The accounting pronouncements issued but not yet effective are GASB Statement No. 93, *Replacement of Interbank Offered Rates* (GASB 93), GASB Statement No. 96, *Subscription- Based Information Technology Arrangements* (GASB 96), GASB Statement No. 99, *Omnibus 2022* (GASB 99), GASB Statement No. 100, *Accounting Changes and Error Corrections* GASB 100), and GASB Statement No. 101, *Compensated Absences (GASB 101).*

GASB 93 addresses accounting and financial reporting implications that result from the replacement of the interbank offered rate. GASB 96 helps in improving the accounting and financial reporting of subscription based information technology arrangements for government end users. GASB 99 helps to enhance comparability in accounting and financial reporting and to improve the consistency of authoritative literature by addressing (1) practice issues that have been identified during implementation and application of certain GASB Statements and (2) accounting and financial reporting for financial guarantees. GASB 100 helps to enhance accounting and financial reporting requirements for accounting changes and error corrections. GASB 101 addresses the objective to better meet the information needs of financial statement users by updating the recognition and measurement guidance for compensated absences. The Authority is currently evaluating the applicability and the impact of these new statements.

(3) Cash and Investments

The New Jersey Turnpike Authority is authorized to engage in investment activity pursuant to the Act, and the Bond Resolution. Specific investment policies and practices are set forth in certain sections of the Authority's Investment Policy adopted on September 24, 2013. These guidelines are adhered to by the Authority's Finance Department when making day-to-day investment decisions. The Authority principally invests in securities of United States agencies, highly rated commercial paper, demand accounts, certificates of deposit, and repurchase agreements. According to management, the Authority is not in violation of any provisions of the Act, the Bond Resolution or its Investment Policy.

(a) Cash

All monies held under the Bond Resolution, except amounts held by the Trustee or amounts which constitute investment securities, shall be continuously and fully secured by pledging, as collateral security, direct obligations of or obligations guaranteed by the United States of America having a fair value not less than the amount of such monies.

The total cash carrying amount as of December 31, 2022 and 2021 is $241,549 and $411,637, respectively. The actual amount of cash on deposit in all bank accounts as of December 31, 2022 and 2021 was $224,243 and $399,795, respectively. Authority bank accounts had a book balance as of December 31, 2022 and 2021 of $240,907 and $410,728, respectively, actual cash on deposit of $223,352 and $398,720, respectively, and are collateralized by pledged securities totaling $267,171 and $397,268, respectively, held in the Authority's name by the Authority's financial institutions or its agents. The Foundation's cash balance as of December 31, 2022 and 2021 includes a book balance of $642 and $909, respectively. The actual amount of cash on deposit in the Foundation's bank accounts as of December 31, 2022 and 2021 was $891 and $1,075, respectively, of which $435 and $435, respectively, was insured by the FDIC. The Foundation bank account balances are not subject to the collateral posting requirements of the Bond Resolution.

(b) Investments

All securities, other than securities held by the respective trustees for the benefit of the bondholders, are held by the Authority. All investment transactions are recorded on a transaction date basis.

Fair Value Measurement

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the financial statement measurement date. The fair value hierarchy categorizes the inputs to valuation techniques used to measure fair value into three levels as follows:

- Level 1 - unadjusted quoted or published prices for identical assets or liabilities in active markets that a government can access at the measurement date.
- Level 2 - quoted or published prices other than those included within Level 1 and other inputs that are observable for an asset or liability, either directly or indirectly.
- Level 3 - unobservable inputs for an asset or liability.

The fair value hierarchy gives the highest priority to Level 1 inputs and the lowest priority to Level 3. When the fair value of an asset or a liability is measured using inputs from more than one level of the fair value hierarchy, the measurement is considered to be based on the lowest priority level that is significant to the entire measurement.

While the Authority believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different estimate of fair value at the reporting date.

The following is a description of the valuation methodologies used for instruments measured at fair value:

- Certificates of Deposit - The fair value of certificates of deposits are based on matrix pricing based on the securities' relationship to benchmark quoted prices.
- Commercial Paper - The fair value is based on model-derived pricing based on the securities' purchase cost and date.
- Federal Agency Notes and U.S. Treasury Bills - The fair value of federal agency notes and U.S. treasury bills are valued using mid prices based on the average of bid/ ask quotes from a consortium of broker dealer institutions.
- U.S. Treasury Notes - The fair value of U.S. treasury notes are based on quoted prices for identical securities in markets that are not active or quoted prices for similar securities in active markets.
- State of New Jersey Cash Management Fund - The fair value of the State of New Jersey Cash Management Fund is based on quoted or published prices.

The Authority's investments as of December 31, 2022 and 2021 are summarized in the following tables by their fair value hierarchy:

(Dollars shown in thousands)

December 31, 2022

	Total	Level 1	Level 2
Investments measured at fair value:			
Cash Reserve	$ 1,633	1,633	—
Certificates of Deposit	749,956	—	749,956
Commercial Paper	980,875	—	980,875
Federal Agency Notes	1,256,793	—	1,256,793
State of New Jersey Cash Management Fund	2,815	2,815	—
U.S. Treasury Bills	480,000	480,000	—
U.S. Treasury Notes	125,774	—	125,774
Total investments	$ 3,597,846	484,448	3,113,398

December 31, 2021

	Total	Level 1	Level 2
Investments measured at fair value:			
Certificates of Deposit	$ 575,295	—	575,295
Commercial Paper	1,095,597	—	1,095,597
Federal Agency Notes	612,229	—	612,229
State of New Jersey Cash Management Fund	7,142	7,142	—
U.S. Treasury Bills	617,770	617,770	—
Total investments	$ 2,908,033	624,912	2,283,121

Investment Maturity

The Authority's Investment Policy specifies maximum maturity limits by Bond Resolution Fund and by type of investment. At the time of purchase, the maturity of each security in the portfolio may not exceed the following maximum time frames for the respective fund in which the investment is made. 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 monies 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)

(Dollars shown in thousands)

The Authority's Investment Policy limits the maturity of commercial paper investments to 270 days. There is no other specific maturity limit for other types of Investment Securities; however the maturities are limited by Bond Resolution Fund as noted above.

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.

As of December 31, 2022 and 2021 the Authority had the following investments by their maturity date range:

	December 31, 2022		
		Investment maturities [1]	
Investment type	**Fair value**	**Less than 1 year**	**1–5 years**
Investments:			
Certificates of Deposit	$ 325,738	325,738	—
Commercial Paper	466,824	466,824	—
Federal Agency Notes	564,972	564,972	—
U.S. Treasury Bills	145,593	145,593	—
U.S. Treasury Notes	124,907	124,907	—
Total investments	1,628,034	1,628,034	—
Restricted investments held by trustee:			
Certificates of Deposit	204,764	165,193	39,571
Commercial Paper	236,382	236,382	—
Federal Agency Notes	348,873	—	348,873
U.S. Treasury Bills	334,407	334,407	—
U.S. Treasury Notes	867	—	867
Total restricted investments held by trustee	1,125,293	735,982	389,311
Restricted investments held by Authority:			
Cash Reserve	1,633	1,633	—
Certificates of Deposit	219,454	149,991	69,463
Commercial Paper	277,669	277,669	—
Federal Agency Notes	342,948	342,948	—
State of New Jersey Cash Management Fund	2,815	2,815	—
Total restricted investments held by Authority	844,519	775,056	69,463
Total investments [2]	$ 3,597,846	3,139,072	458,774

Note:

(1) The Authority does not have any investments with maturities greater than 5 years.

(2) All investments are valued at market value as of December 31, 2022.

(Dollars shown in thousands)

	December 31, 2021		
		Investment maturities [1]	
Investment type	**Fair value**	**Less than 1 year**	**1–5 years**
Investments:			
Certificates of Deposit	$ 134,527	134,527	—
Commercial Paper	786,882	786,882	—
Federal Agency Notes	88,366	88,366	—
U.S. Treasury Bills	257,570	257,570	—
Total investments	1,267,345	1,267,345	—
Restricted investments held by trustee:			
Certificates of Deposit	162,150	93,087	69,063
Commercial Paper	88,565	88,565	—
Federal Agency Notes	523,863	141,187	382,676
U.S. Treasury Bills	314,200	314,200	—
Total restricted investments held by trustee	1,088,778	637,039	451,739
Restricted investments held by Authority:			
Certificates of Deposit	278,618	278,618	—
Commercial Paper	220,150	220,150	—
State of New Jersey Cash Management Fund	7,142	7,142	—
U.S. Treasury Bills	46,000	46,000	—
Total restricted investments held by Authority	551,910	551,910	—
Total investments [2]	$2,908,033	2,456,294	451,739

Note:

(1) The Authority does not have any investments with maturities greater than 5 years.

(2) Table includes $2,062 of accrued interest, and Federal agency notes include $5,973 in unamortized premium/discount and unrealized loss for the year ended December 31, 2021.

The Authority’s investment portfolio is subject to the following risks:

Interest rate risk: Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. As a means of limiting its exposure to fair value losses arising from rising interest rates, the Authority’s Investment Policy sets maximum maturity limits for investments and requires that investment maturities are matched to the Authority’s liquidity needs. At the time of purchase, the maturity of each security in the portfolio may not exceed the following maximum time frames for the respective fund in which the investment is made in accordance with the Bond Resolution or Authority policy.

Credit risk: Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The Authority’s investment guidelines and policies are designed to protect principal by limiting credit risk. This is accomplished through ratings, and collateral requirements that vary according to the type of investment as defined in the

(Dollars shown in thousands)

Authority's Investment Policy. The Authority's Investment Policy states that 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. In addition, certain investment securities require collateral posting requirements as outlined in note 2(d).

As of December 31, 2022 and 2021, the Authority's investment quality ratings as rated by Standard & Poor's and Moody's were as follows:

December 31, 2022

Standard and Poor's/Moody's

Instrument

Ratings	Certificate of Deposit	Commercial Paper	Federal Agency Notes	U.S. Treasury Bills	U.S. Treasury Notes	Totals
A-1/P-1	$ 142,142	—	—	—	—	142,142
A-1+/P-1	498,779	980,875	618,485	—	—	2,098,139
A-1+/WR (1)	—	—	—	480,000	124,907	604,907
NR/P-1 (2)	—	—	289,435	—	—	289,435
A+/A2	23,493	—	—	—	—	23,493
AA/Aa2	34,971	—	—	—	—	34,971
AA-/WR (1)	50,571	—	—	—	—	50,571
AA+/Aaa	—	—	279,952	—	867	280,819
NR/Aaa (2)	—	—	68,921	—	—	68,921
	$ 749,956	980,875	1,256,793	480,000	125,774	3,593,398

(1) WR - withdrawn rating from the agency

(2) NR - not rated by the agency

December 31, 2021

Standard and Poor's/Moody's

Instrument

Ratings	Certificate of Deposit	Commercial Paper	Federal Agency Notes	U.S. Treasury Bills	Totals
A-1+/P-1	$ 505,283	1,095,597	179,951	617,770	2,398,601
Aa+/Aaa	—	—	432,278	—	432,278
AA-/Aa2	70,012	—	—	—	70,012
	$ 575,295	1,095,597	612,229	617,770	2,900,891

(Dollars shown in thousands)

Custodial credit risk: For investments, custodial credit risk is the risk that in the event of the failure of the counterparty, the Authority will not be able to recover the value of its investments that are in the possession of the outside party. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the Authority, and are held by either the counterparty or the counterparty's trust department or agent but not in the name of the Authority.

The Authority manages custodial credit risk by limiting its investments to highly rated institutions, having its investments registered in its name, and requiring high quality collateral be held by the counterparty in the name of the Authority for certain investment securities. As of December 31, 2022 and 2021, the Authority was not exposed to custodial credit risk on its investment securities.

Concentration of credit risk: Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer that exceeds 5% or more of its total investments. Concentrations limits are established in the Authority's Investment Policy as follows:

There are no limitations on investments carrying the full faith and credit of the United States Government, including repurchase agreements collateralized by such investments;

a. 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;

b. Investments in Certificates of Deposit are limited to 30% of the portfolio;

c. Investments made in Commercial Paper are limited to 30% of the total portfolio;

d. Investments in Municipal securities are limited to 30% of the total portfolio;

e. Investments in any one single issuer (excluding US Treasury and Federal Agency securities) are limited to 5% of the portfolio.

The Investment Policy authorizes the management to deviate from the policy if it is in the general best interest of the Authority. More than 5% of the Authority's investments are concentrated in the following issuers as of December 31, 2022 and 2021, respectively:

	December 31	
Issuer	**2022**	**2021**
Federal Home Loan Bank	22.2%	8.5%
U.S. Treasury	16.8	21.2
First Abu Dhabi Bank	9.8	11.4
Nordea Bank	5.2	N/A
Freddie Mac	5.0	N/A
Federal Farm Credit Bureau	N/A	8.9
DNB Bank ASA	N/A	7.2
Australia & New Zealand Banking Group	N/A	5.2

At December 31, 2022, the Authority exceeded its concentration limits for a single issuer with First Abu Dhabi Bank and Nordea Bank. Holdings in these issuers increased in 2022 because they offered the best rates and available securities when the Authority had available funds to invest, considering the ongoing market conditions. At December 31, 2021, the Authority exceeded its concentration limits for a single issuer with Australia & New Zealand Banking Group, DNB Bank ASA, and First Abu Dhabi Bank.

(Dollars shown in thousands)

(4) Capital Assets

Capital assets consist of land, construction in progress, infrastructure, buildings, and equipment. Infrastructure assets are typically items that are immovable, such as highways and bridges. These assets are capitalized as per the Authority's capitalization policy and depreciated as per the depreciation policy. The schedule below shows a summary of changes in the capital assets as of December 31, 2022 and 2021 is as follows:

Classification	December 31, 2021	Additions	GASB 87, 94 Additions	Retirements/ transfers	December 31, 2022
Non-depreciable capital assets:					
Land	$ 833,761	—	—	—	833,761
Construction In Progress	590,538	671,593	—	(385,984)	876,147
Total non-depreciable capital assets	1,424,299	671,593	—	(385,984)	1,709,908
Depreciable capital assets:					
Roadways	6,767,602	208,453	—	—	6,976,055
Bridges	6,282,452	108,677	—	—	6,391,129
Buildings and improvements	1,358,875	8,451	39,077	—	1,406,403
Equipment	1,805,484	42,609	—	(2,526)	1,845,567
Total depreciable capital assets	16,214,413	368,190	39,077	(2,526)	16,619,154
Total capital assets	17,638,712	1,039,783	39,077	(388,510)	18,329,062
Less accumulated depreciation:					
Roadways	(2,273,207)	(180,933)	—	—	(2,454,140)
Bridges	(1,729,563)	(132,894)	—	—	(1,862,457)
Buildings and improvements	(368,263)	(26,243)	(594)	—	(395,100)
Equipment	(873,557)	(71,556)	—	2,526	(942,587)
Total accumulated depreciation	(5,244,590)	(411,626)	(594)	2,526	(5,654,284)
Capital assets, net	$ 12,394,122	628,157	38,483	(385,984)	12,674,778
Right-of-use lease assets, net	$ —	—	526	—	526
Total capital assets, net	$ 12,394,122	$ 628,157	$ 39,009	$ (385,984)	$ 12,675,304

(Dollars shown in thousands)

Classification	December 31, 2020 (as restated)	Additions	GASB 94 Additions	Retirements/ transfers	December 31, 2021
Non-depreciable capital assets:					
Land	$ 833,761	—	—	—	833,761
Construction In Progress	406,754	520,579	—	(336,795)	590,538
Total non-depreciable capital assets	1,240,515	520,579	—	(336,795)	1,424,299
Depreciable capital assets:					
Roadways	6,676,884	90,718	—	—	6,767,602
Bridges	6,082,070	200,382	—	—	6,282,452
Buildings and improvements	1,345,736	13,139	—	—	1,358,875
Equipment	1,778,516	32,556	—	(5,588)	1,805,484
Total depreciable capital assets	15,883,206	336,795	—	(5,588)	16,214,413
Total capital assets	17,123,721	857,374	—	(342,383)	17,638,712
Less accumulated depreciation:					
Roadways	(2,090,312)	(182,895)	—	—	(2,273,207)
Bridges	(1,601,641)	(127,922)	—	—	(1,729,563)
Buildings and improvements	(342,001)	(25,992)	(270)	—	(368,263)
Equipment	(806,259)	(72,886)	—	5,588	(873,557)
Total accumulated depreciation	(4,840,213)	(409,695)	(270)	5,588	(5,244,590)
Capital assets, net	$ 12,283,508	447,679	(270)	(336,795)	12,394,122

(Dollars shown in thousands)

(5) Accounts Payable and Accrued Expenses

Accounts payable consist of amounts owed to vendors for goods and services related to the operation and maintenance of the Turnpike System, and amounts owed to vendors related to materials and services for capital projects. Accounts payable – E-ZPass Group Agencies includes tolls and fees payable from New Jersey E-ZPass customer prepaid balance accounts to tolling agencies utilizing E-ZPass as a payment method. Accounts payable–pension includes the Authority's annual State of New Jersey Public Employees' Retirement System (PERS) payment invoiced by the State of New Jersey, Division of Pension and Benefits, in October 2021 and 2020 and is payable on April 1, 2022 and April 1, 2021, respectively. Accrued expenses include accrued salaries and health benefits earned by employees, while other accrued expenses primarily include the inventory receipt accruals.

A summary of the accounts payable and accrued expenses as of December 31, 2022 and 2021 is as follows:

	December 31	
	2022	**2021**
Vendors – operations and maintenance	$ 72,245	54,038
Vendors – capital expenditures	81,013	81,553
Accounts payable – E-ZPass Group Agencies	63,103	66,484
Accounts payable – pension	23,619	22,278
Accrued salaries and benefits	13,232	12,574
Accrued expenses – other	3,383	3,969
Total	$ 256,595	240,896

(Dollars shown in thousands)

(6) Bond Indebtedness

As of December 31, 2022 and 2021, bond indebtedness consisted of the following:

	Interest rate	Maturity	December 31 2022	December 31 2021
Turnpike revenue bonds:				
Series 2004C-2, not subject to optional redemption prior to maturity	5.50%	Jan. 1, 2025	$ 132,850	132,850
Series 2005A, not subject to optional redemption prior to maturity	5.25%	Jan. 1, 2026 through Jan. 1, 2030	173,650	173,650
Series 2005D1-D4, (Federally Taxable Converting to Tax-Exempt) convertible to tax-exempt on Jan. 1, 2009 through Jan. 1, 2013, not subject to optional redemption	5.25%	Jan. 1, 2026	208,735	208,735
Series 2009F, Term Bond, Federally redemption prior to maturity at make-whole redemption price, subject to mandatory redemption on Jan. 1, 2037 through Jan. 1, 2040	7.41%	Jan. 1, 2040	1,375,000	1,375,000
Series 2010A, Federally Taxable – Issuer Subsidy Build America Bonds, subject to optional redemption prior to maturity at make-whole redemption price. Subject to mandatory redemption on Jan. 1, 2035 through Jan. 1, 2041	7.10%	Jan. 1, 2041	1,850,000	1,850,000
Series 2012A, subject to optional redemption prior to maturity on/after Jan. 1, 2022 in whole or in part	3.63% to 4.00%	Jan. 1, 2031 & Jan. 1, 2033	15,000	15,000
Series 2012B, not subject to optional redemption prior to Jan. 1, 2023	5.00%	Jan. 1, 2019 through Jan. 1, 2023	32,655	32,655
Series 2013A, not subject to optional redemption prior to Jan. 1, 2023	3.00% to 5.00%	Jan. 1, 2017 through Jan. 1, 2023	5,065	5,405
subject to optional redemption on/after Jul. 1, 2022	3.00% to 5.00%	Jan. 1, 2024 through Jan. 1, 2043	—	100,000
Series 2013F, subject to optional redemption prior to maturity on/after Jan. 1, 2023 in whole or part	3.00% to 5.00%	Jan. 1, 2026 through Jan. 1, 2035	11,780	11,780
Series 2014A, subject to optional redemption prior to maturity on/after July 1, 2024 in whole or part	4.00% to 5.00%	Jan. 1, 2027 through Jan. 1, 2035	889,000	889,000
Series 2014C, not subject to optional redemption prior to maturity	5.00%	Jan. 1, 2019 through Jan. 1, 2025	106,715	106,715
*Series 2015A, subject to optional redemption in whole or part, on/after Jan. 1, 2016	Variable, 3.54% at Dec. 31, 2022, 0.85% at Dec. 31, 2021	Jan. 1, 2024	19,650	26,225
*Series 2015C, subject to optional redemption in whole or part, on/after Jan. 1, 2017	Variable, 3.46% at Dec. 31, 2022, 0.77% at Dec. 31, 2021	Jan. 1, 2024	7,325	10,625

(Dollars shown in thousands)

	Interest rate	Maturity	December 31 2022	December 31 2021
*Series 2015D, subject to optional redemption in whole or part, on/after Jan. 1, 2017	Variable, 3.46% at Dec 31, 2022, 0.77% at Dec. 31, 2021	Jan. 1, 2024	7,325	10,600
Series 2015E, subject to optional redemption prior to maturity on/after Jan. 1, 2025 in whole or part	3.375% to 5.00%	Jan. 1, 2031 through Jan. 1, 2045	750,000	750,000
*Series 2015F, subject to optional redemption in whole or part, on/after Jan. 1, 2017	Variable, 0.67% at Dec. 31, 2021	Jan. 1, 2022	—	72,350
*Series 2015G, subject to optional redemption in whole or part, on/after Jan. 1, 2017	Variable, 3.66% at Dec 31, 2022, 0.67% at Dec. 31, 2021	Jan. 1, 2024	16,960	25,000
*Series 2015H, subject to optional redemption in whole or part, on/after Jan. 1, 2017	Variable, 0.81% at Dec. 31, 2021	Jan. 1, 2022	—	48,235
Series 2016A, subject to optional redemption in whole or part, on/after Jan. 1, 2026	3.13% to 5.00%	Jan. 1, 2031 through Jan. 1, 2035	149,995	149,995
*Series 2016B, subject to optional redemption in whole or part, on/after Jan. 1, 2018	Variable, 3.70% at Dec. 31, 2022, 0.71% at Dec. 31, 2021	Jan. 1, 2023	75,025	75,025
*Series 2016C, subject to optional redemption in whole or part, on/after Jan. 1, 2018	Variable, 3.70% at Dec. 31, 2022, 0.71% at Dec. 31, 2021	Jan. 1, 2023	50,015	50,015
*Series 2016D, subject to optional redemption in whole or part, on/after Jan. 1, 2018	Variable, 3.71% at Dec. 31, 2022, 0.71% at Dec. 31, 2021	Jan. 1, 2024	33,925	50,000
Series 2017A, subject to optional redemption in whole , or part on/after Jan. 1, 2027	3.50% to 5.00%	Jan. 1, 2027 through Jan. 1, 2036	600,000	600,000
Series 2017B, subject to optional redemption in whole or part on/ after Jan. 1, 2028	4.00% to 5.00%	Jan. 1, 2025 through Jan. 1, 2040	646,765	646,765
Series 2017 C1-6, not subject to redemption prior to maturity	Variable, (3.48% to 3.63% at Dec. 31, 2022);	Jan. 1, 2021 through Jan. 1, 2024	71,050	103,825
Subject to optional redemption on/after Jul. 1, 2022 in whole or part mandatory tender Jan. 1, 2023	(0.55 to 0.82%, at Dec. 31, 2021)	Jan. 1, 2030	—	115,125
Series 2017D, not subject to redemption prior to maturity	Variable, (3.48% to 3.58% at Dec. 31, 2022); (0.55% to 0.77 at Dec. 31, 2021)	Jan. 1, 2022 through Jan. 1, 2024	163,300	179,375

(Dollars shown in thousands)

	Interest rate	Maturity	December 31 2022	December 31 2021
Series 2017E, subject to optional redemption in whole or part, on/after Jan. 1, 2028	5.00%	Jan. 1, 2024 through Jan. 1, 2033	359,680	359,680
Series 2017F, subject to optional redemption in whole or part, on any date	2.14% to 3.73%	Jan. 1, 2019 through Jan. 1, 2036	104,770	113,765
Series 2017G, subject to optional redemption in whole or part, on/after Jan. 1, 2028	3.25% to 5.00%	Jan. 1, 2033 through Jan. 1, 2043	726,640	726,640
Series 2019A, subject to optional redemption in whole or part, on/after Jan. 1, 2029	4.00% to 5.00%	Jan. 1, 2048	449,110	449,110
*Series 2020A, subject to optional redemption in whole or part, on/after Apr. 1, 2021	Variable, 3.60% at Dec. 31, 2022, 0.38% at Dec. 31,2021	Jan. 1, 2024	8,375	12,125
*Series 2020B, subject to optional redemption in whole or part, on/after Jul. 1, 2025	2.50%	Jan. 1, 2028	24,935	24,935
*Series 2020C, subject to optional redemption in whole or part, on/after Jul. 1, 2025	3.22%	Jan. 1, 2035	163,230	163,230
*Series 2020D, not subject to optional redemption prior to maturity	5.00%	Jan. 1, 2028	149,440	149,440
Series 2021A, subject to optional redemption in whole or part, on/after Jan. 1, 2031	4.00%	Jan. 1, 2042 through Jan. 1, 2051	502,500	502,500
Series 2021B, not subject to redemption prior to maturity	0.47% to 1.86%	Jan. 1 2023 through Jan. 1, 2031	803,995	803,995
Subject to optional redemption, in whole or part, on/after Jan. 1, 2031	1.96% to 2.78%	Jan. 1, 2032 through Jan. 1, 2040	191,240	191,240
*Series 2022A, subject to redemption, in whole or part, on/after July 1, 2032	4.00%	Jan. 1, 2039 through Jan. 1, 2043	100,000	—
Series 2022B, subject to redemption, in whole or part, on/after January 1, 2033	4.25% to 5.25%	Jan. 1, 2042 through Jan. 1, 2052	700,000	—
Series 2022C, not subject to redemption prior to maturity	5.00%	Jan. 1, 2024 through Jan. 1, 2030	112,385	—
			11,788,085	11,310,610
Bond premium - net			502,184	507,936
Bond discount - net			(7,763)	(4,306)
			494,421	503,630
			$12,282,506	11,814,240

Note:
*Denotes a direct placement bond

(a) Bond Insurance

For the Series 2004C, Series 2005A, and Series 2005D Bonds, principal and interest payments are insured on the stated maturity and interest payment dates through municipal bond insurance which totaled $515,235 as of December 31, 2022 and 2021. In addition, there were insurance policies payable to the Trustee with a payment limit of $178,333. Although the insurance policies are still in effect at December 31, 2022, according to the terms of the insurance policies, cash and investments in the Debt Reserve Fund must be drawn upon first to satisfy any payments required from the Debt Reserve Fund (see note 8, Debt Compliance).

(b) Interest Payments - Fixed Rate Debt

Interest payments on all fixed rate debt are payable semi-annually on July 1 and January 1.

(c) Variable Rate Debt

Interest rates on variable rate debt are reset monthly except for Series 2015G, Series 2016B, Series 2016C, and Series 2016D bonds, which are reset weekly. Interest is paid monthly.

(d) Build America Bonds

The Series 2009F Bonds and the Series 2010A Bonds are designated as Federally Taxable, Issuer Subsidy Build America Bonds for purposes of the American Recovery and Reinvestment Act of 2009. The Authority receives a cash subsidy from the United States Treasury originally equal to 35% of the interest payable on the Bonds. The Budget Control Act of 2011 reduced the amount of the subsidy paid by the Federal Government through automatic federal spending cuts commonly known as sequestration. The payment to the Authority received for the July 1, 2022 (Series 2010A was received in September 2022 and Series 2009F was received in June 2022) and January 1, 2023 interest payment (both received in December 2022) was reduced by 5.7%, and will continue to be reduced by 5.7% through the federal fiscal year 2030. There can be no certainty the Federal Government will not make further cuts to the program. These cash payments constitute pledged revenues under the Authority's bond resolution. The Series 2009F Bonds and the Series 2010A Bonds are subject to redemption prior to maturity at the make-whole redemption price which is equal to the greater of (i) 100% of the principal amount of the Bonds to be redeemed plus accrued and unpaid interest and (ii) the sum of the present value of the remaining scheduled payments of principal and interest, discounted to the date on which the Bonds are to be redeemed on a semi-annual basis, assuming a 360 day year consisting of twelve 30 day months, at the adjusted Treasury Rate plus 50 basis points for the Series 2009F Bonds and 40 basis points for the Series 2010A Bonds, plus accrued and unpaid interest. The Bonds are also subject to redemption prior to their maturity at the option of the Authority upon a material adverse change to Section 54AA or 6431 of the Internal Revenue Code of 1986 pursuant to which the Authority's 35% cash subsidy payment is reduced or eliminated. In this case the redemption price is equal to the greater of (i) 100% of principal amount of the Bonds to be redeemed plus accrued and unpaid interest and (ii) the sum of the present value of the remaining scheduled payments of principal and interest, discounted to the date on which the Bonds are to be redeemed on a semi-annual basis, assuming a 360 day year consisting of twelve 30 day months, at the adjusted Treasury Rate plus 100 basis points, plus accrued and unpaid interest. The Series 2009F Bonds are subject to mandatory redemption on January 1, 2037 through January 1, 2040 at 100% of the principal amount plus accrued interest. The Series 2010A Bonds are subject to mandatory redemption on January 1, 2035 through January 1, 2041 at 100% of the principal amount plus accrued interest.

(Dollars shown in thousands)

(e) Floating Rate Bonds

The following tables summarizes the terms of the Authority’s direct placement Floating Rate Bonds and publicly offered Floating Rate Bonds as of December 31, 2022:

Direct Placement Floating Rate Bonds

Series of bonds	Tax exempt or federally taxable	Final maturity date	Par amount	Floating rate	Interest rate reset
2015A	Tax-Exempt	1/1/2024	$ 92,500	67% 1 month LIBOR + 78 bp	Monthly
2015C	Tax-Exempt	1/1/2024	43,750	67% 1 month LIBOR + 70 bp	Monthly
2015D	Tax-Exempt	1/1/2024	43,750	67% 1 month LIBOR + 70 bp	Monthly
2015G	Tax-Exempt	1/1/2024	25,000	69.75% 1 month LIBOR + 60 bp	Weekly
2016B	Tax-Exempt	1/1/2023	75,025	70% 1 month LIBOR + 63 bp	Weekly
2016C	Tax-Exempt	1/1/2023	50,015	70% 1 month LIBOR + 63 bp	Weekly
2016D	Tax-Exempt	1/1/2024	50,000	70% 1 month LIBOR + 64 bp	Weekly
2020A	Tax-Exempt	1/1/2024	33,875	80% 1 month LIBOR + 30 bp	Monthly

Publicly Offered Floating Rate Bonds

Series of bonds	Tax exempt or federally taxable	Final maturity date	Par amount	Floating rate	Interest rate reset
2017C3	Tax-Exempt	1/1/2023	34,575	70% 1 month LIBOR + 60 bp	Monthly
2017C4	Tax-Exempt	1/1/2024	36,475	70% 1 month LIBOR + 70 bp	Monthly
2017D1	Tax-Exempt	1/1/2024	129,375	70% 1 month LIBOR + 70 bp	Monthly
2017D3	Tax-Exempt	1/1/2023	16,675	70% 1 month LIBOR + 60 bp	Monthly
2017D4	Tax-Exempt	1/1/2024	17,250	70% 1 month LIBOR + 70 bp	Monthly

Pursuant to the terms of the direct placement Floating Rate Bonds, in addition to being subject to mandatory tender for purchase on the Mandatory Tender Date or maturity date set forth in the chart above, upon the occurrence of certain enumerated extraordinary mandatory purchase events, the respective Series of Bonds may also be subject to mandatory tender for purchase at the option of the applicable bank that is the holder of such Series of Bonds prior to the occurrence of such Mandatory Tender Date. In the event that the Authority cannot pay the purchase price for all or a portion of such Series of Bonds on the Mandatory Tender Date or any such extraordinary mandatory purchase date, (i) 50% of the principal amount of any unpurchased Bonds will be subject to mandatory redemption on the date that is one year after such Mandatory Tender Date or extraordinary mandatory purchase date, at a Redemption Price equal to 100% of the principal amount of such Bonds to be redeemed plus accrued interest to the redemption date, and (ii) the entire remaining aggregate principal amount of such unpurchased Bonds will be subject to mandatory redemption on the date that is two years after such Mandatory Tender Date or extraordinary mandatory purchase date, at a Redemption Price equal to 100% of the principal amount of such Bonds to be redeemed plus accrued interest to the redemption date. The publicly offered Floating Rate Bonds are subject to mandatory tender for purchase on the Mandatory Tender Date or maturity date set forth in the chart above. The publicly offered Floating Rate Bonds are not subject to certain extraordinary mandatory tender events.

(Dollars shown in thousands)

(f) Security

All bonds outstanding under the Bond Resolution, together with amounts owed under the interest rate swap agreements, are secured on a parity by a pledge of net revenues of the Authority senior in priority to any other Authority obligations secured by such net revenues.

(g) Future Payments of Debt Service

The following table sets forth as of December 31, 2022, payments of principal (through sinking fund installments) and interest to be made to the Debt Service Fund from the Revenue Fund on all outstanding bonds of the Authority for the next five years and thereafter. Interest on variable-rate debt and interest rate swaps in the following table is based upon the variable-rates as of December 31, 2022.

	Bonds						
	Publicly Offered			Direct Placement			
	Principal	Interest non-swap	Interest swap	Principal	Interest non-swap	Interest swap	Total
December 31:							
2023	$ 123,000	533,265	15,645	168,050	15,356	9,202	864,518
2024	268,325	562,882	7,843	50,550	17,356	2,420	909,376
2025	342,245	560,779	—	35,825	17,356	—	956,205
2026	356,525	546,358	—	47,030	15,565	—	965,478
2027	367,995	533,320	—	52,345	13,402	—	967,062
2028-2032	2,177,865	2,419,734	—	156,815	43,634	—	4,798,048
2033-2037	2,686,699	1,862,308	—	45,590	22,675	—	4,617,272
2038-2042	3,090,501	959,135	—	78,085	15,497	—	4,143,218
2043-2047	961,635	309,210	—	21,915	877	—	1,293,637
2048-2052	757,090	95,646	—	—	—	—	852,736
	$11,131,880	8,382,637	23,488	656,205	161,718	11,622	20,367,550

Upon the occurrence of certain events of default, including nonpayment of interest or principal on the Bonds, noncompliance with financial and other covenants, or a voluntary or involuntary bankruptcy of the Authority, which have not been remedied, the Trustee, or the holders of not less than 25% of the principal amount of Bonds outstanding, have the right to declare the principal of and interest on all the outstanding Bonds, due and payable immediately. In addition, if an event of default has not been remedied, the Trustee on its own may, and upon request of the holders of not less than 10% of the principal amount of Bonds outstanding shall, proceed to protect and enforce the rights of the bondholders by filing suit against the Authority. These rights of the Bondholders include the ability to require the Authority to comply with its covenant relating to fixing the tolls and charges for use of the Turnpike System and to require that all pledged revenues be paid to the Trustee and applied as required by the Bond Resolution.

(Dollars shown in thousands)

(h) Interest Expense

Interest expense was comprised of the following:

	Year ended December 31	
	2022	2021
Turnpike Revenue Bonds, Series 2004C	$ 7,307	7,307
Turnpike Revenue Bonds, Series 2005A	9,117	9,117
Turnpike Revenue Bonds, Series 2005D	10,959	10,959
Turnpike Revenue Bonds, Series 2009F	101,943	101,943
Turnpike Revenue Bonds, Series 2010A	131,387	131,387
Turnpike Revenue Bonds, Series 2012A	581	581
Turnpike Revenue Bonds, Series 2012B	1,633	3,711
Turnpike Revenue Bonds, Series 2013A	2,244	4,973
Turnpike Revenue Bonds, Series 2013F	402	732
Turnpike Revenue Bonds, Series 2014A	43,340	43,803
Turnpike Revenue Bonds, Series 2014C	5,336	5,427
Turnpike Revenue Bonds, Series 2015A	645	839
Turnpike Revenue Bonds, Series 2015C	289	419
Turnpike Revenue Bonds, Series 2015D	289	418
Turnpike Revenue Bonds, Series 2015E	36,413	36,413
Turnpike Revenue Bonds, Series 2015F	—	2,927
Turnpike Revenue Bonds, Series 2015G	674	979
Turnpike Revenue Bonds, Series 2015H	3	1,951
Turnpike Revenue Bonds, Series 2016A	7,312	7,312
Turnpike Revenue Bonds, Series 2016B	3,008	3,024
Turnpike Revenue Bonds, Series 2016C	1,995	1,941
Turnpike Revenue Bonds, Series 2016D	1,374	2,004
Turnpike Revenue Bonds, Series 2017A	29,409	29,409
Turnpike Revenue Bonds, Series 2017B	31,304	31,304
Turnpike Revenue Bonds, Series 2017C	8,796	10,623
Turnpike Revenue Bonds, Series 2017D	6,468	7,279
Turnpike Revenue Bonds, Series 2017E	17,984	17,984
Turnpike Revenue Bonds, Series 2017F	3,764	4,010
Turnpike Revenue Bonds, Series 2017G	30,480	30,480
Turnpike Revenue Bonds, Series 2019A	20,456	20,456
Turnpike Revenue Bonds, Series 2020A	307	549
Turnpike Revenue Bonds, Series 2020B	623	623
Turnpike Revenue Bonds, Series 2020C	5,261	5,261
Turnpike Revenue Bonds, Series 2020D	7,472	7,472
Turnpike Revenue Bonds, Series 2021A	20,084	18,258
Turnpike Revenue Bonds, Series 2021B	16,204	14,719
Turnpike Revenue Bonds, Series 2022A	2,000	—
Turnpike Revenue Bonds, Series 2022B (1)	5,607	—
Turnpike Revenue Bonds, Series 2022C	171	—
	572,641	576,594
Less amortization of bond premium and discount	(27,642)	(26,436)
Less GASB Statement No. 53 interest expense adjustment (2)	(14,969)	(11,013)
Net interest expense	$ 530,030	539,145

(1) Interest expense for Series 2022B is paid from bond proceeds through November 1, 2025.

(2) For the Series 2015A, 2015C, 2015D, 2015F, 2016B, 2017C2-4, 2017C6 and 2017D Bonds.

(i) Defeased Bonds

As of December 31, 2022 and 2021, the Authority has approximately $699,000 and $2,108,000, respectively, of bonds outstanding which have been previously defeased in substance and are secured by investments held by various escrow agents. The escrow accounts are invested in obligations of U.S. government agencies and are not controlled by the Authority. The bonds are considered extinguished and accordingly, the assets and obligations are not reflected on the financial statements of the Authority.

(j) Forward Delivery Direct Bond Purchase Agreements

On December 17, 2021, the Authority entered into two Forward Delivery Direct Bond Purchase Agreements (Forward Delivery Agreements) with Barclays Capital, Inc. (Barclays) for the anticipated purchase and sale of the Turnpike Revenue Bonds Series 2022A and 2024A. Based on the terms of both the Forward Delivery Agreements, the Authority received an upfront cash payment of $138,519 on December 28, 2021. The Series 2022A bonds were issued July 1, 2022.

Turnpike Revenue Bonds, Series 2024A (Series 2024A Bonds) are expected to be issued by the Authority on July 1, 2024. The Series 2024A Bonds will partially refund the Series 2014A Bonds and will have an aggregate principal value of $849,000. The Series 2024A Direct Purchase Agreement gives Barclays the option to enter the Authority into tax-exempt traditional fixed rate or synthetic fixed rate bonds. The traditional fixed rate would match that of the Series 2014A Bonds with coupons of 4% and 5%. The floating rate would be equal to the SIFMA Index rate. In accordance with the terms of swap transaction, Barclays made a payment of $124,130 on December 28, 2021 representing the option premium. The details of the swap option (swaption) are detailed in note 7.

(Dollars shown in thousands)

(7) Derivative Instruments

Traditional interest rate swaps

The fair value balances and notional amounts of derivative instruments outstanding as of December 31, 2022 and 2021, classified by type, and the changes in fair value of such derivative instruments for the year then ended as reported in the accompanying financial statements are as follows:

	Changes in fair value for year ended December 31, 2022		Fair value as of December 31, 2022		
	Classification	**Amount**	**Classification**	**Amount**	**Notional**
Cash flow hedges:					
Pay-fixed, receive-variable interest rate swaps [1]	Deferred Outflow	$ 19,478	Interest rate swap liabilities	$ 2,721	447,950

	Changes in fair value for year ended December 31, 2021		Fair value as of December 31, 2021		
	Classification	**Amount**	**Classification**	**Amount**	**Notional**
Cash flow hedges:					
Pay-fixed, receive-variable interest rate swaps [1]	Deferred Outflow	$ 22,932	Interest rate swap liabilities	$ (16,756)	773,525

[1] Includes fair value of at-the-market interest rate swaps from hybrid instruments

The fair values of the interest rate swaps were estimated using the zero-coupon method. This method calculates the future net settlement payments required by the swap, assuming that the current forward rates implied by the yield curve correctly anticipate future spot interest rates. These payments are then discounted using the spot rates implied by the current yield curve for hypothetical zero-coupon bonds due on the date of each future net settlement on the swaps.

(Dollars shown in thousands)

Objective and Terms of Derivative Instruments

The following tables display the objective and terms of the Authority's derivative instruments outstanding as of December 31, 2022 and 2021, along with the credit rating of the associated counterparty:

	December 31, 2022					
Type	**Objective**	**Notional amount**	**Effective date**	**Maturity date**	**Terms**	**Counterparty credit rating**
Hedging derivative instruments:						
Pay-fixed, receive-variable interest rate swap	Hedge of interest rate risk on the Series 2015A bonds	$ 14,650	Apr. 1, 2016	Jan. 1, 2024	Pay 2.98%, receive 67% of 1 month USD-LIBOR-BBA	A1/AA-/AA-
Pay-fixed, receive-variable interest rate swap	Hedge of interest rate risk on the Series 2015C bonds	7,325	Feb. 11, 2009	Jan. 1, 2024	Pay 3.2488%, receive 67% of 1 month USD-LIBOR-BBA	A1/A/A+
Pay-fixed, receive-variable interest rate swap	Hedge of interest rate risk on the Series 2015D bonds	7,325	Feb. 11, 2009	Jan. 1, 2024	Pay 3.2525%, receive 67% of 1 month USD-LIBOR-BBA	A1/A/A+
Pay-fixed, receive-variable interest rate swap	Hedge of interest rate risk on the Series 2015G bonds	16,960	Sep. 1, 2015	Jan. 1, 2024	Pay 3.35%, receive 67% of 1 month USD-LIBOR-BBA	Aa2/A+/AA-
Pay-fixed, receive-variable interest rate swap	Hedge of interest rate risk on the Series 2016B bonds	75,025	May. 21, 2013	Jan. 1, 2023	Pay 3.4486%, receive 73.2% of 1 month of USD-LIBOR-BBA	Aa2/A+/AA-
Pay-fixed, receive-variable interest rate swap	Hedge of interest rate risk on the Series 2016C bonds	50,015	Sep. 1, 2015	Jan. 1, 2023	Pay 3.4486%, receive 63% of 1 month plus 20bp USD-LIBOR-BBA	Aa2/A+/AA-
Pay-fixed, receive-variable interest rate swap	Hedge of interest rate risk on the Series 2016D bonds	33,925	Sep. 1, 2015	Jan. 1, 2024	Pay 3.35%, receive 67% of 1 month USD-LIBOR-BBA	Aa2/A+/AA-
Pay-fixed, receive-variable interest rate swap	Hedge of interest rate risk on the Series 2017C bonds	42,630	Sep. 1, 2015	Jan. 1, 2024	Pay 4.172%, receive 70% of 1 month of USD-LIBOR-BBA	Aa2/A+/AA-
Pay-fixed, receive-variable interest rate swap	Hedge of interest rate risk on the Series 2017C bonds	28,420	May. 21, 2013	Jan. 1, 2024	Pay 4.172%, receive 70% of 1 month of USD-LIBOR-BBA	Aa2/A+/AA-
Pay-fixed, receive-variable interest rate swap	Hedge of interest rate risk on the Series 2017D1 bonds	77,625	May. 21, 2013	Jan. 1, 2024	Pay 3.4486%, receive 73.2% of 1 month of USD-LIBOR-BBA	Aa2/A+/AA-
Pay-fixed, receive-variable interest rate swap	Hedge of interest rate risk on the Series 2017D1 bonds	51,750	Sep. 1, 2015	Jan. 1, 2024	Pay 3.4486%, receive 63% of 1 month plus 20bp USD-LIBOR-BBA	Aa2/A+/AA-
Pay-fixed, receive-variable interest rate swap	Hedge of interest rate risk on the Series 2017D2-4 bonds	33,925	Aug. 4, 2014	Jan. 1, 2024	Pay 3.35%, receive 67% of 1 month USD-LIBOR-BBA	Aa3/A+/A+
Pay-fixed, receive-variable interest rate swap	Hedge of interest rate risk on the Series 2020A bonds	8,375	Feb. 11, 2009	Jan. 1, 2024	Pay 3.3975%, receive 80% of 1 month USD-LIBOR-BBA	A1/A/A+
		$ 447,950				

(Dollars shown in thousands)

	December 31, 2021					
Type	**Objective**	**Notional amount**	**Effective date**	**Maturity date**	**Terms**	**Counterparty credit rating**
Hedging derivative instruments:						
Pay-fixed, receive-variable interest rate swap	Hedge of interest rate risk on the Series 2015A bonds	$ 21,225	Apr. 1, 2016	Jan. 1, 2024	Pay 2.98%, receive 67% of 1 month USD-LIBOR-BBA	A1/AA-/AA-
Pay-fixed, receive-variable interest rate swap	Hedge of interest rate risk on the Series 2015C bonds	10,625	Feb. 11, 2009	Jan. 1, 2024	Pay 3.2488%, receive 67% of 1 month USD-LIBOR-BBA	A1/A/A+
Pay-fixed, receive-variable interest rate swap	Hedge of interest rate risk on the Series 2015D bonds	10,600	Feb. 11, 2009	Jan. 1, 2024	Pay 3.2525%, receive 67% of 1 month USD-LIBOR-BBA	A1/A/A+
Pay-fixed, receive-variable interest rate swap	Hedge of interest rate risk on the Series 2015F bonds	72,350	May. 21, 2013	Jan. 1, 2022	Pay 3.4486%, receive until 73.2% of 1 month USD-LIBOR-BBA	Aa2/A+/AA-
Pay-fixed, receive-variable interest rate swap	Hedge of interest rate risk on the Series 2015G bonds	25,000	Sep. 1, 2015	Jan. 1, 2024	Pay 3.35%, receive 67% of 1 month USD-LIBOR-BBA	Aa2/A+/AA-
Pay-fixed, receive-variable interest rate swap	Hedge of interest rate risk on the Series 2015H bonds	48,235	Sep. 1, 2015	Jan. 1, 2022	Pay 3.305%, receive 67% of 1 month USD-LIBOR-BBA	Aa2/A+/AA-
Pay-fixed, receive-variable interest rate swap	Hedge of interest rate risk on the Series 2016B bonds	75,025	May. 21, 2013	Jan. 1, 2023	Pay 3.4486%, receive 73.2% of 1 month of USD-LIBOR-BBA	Aa2/A+/AA-
Pay-fixed, receive-variable interest rate swap	Hedge of interest rate risk on the Series 2016C bonds	50,015	Sep. 1, 2015	Jan. 1, 2023	Pay 3.4486%, receive 63% of 1 month plus 20bp USD-LIBOR-BBA	Aa2/A+/AA-
Pay-fixed, receive-variable interest rate swap	Hedge of interest rate risk on the Series 2016D bonds	50,000	Sep. 1, 2015	Jan. 1, 2024	Pay 3.35%, receive 67% of 1 month USD-LIBOR-BBA	Aa2/A+/AA-
Pay-fixed, receive-variable interest rate swap	Hedge of interest rate risk on the Series 2017C bonds	131,370	Sep. 1, 2015	Jan. 1, 2030	Pay 4.172%, receive 70% of 1 month of USD-LIBOR-BBA	Aa2/A+/AA-
Pay-fixed, receive-variable interest rate swap	Hedge of interest rate risk on the Series 2017C bonds	87,580	May. 21, 2013	Jan. 1, 2030	Pay 4.172%, receive 70% of 1 month of USD-LIBOR-BBA	Aa2/A+/AA-
Pay-fixed, receive-variable interest rate swap	Hedge of interest rate risk on the Series 2017D1 bonds	77,625	May. 21, 2013	Jan. 1, 2024	Pay 3.4486%, receive 73.2% of 1 month of USD-LIBOR-BBA	Aa2/A+/AA-
Pay-fixed, receive-variable interest rate swap	Hedge of interest rate risk on the Series 2017D1 bonds	51,750	Sep. 1, 2015	Jan. 1, 2024	Pay 3.4486%, receive 63% of 1 month plus 20bp USD-LIBOR-BBA	Aa2/A+/AA-
Pay-fixed, receive-variable interest rate swap	Hedge of interest rate risk on the Series 2017D2-4 bonds	50,000	Aug. 4, 2014	Jan. 1, 2024	Pay 3.35%, receive 67% of 1 month USD-LIBOR-BBA	Aa3/A+/A+
Pay-fixed, receive-variable interest rate swap	Hedge of interest rate risk on the Series 2020A bonds	12,125	Feb. 11, 2009	Jan. 1, 2024	Pay 3.3975%, receive 80% of 1 month USD-LIBOR-BBA	A1/A/A+
		$ 773,525				

(a) Risks

Credit risk: The Authority is exposed to credit risk on derivative instruments that are in asset positions. To minimize its exposure to loss related to credit risk, it is the Authority's policy to require counterparty collateral posting provisions in its derivative instruments. These terms require full collateralization of the fair value of derivative instruments in asset positions (net of the effect of applicable netting arrangements) should the counterparty's credit rating fall below BBB- as issued by Standard & Poor's or Baa3 as issued by Moody's Investors Service. Collateral posted is to be in the form of U.S. Treasury securities held by a third-party custodian. All of the Authority's derivative investments provide for the netting of the value of asset and liability positions with the same counterparty upon termination. As of December 31, 2022, the Authority had exposure to the derivative instruments that were in asset positions with US Bank and Barclays Bank PLC. After taking into account the netting arrangement, the fair market value of those derivative instruments exposed to US Bank and Barclays PLC were, $26 and $2, respectively. However, the Authority didn't require US Bank and Barclays Bank PLC to post collateral as the credit ratings of these banks were AA-/A1 and A/A1, respectively, well above the minimum threshold rating required by Standard & Poor's and Moody's Investors Service. There were no derivative instruments in asset positions as of December 31, 2021.

Basis risk: is the risk associated with imperfect hedging. It arises because of the difference between the price of the asset to be hedged and the price of the asset serving as the hedge. The Authority as of December 31, 2022 and December 31, 2021 is not exposed to basis risk as all interest rate swaps receive a variable rate based on the same rate or index as the hedge variable rate debt.

Termination risk: The Authority or its counterparties may terminate a derivative instrument if the other party fails to perform under the terms of the contract. If at the time of termination, a hedging derivative instrument is in a liability position, the Authority would be liable to the counterparty for a payment equal to the liability, subject to netting arrangements.

(b) Contingencies

All of the Authority's derivative instruments, except for the $16,960, $50,015, $33,925, $51,750, and $33,925 notional value swaps that hedge the Series 2015G, 2016C, 2016D, 2017D1 and 2017D2-4 Bonds, respectively, include provisions that require the Authority to post collateral in the event its credit rating falls below BBB as issued by Standard & Poor's or Baa2 as issued by Moody's Investors Service. For the Series 2015G, 2016C, 2016D, 2017D1 and 2017D2-4 Swap Agreements only, the rating on the respective Series 2015G, 2016C, 2016D, 2017D1 and 2017D2-4 Bonds would have to drop below A2 from Moody's, below A from S&P and below A from Fitch for any collateral posting requirements to be imposed upon the Authority under such agreements. The collateral posted is to be in the form of U.S. Treasury securities in the amount of the fair value of derivative instruments in liability positions. If the Authority does not post collateral, the derivative instrument may be terminated by the counterparty. As of December 31, 2022 and 2021, the aggregate fair value of all derivative instruments in liability positions with these collateral posting provisions, based on their stated fixed rates, is approximately $99 and $45,701, respectively. If the collateral posting requirements were triggered as of December 31, 2022 and 2021, the Authority would be required to post $99 and $45,701, respectively, in collateral to its counterparties. The Authority's credit rating is A1 Moody's, AA- S&P and A+ Fitch; therefore, no collateral posting is required as of December 31, 2022 or 2021, respectively.

(Dollars shown in thousands)

(c) Hybrid Instrument Borrowings

The interest rate swaps hedging the series noted below include fixed rates that were off-market at the execution of the interest rate swaps or current hedging relationship. For financial reporting purposes these interest rate swaps are considered hybrid instruments and are allocated between borrowings with an aggregate original amount of $49,846, as of December 31, 2022 and $94,421 as of December 31, 2021, reflecting the difference between the fair value of the instrument at execution and an interest rate swap with a fixed rate that was considered at-the-market at execution.

Activity for the hybrid instrument borrowings for the years ended December 31, 2022 and 2021 was as follows:

	December 31, 2021	Reidentifications	Additions/ Reductions	December 31, 2022	Current portion
Hybrid instrument borrowings:					
Series 2015A	$ 3,818	—	(1,260)	2,558	1,272
Series 2015C	1,970	—	(650)	1,320	657
Series 2015D	1,974	—	(652)	1,322	658
Series 2015F	1,824	—	(1,824)	—	—
Series 2016B	3,059	—	(1,518)	1,541	1,541
Series 2017C1*	20,116	—	(20,291)	(175)	(5)
Series 2017C2*	13,411	—	(13,527)	(116)	(3)
Series 2017D1	4,334	—	(1,422)	2,912	1,444
Series 2020A	1,269	—	(422)	847	423
	$ 51,775	—	(41,566)	10,209	5,987

	December 31, 2020	Reidentifications	Additions/ Reductions	December 31, 2021	Current portion
Hybrid instrument borrowings:					
Series 2015A	$ 5,066	—	(1,248)	3,818	1,260
Series 2015C	2,614	—	(644)	1,970	650
Series 2015D	2,619	—	(645)	1,974	652
Series 2015F	3,625	—	(1,801)	1,824	1,824
Series 2016B	4,556	—	(1,497)	3,059	1,518
Series 2017C1	22,180	—	(2,064)	20,116	2,096
Series 2017C2	14,786	—	(1,375)	13,411	1,398
Series 2017D1	5,735	—	(1,401)	4,334	1,422
Series 2020A	1,585	—	(316)	1,269	422
	$ 62,766	—	(10,991)	51,775	11,242

*Large reduction due to refunding of the Series 2017C-6 resulting in partial termination of the swaps.

(Dollars shown in thousands)

The following table sets forth as of December 31, 2022, payments of principal and interest on the hybrid instrument borrowings for the next five years and thereafter. The total payments generally reflect the difference between the stated fixed rate of the hybrid instrument and the at-the-market fixed rate at the execution of the instrument or current hedging relationship.

		Principal	Interest	Total
December 31:				
2023	$	5,987	121	6,108
2024		4,222	58	4,280
	$	10,209	179	10,388

Swaption

As mentioned in note 6(j), on December 17, 2021, the Authority entered into a swaption transaction with Barclays relating to the Turnpike Revenue, Bonds Series 2024A. The Authority sold Barclays an option to put the Authority into an interest rate swap that would hedge the Series 2024A variable rate bonds. If the option is exercised by Barclays, the Authority will pay a fixed rate in the range of 4.00-4.87% and Barclays will pay a variable rate based on the SIFMA Index rate. The swaption is considered a cost of funds swap, as the variable payments on the bonds would equal the variable payments received by the Authority. In accordance with the terms of the swaption, Barclays made an option premium payment of $124,130 to the Authority on December 28, 2021. The swaption's notional amount is amortizing with a final maturity on January 1, 2035. The variable rate is reset and paid monthly, and the fixed rate of the swaption is paid monthly beginning August 1, 2024. The swaption has an effective date of July 1, 2024 and an exercise date of May 17, 2024. The Authority is not exposed to any additional credit, basis, or termination risk resulting from entering into the swaption.

The upfront payment of $124,130 was received by the Authority. Of the total upfront payment, $118,762 is considered the intrinsic value of the swap and is recorded as a hybrid instrument borrowing (liability) per GASB Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments*. The remaining $5,368 is the time value of the option premium which is recorded within unearned revenue and amortized leading up to the exercise date. The borrowing will accrete interest from inception to the exercise date which will increase the liability. At exercise date, the embedded borrowing will match the upfront payment of $124,130. The total value of the liability at December 31, 2022 is $120,577 which represents the original borrowing amount of $118,762 and accrued interest of $1,816. The total value of the liability at December 31, 2021 was $118,829 which represents the original borrowing of $118,762 and accrued interest of $67. There is also an embedded derivative associated with this Forward Delivery Agreement. During the pre-exercise term of the agreement, this embedded derivative, which is considered a swap asset, is to be adjusted to the intrinsic value of the embedded swap. As of December 31, 2022 and December 31, 2021, the total value of this embedded derivative is $3,540 which is recorded as an interest rate swap asset and a Deferred Inflow - Accumulated increase in fair value of hedging derivatives in the statements of net position. The notional amount of the swap is $849,000 which represents the principal amount of the Series 2024A Bonds which will be issued.

(Dollars shown in thousands)

The Authority is not exposed to any credit risk, basis risk, or termination risk resulting from the swaption.

The fair value balances and notional amounts of swaption outstanding as of December 31, 2022 and 2021, classified by type, and the changes in fair value of such derivative instruments for the year then ended as reported in the accompanying financial statements are as follows:

	Changes in fair value for year ended December 31, 2022		**Fair value as of December 31, 2022**		
	Classification	**Amount**	**Classification**	**Amount**	**Notional**
Cash flow hedges:					
Pay-fixed, receive-variable interest rate swaps [1]	Deferred Inflow	—	Interest rate swap asset	3,540	849,000

	Changes in fair value for year ended December 31, 2021		**Fair value as of December 31, 2021**		
	Classification	**Amount**	**Classification**	**Amount**	**Notional**
Cash flow hedges:					
Pay-fixed, receive-variable interest rate swaps [1]	Deferred Inflow	3,540	Interest rate swap asset	3,540	849,000

The fair values of the swaption was estimated using the zero-coupon method. This method calculates the future net settlement payments required by the swap, assuming that the current forward rates implied by the yield curve correctly anticipate future spot interest rates. These payments are then discounted using the spot rates implied by the current yield curve for hypothetical zero-coupon bonds due on the date of each future net settlement on the swaps.

(Dollars shown in thousands)

Objective and Terms of Swaption

The following table displays the objective and terms of the Authority's swaption outstanding as of December 31, 2022 and December 31, 2021, along with the credit rating of the associated counterparty:

	As of December 31, 2022 and December 31, 2021					
Type	**Objective**	**Notional amount**	**Effective date**	**Maturity date**	**Terms**	**Counterparty credit rating**
Hedging derivative instruments:						
*Pay-fixed, receive-variable swaption	Hedge of interest rate risk on the Series 2024A bonds	849,000	Jul. 1, 2024	Jan. 1, 2035	Pay 4.8693%, receive sum of SIFMA Municipal Swap Index plus 0.60%	A1/A/A+

The following table sets forth as of December 31, 2022, accreted interest and payment of principal on the swaption hybrid instrument borrowing for the next five years and thereafter. The total payments generally reflect the difference between the stated fixed rate of the hybrid instrument and the at-the-market fixed rate at the execution of the instrument or current hedging relationship.

	Principal	**Interest (1)**	**Total**
December 31:			
2023	—	(1,775)	(1,775)
2024	11,247	(677)	10,570
2025	18,077	—	18,077
2026	18,077	—	18,077
2027-2031	61,448	—	61,448
2032-2034	14,180	—	14,180
	$ 123,029	(2,452)	120,577

(1) Interest on the swaption hybrid borrowing is accreting through the exercise date.

(Dollars shown in thousands)

(8) Debt Compliance

To meet the Debt Reserve Requirement under the Bond Resolution, the Authority must deposit cash and investments in the Debt Reserve Fund. In lieu of cash and investments, the Authority may maintain a surety bond or insurance policy payable to the Trustee. The Debt Reserve Requirement of $590,501 as of December 31, 2022 was met through investments in the Debt Reserve Fund with a value of $600,327, as valued according to the General Bond Resolution requirements. The Debt Reserve Requirement of $577,465 as of December 31, 2021 was met through investments in the Debt Reserve Fund with a value of $594,428.

The Revenue Requirement under Section 713(b) of the Turnpike Revenue Bond Resolution states that in each calendar year, Net Revenues shall at least equal the Net Revenue Requirement for such year. Under Section 101 of said Resolution, Net Revenues are defined as "for any calendar year or other period of time, the Pledged Revenues during such year or period less the amounts of the Operating Expenses for such year or period." The Net Revenue Requirement means with respect to any period of time, "an amount equal to the greater of (i) the sum of 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 the purposes of clause (ii) only, any payment due and payable by the Authority under a Qualified Swap upon an early termination thereof)."

The net revenue requirement was met under test (i) and (ii) above for 2022 and 2021 as follows:

	2022	2021
(i):		
Net revenue available for Debt Service	$ 1,823,044	1,677,847
Less net revenue requirements computed under test (the sum of aggregate debt service, maintenance reserve, special project reserve and charges fund payments)	(1,108,085)	(1,006,379)
Excess net revenue	$ 714,959	671,468
(ii):		
Net revenue available for Debt Service	$ 1,823,044	1,677,847
Less net revenue requirements computed under test (120% x aggregate debt service requirements of $858,085 and $796,379 in 2022 and 2021, respectively)	(1,029,702)	(955,655)
Excess net revenue	$ 793,342	722,192

The debt service coverage ratio (Net Revenue divided by Debt Service) was 2.12 and 2.11 in 2022 and 2021, respectively.

(Dollars shown in thousands)

(9) Changes in Liabilities

Long-term liabilities primarily include bonds payable (note 6), hybrid instrument borrowing and interest rate SWAP liabilities (recorded as per GASB 53 and detailed in note 7), other post employment benefit (OPEB) liability (recorded as per GASB 75 and detailed in note 12), net pension liability (recorded as per GASB 68 and detailed in note 11) and other long-term obligations. Other long-term obligations include pollution remediation obligations (note 10), self-insurance liability (note 13), and a reserve for E-ZPass tag swap to cover the costs of a program which periodically replaces New Jersey E-ZPass customer transponders that have reached the end of their useful lives. In addition, other long-term obligations include other reserves, which primarily includes the reserve for separation bonus contractually required for payout at the time of retirement and the reserve for retroactive salary increase payments. Other long-term obligations also include the pension - employer contribution which represents pension expenses for 6 months (July 1, 2021 - December 31, 2021) that are not payable within a year, employees accrued sick and vacation banks, and other liabilities which mainly includes escrow deposits, FICA tax and arbitrage liabilities.

The chart below shows the additions to and reductions from the above-mentioned categories of long-term liabilities and the balances as of December 31, 2022 and 2021, respectively.

	December 31, 2021	Additions	Reductions	December 31, 2022	Current portion
Bonds payable, net	$ 11,814,240	954,034	(485,768)	12,282,506	291,050
Hybrid instrument borrowing	170,604	1,748	(41,566)	130,786	5,987
Interest rate swap liabilities	16,756	—	(16,756)	—	—
Other postemployment benefits	1,977,246	111,096	(83,196)	2,005,146	—
Net pension liability	225,358	57,783	—	283,141	—
Other long-term obligations:					
Pollution remediation obligations	22,370	3,320	(3,422)	22,268	800
Self-Insurance Reserve	38,522	15,539	(13,011)	41,050	—
Reserve for E-ZPass tag swap	21,587	9,706	(13,800)	17,493	—
Other Reserves	12,955	1,120	(2,194)	11,881	—
Pension - Employer Contribution	17,573	29,791	(29,051)	18,313	—
Accrued Sick and Vacation	17,784	2,289	(2,646)	17,427	6,477
Other Liabilities	12,547	4,766	(3,968)	13,345	9,670
Total	$ 14,347,542	1,191,192	(695,378)	14,843,356	313,984

(Dollars shown in thousands)

	December 31, 2020	Additions	Reductions	December 31, 2021	Current portion
Bonds payable, net	$ 11,314,455	1,533,492	(1,033,707)	11,814,240	219,785
Hybrid instrument borrowing	62,766	118,829	(10,991)	170,604	11,242
Interest rate swap liabilities	39,688	3,540	(26,472)	16,756	—
Other postemployment benefits	1,753,972	267,502	(44,228)	1,977,246	—
Net pension liability	312,545	—	(87,187)	225,358	—
Other long-term obligations:					
Pollution remediation obligations	22,798	2,638	(3,066)	22,370	800
Self-Insurance Reserve	40,787	7,616	(9,881)	38,522	—
Reserve for E-ZPass tag swap	16,487	5,100	—	21,587	—
Other Reserves	22,487	3,455	(12,987)	12,955	—
Pension - Employer Contribution	15,602	28,776	(26,805)	17,573	—
Accrued Sick and Vacation	18,465	588	(1,269)	17,784	5,729
Other Liabilities	8,696	10,998	(7,147)	12,547	8,188
Total	$ 13,628,748	1,982,534	(1,263,740)	14,347,542	245,744

(10) Pollution Remediation Obligations

The Authority accounts for its pollution remediation obligations (PRO) in accordance with GASB Statement No. 49, *Accounting and Financial Reporting for Pollution Remediation Obligations* (GASB 49). As a result, the Authority has recorded in the statements of net position a PRO liability in the amount of $22,268 and $22,370 as of December 31, 2022 and 2021, respectively. The Authority's Pollution Remediation Obligation is measured based on the expected costs of future activities, estimating a reasonable range of potential outlays and multiplying those outlays by their probability of occurring. The estimate of the liability does not include cost components that are not yet reasonably measurable.

The Authority owns numerous properties with environmental issues that meet the criteria for "obligating events" and disclosure under GASB 49. The matters relate to soil and groundwater contamination at various facilities along the Turnpike and Parkway including maintenance districts, toll facilities, service areas and other Authority owned facilities (see note 15). The following table summarizes the Authority's expected outlays and payments for pollution remediation as of December 31:

	2022	2021
Right of Way	$ 11,650	11,650
Service areas	8,722	8,840
Maintenance districts	732	984
Toll facilities	334	406
Other facilities	830	490
Liability for pollution remediation obligations	$ 22,268	22,370

As of December 31, 2022, the Authority has fully funded its Pollution Remediation Obligation by designating reserves of $22,268. As of December 31, 2021 the Authority had designated reserves of $22,370 for the Pollution Remediation Obligation.

(11) Pension and Deferred Compensation

(a) Plan description

Permanent full-time employees of the Authority are covered by the State of New Jersey Public Employees' Retirement System (PERS), a plan that has been characterized for financial accounting purposes as a cost-sharing multiple-employer defined benefit pension plan. PERS is a contributory defined-benefit plan established in January 1955, under the provisions of N.J.S.A. 43:15A to provide coverage to substantially all full-time employees of the State of New Jersey or any county, municipality, school district or public agency, provided the employee is not a member of another State administered retired system. Membership is mandatory and vesting occurs after ten years of service, except for medical benefits, which vest after 25 years of service or under the disability provisions of PERS.

The risks of participating in a cost-sharing multiple-employer plan are different from those of participating in a single-employer plan in the following aspects:

- Assets contributed to the multiple-employer plan by one employer may be used to provide benefits to employees of other participating employers.
- If a participating entity stops contributing to the multiple-employer plan, the unfunded obligations of the plan may be borne by the remaining participating entities.
- If an entity petitions to stop participating in the multiple-employer plan, the entity may be required to pay the plan a withdrawal liability based on the funded status of the plan.

These aspects of cost-sharing multiple-employer plan participation are consistent with the manner of administration of the PERS. These aspects are not required by law but are part of the PERS administrative practices. Neither the financial accounting treatment of the PERS, nor their administrative practices, nor this note shall be deemed a representation that the PERS are subject to any laws that require the multiple-employer plan attributes that are set forth above.

The PERS report is available to the public and may be accessed via the State of New Jersey's website at: https://www.state.nj.us/treasury/pensions/documents/financial/gasb/gasb68-pers23.pdf

(Dollars shown in thousands)

(b) Benefits provided

A summary of the PERS eligibility requirements is as follows:

	TIER 1 (Enrolled before July 1, 2007)	TIER 2 (Eligible for enrollment on or after July 1, 2007 and before November 2, 2008)	TIER 3 (Eligible for enrollment on or after November 2, 2008 and on or before May 21, 2010)	TIER 4 (Eligible for enrollment after May 21, 2010 and before June 28, 2011)	TIER 5 (Eligible for enrollment on or after June 28, 2011)
PERS	Minimum base salary of $1,500 required for PERS Tier 1 enrollment. IRS Annual Compensation Limit on maximum salary generally apply $305,000 for 2022.	Minimum base salary of $1,500 required for PERS Tier 2 enrollment. PERS salary limited to Social Security maximum wage $147,000 for 2022. PERS members are eligible for participation in the Defined Contribution Retirement Program (DCRP) for salary over the maximum wage limit.	Minimum base salary required for PERS Tier 3 enrollment. $8,400 for 2022. Employees with base salary between $5,000 and current minimum PERS. Tier 3 salary are eligible for participation in the DCRP. PERS salary limited to Social Security maximum wage $147,000 for 2022. PERS members are eligible for participation in the DCRP for salary over the maximum wage limit.	PERS Tier 4 enrollment requires a minimum of 35 hours per week for State Employees, or 32 hours per week for Local Government or Local Education Employees. No minimum salary requirement. Employees who do not work the minimum required hours but who earn base salary of at least $5,000 are eligible for participation in the DCRP. PERS salary limited to Social Security maximum wage $147,000 for 2022. PERS members are eligible for participation in the DCRP for salary over the maximum wage limit.	PERS Tier 5 enrollment requires a minimum of 35 hours per week for State Employees, or 32 hours per week for Local Government or Local Education Employees. No minimum salary requirement. Employees who do not work the minimum required hours but who earn base salary of at least $5,000 are eligible for participation in the DCRP. PERS salary limited to Social Security maximum wage $147,000 for 2022. PERS members are eligible for participation in the DCRP for salary over the maximum wage limit.
TPAF	Minimum base salary of $500 required for TPAF Tier 1 enrollment. IRS Annual Compensation Limit on maximum salary generally apply $305,000 for 2022	Minimum base salary of $500 required for TPAF Tier 2 enrollment. TPAF salary limited to Social Security maximum wage $147,000 for 2022. TPAF members are eligible for participation in the DCRP for salary over the maximum wage limit.	Minimum base salary required for TPAF Tier 3 enrollment. $8,400 for 2022. Employees with base salary between $5,000 and current minimum TPAF Tier 3 salary are eligible for participation in the DCRP. TPAF salary limited to Social Security maximum wage $147,000 for 2022. TPAF members are eligible for participation in the DCRP for salary over the maximum wage limit.	TPAF Tier 4 enrollment requires a minimum of 35 hours per week for State Employees, or 32 hours per week for Local Education Employees. No minimum salary requirement. Employees who do not work the minimum required hours but who earn base salary of at least $5,000 are eligible for participation in the DCRP. TPAF salary limited to Social Security maximum wage $147,000 for 2022. TPAF members are eligible for participation in the DCRP for salary over the maximum wage limit.	TPAF Tier 5 enrollment requires a minimum of 35 hours per week for State Employees, or 32 hours per week for Local Education Employees. No minimum salary requirement. Employees who do not work the minimum required hours but who earn base salary of at least $5,000 are eligible for participation in the DCRP. TPAF salary limited to Social Security maximum wage $147,000 for 2022. TPAF members are eligible for participation in the DCRP for salary over the maximum wage limit.
SERVICE RETIREMENT	Minimum age of 60, no minimum service required. Annual Benefit = Years of Service ÷ 55 X Final Average (3 yrs.) Salary.	Minimum age of 60, no minimum service required. Annual Benefit = Years of Service ÷ 55 X Final Average (3 yrs.) Salary.	Minimum age of 62, no minimum service required. Annual Benefit = Years of Service ÷ 55 X Final Average (3 yrs.) Salary.	Minimum age of 62, no minimum service required. Annual Benefit = Years of Service ÷ 60 X Final Average (5 yrs.) Salary.	Minimum age of 65, no minimum service required. Annual Benefit = Years of Service ÷ 60 X Final Average (5 yrs.) Salary.
DEFERRED RETIREMENT	Collectible at age 60, at least 10 years of service required. Annual Benefit = Years of Service ÷ 55 X Final Average (3 yrs.) Salary	Collectible at age 60, at least 10 years of service required. Annual Benefit = Years of Service ÷ 55 X Final Average (3 yrs.) Salary.	Collectible at age 62, at least 10 years of service required. Annual Benefit = Years of Service ÷ 55 X Final Average (3 yrs.) Salary.	Collectible at age 62, at least 10 years of service required. Annual Benefit = Years of Service ÷ 60 X Final Average (5 yrs.) Salary.	Collectible at age 65, at least 10 years of service required. Annual Benefit = Years of Service ÷ 60 X Final Average (5 yrs.) Salary.
EARLY RETIREMENT	At least 25 years of service required. Annual Benefit = Years of Service ÷ 55 X Final Average (3 yrs.) Salary. No minimum age; however, if under age of 55, the benefit is reduced 3 percent per year (1/4 of 1 percent per month) for each year under age 55.	At least 25 years of service required. Annual Benefit = Years of Service ÷ 55 X Final Average (3 yrs.) Salary. No minimum age; however, if under age of 60, the benefit is reduced 1 percent per year (1/12 of 1 percent per month) for each year under age 60 but over age 55; and 3 percent per year (1/4 of 1 percent per month) for each year under age 55.	At least 25 years of service required. Annual Benefit = Years of Service ÷ 55 X Final Average (3 yrs.) Salary. No minimum age; however, if under age of 62, the benefit is reduced 1 percent per year (1/12 of 1 percent per month) for each year under age 62 but over age 55; and 3 percent per year (1/4 of 1 percent per month) for each year under age 55.	At least 25 years of service required. Annual Benefit = Years of Service ÷ 60 X Final Average (5 yrs.) Salary. No minimum age; however, if under age of 62, the benefit is reduced 1 percent per year (1/12 of 1 percent per month) for each year under age 62 but over age 55; and 3 percent per year (1/4 of 1 percent per month) for each year under age 55.	At least 30 years of service required. Annual Benefit = Years of Service ÷ 60 X Final Average (5 yrs.) Salary. No minimum age; however, if under age of 65, the benefit is reduced 3 percent per year (1/4 of 1 percent per month) for each year under age 65.
VETERAN RETIREMENT	At least 25 years of service at age 55 or older; or at least 20 years of service at age 60 or older. Annual Benefit = 54.5 percent X last year or highest 12 months of salary; or At least 35 years of service at age 55 or older. Annual Benefit = Years of Service ÷ 55 X Highest 12 Months of Salary.	At least 25 years of service at age 55 or older; or at least 20 years of service at age 60 or older. Annual Benefit = 54.5 percent X last year or highest 12 months of salary; or At least 35 years of service at age 55 or older. Annual Benefit = Years of Service ÷ 55 X Highest 12 Months of Salary.	At least 25 years of service at age 55 or older; or at least 20 years of service at age 60 or older. Annual Benefit = 54.5 percent X last year or highest 12 months of salary; or At least 35 years of service at age 55 or older. Annual Benefit = Years of Service ÷ 55 X Highest 12 Months of Salary.	At least 25 years of service at age 55 or older; or at least 20 years of service at age 60 or older. Annual Benefit = 54.5 percent X last year or highest 12 months of salary; or At least 35 years of service at age 55 or older. Annual Benefit = Years of Service ÷ 55 X Highest 12 Months of Salary.	At least 25 years of service at age 55 or older; or at least 20 years of service at age 60 or older. Annual Benefit = 54.5 percent X last year or highest 12 months of salary; or At least 35 years of service at age 55 or older. Annual Benefit = Years of Service ÷ 55 X Highest 12 Months of Salary.
ORDINARY DISABILITY RETIREMENT	If approved: Annual benefit = 43.6 percent X Final Average (3 yrs.) Salary.	If approved: Annual benefit = 43.6 percent X Final Average (3 yrs.) Salary.	If approved: Annual benefit = 43.6 percent X Final Average (3 yrs.) Salary.	NOT AVAILABLE: PERS Tier 4 members may be eligible for long-term disability insurance coverage.	NOT AVAILABLE: PERS Tier 5 members may be eligible for long-term disability insurance coverage.
ACCIDENTAL DISABILITY RETIREMENT	If approved: Annual Benefit = 72.7 percent X Annual Salary at time of accident.	If approved: Annual Benefit = 72.7 percent X Annual Salary at time of accident.	If approved: Annual Benefit = 72.7 percent X Annual Salary at time of accident.	NOT AVAILABLE: TPAF Tier 4 members may be eligible for long-term disability insurance coverage.	NOT AVAILABLE: TPAF Tier 5 members may be eligible for long-term disability insurance coverage.

(c) Contributions

The contribution policy for PERS is set by N.J.S.A. 15A and requires contributions by active members and contributing employers. State legislation has modified the amount that is contributed by the State. The State's pension contribution is based on an actuarially determined amount, which includes the employer portion of the normal cost and an amortization of the unfunded accrued liability. Funding for noncontributory group insurance benefits is based on actual claims paid. For fiscal years 2022 and 2021, the State's pension contribution was less than the actuarial determined amount. The local employers' contribution amounts are based on an actuarially determined rate, which includes the normal cost and unfunded accrued liability.

Covered Authority employees are required to contribute a percentage of their salary toward their pension benefits. P.L. 2011, c78, effective June 28, 2011, increased the active member contribution rate from 5.5% of annual compensation to 6.5% plus an additional 1% phased in over 7 years. The payment of automatic cost of living adjustment (COLA) additional increases to current and future retirees and beneficiaries was suspended. COLA increases may be reactivated at a future date as permitted by this law. Employee contributions were $10,687 and $10,489 for the years ended December 31, 2022 and 2021, respectively. The percentage of employee's contribution rate as a percentage of covered payroll for 2022 and 2021 was 7.50%, and 7.50%, respectively. The payroll subject to pension for the Authority's employees covered by PERS was approximately $142,500 and $139,900 for the years ended December 31, 2022 and 2021, respectively. The Authority's total payroll for the years ended December 31, 2022 and 2021 was approximately $172,000 and $171,700, respectively.

The Authority is required by statute to contribute to the employee's pension benefits based on an annual actuarial calculation. The valuation is a determination of the financial condition of the retirement system. The PERS employer pension contribution rates were 15.98% and 15.11% for the years ended December 31, 2022 and 2021, respectively. The Authority's required annual contributions to PERS were $23,659 and $22,278 for the years ended December 31, 2022 and 2021, respectively. The percentage of employer's contribution rate as a percentage of total payroll for 2022 and 2021 was 13.76% and 12.95%, respectively. The Authority's required annual contributions represent less than 2% of total contributions by municipalities and local groups to the PERS.

Pension benefit recognized in accordance with the requirements of GASB 68 was $20,783 and $31,177 at December 31, 2022 and 2021, respectively.

(d) Net Pension Liability and Deferred Outflows/Inflows of Resources Related to Pensions

December 31, 2022 and 2021, the Authority reported a liability of $283,141 and $225,358, respectively, for its proportionate share of the collective PERS net pension liability. The net pension liability was measured as of June 30, 2022 and June 30, 2021, respectively, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of July 1, 2021 and

(Dollars shown in thousands)

July 1, 2020, respectively with amounts rolled forward to the measurement date using update procedures. For purposes of measuring the net pension liability, the plan's fiduciary net position has been determined on the same basis as they are reported for PERS. Benefit payments are recognized when due and payable in accordance with the benefit terms and investments are measured at their fair value. At June 30, 2022, the Authority's proportion of the total plan was 0.75%, which was a decrease of 0.14% from 0.89% which was the Authority's proportion measured as of June 30, 2021. The employer allocation percentages are based on the ratio of the contributions of an individual employer to the total contributions to PERS during the measurement period. At December 31, 2022 and 2021, respectively, the Authority reported deferred outflows and deferred inflows of resources related to pensions from the following sources:

	2022		2021	
	Deferred outflows of resources	**Deferred inflows of resources**	**Deferred outflows of resources**	**Deferred inflows of resources**
Differences between expected and actual experience	$ 2,044	1,802	3,554	1,613
Net difference between projected and actual earnings on pension plan investments	11,718	—	—	59,365
Changes in employer proportion	8,267	8,033	12,094	7,176
Changes in assumptions	877	42,398	1,174	80,229
Employer contribution made subsequent to the measurement date	11,830	—	11,140	—
Total	$ 34,736	52,233	27,962	148,383

Included in deferred outflows of resources related to pensions at December 31, 2022 and 2021 is $11,830 and $11,140, respectively, from contributions made by the Authority subsequent to the respective measurement date that will be recognized as a reduction of the net pension liability in the following fiscal year. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

(Dollars shown in thousands)

		2022
Year ended June 30:		
2023	$	(23,948)
2024		(10,395)
2025		(7,015)
2026		12,099
2027		(68)
Total		(29,327)

(e) *Significant Assumptions and Other Inputs Used to Measure Total Pension Liability*

The collective total pension liability for the June 30, 2022 and 2021 measurement date was determined by an actuarial valuation as of July 1, 2021 and 2020, respectively, which was rolled forward to June 30, 2022 and 2021. The respective actuarial valuations used the following actuarial assumptions.

	2022
Inflation rate:	
Price	2.75%
Wage	3.25%
Salary Increases:	2.75 - 6.55% based on years of service
Investment rate of return	7.00%

	2021
Inflation rate:	
Price	2.75%
Wage	3.25%
Salary Increases:	
Through 2026	2.00 - 6.00% based on years of service
Thereafter	3.00 - 7.00% based on years of service
Investment rate of return	7.00%

2022 and 2021

For the July 1, 2021 and July 1, 2020 valuations, preretirement mortality rates were based on the Pub-2010 General Below-Median Income Employee mortality table with an 82.2% adjustment for males and 101.4% adjustment for females, and with future improvement from the base year of 2010 on a generational basis. Post-retirement mortality rates were based on the Pub-2010 General Below-Median Income Healthy Retiree mortality table with a 91.4% adjustment for males and 99.7% adjustment for females, and with future improvement from the base year of 2010 on a generational basis. Disability retirement rates used to value disabled retirees were based on the Pub-2010 Non-Safety Disabled Retiree mortality table with a 127.7% adjustment for males and 117.2% adjustment for females, and with future improvement from the base year of 2010 on a generational basis. Mortality improvement is based on Scale MP-2021 for both valuations.

(Dollars shown in thousands)

The actuarial assumptions used in the July 1, 2021 and July 1, 2020 valuation were based on the results of an actuarial experience study for the period July 1, 2018 to June 30, 2021 and July 1, 2014 to June 30, 2018, respectively.

Long-Term Expected Rate of Return

The long-term expected rate of return was 7.00% for the June 30, 2022 and 2021 valuations. The long-term expected rate of return was determined using a building block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in PERS's target asset allocation as of June 30, 2022 and 2021 are summarized in the following table:

	2022	
Asset class	**Target allocation**	**Long-term expected real rate of return**
Risk mitigation strategies	3.00 %	4.91 %
Cash equivalents	4.00	1.75
U.S. treasuries	4.00	1.75
Investment grade credit	7.00	3.38
High yield	4.00	4.95
Private credit	8.00	8.10
Real assets	3.00	7.60
Real estate	8.00	11.19
US equity	27.00	8.12
Non-U.S. developed market equity	13.50	8.38
Emerging market equity	5.50	10.33
Private equity	13.00	11.80

(Dollars shown in thousands)

	2021	
Asset class	Target allocation	Long-term expected real rate of return
Risk mitigation strategies	3.00%	3.35%
Cash equivalents	4.00	0.50
U.S. treasuries	5.00	0.95
Investment grade credit	8.00	1.68
High yield	2.00	3.75
Private credit	8.00	7.60
Real assets	3.00	7.40
Real estate	8.00	9.15
US equity	27.00	8.09
Non-U.S. developed market equity	13.50	8.71
Emerging market equity	5.50	10.96
Private equity	13.00	11.30

Discount Rate

The discount rate used to measure the total pension liability was 7.00% as of June 30, 2022 and June 30, 2021. The projection of cash flows used to determine the discount rate assumed that contributions from plan members will be made at the current member contribution rates and that contributions from employers and the nonemployer contributing entity will be based on 100% of the actuarially determined contributions for the State employer and 100% of actuarially determined contributions for the local employers. Based on those assumptions, the plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on plan investments was applied to all projected benefit payments to determine the total pension liability.

Sensitivity of the Authority's Proportionate Share of the Net Pension Liability to Changes in the Discount Rate

The following presents the Authority's proportionate share of the net pension liability of the participating employers as of June 30, 2022 and 2021, respectively, calculated using the discount rate as disclosed above as well as what the proportionate net pension liability would be if it was calculated using a discount rate that is 1 percentage point lower or 1 percentage point higher than the current rate:

	1% Decrease	Current discount rate	1% Increase
2022 (6.00%, 7.00%, and 8.00%)	$ 366,833	283,141	216,353
2021 (6.00%, 7.00%, and 8.00%)	310,163	225,358	157,829

Deferred Compensation Plan

The Authority adopted the New Jersey Turnpike Authority Employees' Deferred Compensation Plan (Deferred Compensation Plan) effective as of January 1, 1999, in accordance with the provisions of Section 27:23-1, et seq., of the New Jersey Revised Statutes and as provided in Section 457 of the Internal Revenue Code of 1986, as amended (Code). The Deferred Compensation Plan was amended and restated effective as of December 6, 2018. All permanent employees are eligible to participate in the plan, which permits participants to defer annually a portion of their salary. The Authority does not make any contributions to the plan. Employees of the South Jersey Transportation Authority and the Burlington County Bridge Commission are also eligible to participate in the plan. All amounts of compensation deferred under the plan, all property and rights purchased with these amounts, and all income attributable to these amounts, property, or rights are solely the property of the employees.

(Dollars shown in thousands)

(12) Postemployment Benefits Other Than Pensions (OPEB)

(a) Plan description

The Authority provides medical, prescription drug, vision, dental and Medicare Part B reimbursement to retirees and their covered dependents, in accordance with the terms of the applicable collective bargaining agreements or Authority personnel policies for non-bargaining unit members. The Authority maintains a single employer, self-funded health benefit plan administered by third party claims administrators. All active employees who retire from the Authority and meet the eligibility criteria will receive these benefits.

The Authority establishes and has the power to amend benefits and contribution obligations, subject to collective bargaining agreements. For the Authority's union and non-union employees,the terms of P.L. 2011, Chapter 78 were completed and it has sunset in accordance with its terms. As such, in September 2022, new health benefit contribution rates were set by the Authority.

(b) Benefits provided

The Authority provides medical, prescription drug, vision, dental and Medicare Part B reimbursement to retirees and their dependents. Life insurance is also provided to retirees. Certain retirees (those with less than 20 years of service at June 28, 2011) will be required to contribute under P.L. 2011, Chapter 78 mandated by the State of New Jersey (effective June 28, 2011). For the years ended December 31, 2022 and 2021, 344 and 319 retirees, respectively, contributed to their healthcare cost, in accordance with the provisions of agreements in effect at the time of their retirement and P.L. 2011, Chapter 78.

The Authority currently funds the cost to provide OPEB on a pay-as-you-go basis.

(c) Plan membership

At December 31, 2021, the actuarial valuation date, the following employees were covered by the benefit terms:

Inactive employees or beneficiaries currently receiving benefit payments	2,034
Inactive employees entitled to but not yet receiving benefit payments	—
Active employees	1,958
	3,992

(d) Total OPEB liability

The Authority’s total OPEB liability is $2,005,146 as of December 31, 2022 and $1,977,246 as of December 31, 2021. The liability as of December 31, 2022 and 2021 was measured as of December 31, 2021 and December 31, 2020, respectively, and was determined by actuarial valuations using data as of December 31, 2021 and December 31, 2019, respectively. The total OPEB liability was determined using the following actuarial assumptions and other inputs, applied to all periods included in the measurement, unless otherwise specified:

(Dollars shown in thousands)

	2022	2021
Inflation	2.00%	2.00%
Salary increases	3.00%	3.00%
Discount rate	2.06%	2.12%
Healthcare cost trend rates		
Pre Medicare Medical	7.00% grading down to 4.50% over 10 years	6.75% grading down to 4.50% over 9 years
Post Medicare Medical	6.00% grading down to 4.50% over 6 years	5.75% grading down to 4.50% over 5 years
Prescription drug	8.00% grading down to 4.50% over 14 years	7.75% grading down to 4.50% over 13 years
Dental	3.00%	3.00%
Vision	2.00%	2.00%
Medicare Part B reimbursement	-3.06% in 2022 and 3.50% thereafter	3.50%

In 2022 and 2021, the discount rate was based on a yield of index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher as shown in the Bond Buyer 20-Bond General Obligation Index.

In 2022 and 2021, mortality rates were based on Pub-2010 General Below-Median Income Employee/Retiree Mortality Tables for males and females, with adjustments for mortality improvement using Scale MP-2021 in both 2022 and 2021, respectively. Non-Annuitant mortality rates are based on Pub-2010 General Below-Median Income Employee Headcount-Weighted mortality table (82.2% adjustment for males and 101.4% adjustment for females). Healthy Annuitant mortality rates are based on Pub-2010 General Below-Median Income Healthy Retiree Headcount-Weighted mortality table (91.4% adjustment for males and 99.7% adjustment for females). Disabled Annuitant mortality rates are based on Pub-2010 Non-Safety Disabled Retiree Headcount-Weighted mortality table (127.7% adjustment for males and 117.2% adjustment for females). The underlying tables reasonably reflect the mortality experience of the Plan as of the measurement date. These mortality tables were then adjusted to future years from base year 2010 using a generational projection based on Scale MP-2021 in 2022 and Scale MP-2021 in 2020 to reflect future mortality improvement between the measurement date and those years.

Changes in the total OPEB liability

	2022	2021
Balance at January 1	$ 1,977,246	1,753,972
Changes for the year:		
Service cost	56,100	47,698
Interest	42,627	48,779
Differences between expected and actual experience in the total OPEB liability	12,369	(1,137)
Changes in assumptions or other inputs	(37,722)	171,025
Benefit payments, including refunds of member contributions	(45,474)	(43,091)
Net changes	27,900	223,274
Balance at December 31	$ 2,005,146	1,977,246

(Dollars shown in thousands)

The net change in total OPEB liability for the years ended December 31, 2022 and 2021 was $27,900 and $223,274, respectively. The difference between expected and actual experience increased the total OPEB liability by $12,369 in 2022 and decreased it by $1,137 in 2021 as claims experience and the trends on those claims was updated based on recent experience and future expectations. Valuation assumption changes decreased the total OPEB liability by $37,722 in 2022 and increased the liability by $171,025 in 2021. In 2022, the net increase was primarily due to (1) a decrease in obligations due to revising the valuation-year per capita health costs and future trend on such costs, and (2) an increase due to lowering the discount rate from 2.12% to 2.06%. In 2021, the net increase was primarily due to (1) an increase in obligations due to lowering the discount rate from 2.74% to 2.12%, (2) a decrease in obligations due to update of mortality projection scale from MP-2018 to MP-2021.

Sensitivity of the total OPEB liability to changes in the discount rate

The following presents the total OPEB liability of the Authority, as well as what the Authority's total OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current discount rate:

	1% Decrease	Current Discount Rate	1% Increase
Total OPEB liability			
2022 (1.06%, 2.06%, 3.06%)	$ 2,413,952	2,005,146	1,688,245
2021 (1.12%, 2.12%, 3.12%)	2,378,327	1,977,246	1,666,393

Sensitivity of the total OPEB liability to changes in the healthcare cost trend rates

The following presents the total OPEB liability of the Authority, as well as what the Authority's total OPEB liability would be if it were calculated using health care cost trend rates that are 1-percentage-point lower or 1-percentage-point higher than the current healthcare cost trends.

	1% Decrease in Health Care Cost Trend Rates	Current Health Care Cost Trend Rates	1% Increase in Health Care Cost Trend Rates
Total OPEB liability			
2022 (6.00%-1.00%, 7.00%-2.00%, 8.00%-3.00%)	$ 1,655,960	2,005,146	2,470,996
2021 (5.75%-1.00%, 6.75%-2.00%, 7.75%-3.00%)	1,621,617	1,977,246	2,451,704

(e) OPEB expense and deferred outflows of resources and deferred in flows of resources related to OPEB

For the years ended December 31, 2022 and 2021, the Authority recognized OPEB expense of $119,768 and $121,997, respectively. As of December 31, 2022 and 2021, the Authority reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

(Dollars shown in thousands)

	2022		2021	
	Deferred outflows of resources	Deferred inflows of resources	Deferred outflows of resources	Deferred inflows of resources
Differences between expected and actual experience in the Total OPEB Liability	$ 49,492	7,092	67,409	11,479
Changes of assumptions or other inputs	121,882	80,386	156,900	82,539
Retiree health benefit payments subsequent to the measurement date	49,612	—	45,474	—
Total	$ 220,986	87,478	269,783	94,018

Amounts reported as retiree health benefit payments subsequent to the measurement date will be recognized as a reduction of the total OPEB liability in the next fiscal year. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

	2022
Year ended December 31:	
2023	$ 13,778
2024	23,306
2025	35,776
2026	13,993
2027	(2,957)
Total	$ 83,896

(13) Risk Management and Self-Insurance

The Authority is exposed to a variety of risks such as theft, damage to and destruction of its infrastructure, natural disasters and injuries to employees during regular business operations. To mitigate these types of risks and others, the Authority maintains a robust insurance program which includes commercial insurance to cover bridge, property, business interruption, crime, and cyber risks, among others. In addition, the insurance program includes self-insurance for workers compensation, automobile liability and general liability up to certain limits and a comprehensive owner controlled insurance program (OCIP) for certain construction contracts that were included in the Authority’s 2008 $7 Billion CIP. The Authority does purchase excess liability insurance coverage to partially mitigate its self-insured risk for large claims related to its workers compensation, auto, general liability and OCIP program risks. The Authority's claim liabilities for its self-insured risks as of December 31, 2022 and December 31, 2021 are reported on the chart at the end of this note.

(Dollars shown in thousands)

From 2009 to 2017, the Authority provided general liability and workers compensation coverage, as well as other insurance coverages, for construction contracts included in the Authority's 2008 $7 Billion CIP, for the benefit of the Authority and its contractors, subcontractors, consultants and sub-consultants at customary ranges of coverage limits and self-insured retentions and/or deductibles. The Authority ceased enrolling new contracts in its OCIPs in 2014, and ceased providing coverage after July 15, 2017, but the OCIP programs still administer and pay general liability, workers compensation and other claims related to prior coverage periods. After July 15, 2017, the contractors and the consultants provide their own coverage.

Finally, the Authority is self-insured for the cost of providing health benefits to its employees and retirees. These benefits include medical, prescription, dental and vision. The Authority does purchase excess liability insurance for employee health benefits (stop loss) to mitigate large claim risk.

The Authority insures other selected risks by purchasing commercial crime insurance, cyber liability insurance, fiduciary insurance, aviation insurance, drone insurance, and public officials and employment practices liability insurance.

The following chart provides additional information as to risks insured for the protection of the Authority, and deductibles/self-insured retentions. Certain defined risks are subject to sub-limits and more specific deductibles/self-insured retentions and all insurances are subject to terms and conditions as set forth in the policies.

Type of insurance coverage	Deductible/retention	
Primary Insurance Policies		
Bridge and Property (1)	$ 2,000	per occurrence
Commercial Crime	75	per occurrence
Cyber Insurance	1,000	per occurrence
Public Official and Employment Practices Liability	500	per occurrence
Professional Liability Insurance Architects & Engineers	100	per claim for projects under $50,000 in construction values
	250	per claim for projects between $50,000 and $250,000 in construction values
	500	per claim for projects above $250,000 in construction values
Professional Liability Insurance Owners Protective	100	per claim for projects under $50,000 in construction values
	250	per claim for projects between $50,000 and $250,000 in construction values
	500	per claim for projects above $250,000 in construction values
Excess Insurance for Self-Insured Programs		
Excess Liability (general liability)	$ 5,000	per occurrence ($3,000 aggregate)
Excess Liability (automobile liability)	5,000	per occurrence
Excess Liability (State police)	5,000	per occurrence
Excess Employee Medical Benefits	350	per family, plus $250 aggregating deductible
Excess Workers Compensation & Employers Liability	1,250	per occurrence

(1) Bridge and property insurance includes business interruption insurance which is subject to a two-day waiting period with respect to the primary policy insurers. In the event a covered loss continues beyond the respective waiting periods, coverage starts from the first day of the loss, subject to the $2,000 deductible.

(Dollars shown in thousands)

In December 2017, the Authority filed a claim under its Bridge and Property Insurance, including business interruption insurance, for all physical damage costs, related extra expenses and lost revenue due to the damage and subsequent closure of the Delaware River Turnpike Bridge in the first quarter of 2017. At the October 2022 Board of Commissioners meeting, the board authorized the Authority to settle this claim with the insurance companies in the amount of $15,906. As of December 31, 2022, the Authority has received $13,368 and is expected to receive the remaining payments in early 2023.

Claim liabilities are recorded when it is probable that a loss occurred and the amount of that loss can be reasonably estimated. The liabilities include a provision for claim reserves as well as incurred but not reported and future development of known cases. The following tables present the changes in claims liabilities for the years ended December 31, 2022 and 2021:

		December 31, 2021	Change in estimate	Payments	December 31, 2022
General liability	$	4,245	3,602	(1,610)	6,237
Auto liability		2,489	1,799	(1,397)	2,891
Workers' compensation		21,153	9,646	(7,937)	22,862
Owner controlled insurance program (OCIP)		10,635	492	(2,067)	9,060
Total	$	38,522	15,539	(13,011)	41,050

		December 31, 2020	Change in estimate	Payments	December 31, 2021
General liability	$	4,568	608	(931)	4,245
Auto liability		2,891	697	(1,099)	2,489
Workers' compensation		20,738	6,255	(5,840)	21,153
Owner controlled insurance program (OCIP)		12,590	56	(2,011)	10,635
Total	$	40,787	7,616	(9,881)	38,522

The Authority has designated reserves of approximately $41,050 and $38,500 as of December 31, 2022 and 2021, respectively, to fund the claim liabilities as of that date.

(14) Blended Component Unit - Garden State Arts Foundation, Inc.

The Garden State Arts Foundation, Inc. (formerly known as the Garden State Arts Center Foundation) was established in 1984 pursuant to the provisions of Title 15A, Corporations-Non-Profit, of the New Jersey State Statutes. The purpose of the Foundation is to receive contributions from the public or other entities, engage in such fundraising activities as the members deem appropriate, fund and administer an annual scholarship program to provide scholarships to students pursuing an undergraduate degree with a performing arts concentration at four-year New Jersey colleges and universities, support the study of performing arts in New Jersey and support educational and charitable activities. The

(Dollars shown in thousands)

Foundation provides free entertainment at the PNC Bank Arts Center and various outreach locations throughout the State of New Jersey for New Jersey's senior citizens, school children, and other deserving residents. The Foundation's members include the Commissioners of the New Jersey Turnpike Authority. The Foundation is qualified as a tax-exempt organization as defined by Section 501(c) (3) of the Internal Revenue Code.

The condensed statements of net position and statements of revenues, expenses, and changes in net position of the Foundation as of and for the years ended December 31, 2022 and 2021 are as follows:

Consolidated Summary of Net Position

Assets	**2022**	**2021**
Current assets	$ 1,278	1,439
Total assets	$ 1,278	1,439
Liabilities		
Current liabilities	$ 1	1
Total liabilities	$ 1	1
Net Position		
Net position:		
Expendable – restricted by donor agreements	$ —	—
Unrestricted	1,277	1,438
Total net position	$ 1,277	1,438

Consolidated Summary of Revenues, Expenses, and Changes in Net Position

	2022	**2021**
Operating revenues	$ 633	610
Operating expenses	795	356
Operating (loss) income	(162)	254
Nonoperating revenues	1	2
(Decrease) increase in net position	(161)	256
Net position as of beginning of year	1,438	1,182
Net position as of end of year	$ 1,277	1,438

(15) Litigation

The Authority is a party to various legal actions and regulatory reviews arising in the ordinary course of its operations which includes investigation, remediation of existing and projected action level environmental conditions. The Authority is contingently liable under pending lawsuits and claims, relating principally to construction programs and personal injury claims, in which the Authority is named a defendant. The Authority is also subject to regulatory directives or environmental claims by third parties to investigate and/or remediate suspected or known contamination that is claimed to be the Authority's responsibility. The Authority believes the aggregate liability of the Authority under such actions, even if adversely determined, would not have a material adverse effect on the financial position of the Authority; and sufficient funds are expected to be available to satisfy any payments required in connection therewith.

In 2017, a Petition for Rule Change seeking to have the Authority revoke its rule imposing an administrative fee in connection with collecting unpaid tolls from toll violators of the Turnpike and Parkway was filed with the Authority. In the Petition, the petitioners argue that the administrative fee is unreasonable and therefore not authorized by the Act. The Petition also includes a demand for a refund of the administrative fees collected by the Authority to the extent unreasonable, which amount the petitioners claim is nearly $200,000.

After reviewing a financial analysis of the costs of processing, prosecuting and collecting unpaid tolls from toll violators, the Authority concluded that the administrative fee is reasonable and consistent with the Act and, in a written response dated October 18, 2017, the Executive Director of the Authority denied the Petition. On December 1, 2017 the petitioners filed an appeal of that denial with the Appellate Division of the Superior Court of the State of New Jersey. The parties completed their submission of written briefs to the Appellate Division and an oral argument occurred on February 4, 2019. On March 8, 2019, the Appellate Division issued its decision "reject[ing] petitioners' contention that NJTA violated the Administrative Procedures Act … or notions of due process or fundamental fairness, when it initially promulgated the regulation in 2011, and in 2017, when it considered the petition." However, the Appellate Division remanded for further proceedings in Middlesex County Superior Court to supplement the record.

At the trial court level, the matter was handled before the Honorable Alberto Rivas, A.J.S.C., in Middlesex County. The parties engaged in extensive discovery between May 2019 and May 2021, which was followed by the evidentiary hearing as ordered by the Appellate Division. The evidentiary hearing was conducted by Judge Rivas and took place between June 28, 2021 and July 2, 2021. The parties concluded the hearing on August 4, 2021 and then submitted post-hearing briefs on September 20, 2021.

On Monday, January 10, 2022, the parties received Judge Rivas' opinion which upheld the $50 administrative fee. In short, Judge Rivas rejected the Petitioners' arguments and concluded that the administrative fee was both reasonable and based on the costs associated with processing and collecting a toll violation. In accordance with the Appellate Division order, the parties will be submitting supplemental briefs over the next few months. While we cannot predict when we will receive a date for oral argument or an actual decision, the Appellate Division will have the final word on the reasonableness of the administrative fee. While the Authority is confident in the case that it presented to Judge Rivas and in Judge Rivas' opinion, in the unlikely event that the Appellate Division ultimately rules that some portion of the administrative fee is not reasonable and must be refunded by the Authority, the aggregate amount required to be refunded would be substantially less than the amount claimed by the petitioners given that the total aggregate amount of administrative fees collected by the Authority since the fee is substantially less than $200,000. Based on the Appellate Division's prior ruling, however, we believe that it will be extremely unlikely that any refunds are ordered regardless of its determination on the reasonableness of the fee.

On December 1, 2017, the law firm representing the petitioners also filed a class action lawsuit in the United States District Court for the District of New Jersey alleging, among other things, that the administrative fee violates the Fair Debt Collections Practices Act (FDCPA) and the Eighth Amendment to the United States Constitution. With the agreement of the parties, on January 17, 2018, the Court issued an order staying this lawsuit pending the resolution of the appeal with the Appellate Division of the Superior Court of the State of New Jersey described above. If and when this lawsuit is reactivated, the Authority intends to vigorously defend its conclusion that the administrative fee does not violate the FDCPA or the United States Constitution.

The Authority is defending several lawsuits arising from operations of the New Jersey State Police (State Police) assigned to provide police services on the Turnpike and the Parkway pursuant to the Authority's contract with the State Police. The contract includes an indemnification provision requiring the Authority to defend and indemnify State troopers individually, as well as the State Police and the State, against claims related to their conduct in the course of their duties. The Authority, under the indemnification provisions of the contract, may be responsible for a State trooper's liability for negligent acts, but not for intentional wrongful acts or acts beyond the scope of such trooper's employment. The Authority believes the aggregate liability of the Authority under such actions, if adversely determined, would not materially adversely affect the financial position of the Authority and sufficient funds are expected to be available to satisfy any payments required in connection therewith.

With respect to the Authority generally, soil contamination, groundwater contamination and/or solid waste found on off-site properties, Authority properties, and properties for which the Authority has assumed remediation responsibility, as well as waterway contamination that is alleged to have resulted from operations conducted at Parkway facilities, have resulted in claims against the Authority and may lead to additional claims in the future. Claims for reimbursement of remediation costs and other alleged damages have been asserted or may be forthcoming from other parties responsible for undertaking remediation activities at these properties. As a result, it may be necessary for the Authority to undertake, fund or reimburse others for remediation activities at these properties. The Authority believes the ultimate resolution of these claims will not have a material adverse impact on the financial position of the Authority. As to environmental regulatory compliance expenditures, such costs are also not expected to have a material adverse impact on the financial position of the Authority.

(Dollars shown in thousands)

(16) Related Parties

Under the regular course of operations, the Authority enters into various agreements with the State of New Jersey (the State). A summary of transactions with the State in 2022 and 2021 is as follows:

	December 31	
	2022	**2021**
Due from the State - Project reimbursements	$ —	$ 29
Due to the State - Potential unemployment claims	$ 4,078	$ 3,699
Payments to the State - Operating expenses		
State police services	$ 98,338	$ 90,689
PERS contribution	23,659	22,278
Other State payments	128	466
Total payments to the State - Operating expenses	$ 122,125	113,433
Payments to the State - Nonoperating expenses		
Transportation Trust Fund Agreement	$ 22,000	22,000
State Transportation Projects Funding Agreement (2016-2021)	—	64,500
State Public Transportation Projects Funding Agreement	523,000	175,000
Feeder Road Maintenance Agreement	2,500	2,500
Total payments to the State - Nonoperating expenses	$ 547,500	264,000

From time to time the Authority enters into various memorandums of agreement with the State that cover cost-sharing or cost-reimbursement work for various construction projects, including a pass-through of Federal funding. These agreements generally require the Authority to invoice the State for its share of the construction or engineering work performed under the agreements.

The Authority is a participating employer in the State's Unemployment Insurance program and reimburses the State for unemployment claims made by its eligible former employees.

The Authority has an agreement with the State's Department of Law and Public Safety (State Police) to patrol the Turnpike and the Parkway. As per this agreement the Authority makes payments for the State Police services received. These payments include, but are not limited to salary and overtime expenses, travel expenses, training costs, health benefit costs, fringe benefits and other indirect costs.

The Authority is a participating employer in the State's PERS plan and annually contributes the employer's portion as billed by the State (note 11).

Under the terms of an agreement dated April 27, 1984 and amendments dated August 1, 1995 and March 27, 2000, the Authority makes annual payments to the State of New Jersey to assist in transportation purposes. These payments are $22,000 annually and are due until all obligations of the New Jersey Transportation Trust Fund Authority, as set forth in the

2000 Amendment, are paid for or such payment has been provided for. The payments are made from the General Reserve Fund and are subordinate to debt service payments on all outstanding bonds and all other obligations under the Authority's General Bond Resolution.

On June 28, 2016, the Authority entered into a State Transportation Funding Agreement with the Treasurer of the State of New Jersey. Under this Funding Agreement, the Authority made payments to the State of New Jersey to be used for statewide transportation purposes for a five year period beginning on July 1, 2016 and ending on June 30, 2021. The agreement was amended in October 2018 to provide an additional one-time $25,000 payment in State fiscal 2019 (Authority calendar year 2019). In September 2019, a second amendment to the agreement was authorized to provide additional annual payments of $25,000 to fund a portion of the construction of a new Portal North Bridge. The payments under the Funding Agreement were $0 for the year ended December 31, 2022 and $239,500 for the year ended December 31, 2021 as the agreement expired on June 30, 2021. Total payments over the five-year period were $820,000.

On June 22, 2021, the Authority entered into a State Public Transportation Projects Funding Agreement with the Treasurer of the State of New Jersey. Under this new agreement the Authority has made or will make payments to the State of New Jersey to be used to support New Jersey Transit's role in providing continuing improvements to the State's integrated transportation network to the benefit of the public served by its various transportation components. This agreement supersedes the second amendment to the Funding Agreement dated September 24, 2019. The payments under this new agreement began on July 1, 2021 and will continue until New Jersey Transit has fully eliminated its capital budget to operating budget transfer and can maintain financial stability with lesser or zero amount. The Authority has or will make annual payments, payable quarterly, of $350,000 in State fiscal year 2022, $746,000 in State fiscal year 2023, $465,000 in State fiscal year 2024, $480,000 in State fiscal year 2025, $495,000 in State fiscal year 2026, $510,000 in State fiscal year 2027, and $525,000 in State fiscal year 2028 and beyond. The payments totaled $523,000 in calendar year 2022 and $175,000 in calendar year 2021. The payments are made from the General Reserve Fund and are subordinate to debt service payments on all outstanding bonds and all other obligations under the Authority's General Bond Resolution.

The Authority entered into a Feeder Road Maintenance and Cost Sharing Agreement with the State for the period July 1, 2016 through June 30, 2023, a term of seven years. Under the terms of the Feeder Road Agreement, the State will continue to reconstruct, maintain and repair 280 miles of feeder roads leading to 20 interchanges on the New Jersey Turnpike and 36 interchanges on the Garden State Parkway. The Authority has or will reimburse the State on an annual basis, payable quarterly, $8,000 in the State fiscal year 2017, $5,000 in the State fiscal year 2018, $4,000 in the State fiscal year 2019, $2,750 in the State fiscal year 2020, and $2,500 in State fiscal year 2021, 2022 and 2023, for a total of $27,250 over the seven-year term. The Authority also made annual payments to the State totaling $2,500 in 2022 and $2,500 in 2021 for feeder road maintenance provided by the New Jersey Department of Transportation.

On December 12, 2021, the Authority entered into negotiations with the Treasurer of the State of New Jersey over funding to advance the Hudson Tunnel Project (HTP). The HTP is part of the larger Gateway Program, which includes the Portal North Bridge, that will expand and renovate the Northeast Corridor (NEC) - the busiest passenger rail line in the country - between Penn Station, Newark, New Jersey and Penn Station, New York, New

York (see note 19). On December 22, 2022 authorization was requested to execute an agreement with the State Treasurer on behalf of the State. The agreement outlines payments to the State on a quarterly basis in an amount not to exceed $124 million annually, to be utilized for payment of the State's share of the costs of the HTP. Payments will commence upon completion of construction of the HTP, anticipated in or about 2033. The Authority's obligation to make these payments shall terminate the earlier of (i) satisfaction of the State's share of costs of the HTP or (ii) assumption by another entity of the State's share. Additionally, and subject to the rights and security interests of its bondholders, the Authority agrees to make payments to the State in an amount not to exceed $1,666,667 monthly commencing on or about January 1, 2023 for GDC operations, which shall terminate the earlier of (i) completion of construction of the HTP or (ii) abandonment of construction of the HTP.

(17) Commitments

The Authority's Capital Spending Program includes revenue funded as well as bond funded projects. The revenue funded projects are referred to as the Capital Budget and includes the Maintenance Reserve, Special Projects Reserve, and Supplemental Capital Program. The bond funded projects are referred to as the Construction Fund and include the 2022-2026 Capital Improvement Program, 2019 Capital Improvement Program, and the 2008 $7 Billion Capital Improvement Program that is nearing completion. The Capital Budget has open commitments related to these revenue funded construction and supervision contracts of approximately $144,485 and $144,510 as of December 31, 2022 and 2021, respectively. The Construction Fund has open commitments for construction and supervision contracts of $885,121 and $947,172 as of December 31, 2022 and 2021, respectively.

On December 7, 2017, the Authority entered into a 25-year lease agreement with Live Nation Worldwide, Inc. (tenant), which commenced on January 1, 2018, to lease the Amphitheater located at PNC Bank Arts Center. As per the agreement, the tenant is responsible to pay the greater of the minimum fixed rent or a percentage rental amount based on sales for each lease year. In addition, the tenant has agreed to fund capital improvements to the Amphitheater in the amount of $11,000 payable in equal installments of $2,750 starting on March 1, 2018 and ending on March 1, 2021. On August 27, 2019, the agreement was amended. As per the amended agreement, the tenant will make an additional contribution of $4,000 payable in equal installments of $2,000 on September 1, 2019 and on September 1, 2020. As per the agreement, the Authority is committed to deposit an equal amount towards capital improvements within 30 days after the tenant makes its payment. Both the Authority's and the tenant's payments are deposited into a joint bank account held by the Authority. As of December 31, 2022, both the tenant and the Authority have made all required deposits except $39 of the $4,000 deposit due by the tenant on September 1, 2020. As of December 31, 2021, both the tenant and the Authority have made all required deposits except for the payment due on September 1, 2020.

(18) Leases

Lessor Arrangements

The New Jersey Turnpike Authority is a lessor for various noncancellable long-term leases related to its land, buildings, and equipment. These leases comprise the following categories: Arts Center, Building Rental, Communication Towers, Fiber, and Service Area Related. The remaining lease terms vary from 2 years to 86 years. The net present value calculation of the lease receivable varies depending on the length of the respective leases and ranged from 0.27% to 1.78% for 2022 and 2021, respectively.

Variable payments that are based on future performance of the lessee or usage of the underlying asset are not included in the measurement of the lease receivable. Those variable payments are recognized as inflows of resources in the period to which those payments relate. Variable payments not recorded in the lease receivable were $1,169 and $1,086 for the years ended December 31, 2022 and 2021, respectively. Some of the Authority's leases contain multiple components (both a lease component and nonlease component). These components are accounted for as separate contracts with a receivable calculated for the lease component and the nonlease component recognized as an inflow of resources in the period to which those payments relate.

Lease income from noncancellable long-term fixed payment leases totaled $9,380 and $9,453 for the years ended December 31, 2022 and 2021, respectively. Interest income from noncancellable long-term leases totaled $2,805 and $2,895 for the years ended December 31, 2022 and 2021, respectively.

Where a monthly lease payment is less than the calculated interest amount for that month, the difference is recorded as accrued interest receivable and accounted for separately from the respective lease receivable balance. Monthly interest accrues based on prior month-end balances of both the lease receivable account and the related accrued interest receivable account. This accrued interest account will accumulate until such time that the monthly lease payment is greater than the interest calculated for that month. In leases that have outstanding accrued interest receivable balances, the related lease payments are applied in the following order: (1) to the interest portion of the rent, (2) to the accrued interest balance until fully paid, and (3) to the lease receivable balance. Accrued interest receivable totaled $1,628 and $1,589 at December 31, 2022 and 2021, respectively.

(Dollars shown in thousands)

The detail of lessor activity for the year ended December 31, 2022 and 2021 is as follows:

	January 1, 2022	Additions	Deductions	December 31, 2022
Lease receivable	$ 172,980	$ 242	$ 6,862	$ 166,360
Deferred amount relating to leases	$ 171,685	$ 242	$ 9,380	$ 162,547

	January 1, 2021	Additions	Deductions	December 31, 2021
Lease receivable	$ 181,138	$ —	$ 8,158	$ 172,980
Deferred amount relating to leases	$ 181,138	$ —	$ 9,453	$ 171,685

Future minimum lease payments to be received under noncancellable long-term leases, exclusive of variable payments, are as follows:

Year	Principal	Interest	Total
2023	$ 6,508	$ 2,680	$ 9,188
2024	6,391	2,588	8,979
2025	5,807	2,505	8,312
2026	5,519	2,421	7,940
2027	5,300	2,337	7,637
2028-2032	29,277	10,329	39,606
2033-2037	34,943	7,726	42,669
2038-2042	40,755	4,616	45,371
2043-2047	24,516	1,745	26,261
2048-2052	29	594	623
2053-2057	30	685	715
2058-2062	—	792	792
2063-2067	—	919	919
2068-2072	—	1,065	1,065
Thereafter	7,285	5,944	13,229
Total	$ 166,360	$ 46,946	$ 213,306

(19) Public-Private Partnerships (PPP's)

Transferor Arrangements

The Authority is a transferor in various "public-private partnerships," as defined by GASB Statement No. 94, *Public-Private and Public-Public Partnerships and Availability Pay Arrangements* (GASB 94), related to its service areas.

Under the agreements for these public-private partnerships (PPP), Applegreen Welcome Centers LLC (Applegreen) and Sunoco Retail LLC (Sunoco) are the operators of all Authority owned service area restaurants, facilities and service stations and are obligated to operate these facilities pursuant to the terms outlined by the Authority in the agreement. In general, the rights retained by the Authority as outlined in the agreements are as follows: ownership of the facilities, improvements, and equipment, right to determine reasonable pricing, right of inspection, and obligation to maintain facilities and access roads from the curb outward. The rights granted to the operator are as follows: operations of all restaurants and facilities including staffing and security, and maintenance of the facilities from the curb inward.

Additionally, Applegreen is contractually committed to invest $125,789 in capital contributions over the term of the agreement to reconstruct and renovate restaurant buildings located at the service areas and Sunoco is committed to invest $90,000 over the term of the agreement towards capital improvement projects at the service stations.

The projects associated with the capital contribution are scheduled to be completed in six phases. Work on phases one through three is completed as of December 31, 2022. Prior to the implementation of GASB 94, the completed construction on certain service area projects was capitalized by the Authority. As of January 1, 2021, an additional $13,463 of gross PPP assets were capitalized related to the completion of Richard Stockton service area remodel, fueling station and service bay renovations and convenience store (C-store) buildout. For the year ended December 31, 2022, $39,077 of total gross new PPP assets were capitalized. Capital contributions by Applegreen were $7,344 related to the completion of the Woodrow Wilson service area remodel and $13,940 related to the completion of the Molly Pitcher service area remodel. Capital contributions by Sunoco were $6,545 related to the completion of the Woodrow Wilson C-store buildout and fueling renovations, $7,223 related to the completion of the Molly Pitcher C-store buildout and fueling renovations, and $4,025 recorded related to the completion of Grover Cleveland fueling renovations.

(Dollars shown in thousands)

The below table outlines the status of the construction projects based on the latest known updates for the next phase of construction (Phase 4):

Service Area	Expected Opening	Scope	Location
James Fenimore Cooper Service Area			
Applegreen	2023	Remodel	Turnpike
Sunoco	2023	C-Store buildout, fueling	Turnpike
Joyce Kilmer Service Area			
Applegreen	2023	Rebuild	Turnpike
Sunoco	2023	C-Store buildout, Service bay, fueling	Turnpike
Walt Whitman Service Area			
Applegreen	2023	Rebuild	Turnpike
Sunoco	2023	C-Store buildout, fueling	Turnpike
Vauxhall Service Area			
Applegreen	2023	Rebuild	Parkway
Sunoco	2023	Fueling, Kiosk	Parkway
Brookdale South Service Area			
Applegreen	2023	Rebuild	Parkway
Sunoco	2023	Fueling, Kiosk	Parkway

As operators, Applegreen and Sunoco collect payment from third party customers and in return the Authority is due a minimum annual guarantee (MAG) and an additional percentage fee based on gross sales if that percentage fee exceeds the MAG. As of December 31, 2022, there were 240 monthly MAG payments remaining totaling $330,000 for Sunoco and there were 261 monthly MAG payments remaining totaling $260,792 for Applegreen, respectively. As of December 31, 2021, there were 252 monthly MAG payments remaining totaling $344,000 for Sunoco and there were 273 monthly MAG payments remaining totaling $272,792 for Applegreen, respectively. The percentage fee is not included in the measurement of the PPP receivable and is instead recognized as an inflow of resources in the period in which it is received.

The net present value calculation of the PPP receivable varies depending on the length of the respective PPP term and ranged from 1.64% to 1.69% for 2022 and 2021.

(Dollars shown in thousands)

The detail of PPP transferor activity for the years ended December 31, 2022 and 2021 is as follows:

	January 1, 2022	Additions	Deductions	December 31, 2022
PPP receivable	$ 515,144	$ —	$ 17,572	$ 497,572
Deferred amount relating to PPP's - NPV of installments	$ 509,694	$ —	$ 23,470	$ 486,224
Deferred amount relating to PPP's - capital assets	90,848	39,077	5,823	124,102
Deferred amount relating to PPP's	$ 600,542	$ 39,077	$ 29,293	$ 610,326

	January 1, 2021	Additions	Deductions	December 31, 2021
PPP receivable	$ 533,164	$ —	$ 18,020	$ 515,144
Deferred amount relating to PPP's - NPV of installments	$ 533,164	$ —	$ 23,470	$ 509,694
Deferred amount relating to PPP's - capital assets	94,898	—	4,050	90,848
Deferred amount relating to PPP's	$ 628,062	$ —	$ 27,520	$ 600,542

PPP revenue related to the amortization of the deferred inflow associated with the PPP receivable totaled $23,470 and $23,470 for the years ended December 31, 2022 and 2021, respectively. Interest income from PPP receivable totaled $8,404 and $8,694 for the years ended December 31, 2022 and 2021, respectively. PPP revenue related to the amortization of the deferred inflow associated with the PPP assets totaled $5,823 and $4,050 for the years ended December 31, 2022 and 2021, respectively. There was no significant income associated with variable payments for the years ended December 31, 2022 and 2021, respectively.

Where a monthly payment is less than the calculated interest amount for that month, the difference is recorded as accrued interest receivable and accounted for separately from the respective PPP receivable balance. Monthly interest accrues based on prior month-end balances of both the PPP receivable account and the related accrued interest receivable account. This accrued interest account will accumulate until such time that the monthly PPP payment is greater than the interest calculated for that month. In PPP's that have outstanding accrued interest receivable balances, the related PPP payments are applied in the following order: (1) to the interest portion of the installment, (2) to the accrued interest balance until fully paid, and (3) to the PPP receivable balance. Accrued interest receivable totaled $713 and $689 at December 31, 2022 and 2021, respectively.

(20) Subsequent Events

On January 1, 2023, the Authority implemented toll rate indexing of 3% on both of the roadways.

On January 1, 2023, the Authority executed an agreement with the State Treasurer on behalf of the State to provide funding for the Hudson Tunnel Project (HTP). The agreement outlines payments to the State on a quarterly basis in an amount not to exceed $124,000 annually, to be utilized for payment of the State's share of the costs of the HTP. Payments will commence upon completion of construction of the HTP, anticipated in or about 2033. Additionally, the Authority is obligated to make payments to the State in an amount not to exceed $1,667 monthly beginning on January 1, 2023 for Gateway Development Commission operations. These payments will end when the HTP construction is complete, anticipated in or about 2033.

In June 2023, the Authority adhered to the International Swaps and Derivatives Association (ISDA) fallback protocol, which results in the 1 month LIBOR rate automatically being replaced with the fallback rate, which is the Secured Overnight Financing Rate (SOFR) for USD LIBOR when the 1 month LIBOR is discontinued. With no further action required on the Authority’s part due to adherence to the ISDA Fallback Protocol, once 1 month LIBOR ceases to be published it will be automatically replaced by the SOFR fallback reference rate. The Authority also reached agreements on the floating rate debt to transition the reference rate from USD LIBOR to SOFR. All payments starting on September 1, 2023 will be calculated using SOFR moving forward.

In July 2023, the Authority adopted the Series 2023 Turnpike Revenue Bond Resolution (The Resolution) and the 2023 Turnpike Revenue Refunding Bond Resolution (The Refunding Resolution). The Resolution authorizes the Authority to issue up to $1,000,000 of new money bonds, proceeds of which will be used to fund the Authority's ongoing Capital Improvement Programs, including those projects that are part of the 2020 Long-Range Capital Plan. The Refunding Resolution authorizes the Authority to issue up to $2,000,000 of refunding bonds, proceeds of which will be used to refinance for savings on certain outstanding Turnpike Revenue Bonds.

On August 22, 2023, the Authority refunded a portion ($135,230) of its Series 2020C Bonds through the issuance of Series 2023A Bonds which were issued under a Direct Purchase Bondholder Agreement with Barclays Bank. The Series 2023A Bonds will mature on January 1, 2035, and the refunding resulted in approximately $14,850 of NPV savings.

Schedule 1

NEW JERSEY TURNPIKE AUTHORITY
(A Component Unit of the State of New Jersey)

Required Supplementary Information (Unaudited)

Schedules of Changes in Total OPEB Liability and Related Ratios

December 31, 2022

(In thousands)

		2022	2021	2020	2019	2018
Total OPEB liability						
Service cost	$	56,100	47,698	38,653	46,612	42,623
Interest		42,627	48,779	66,364	60,701	61,150
Differences between expected and actual experience		12,369	(1,137)	66,290	(23,098)	89,887
Changes of assumptions		(37,722)	171,025	25,425	(176,958)	(6,371)
Benefit payments, including refunds of member contributions		(45,474)	(43,091)	(45,029)	(45,901)	(42,933)
Net change in total OPEB liability		27,900	223,274	151,703	(138,644)	144,356
Total OPEB liability - beginning		1,977,246	1,753,972	1,602,269	1,740,913	1,596,557
Total OPEB liability - ending	$	2,005,146	1,977,246	1,753,972	1,602,269	1,740,913
Covered payroll	$	141,047	126,645	133,432	136,084	126,689
Total OPEB liability as a percentage of covered payroll		1422%	1561%	1315%	1177%	1374%

Notes

The total OPEB liability is measured at December 31 of the previous year.

For all years presented, no assets are accumulated in a trust to pay related benefits.

Changes in benefit terms – There were no significant changes in benefits for any of the actuarial valuations used to determine required contributions.

Changes in assumptions – There were no significant changes in assumptions except for the annual change in the discount rate.

The following are the discount rates used in each period:

December 31, 2022: 2.06%

December 31, 2021: 2.12%

December 31, 2020: 2.74%

December 31, 2019: 4.10%

December 31, 2018: 3.44%

In 2022, amounts reflect a 0.75% decrease in the health care cost trend rates for Medical Pre Medicare, Medical Post Medicare and prescription drug.

In 2021, amounts reflect a 0.75% decrease in the health care cost trend rates for Medical Pre Medicare, Medical Post Medicare and prescription drug.

In 2020, amounts reflect a 3.75% decrease in the health care cost trend rates for Medical Pre Medicare, Medical Post Medicare and prescription drug.

Information provided for Required Supplementary Information will be provided for ten years as information becomes available in subsequent years.

See accompanying independent auditors' report.

Schedule 2

NEW JERSEY TURNPIKE AUTHORITY
(A Component Unit of the State of New Jersey)

Required Supplementary Information (Unaudited)

Schedules of Proportionate Share, Employer Contributions and Notes

State of New Jersey Public Employees' Retirement System

December 31, 2022

(In thousands)

Schedule of Proportionate Share of Net Pension Liability at June 30 (measurement date)

		2022	2021	2020	2019	2018	2017	2016	2015	2014
Proportion of net pension liability – Local Group		1.8762%	1.9023%	1.9166%	1.8289%	1.8568%	1.8837%	1.8957%	1.9379%	1.9564%
Proportion of net pension liability – Total Plan		0.7480	0.8946	0.9904	0.9515	1.0990	1.1904	1.3225	1.5352	1.6194
Proportionate share of net pension liability	$	283,141	225,358	312,545	329,534	365,599	438,493	561,453	435,015	366,300
Covered payroll (approximate)		141,600	138,200	139,000	135,600	130,100	130,200	129,800	131,100	133,700
Proportionate share of net pension liability as a percentage of covered payroll		199.96%	163.07%	224.85%	243.02%	281.01%	336.78%	432.55%	331.82%	273.97%
Plan fiduciary net position as a percentage of total pension liability		46.41%	51.52%	42.90%	42.04%	40.45%	36.78%	31.20%	38.21%	42.74%

Schedule of Employer Contributions for the year ended December 31

		2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Contractually required contributions	$	23,659	22,278	20,966	17,789	18,469	17,450	16,841	16,660	16,129	14,954
Contributions in relation to the contractually required contributions		23,659	22,278	20,966	17,789	18,469	17,450	16,841	16,660	16,129	14,954
Contribution deficiency (excess)	$	—	—	—	—	—	—	—	—	—	—
Covered payroll (approximate)		142,500	139,900	138,900	138,300	131,300	130,400	130,000	130,000	132,600	134,600
Contributions as a percentage of covered payroll		16.60%	15.92%	15.09%	12.86%	14.07%	13.38%	12.95%	12.82%	12.16%	11.11%

Notes

Changes in benefit terms – There were no significant changes in benefits for any of the actuarial valuations used to determine required contributions.
Changes in assumptions – There were no significant changes in assumptions except for the annual change in the discount rate as follows:
June 30, 2022: 7.00%
June 30, 2021: 7.00%
June 30, 2020: 7.00%
June 30, 2019: 6.28%
June 30, 2018: 5.66%
June 30, 2017: 5.00%
June 30, 2016: 3.98%
June 30, 2015: 4.90%
Information provided for Required Supplementary Information will be provided for ten years as information becomes available in subsequent years.

See accompanying independent auditors' report.

NEW JERSEY TURNPIKE AUTHORITY
(A Component Unit of the State of New Jersey)

Schedule of Net Position

December 31, 2022
(With summarized comparative financial information as of December 31, 2021)

(In thousands)

Assets	Revenue	Construction	Maintenance reserve	Special project reserve	General reserve	Debt service	Debt reserve	Total bond resolution	Garden State Arts Foundation	GASB Adjustments (1)	Total 2022 Combined Financials	Total 2021 (as restated) Combined Financials
Current assets:												
Cash	$ 204,262	—	3,317	6,362	7,037	—	—	220,978	642	—	221,620	396,130
Restricted cash	—	7,912	—	—	8,948	3,046	23	19,929	—	—	19,929	15,507
Investments	428,528	—	171,453	132,307	895,746	—	—	1,628,034	—	—	1,628,034	1,267,345
Restricted investments	—	—	—	—	—	570,789	165,193	735,982	—	—	735,982	637,039
Receivables, net of allowance	108,939	—	697	180	739	—	—	110,555	635	2,627	113,817	99,879
Lease receivable - current portion	—	—	—	—	—	—	—	—	—	6,523	6,523	6,861
PPP receivable - current portion	—	—	—	—	—	—	—	—	—	18,874	18,874	17,572
Inventory	22,965	—	—	—	—	—	—	22,965	—	—	22,965	22,384
Due from State of New Jersey	—	—	—	—	—	—	—	—	—	—	—	29
Restricted deposits	2,866	—	—	—	11,420	—	—	14,286	—	—	14,286	18,459
Prepaid expenses	12,168	—	—	—	—	—	—	12,168	1	—	12,169	12,168
Interfund	(79,155)	19	733	804	77,905	(324)	18	—	—	—	—	—
Total current assets	700,573	7,931	176,200	139,653	1,001,795	573,511	165,234	2,764,897	1,278	28,024	2,794,199	2,493,373
Noncurrent assets:												
Restricted investments	—	844,518	—	—	—	—	389,312	1,233,830	—	—	1,233,830	1,003,649
Lease receivable - noncurrent portion	—	—	—	—	—	—	—	—	—	159,837	159,837	166,119
PPP receivable - noncurrent portion	—	—	—	—	—	—	—	—	—	478,698	478,698	497,572
Interest rate swap assets	—	—	—	—	—	—	—	—	—	6,261	6,261	3,540
Capital assets, net of accumulated depreciation	—	11,725,768	811,274	137,736	—	—	—	12,674,778	—	526	12,675,304	12,394,122
Total noncurrent assets	—	12,570,286	811,274	137,736	—	—	389,312	13,908,608	—	645,322	14,553,930	14,065,002
Total assets	700,573	12,578,217	987,474	277,389	1,001,795	573,511	554,546	16,673,505	1,278	673,346	17,348,129	16,558,375
Deferred Outflows of Resources												
Deferred outflows of resources:												
Accumulated decrease in fair value of hedging derivatives	—	—	—	—	—	—	—	—	—	—	—	9,939
Deferred amounts on refunding and derivative instruments	—	—	—	—	—	—	—	—	—	163,332	163,332	206,205
Deferred amount relating to pensions	—	—	—	—	—	—	—	—	—	34,736	34,736	27,962
Deferred amount relating to other postemployment benefit	—	—	—	—	—	—	—	—	—	220,986	220,986	269,783
Total deferred outflows of resources	—	—	—	—	—	—	—	—	—	419,054	419,054	513,889
Liabilities												
Current liabilities:												
Accounts payable and accrued expenses	168,861	64,787	18,039	4,448	384	—	—	256,519	1	75	256,595	240,896
Due to State of New Jersey	4,078	—	—	—	—	—	—	4,078	—	—	4,078	3,699
Accrued interest payable	—	—	—	—	—	278,826	—	278,826	—	—	278,826	274,418
Unearned revenue	338,782	—	—	—	2,387	—	—	341,169	—	(121,849)	219,320	224,668
Current portion of bonds payable	—	291,050	—	—	—	—	—	291,050	—	—	291,050	219,785
Current portion of hybrid instrument borrowing	—	—	—	—	—	—	—	—	—	5,987	5,987	11,242
Current portion of other liabilities	6,486	—	38	1,478	8,797	—	—	16,799	—	148	16,947	14,717
Total current liabilities	518,207	355,837	18,077	5,926	11,568	278,826	—	1,188,441	1	(115,639)	1,072,803	989,425
Noncurrent liabilities:												
Bonds payable, net	—	11,991,456	—	—	—	—	—	11,991,456	—	—	11,991,456	11,594,455
Hybrid instrument borrowing	—	—	—	—	—	—	—	—	—	124,799	124,799	159,362
Other liabilities	115,202	—	—	—	31,843	—	—	147,045	—	(22,215)	124,830	128,621
Other postemployment benefit liability	—	—	—	—	151,325	—	—	151,325	—	1,853,821	2,005,146	1,977,246
Interest rate swaps liabilities	—	—	—	—	—	—	—	—	—	—	—	16,756
Net pension liability	—	—	—	—	—	—	—	—	—	283,141	283,141	225,358
Total noncurrent liabilities	115,202	11,991,456	—	—	183,168	—	—	12,289,826	—	2,239,546	14,529,372	14,101,798
Total liabilities	633,409	12,347,293	18,077	5,926	194,736	278,826	—	13,478,267	1	2,123,907	15,602,175	15,091,223
Deferred Inflows of Resources												
Deferred inflows:												
Accumulated increase in fair value of hedging derivatives	—	—	—	—	—	—	—	—	—	9,175	9,175	3,540
Deferred amount relating to pensions	—	—	—	—	—	—	—	—	—	52,233	52,233	148,383
Deferred amount relating to other postemployment benefit	—	—	—	—	—	—	—	—	—	87,478	87,478	94,018
Deferred amount relating to leases	—	—	—	—	—	—	—	—	—	162,547	162,547	171,685
Deferred amount relating to PPP's	—	—	—	—	—	—	—	—	—	610,326	610,326	600,542
Total deferred inflows of resources	—	—	—	—	—	—	—	—	—	921,759	921,759	1,018,168
Net Position												
Net position:												
Net investment in capital assets	—	230,924	811,274	137,736		—	554,546	1,734,480	—	33,141	1,767,621	1,697,118
Restricted under trust agreements	—	—	—	—	11,420	294,685	—	306,105	—	—	306,105	235,381
Unrestricted	67,164	—	158,123	133,727	795,639	—	—	1,154,653	1,277	(1,986,407)	(830,477)	(969,626)
Total net position	$ 67,164	230,924	969,397	271,463	807,059	294,685	554,546	3,195,238	1,277	(1,953,266)	1,243,249	962,873

(1) GASB Adjustment principally includes the noncash impact of GASB Statement No. 49, *Accounting and Financial Reporting for Pollution Remediation Obligations*, GASB Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments*, GASB Statement No. 68, *Accounting and Financial Reporting for Pensions—an amendment of GASB Statement No. 27*, GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions,* GASB Statement No. 87, *Leases*, GASB Statement No. 94, *Public-Private Partnerships and Availability Payment Arrangements.*

See accompanying independent auditors' report.

Schedule 4

NEW JERSEY TURNPIKE AUTHORITY
(A Component Unit of the State of New Jersey)

Schedule of Revenues, Expenses, and Changes in Net Position

Year ended December 31, 2022
(With summarized comparative financial information for the year ended December 31, 2021)

(In thousands)

	Revenue	Construction	Maintenance reserve	Special project reserve	General reserve	Debt service	Debt reserve	Total bond resolution	Garden State Arts Foundation	GASB Adjustments (1)	Total 2022 Combined Financials	Total 2021 (as restated) Combined Financials
Operating revenues:												
Tolls	$ 2,126,027	—	—	—	—	—	—	2,126,027	—	—	2,126,027	1,998,825
Fees	139,356	—	—	—	—	—	—	139,356	—	—	139,356	131,717
Concessions	36,573	—	—	—	—	—	—	36,573	—	(2,540)	34,033	28,613
Miscellaneous	16,673	—	—	—	—	—	—	16,673	633	5,320	22,626	26,714
Total operating revenues	2,318,629	—	—	—	—	—	—	2,318,629	633	2,780	2,322,042	2,185,869
Operating expenses:												
Maintenance of roadway, buildings and equipment	229,314	85	—	867	21,663	—	—	251,929	—	4,043	255,972	262,131
Toll collection	189,729	—	—	—	4,277	—	—	194,006	—	2,140	196,146	185,076
State police and traffic control	120,236	—	—	1,171	1,000	—	—	122,407	—	458	122,865	112,159
Technology	23,032	18	—	3,384	746	—	—	27,180	—	623	27,803	28,552
General administrative costs	50,179	—	—	409	1,809	—	—	52,397	795	1,217	54,409	49,061
Depreciation	—	330,517	68,649	13,054	—	—	—	412,220	—	—	412,220	410,099
Total operating expenses	612,490	330,620	68,649	18,885	29,495	—	—	1,060,139	795	8,481	1,069,415	1,047,078
Operating income (loss)	1,706,139	(330,620)	(68,649)	(18,885)	(29,495)	—	—	1,258,490	(162)	(5,701)	1,252,627	1,138,791
Nonoperating revenues (expenses):												
Build America Bonds subsidy	77,235	—	—	—	—	—	—	77,235	—	—	77,235	77,468
Federal, State, and insurance reimbursements	1,813	—	4,568	—	—	—	—	6,381	—	—	6,381	1,928
Payments to the State of New Jersey	—	—	—	—	(547,500)	—	—	(547,500)	—	—	(547,500)	(264,000)
Interest income - lessor and PPPs	—	—	—	—	—	—	—	—	—	11,209	11,209	11,589
Interest expense, Turnpike Revenue Bonds	—	33,934	—	—	—	(567,035)	—	(533,101)	—	3,071	(530,030)	(539,145)
Other bond expenses	—	(1,347)	—	—	(340)	—	—	(1,687)	—	—	(1,687)	(3,557)
Investment income	20,282	6,772	2,159	1,336	9,777	5,617	(33,730)	12,213	1	(473)	11,741	999
Total nonoperating revenues (expenses), net	99,330	39,359	6,727	1,336	(538,063)	(561,418)	(33,730)	(986,459)	1	13,807	(972,651)	(714,718)
Income before capital contributions and interfund transfers	1,805,469	(291,261)	(61,922)	(17,549)	(567,558)	(561,418)	(33,730)	272,031	(161)	8,106	279,976	424,073
Capital contributions	—	39,077	—	—	400	—	—	39,477	—	(39,077)	400	—
Income before interfund transfers	1,805,469	(252,184)	(61,922)	(17,549)	(567,158)	(561,418)	(33,730)	311,508	(161)	(30,971)	280,376	424,073
Interfund transfers	(1,800,597)	280,556	198,372	48,868	641,290	636,318	(4,807)	—	—	—	—	—
Net change in fund balance/change in net position	4,872	28,372	136,450	31,319	74,132	74,900	(38,537)	311,508	(161)	(30,971)	280,376	424,073
Net position (deficit) – beginning of year	62,292	202,552	832,947	240,144	732,927	219,785	593,083	2,883,730	1,438	(1,922,295)	962,873	538,800
Net position (deficit) – end of year	$ 67,164	230,924	969,397	271,463	807,059	294,685	554,546	3,195,238	1,277	(1,953,266)	1,243,249	962,873

(1) GASB Adjustment principally includes the noncash impact of GASB Statement No. 49, *Accounting and Financial Reporting for Pollution Remediation Obligations* , GASB Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments* , GASB Statement No. 68, *Accounting and Financial Reporting for Pensions—an amendment of GASB Statement No. 27* , GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions,* GASB Statement No. 87, *Leases* , GASB Statement No. 94, *Public-Private Partnerships and Availability Payment Arrangements.*

See accompanying independent auditors' report.

NEW JERSEY TURNPIKE AUTHORITY
(A Component Unit of the State of New Jersey)

Schedule of Cash Flows

Year ended December 31, 2022
(With summarized comparative financial information for the year ended December 31, 2021)

(In thousands)

	Revenue	Construction	Maintenance reserve	Special project reserve	General reserve	Debt service	Debt reserve	Total bond resolution	Garden State Arts Foundation	GASB Adjustments (1)	Total 2022 Combined Financials	Total 2021 (as restated) Combined Financials
Cash flows from operating activities:												
Receipts from customers and other operating activities	$ 2,301,419	—	—	—	(264)	—	—	2,301,155	529	36,035	2,337,719	2,375,167
Payments to suppliers	(331,212)	(103)	—	(5,141)	(14,505)	—	—	(350,961)	(797)	—	(351,758)	(337,553)
Payments to employees	(174,877)	—	—	—	—	—	—	(174,877)	—	—	(174,877)	(173,378)
Payments for health benefits claims	(91,902)	—	—	—	—	—	—	(91,902)	—	—	(91,902)	(84,910)
Net cash provided by (used in) operating activities	1,703,428	(103)	—	(5,141)	(14,769)	—	—	1,683,415	(268)	36,035	1,719,182	1,779,326
Cash flows from noncapital financing activities:												
Receipts from Federal and State reimbursements	1,813	—	4,568	—	—	—	—	6,381	—	—	6,381	2,071
Payments to State of New Jersey	—	—	—	—	(547,500)	—	—	(547,500)	—	—	(547,500)	(264,000)
Net cash provided by (used in) noncapital financing activities	1,813	—	4,568	—	(547,500)	—	—	(541,119)	—	—	(541,119)	(261,929)
Cash flows from capital and related financing activities:												
Proceeds acquired from new capital debt	—	942,671	—	—	—	—	—	942,671	—	—	942,671	1,507,367
Purchases and sales of capital assets, net	—	(532,826)	(141,824)	(18,598)	4,176	—	—	(689,072)	—	—	(689,072)	(509,556)
Principal paid on capital debt	—	(219,785)	—	—	—	—	—	(219,785)	—	—	(219,785)	(72,870)
Principal paid on defeased capital debt	—	(215,125)	—	—	—	—	—	(215,125)	—	—	(215,125)	(909,845)
Proceeds from Build America Bonds subsidy	77,235	—	—	—	—	—	—	77,235	—	—	77,235	77,185
Proceeds from lease interest	—	—	—	—	—	—	—	—	—	2,805	2,805	2,895
Amortization of lease receivables - lessor	—	—	—	—	—	—	—	—	—	(2,223)	(2,223)	(4,729)
Amortization of lease liabilities - lessee	—	—	—	—	—	—	—	—	—	(70)	(70)	—
Proceeds from PPP interest	—	—	—	—	—	—	—	—	—	8,404	8,404	8,694
Amortization of PPP receivables	—	—	—	—	—	—	—	—	—	(5,874)	(5,874)	(6,164)
Interest paid on capital debt	—	(5,607)	—	—	—	(562,628)	—	(568,235)	—	—	(568,235)	(578,066)
Payments for bond expenses	—	(1,347)	—	—	(340)	—	—	(1,687)	—	—	(1,687)	(3,557)
Proceeds from capital contributions	—	39,077	—	—	400	—	—	39,477	—	(39,077)	400	—
Interfund Transfers related to capital and related financing activities	(1,905,145)	277,691	196,607	48,238	752,371	636,443	(6,205)	—	—	—	—	—
Net cash provided by (used in) capital and related financing activities	(1,827,910)	284,749	54,783	29,640	756,607	73,815	(6,205)	(634,521)	—	(36,035)	(670,556)	(488,646)
Cash flows from investing activities:												
Purchases of investments	(4,818,006)	(3,156,669)	(770,127)	(520,960)	(4,126,086)	(1,162,234)	(414,501)	(14,968,583)	—	—	(14,968,583)	(14,251,111)
Sales and maturities of investments	4,758,005	2,865,116	705,039	492,087	3,917,573	1,089,554	414,407	14,241,781	—	—	14,241,781	13,316,898
Interest received	19,236	5,718	1,640	2,836	11,632	1,857	6,287	49,206	1	—	49,207	952
Net cash (used in) provided by investing activities	(40,765)	(285,835)	(63,448)	(26,037)	(196,881)	(70,823)	6,193	(677,596)	1	—	(677,595)	(933,261)
Net increase (decrease) in cash	(163,434)	(1,189)	(4,097)	(1,538)	(2,543)	2,992	(12)	(169,821)	(267)	—	(170,088)	95,490
Cash and restricted cash – beginning of year	367,696	9,101	7,414	7,900	18,528	54	35	410,728	909	—	411,637	316,147
Cash and restricted cash – end of year	$ 204,262	7,912	3,317	6,362	15,985	3,046	23	240,907	642	—	241,549	411,637
Reconciliation of operating income (loss) to net cash provided by (used in) operating activities:												
Operating income (loss)	$ 1,706,139	(330,620)	(68,649)	(18,885)	(29,495)	—	—	1,258,490	(162)	(5,701)	1,252,627	1,138,791
Adjustments to reconcile operating income (loss) to net cash provided by (used in) operating activities:												
Depreciation expense	—	330,517	68,649	13,054	—	—	—	412,220	—	—	412,220	410,099
Changes in assets and liabilities:												
Receivables	(13,201)	—	—	(180)	(265)	—	—	(13,646)	(105)	—	(13,751)	19,755
Inventory	(581)	—	—	—	—	—	—	(581)	—	—	(581)	(1,072)
Prepaid expenses	(2)	—	—	—	—	—	—	(2)	(1)	—	(3)	(211)
Accounts payable and accrued expenses	15,073	—	—	965	9	—	—	16,047	—	—	16,047	21,149
Unearned revenue	(4,008)	—	—	—	—	—	—	(4,008)	—	—	(4,008)	(39,749)
Hybrid instrument borrowing	—	—	—	—	—	—	—	—	—	—	—	118,829
Other liabilities	8	—	—	(95)	84	—	—	(3)	—	(1,602)	(1,605)	(1,091)
Other postemployment benefit liability	—	—	—	—	15,000	—	—	15,000	—	12,900	27,900	223,274
Net pension liability	—	—	—	—	—	—	—	—	—	57,783	57,783	(87,187)
Deferred outflows of resources related to pension	—	—	—	—	—	—	—	—	—	(6,775)	(6,775)	24,957
Deferred inflows of resources related to pension	—	—	—	—	—	—	—	—	—	(96,150)	(96,150)	8,115
Deferred outflows relating to other postemployment benefit	—	—	—	—	—	—	—	—	—	48,796	48,796	(110,290)
Deferred inflows relating to other postemployment benefit	—	—	—	—	—	—	—	—	—	(6,541)	(6,541)	(36,462)
Amortization of lease assets	—	—	—	—	—	—	—	—	—	71	71	—
Deferred inflows relating to PPP assets	—	—	—	—	—	—	—	—	—	33,254	33,254	90,847
Pollution remediation obligations	—	—	—	—	(102)	—	—	(102)	—	—	(102)	(428)
Net cash provided by (used in) operating activities	$ 1,703,428	(103)	—	(5,141)	(14,769)	—	—	1,683,415	(268)	36,035	1,719,182	1,779,326

(1) GASB Adjustment principally includes the noncash impact of GASB Statement No. 49, *Accounting and Financial Reporting for Pollution Remediation Obligations* , GASB Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments* , GASB Statement No. 68, *Accounting and Financial Reporting for Pensions—an amendment of GASB Statement No. 27* , GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions,* GASB Statement No. 87*, Leases* , GASB Statement No. 94, *Public-Private Partnerships and Availability Payment Arrangements.*

Schedule 6

NEW JERSEY TURNPIKE AUTHORITY
(A Component Unit of the State of New Jersey)

Schedule of Net Revenue Requirement

Years ended December 31, 2022 and 2021

(In thousands)

		2022	2021
Test 1:			
Total operating revenues - bond resolution	$	2,318,629	2,181,346
Build America Bonds subsidy		77,235	77,468
Federal, State, and insurance reimbursements		6,381	1,928
Less insurance recovery - maintenance reserve fund		(4,568)	(1,200)
Total investment income - bond resolution		12,213	1,016
Less earnings on construction investments		(6,772)	(1,046)
Fair market value adjustments		32,416	6,709
Total pledged revenues		2,435,534	2,266,221
Less revenue operating expenses - revenue fund		(612,490)	(588,374)
Net revenue available for debt service		1,823,044	1,677,847
Less net revenue requirements:			
Interest expense – debt service		(567,035)	(576,594)
Principal payment – debt service		(291,050)	(219,785)
Revenue transfer to maintenance reserve		(200,000)	(160,000)
Revenue transfer to special project reserve		(50,000)	(50,000)
Excess net revenues	$	714,959	671,468
Test 2:			
Total operating revenues - bond resolution	$	2,318,629	2,181,346
Build America Bonds subsidy		77,235	77,468
Federal, State, and insurance reimbursements		6,381	1,928
Less insurance recovery - maintenance reserve fund		(4,568)	(1,200)
Total investment income - bond resolution		12,213	1,016
Less earnings on construction investments		(6,772)	(1,046)
Fair market value adjustments		32,416	6,709
Total pledged revenues		2,435,534	2,266,221
Less revenue operating expenses - revenue fund		(612,490)	(588,374)
Net revenue available for debt service		1,823,044	1,677,847
Less 1.2 times aggregate debt service		(1,029,702)	(955,655)
Excess net revenues	$	793,342	722,192
Debt service coverage ratio		2.12	2.11

See accompanying independent auditors' report.

Schedule 7A

NEW JERSEY TURNPIKE AUTHORITY
(A Component Unit of the State of New Jersey)

Schedule of Investments

December 31, 2022

(In thousands)

	Interest rate	Maturity		Par value	Carrying value
Revenue:					
Commercial paper	4.78%	6/22/2023	$	49,500	48,340
Federal agency note	3.50-4.33	1/5/2023-3/21/2023		337,122	336,193
U.S. Treasury bill	2.00-4.05	1/5/2023-3/30/2023		44,265	43,995
				430,887	428,528
Construction:					
Certificate of deposit	4.81%-5.65%	5/2/2023-1/3/2025		220,000	219,454
Commercial paper	3.39-4.81	1/5/2023-4/24/2023		280,000	277,669
Federal agency note	3.85-4.62	1/12/2023-12/8/2023		345,000	342,948
State of New Jersey Cash Management Fund	4.11	1/3/2023		2,815	2,815
Cash Reserve	1.80	1/1/2023		1,632	1,632
				849,447	844,518
Maintenance reserve:					
Certificate of deposit	5.09%-5.46%	12/5/2023-12/11/2023		25,000	24,964
Commercial paper	5.05-5.06	6/15/2023-6/30/2023		26,000	25,367
Federal agency note	3.80-4.67	1/5/2023-7/31/2023		25,000	24,459
U.S. Treasury bill	3.87-4.46	1/19/2023-11/30/2023		100,000	96,663
				176,000	171,453
Special project reserve:					
Commercial paper	4.20%	2/17/2023		7,000	6,959
Federal agency note	3.50-4.68	1/5/2023-12/1/2023		73,000	70,963
U.S. Treasury bill	4.30	4/20/2023		5,000	4,935
U.S. Treasury note	.13-2.75	7/15/2023-12/15/2023		51,000	49,450
				136,000	132,307
General reserve:					
Certificate of deposit	2.48%-5.39%	3/31/2023-12/27/2023		302,000	300,774
Commercial paper	3.10-4.90	1/30/2023-9/22/2023		391,177	386,159
Federal agency note	3.50-4.60	1/5/2023-9/29/2023		135,000	133,356
U.S. Treasury note	.25	9/30/2023		78,000	75,457
				906,177	895,746
Debt service:					
Commercial paper	1.78%-4.13%	1/3/2023		236,496	236,382
U.S. Treasury bill	3.48-3.80	1/3/2023		334,435	334,407
				570,931	570,789
Debt reserve:					
Certificate of deposit	0.30%-3.97%	1/19/2023-1/14/2025		209,480	204,765
Federal agency note	.46-.83	8/19/2024-8/10/2026		388,638	348,873
U.S. Treasury note	.25	3/15/2024		914	867
				599,032	554,505
Total			$	3,668,474	3,597,846

Above is the detail of investments listed on the Schedule of Net Position (Schedule 3) for Total Bond Resolution.

See accompanying independent auditors’ report.

NEW JERSEY TURNPIKE AUTHORITY
(A Component Unit of the State of New Jersey)

Schedule of Investments

December 31, 2021

(In thousands)

	Interest rate	Maturity	Par value	Carrying value
Revenue:				
Commercial paper	0.05%-0.08%	1/20/2022-3/22/2022	$ 246,037	246,022
Federal agency note	0.01-0.04	1/4/2022-3/31/2022	51,510	51,509
U.S. Treasury bill	0.02-0.05	1/6/2022-3/24/2022	69,955	69,949
			367,502	367,480
Construction:				
Certificate of deposit	0.18%-0.24%	1/3/2022-6/28/2022	278,200	278,618
Commercial paper	0.06-0.25	1/13/2022-8/15/2022	220,300	220,150
U.S. Treasury bill	0.03	1/6/2022	46,000	46,000
State of New Jersey Cash Management Fund	0.00	1/3/2022	7,142	7,142
			551,642	551,910
Maintenance reserve:				
Certificate of deposit	0.31%-0.37%	8/18/2022-10/13/2022	27,000	27,008
Commercial paper	0.25-0.34	7/21/2022-9/12/2022	27,000	26,949
Federal agency note	0.07	8/8/2022	6,900	6,897
U.S. Treasury bill	0.05-0.06	3/24/2022-6/2/2022	45,000	44,992
			105,900	105,846
Special project reserve:				
Certificate of deposit	0.27%	8/28/2022	27,500	27,506
Commercial paper	0.07-0.29	1/4/2022-7/14/2022	41,500	41,474
Federal agency note	0.16	9/15/2022-12/15/2022	30,000	29,960
U.S. Treasury bill	0.04-0.18	3/17/2022-12/1/2022	6,000	5,993
			105,000	104,933
General reserve:				
Certificate of deposit	0.26%-0.31%	5/23/2022-9/30/2022	80,000	80,013
Commercial paper	0.08-0.25	1/31/2022-6/30/2022	472,695	472,437
U.S. Treasury bill	0.01-0.03	1/18/2022-2/15/2022	136,637	136,636
			689,332	689,086
Debt service:				
Commercial paper	0.05%-0.10%	1/3/2022	88,565	88,565
Federal agency note	0.01-0.06	1/3/2022	91,585	91,585
U.S. Treasury bill	0.01-0.02	1/4/2022	314,201	314,200
			494,351	494,350
Debt reserve:				
Certificate of deposit	0.30%-3.29%	1/13/2022-4/9/2024	161,188	162,150
Federal agency note	0.13-2.38	1/13/2022-8/10/2026	437,803	432,278
			598,991	594,428
Total			$ 2,912,718	2,908,033

Above is the detail of investments listed on the Schedule of Net Position (Schedule 3) for Total Bond Resolution.

See accompanying independent auditors' report.

Schedule 8

NEW JERSEY TURNPIKE AUTHORITY
(A Component Unit of the State of New Jersey)

Schedule of Depositories

December 31, 2022 and 2021

(In thousands)

		2022			2021	
	Book balance	Bank balance	Market value of securities pledged to secure deposits	Book balance	Bank balance	Market value of securities pledged to secure deposits
JP Morgan Chase:						
Revenue	$ 159,188	142,301		269,808	257,231	
Construction	613	637		2,528	2,530	
Maintenance reserve	3,317	3,318		7,414	7,414	
General Reserve	2,414	2,414		1,302	1,302	
	165,532	148,670	173,554	281,052	268,477	264,795
Bank of America:						
Revenue	33,649	34,680		69,447	70,260	
	33,649	34,680	45,439	69,447	70,260	71,751
Wells Fargo:						
Revenue	10,236	8,729		27,413	26,460	
Construction	6,744	6,398		6,557	6,558	
Special project reserve	6,362	13,571		7,900	7,993	
General reserve	13,571	6,744		17,226	17,226	
	36,913	35,442	45,370	59,096	58,237	58,206
Bank of New York Mellon:						
Revenue	521	521		510	539	
	521	521	2,146	510	539	736
TD Bank, NA:						
Revenue	255	482		253	1,130	
	255	482	662	253	1,130	1,780
Total Subject to Pledged Securities	236,870	219,795	$ 267,171	410,358	398,643	$ 397,268
Bank of New York Mellon – Trust:						
Construction	555	539		16	16	
General reserve	—	—		—	—	
Debt service	3,046	2,995		54	26	
	3,601	3,534 (1)		70	42 (1)	
US Bank:						
Debt Reserve	23	23		35	35	
	23	23 (1)		35	35 (1)	
Toll collection and other imprest funds:						
Revenue	413	—		265	—	
	413 (2)	—		265 (2)	—	
Total subject to bond resolution	240,907	223,352		410,728	398,720	
Investors Bank:						
Garden State Arts Center Foundation	456	705		724	890	
	456	705 (3)		724	890 (3)	
Northfield Bank:						
Garden State Arts Center Foundation	186	186		185	185	
	186	186 (3)		185	185 (3)	
	$ 241,549	224,243		411,637	399,795	

(1) Funds held by Trustee are not subject to collateral requirements, under the Bond Resolution.
(2) Cash on hand, not at bank.
(3) Garden State Arts Foundation bank account balances are not subject to the collateral posting requirements of the Bond Resolution.

See accompanying independent auditors' report.

NEW JERSEY TURNPIKE AUTHORITY
(A Component Unit of the State of New Jersey)

Schedule of Cost of Investment in Facilities

December 31, 2022
(With summarized comparative financial information for the year ended December 31, 2021)

(In thousands)

	Completed construction funds	$7 Billion Capital Improvement Program	2019 Capital Improvement Plan	2021-2025 Capital Improvement Program	Revenue Funded Construction (1)	Maintenance reserve	Special project reserve	GASB Adjustments (2)	2022 Total	2021 (as restated) Total
Land	$ 660,555	165,078	—	—	8,128	—	—	—	833,761	833,761
Construction-In-Progress	—	151,446	299,352	316,427	63,035	14,745	31,142	—	876,147	590,538
Roadways	3,185,141	3,012,787	88,470	8,736	118,966	557,568	4,387	—	6,976,055	6,767,602
Bridges	1,910,858	3,750,098	50,447	11,000	71,479	596,978	269	—	6,391,129	6,282,452
Buildings	375,090	790,127	612	—	196,003	1,162	43,409	—	1,406,403	1,358,875
Equipment	542,212	914,209	16,460	8,587	151,370	36,428	176,301	—	1,845,567	1,805,484
Cost of investment in facilities	6,673,856	8,783,745	455,341	344,750	608,981	1,206,881	255,508	—	18,329,062	17,638,712
Accumulated depreciation	(3,362,322)	(1,614,375)	(4,853)	(51)	(159,304)	(395,607)	(117,772)	—	(5,654,284)	(5,244,590)
Capital assets, net of accumulated depreciation	3,311,534	7,169,370	450,488	344,699	449,677	811,274	137,736	—	12,674,778	12,394,122
Right-of-use lease assets, net	—	—	—	—	—	—	—	526	526	—
Total capital assets, net	$ 3,311,534	7,169,370	450,488	344,699	449,677	811,274	137,736	526	12,675,304	12,394,122

Completed construction funds:	
Original turnpike extensions and additional lanes	$ 54,710
Revenues invested in facilities	34,829
1966 Turnpike Improvement	127,553
1971 Turnpike Improvement	14,615
1973 Improvement and Funding Program	23,616
1985-1990 Widening Project	269,986
Business Plan for the 90's	705,561
Former NJHA Construction	458,817
2000 Construction Fund	1,082,052
2003 Construction Fund	14,765
2004 Construction Fund	353,379
2005 Construction Fund	62,464
2008/2009 Bond anticipation note	109,187
	$ 3,311,534

(1) Revenue Funded Construction represents the revenue funded account in the Construction Fund.

(2) GASB Adjustment principally includes the noncash impact of GASB Statement No. 49, *Accounting and Financial Reporting for Pollution Remediation Obligations* , GASB Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments* , GASB Sta *Accounting and Financial Reporting for Pensions—an amendment of GASB Statement No. 27* , GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions,* GASB Statement No. 87*, Leases* , GASB Statement No. *Partnerships and Availability Payment Arrangements.*

See accompanying independent auditors' report.

Schedule 10A

NEW JERSEY TURNPIKE AUTHORITY

(A Component Unit of the State of New Jersey)

Schedule of Bond Indebtedness

December 31, 2022

(In thousands)

	Amount outstanding December 31, 2021	Refunded or acquired and canceled in current year	Mandatory redemption/ sinking fund installments	Debt issuance	Amortization of premiums and discounts	Amount outstanding December 31, 2022
Turnpike revenue bonds:						
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	32,655	—	—	—	—	32,655
Series 2013A	105,405	(100,000)	(340)	—	—	5,065
Series 2013F	11,780	—	—	—	—	11,780
Series 2014A	889,000	—	—	—	—	889,000
Series 2014C	106,715	—	—	—	—	106,715
Series 2015A	26,225	—	(6,575)	—	—	19,650
Series 2015C	10,625	—	(3,300)	—	—	7,325
Series 2015D	10,600	—	(3,275)	—	—	7,325
Series 2015E	750,000	—	—	—	—	750,000
Series 2015F	72,350	—	(72,350)	—	—	—
Series 2015G	25,000	—	(8,040)	—	—	16,960
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	—	(16,075)	—	—	33,925
Series 2017A	600,000	—	—	—	—	600,000
Series 2017B	646,765	—	—	—	—	646,765
Series 2017C	218,950	(115,125)	(32,775)	—	—	71,050
Series 2017D	179,375	—	(16,075)	—	—	163,300
Series 2017E	359,680	—	—	—	—	359,680
Series 2017F	113,765	—	(8,995)	—	—	104,770
Series 2017G	726,640	—	—	—	—	726,640
Series 2019A	449,110	—	—	—	—	449,110
Series 2020A	12,125	—	(3,750)	—	—	8,375
Series 2020B	24,935	—	—	—	—	24,935
Series 2020C	163,230	—	—	—	—	163,230
Series 2020D	149,440	—	—	—	—	149,440
Series 2021A	502,500	—	—	—	—	502,500
Series 2021B	995,235	—	—	—	—	995,235
Series 2022A	—	—	—	100,000	—	100,000
Series 2022B	—	—	—	700,000	—	700,000
Series 2022C	—	—	—	112,385	—	112,385
	11,310,610	(215,125)	(219,785)	912,385	—	11,788,085
Premiums and discounts, net	503,630	—	—	41,649	(50,858)	494,421
	$ 11,814,240	(215,125)	(219,785)	954,034	(50,858)	12,282,506

See accompanying independent auditors' report.

Schedule 10B

NEW JERSEY TURNPIKE AUTHORITY
(A Component Unit of the State of New Jersey)

Schedule of Bond Indebtedness

December 31, 2021

(In thousands)

		Amount outstanding December 31, 2020	Refunded or acquired and canceled in current year	Mandatory redemption/ sinking fund installments	Debt issuance	Amortization of premiums and discounts	Amount outstanding December 31, 2021
Turnpike revenue bonds:							
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	(507,790)	—	—	—	32,655
Series 2013A		295,520	(190,115)	—	—	—	105,405
Series 2013F		90,880	(79,100)	—	—	—	11,780
Series 2014A		1,000,000	(111,000)	—	—	—	889,000
Series 2014C		128,555	(21,840)	—	—	—	106,715
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		218,950	—	—	—	—	218,950
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 2020D		149,440	—	—	—	—	149,440
Series 2021A		—	—	—	502,500	—	502,500
Series 2021B		—	—	—	995,235	—	995,235
		10,795,590	(909,845)	(72,870)	1,497,735	—	11,310,610
Premiums and discounts, net		518,865	—	—	35,757	(50,992)	503,630
	$	11,314,455	(909,845)	(72,870)	1,533,492	(50,992)	11,814,240

See accompanying independent auditors' report.

Schedule 10C

NEW JERSEY TURNPIKE AUTHORITY
(A Component Unit of the State of New Jersey)

Schedule of Refunded Bond and Note Indebtedness

December 31, 2022
(With summarized comparative financial information as of December 31, 2021)

(In thousands)

Note:
As of December 31, 2021 and 2020, refunded bond and note indebtedness which is still outstanding in fully collateralized escrow accounts is as follows:

Refunded series		Refunded amount	Matured/ redeemed	2022 outstanding	2021 outstanding
Turnpike revenue bonds:					
Series 2012A Turnpike Revenue Bonds, redemption July 1, 2022	$	126,255	(126,255)	—	126,255
Series 2012B Turnpike Revenue Bonds, redemption January 1, 2021 through January 1, 2023		549,860	(74,675)	475,185	507,790
Series 2013A Turnpike Revenue Bonds, redemption January 1, 2020 through January 1, 2023		1,268,785	(1,235,060)	33,725	1,261,540
Series 2013F Turnpike Revenue Bonds, redemption January 1, 2023		79,100	—	79,100	79,100
Series 2014A Turnpike Revenue Bonds, redemption July 1, 2024		111,000	—	111,000	111,000
Series 2014C Turnpike Revenue Bonds, redemption January 1, 2021 through January 1, 2022		42,930	(42,930)	—	21,840
Series 2017C-6 Turnpike Revenue Bonds, redemption January 1, 2021		115,125	(115,125)	—	—
Total	$	2,293,055	(1,594,045)	699,010	2,107,525

See accompanying independent auditors' report.

Schedule 11A

NEW JERSEY TURNPIKE AUTHORITY
(A Component Unit of the State of New Jersey)

NEW JERSEY TURNPIKE

Schedule of Toll Revenue

Years ended December 31, 2022 and 2021

(Unaudited)

(In thousands)

		2022		2021	
Class	**Description**	**Toll revenue**	**Number of vehicles**	**Toll revenue**	**Number of vehicles**
1	Passenger car, motorcycle, taxi or hearse, light truck	$ 1,108,551	215,522	1,032,969	205,819
2	Vehicles having two axles other than type described under Class 1	104,015	10,080	101,177	10,205
3	Vehicle (vehicles), single or in combination, having three axles	50,832	4,374	48,264	4,250
4	Vehicle (vehicles), single or in combination, having four axles	52,293	3,053	50,863	3,031
5	Vehicle (vehicles), single or in combination, having five axles	371,071	17,479	334,870	16,268
6	Vehicle (vehicles), single or in combination, having six or more axles	13,442	513	12,896	500
7	Buses having two axles	1,815	412	1,481	370
8	Buses having three axles	10,956	1,239	8,804	1,066
	Nonrevenue vehicles	—	783	—	705
		1,712,975	253,455	1,591,324	242,214
	Nonrevenue vehicles	—	(783)	—	(705)
	Toll adjustments and discounts	(7,118)	—	(5,734)	—
	Net uncollected tolls	(108,217)	—	(92,009)	—
		$ 1,597,640	252,672	1,493,581	241,509

See accompanying independent auditors’ report.

Schedule 11B

NEW JERSEY TURNPIKE AUTHORITY
(A Component Unit of the State of New Jersey)

GARDEN STATE PARKWAY

Schedule of Toll Revenue

Years ended December 31, 2022 and 2021

(Unaudited)

(In thousands)

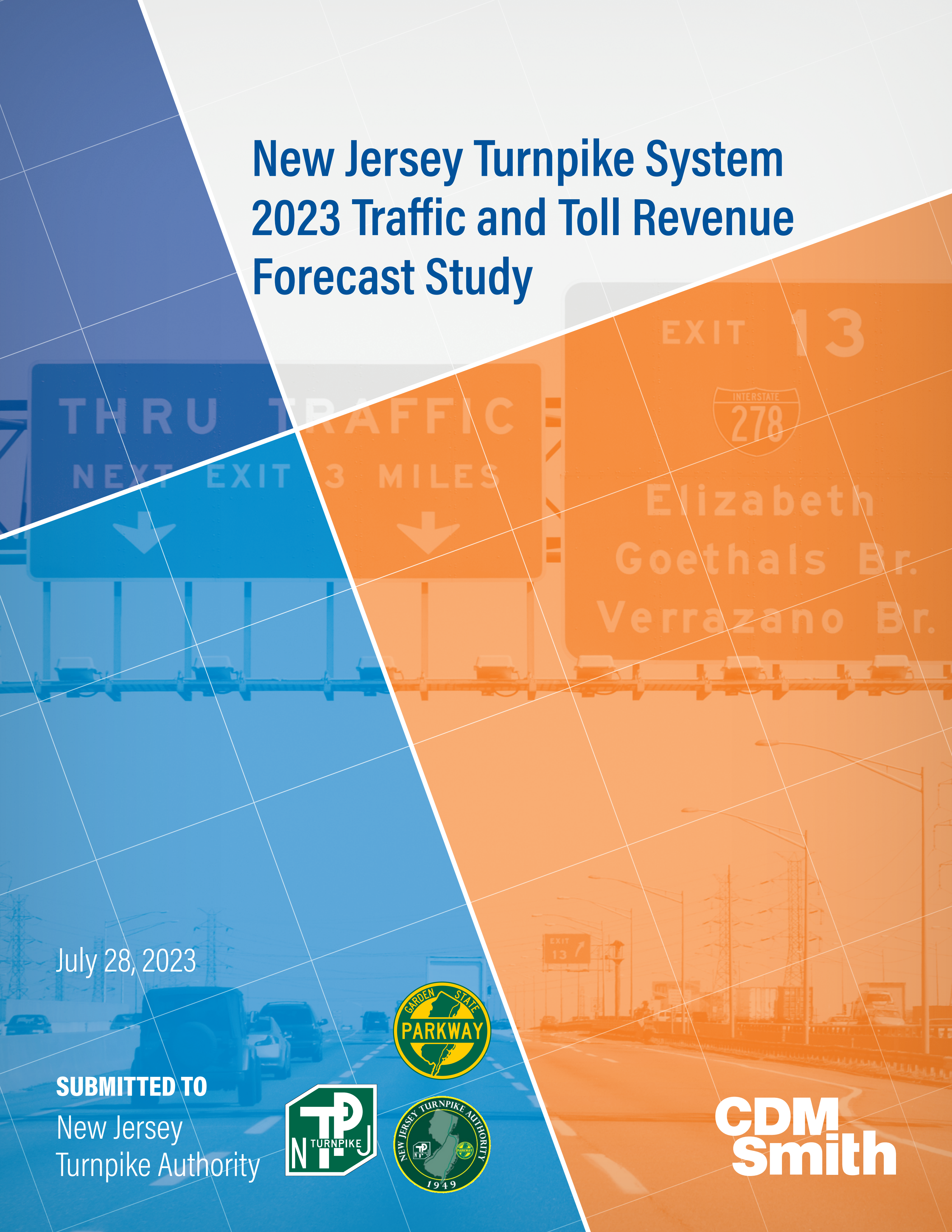
			2022		2021	
Class	**Description**		**Toll revenue**	**Number of vehicles**	**Toll revenue**	**Number of vehicles**
1	Passenger car, motorcycle, taxi or hearse, light truck	$	524,159	354,608	496,465	347,005
2	Vehicles having two axles other than type described under Class 1		5,841	2,038	5,338	1,959
3	Vehicle (vehicles), single or in combination, having three axles		5,064	1,235	5,546	1,337
4	Vehicle (vehicles), single or in combination, having four axles		5,254	930	5,092	926
5	Vehicle (vehicles), single or in combination, having five axles		4,033	658	3,805	633
6	Vehicle (vehicles), single or in combination, having six or more axles		153	21	135	19
7	Buses having two axles		1,036	640	785	514
8	Buses having three axles		1,696	629	1,476	569
	Nonrevenue vehicles		—	1,710	—	1,583
			547,236	362,469	518,642	354,545
	Nonrevenue vehicles		—	(1,710)	—	(1,583)
	Toll adjustments and discounts		(484)	—	(466)	—
	Net uncollected tolls		(18,365)	—	(12,932)	—
		$	528,387	360,759	505,244	352,962

See accompanying independent auditors' report.

APPENDIX B

2023 TRAFFIC AND TOLL REVENUE FORECAST STUDY

New Jersey Turnpike System 2023 Traffic and Toll Revenue Forecast Study



July 28, 2023

SUBMITTED TO

New Jersey Turnpike Authority

CDM Smith

Table of Contents

List of Figures

List of Tables

Chapter 1

Introduction

This study presents the traffic and toll revenue forecasts from 2023 through 2033 developed by CDM Smith for the New Jersey Turnpike (Turnpike), the Garden State Parkway (Parkway), and the Turnpike and Parkway combined (Total System). This investment grade study was undertaken at the request of the New Jersey Turnpike Authority (NJTA) for use in future bond issuances.

CDM Smith last completed a detailed investment grade traffic and toll revenue study for the NJTA in September 2018 (2018 Forecast Study). Since then, CDM Smith has provided updated forecasts to NJTA in May 2020 (2020 Toll Hearing Report), October 2020 (2020 Draw Down Letter), and July 22 (2022 Draw Down Letter). Additionally, CDM Smith developed two informal forecast updates in June and September 2021 (2021 Forecast Updates), which were not accompanied by a full Draw Down Letter. The purpose of these draw down letters and updated forecasts is to update actual traffic and revenue experience since the last study and to adjust short-term (two- to five-year) forecasts based on recent trends. Detailed economic analyses are not conducted as part of a draw down letter and therefore, longer term forecasts are not adjusted from those originally developed as part of the prior investment grade study. Notably, because the COVID-19 pandemic occurred after the completion of the 2018 Forecast Study, the subsequent draw down letters and updated forecasts accounted for the significant effects of COVID-19 by applying estimated impacts onto a baseline forecast that did not account for the pandemic. This 2023 forecast now considers the long-term effects of the pandemic, such as increased prevalence of telecommuting and freight traffic, within the baseline forecast. These effects are discussed in Chapter 5.

This current investment grade study presents a new ten-year forecast of traffic and toll revenue for the Turnpike and Parkway. The traffic and revenue forecasts are based on a detailed analysis of the past relationship between actual Turnpike and Parkway transactions and actual socio-economic data. The development of the new forecasts relied on the most currently available socioeconomic forecasts, historic transaction and toll revenue trends through May 2023, and NJTA's most recent assumptions regarding future toll schedules, discount programs, and capital improvements. While no discount program changes are planned or accounted for in the forecast, NJTA is assumed to continue implementing annual 3% toll rate indexing in January of each year of the forecast period. In addition, the estimated E-ZPass market share was developed for the forecast period based on historical trends and on future toll schedule assumptions. Meetings with local Metropolitan Planning Organizations (MPOs) were conducted to supplement the analysis of the potential growth in traffic and toll revenue on the Turnpike and Parkway. Lastly, CDM Smith has included estimated short-term traffic and revenue impacts that would be consistent with a mild recession beginning later this year, consistent with the Federal Reserve's forecast assumption.

1.1 Report Structure

This report is comprised of five chapters, as follows.

Chapter 1 (Introduction) introduces the study, outlines the report structure, and presents the basic study methodology. This paragraph is formatted in the “LFT Body” style, which serves as the basic formatting for standard narrative text.

Chapter 2 (Current Turnpike System Characteristics) introduces the NJTA Turnpike System and provides information on current Turnpike and Parkway characteristics, including per-mile toll rates and toll discount programs, current E-ZPass market shares, and vehicle class compositions on the two facilities. Also included are mainline traffic volumes and recent monthly and daily variations at select mainline locations.

Chapter 3 (Historical Traffic and Toll Revenue Trends) reviews annual and monthly transaction and toll revenue trends on the Turnpike and Parkway. Data are provided for passenger cars and commercial vehicles on the Turnpike and total vehicles on the Parkway. Information is provided on historical changes in the toll schedule and discount programs. Also included are historical E-ZPass market share trends and trends in vehicle composition.

Chapter 4 (Corridor Growth Analysis) summarizes the methodology that was employed to estimate future growth in toll transactions on the Turnpike and Parkway. This includes a description of the econometric model that was utilized as well as the meetings with local Metropolitan Planning Organizations (MPOs). A socioeconomic analysis was conducted to identify explanatory factors that may influence growth in future toll transactions. A discussion of the factors, including population, employment, unemployment, retail sales, and gross regional product trends and forecasts is provided. The ultimate product of the corridor growth analysis is a set of estimated annual normal growth rates for Turnpike passenger cars and commercial vehicles and Parkway total vehicles. These estimated growth rates are presented along with a discussion of the explanatory factors.

Chapter 5 (Estimated Annual Toll Transactions and Gross Toll Revenue) presents a summary of the planned roadway improvement program on the Turnpike, the Parkway, and other roads in the study corridor. Estimates of future E-ZPass market shares are described. Short term transaction and revenue impacts applied to normal growth forecasts are presented. Lastly, estimated annual toll transactions and gross toll revenue are provided from 2023 through 2033. The annual estimates are provided for Turnpike passenger cars and commercial vehicles and for total Parkway vehicles.

Chapter 2

Current Turnpike System Characteristics

This chapter describes the two toll facilities that comprise the NJTA System, the Turnpike and Parkway, and presents current characteristics of the two facilities. The characteristics include the current toll collection system, toll rates, and accepted methods of payment. The proportion of 2022 toll transactions and toll revenue by each facility is provided. Other characteristics include the current E-ZPass market share and the vehicle class composition. Average daily mainline traffic volumes are presented for calendar year 2022 along with a presentation of monthly and daily traffic variations at select mainline locations. It should be noted that gross toll revenue is defined in this report as toll revenue including all toll adjustments and discounts, but not accounting for maintenance and operating costs.

2.1 Facility Descriptions

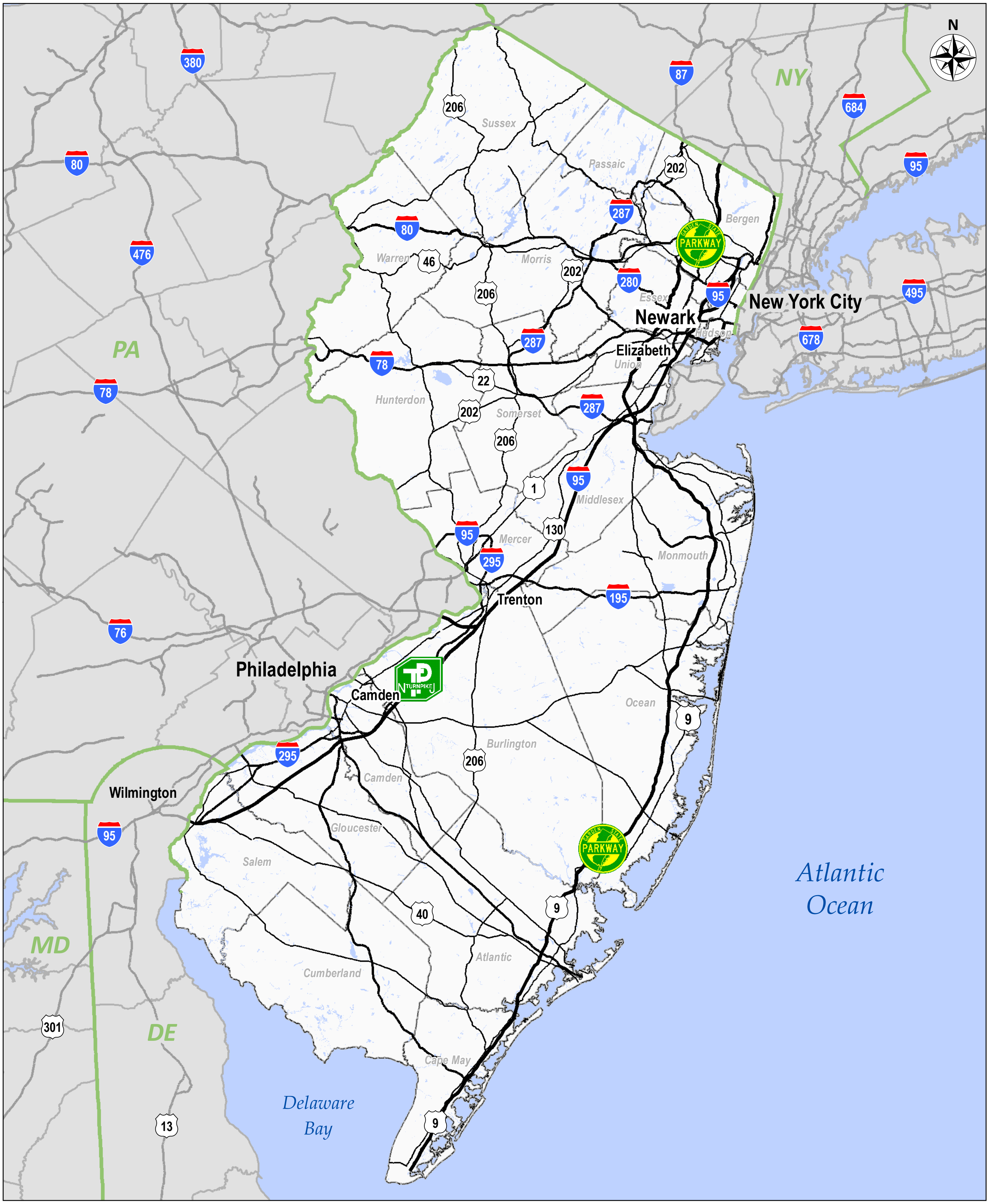
The NJTA toll road facilities are comprised of the New Jersey Turnpike and the Garden State Parkway. **Figure 2-1** shows the location of these two toll roads. Interchange locations in northern and southern New Jersey are shown in **Figures 2-2** and **2-3**, respectively.

2.1.1 The New Jersey Turnpike

The Turnpike consists of a 122-mile mainline and two extensions, the 8.2-mile Newark Bay-Hudson County Extension (which crosses Newark Bay and connects the cities of Newark with Bayonne and Jersey City) and the 5.7-mile Pearl Harbor Memorial Turnpike Extension (which connects the Turnpike to the Pennsylvania Turnpike via the Delaware River Toll Bridge over the Delaware River). The Turnpike mainline is a principal north-south roadway in New Jersey linking major economic centers of the east coast, including Boston, New York City, Philadelphia, and Washington, D.C. Within New Jersey, the Turnpike provides access to a major seaport in Newark and Elizabeth and to a major airport (Newark International Airport).

Interchanges on the Turnpike are numbered sequentially from the southern terminus to the northern, ranging from Interchange 1 to 19W on the western alignment and 18E on the eastern alignment. At its southern terminus the Turnpike connects, via a short section of US Route 40, with the Delaware Memorial Bridge, the only crossing between New Jersey and Delaware. At its northern terminus, the Turnpike feeds into the George Washington Bridge, one of the most heavily traveled bridges in the world. The Turnpike carries the I-95 designation from its connection with the Pennsylvania Turnpike at the Delaware River Toll Bridge through the length of the Pearl Harbor Memorial Turnpike Extension and on the mainline from Interchange 6 to its northern terminus.

The Turnpike currently provides two travel lanes per direction between Interchange 1 (Delaware Memorial Bridge) to Interchange 4 (Camden-Philadelphia) and three travel lanes per direction between Interchange 4 to Interchange 6 (Pennsylvania Turnpike). Between Interchange 6 to just north of Interchange 14 (Newark), the Turnpike has an inner roadway and an outer roadway in each direction (four separate roads). Under normal operations, the outer roadway permits truck,



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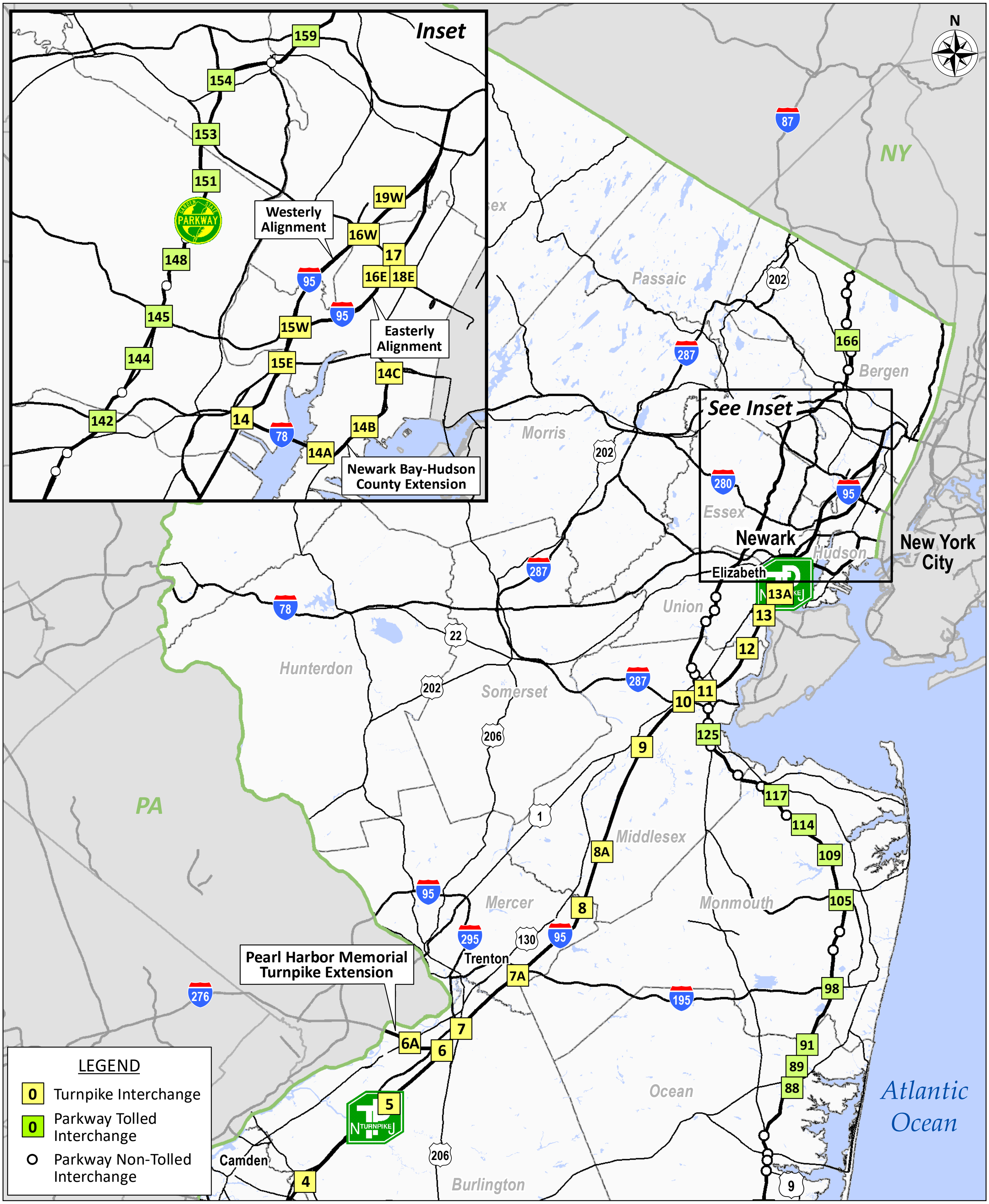
CDM Smith

NJTA TOLL ROAD FACILITIES

FIGURE 2-1



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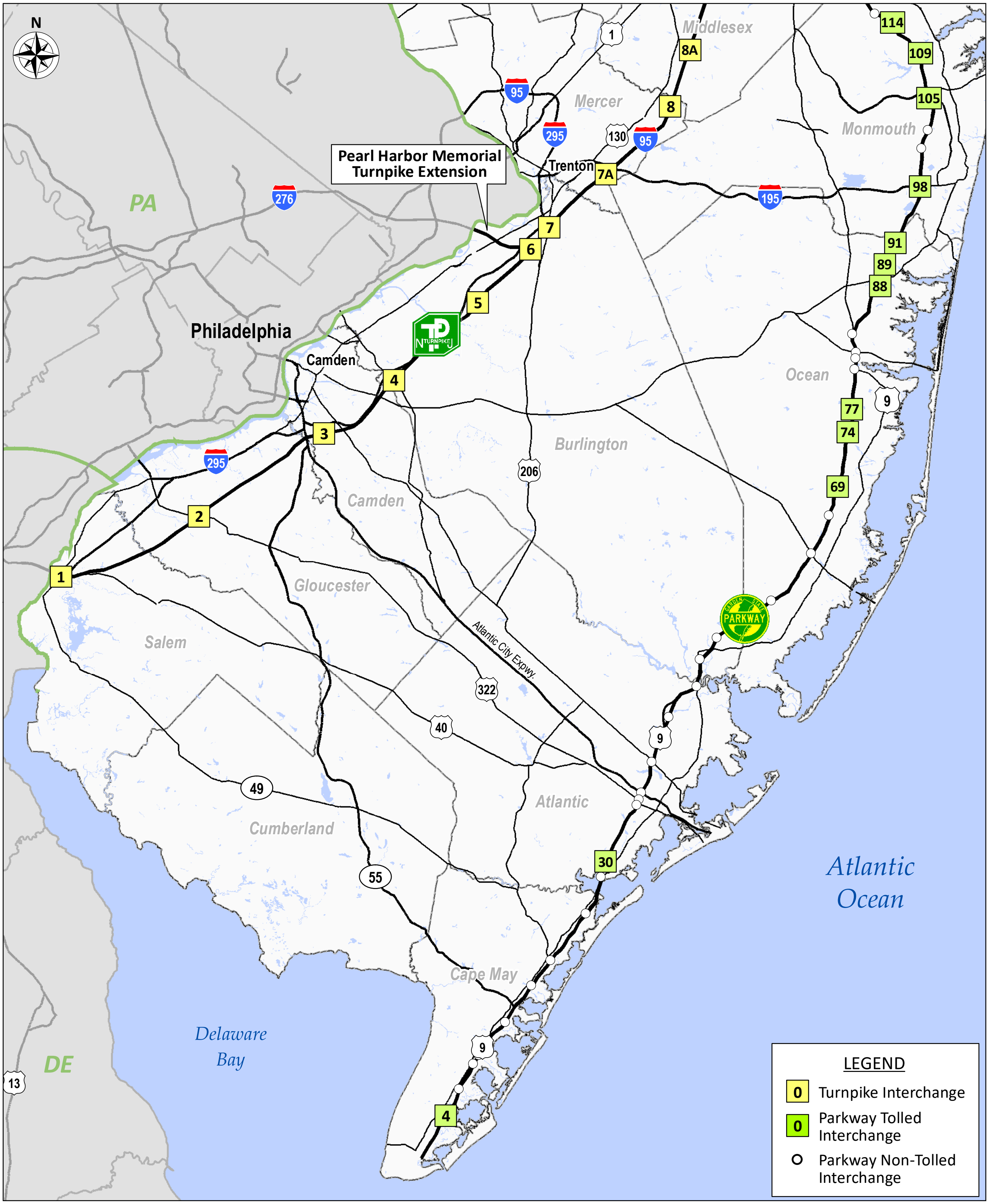
CDM Smith

DETAIL MAP OF NORTHERN NEW JERSEY

FIGURE 2-2



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DETAIL MAP OF SOUTHERN NEW JERSEY

FIGURE 2-3

bus, and passenger car traffic, while the inner roadway permits only passenger car traffic. This system of inner and outer roadways is called the “dual/dual” roadway. Between Interchanges 6 and 14 there are six lanes per direction—three outer lanes and three inner lanes.

North of Interchange 14, the inner and outer roadways merge together and then split into two alignments, a westerly alignment west of the Hackensack River and an easterly alignment on the east side of the river. Each alignment serves both northbound and southbound traffic. The westerly alignment provides three travel lanes per direction north to Interchange 16W (NJ Route 30), and two travel lanes per direction between Interchange 16W and the merge with the easterly alignment. The easterly alignment provides three travel lanes per direction.

The Newark Bay-Hudson County Extension is a four-lane, 8.2-mile roadway that extends from Interchange 14 and provides access to Bayonne, Jersey City, and the Holland Tunnel via Interchanges 14A, 14B, and 14C, respectively. This extension is designated as I-78 on its entire length. The Pearl Harbor Memorial Turnpike Extension is a six-lane, 5.7-mile roadway that provides a connection between the Turnpike mainline and the Pennsylvania Turnpike (I-276/I-76/I-95). There is only one Interchange on this extension (Interchange 6A).

2.1.2 The Garden State Parkway

The Parkway is a 173-mile roadway that follows the New Jersey coastline from its southern terminus in Cape May northward to Woodbridge where the Parkway crosses the Turnpike and continues in a northerly direction further inland, passing through Newark and Clifton before reaching the New Jersey/New York state line. The Parkway connects to the New State Thruway (Interstate 87) just north of the state line. Interchanges on the Parkway are numbered by milepost from south to north beginning with Interchange 0 in Cape May and ending with Interchange 171 in northern New Jersey. The Parkway provides access to the Atlantic City Expressway; Interstate Routes 195, 287, 95, 78, 280, and 80; the New Jersey Turnpike; and various U.S. and state highways.

Both commuters and tourists are served by the Parkway. Commuter and business traffic is high in the northern sections of the Parkway, as it passes through Bergen, Passaic, Essex, Union, and Middlesex counties near the New Jersey cities of New Brunswick, Newark, Jersey City, and New York City, NY. The proportion of tourist and recreational trips increases on the southern Parkway through Monmouth, Ocean, Atlantic, and Cape May counties. While commercial traffic does occur on the Parkway, heavy commercial vehicles (registered as 10,000 lbs. or more, or those having six tires or three-or-more axles) are prohibited from using the Parkway north of Interchange 105 in Monmouth County.

Two travel lanes per direction are provided on the Parkway from Interchange 0 (Cape May) to Interchange 6 in the northbound travel lanes and to Interchange 9 in the southbound lanes. The Parkway then has three lanes per direction until just north of Interchange 11. The Parkway maintains two lanes per direction until Interchange 36 (Fire Road in Atlantic County). Three travel lanes per direction are provided northward to Interchange 91 (Route 549 in Monmouth County), four lanes per direction through Interchange 102 (Neptune in Monmouth County), and five lanes per direction through Interchange 117 (Route 35 in Monmouth County). Six travel lanes per direction are provided between Interchanges 117 and 127 (I-287 in Union County), and five lanes per direction are provided northward through Interchange 140 in Union County. Four travel lanes per direction exist northward to Interchange 145 (I-280 in Essex County), six lanes per direction continue northward to Interchange 168 in Bergen County, and four lanes per direction continue to the New York border.

2.2 Toll Collection

This section presents information on the current toll collection system, the toll schedule and accepted methods of payment, and discount programs.

2.2.1 Toll Collection Systems

There are two toll collection systems on the Turnpike System: a ticket system on the Turnpike (with the exception of three barrier toll plazas described below) and an open-barrier system on the Parkway.

On the Turnpike, motorists pick up a ticket upon entering the Turnpike and pay for the trip upon exiting the Turnpike. The toll rate is based on the trip entrance and exit (the trip distance), the vehicle class, the time of day, and the method of payment. There are no toll-free movements on the ticket system. There are three barrier plazas that are part of the Turnpike, but not part of the ticket system. These are located at Interchanges 6A (Florence), 17 (Lincoln Tunnel, Secaucus), and 19W (American Dream Sports Complex). At these three locations, motorists pay a fixed toll for passing through the toll plaza. Tolls are collected in the northbound direction at Interchange 17 and in the eastbound direction at Interchange 6A. At Interchange 19W, vehicles exiting in the southbound direction or entering in the northbound direction. There is no northbound exit, and vehicles entering southbound do no pay a toll but immediately enter the ticket system at its northern terminus. There are 27 interchanges on the Turnpike’s ticket system in addition to these three barrier plazas.

On the Parkway, motorists pay a fixed toll at mainline and ramp barrier toll plazas. The toll is based on the type of barrier (mainline or ramp), vehicle class, the time of day, and method of payment. One trip may pass through multiple toll barriers. There are 11 mainline barrier locations, and 23 interchanges that have ramp barrier toll plazas. Out of the 11 mainline barriers, only one, Toms River at milepost 85, support toll collection in both the northbound and southbound directions. The ten other mainline barriers were all gradually converted from two-way to one-way toll collection (either northbound or southbound) to create greater efficiencies in the toll collection system and reduce motorist delay.

2.2.2. Toll Schedule and Methods of Payment

Both the Turnpike and the Parkway accept cash and E-ZPass for toll payments. Peak periods are defined by NJTA as 7:00 to 9:00 AM and 4:30 to 6:30 PM Monday through Friday, and all-day Saturday and Sunday for both toll road facilities. Both toll roads have a separate toll schedule for the following vehicle classes:

- 2-axle passenger cars;
- 2-axle trucks;

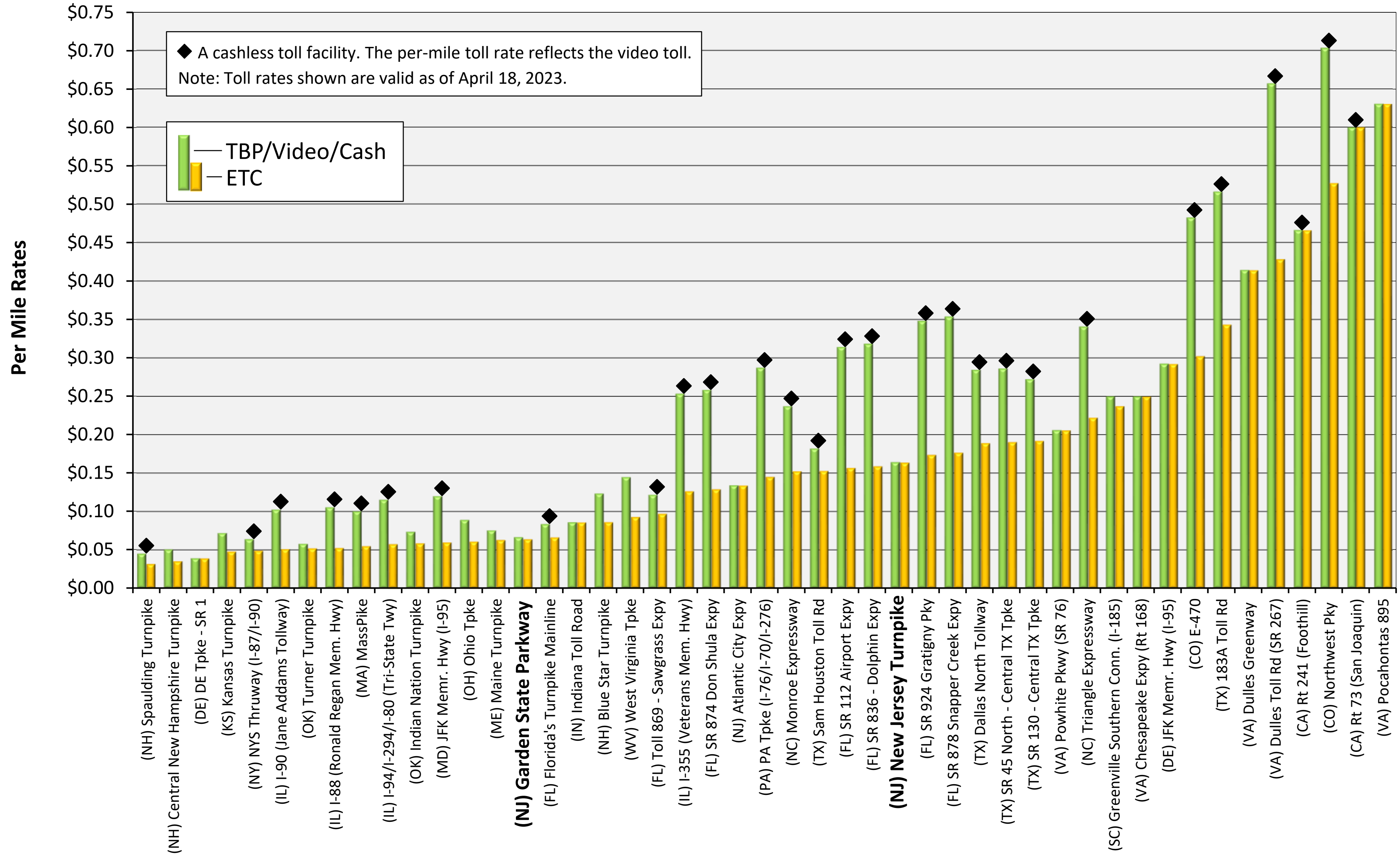
- 3-axle trucks;
- 4-axle trucks;
- 5-axle trucks;
- 6-or-more axle trucks;
- 2-axle buses; and
- 3-axle buses.

NJTA offers automatic discounted toll rates on both toll roads to vehicles equipped with a New Jersey E-ZPass transponder. Eligibility for various discounts is based on time of day, vehicle class, interchange used, and/or ZIP code of residence, among other factors. Other discount programs that require enrollment are offered on one or both toll roads. These programs include a Senior Citizen Discount and a Green Pass Discount (eligible low-emissions vehicles), among others.

The current toll schedule was implemented on January 1, 2023. Currently, the toll rate for a passenger car paying with E-ZPass to travel the entire length of the Turnpike during a peak period is $20.01, which is equivalent to 16.4 cents per mile. The passenger car E-ZPass toll rate for a through trip on the Parkway is $11.11 or 6.4 cents per mile.

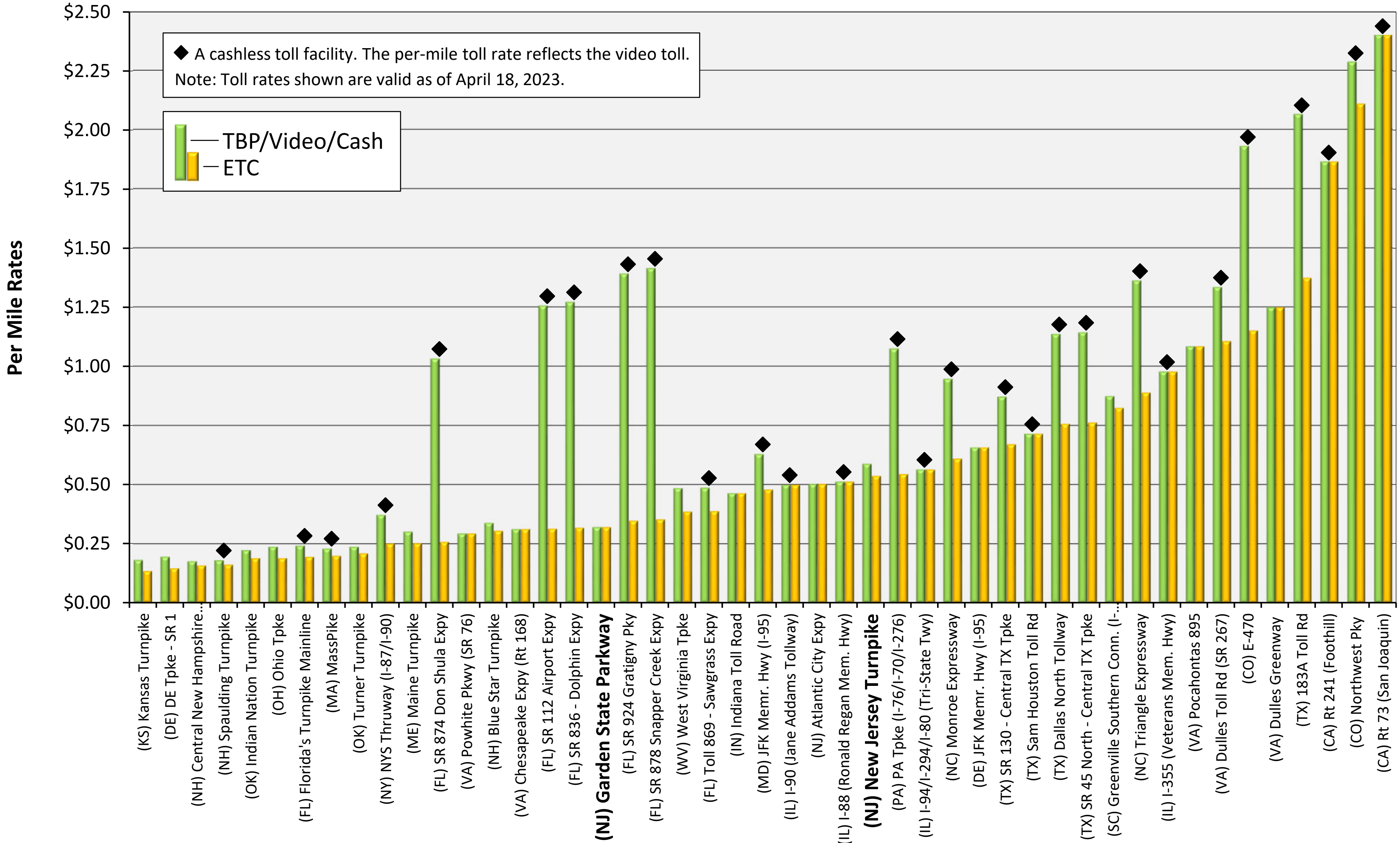
For five-axle vehicles on the Turnpike, a through trip toll for a cash customer costs $71.80, or 58.9 cents per mile. The same trip for a peak period E-ZPass customer costs $65.57, or 53.7 cents per mile. Just as for passenger cars, five-axle per-mile toll rates on the Parkway are much less. A round trip on the Parkway for a five-axle vehicle between Milepost 0 and 105 (trucks are prohibited north of Milepost 105) costs $55.55 for both cash and peak period E-ZPass customers. This amounts to a per-mile rate of 26.5 cents.

Figures 2-4 and **2-5** help to put these per-mile toll rates in perspective. Figure 2-4 graphically shows the passenger car cash and ETC per-mile toll rates for both the New Jersey Turnpike and Parkway, along with the passenger car per-mile rates for other toll facilities throughout the United States. Figure 2-5 shows the same information for five-axle vehicles. In both figures, the toll facilities are placed in order of their ETC per-mile rate, from lowest on the left to highest on the right. As evident in these two figures, Parkway per-mile rates are relatively low compared to those on the other facilities. Even though the Turnpike’s per-mile rates are in the top half of the sample facilities, the rates are only slightly higher than less expensive facilities, while being significantly less than the most expensive facilities.



COMPARISON OF 2023 PASSENGER CAR PER-MILE THROUGH TRIP TOLL RATES (DATA SORTED BY ETC TOLL RATES)

FIGURE 2-4



COMPARISON OF 2023 FIVE-AXLE VEHICLE PER-MILE THROUGH TRIP TOLL RATES (DATA SORTED BY ETC TOLL RATES)

CDM Smith

FIGURE 2-5

2.3 2022 Toll Transactions and Gross Toll Revenue by Facility

As presented in **Figure 2-6**, approximately 75.1 percent of the systemwide 2022 annual gross toll revenue was collected on the Turnpike compared to 24.9 percent on the Parkway. This reflects the higher per-mile toll rate structure on the Turnpike compared to the Parkway. In 2022, the Turnpike generated $1,598 million in gross toll revenue compared to $528 million for the Parkway.

In contrast, the Turnpike generated only 41.2 percent of the total 2022 toll transactions compared to 58.8 percent generated by the Parkway. The Turnpike generates fewer toll transactions because one transaction accounts for the entire trip while multiple transactions may occur on a Parkway trip. In 2022, the Turnpike generated approximately 253 million toll transactions compared to 361 million toll transactions for the Parkway.

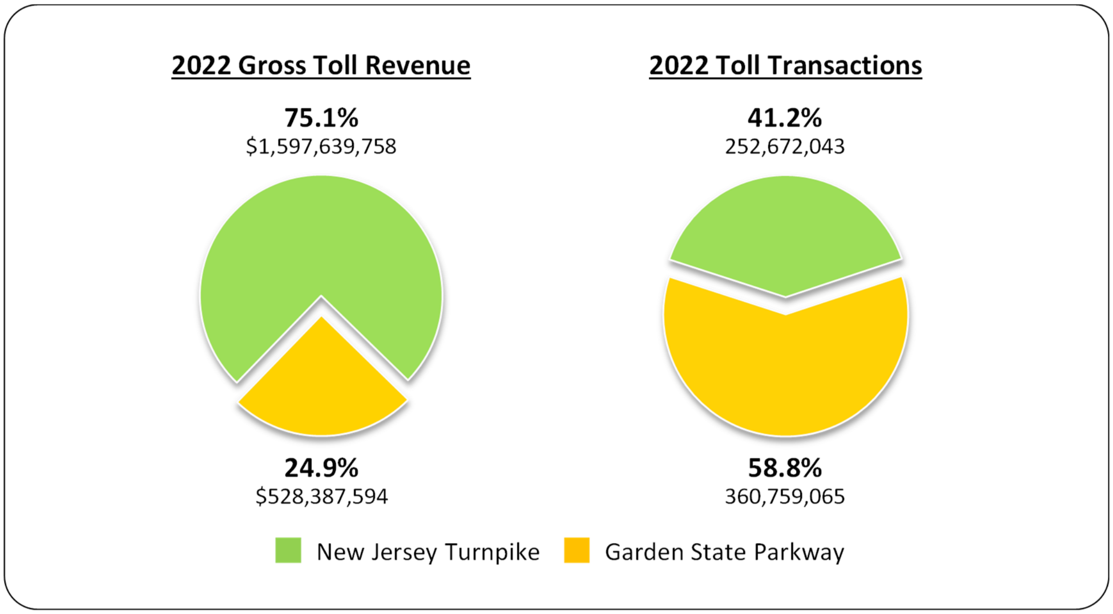


Figure 2-6
Toll Transactions and Gross Toll Revenue Distribution by Facility

2.4 2022 E-ZPass Market Share

E-ZPass is the preferred method of payment on both the Turnpike and the Parkway. The market share of E-ZPass in 2022 for the Turnpike and Parkway is presented in **Figure 2-7**. E-ZPass comprised 90.6 percent of all Turnpike and 89.7 percent of all Parkway passenger car toll transactions. The E-ZPass market share was even higher for commercial vehicles, totaling 96.7 percent of all commercial vehicle transactions on the Turnpike and 95.0 percent on the Parkway.

The market share of gross toll revenue generated by E-ZPass compared to cash was very similar to the market share by transactions. About 89.6 percent of passenger car gross toll revenue was generated by E-ZPass on the Turnpike and 89.4 percent on the Parkway. About 97.3 percent of commercial vehicle gross toll revenue was generated by E-ZPass on the Turnpike and 94.2 percent on the Parkway.

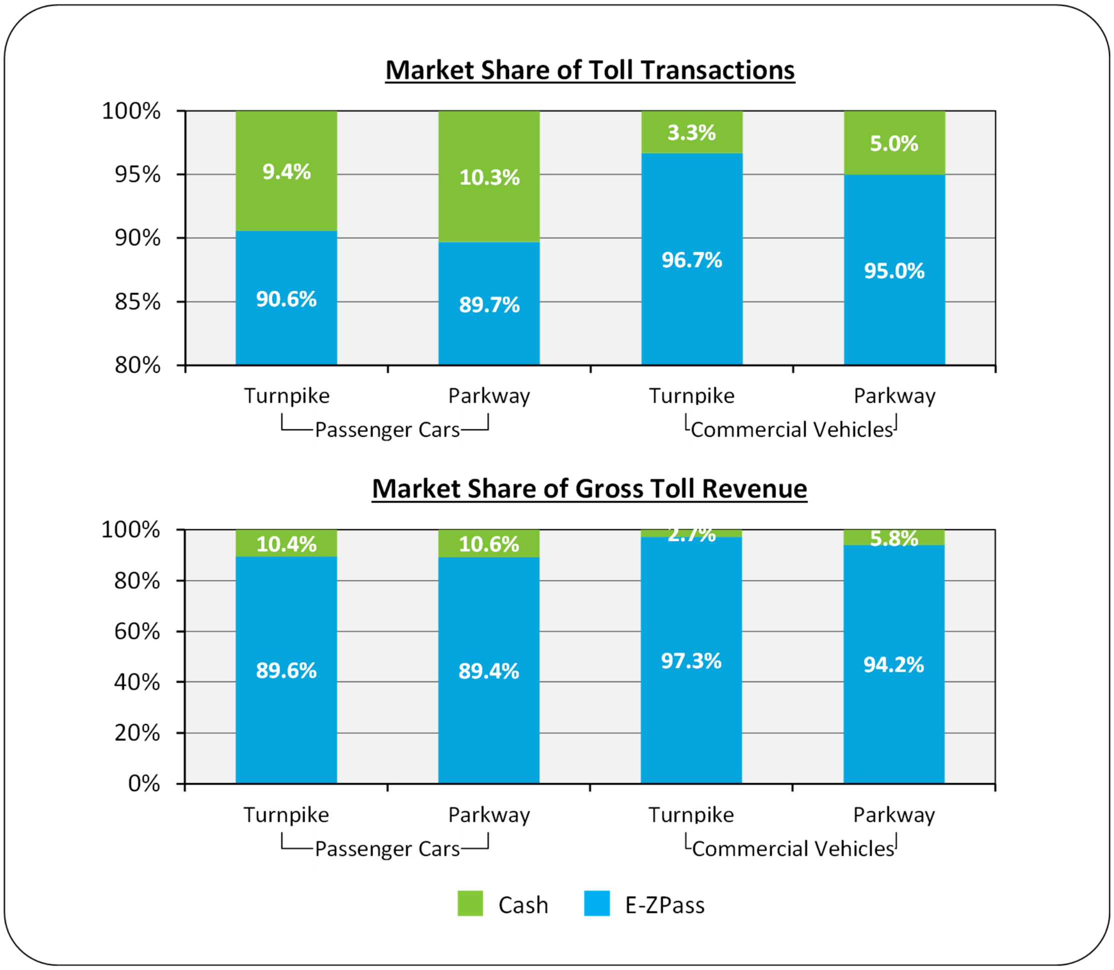


Figure 2-7
2022 E-ZPass Market Share

2.5 2022 Vehicle Class Distribution

Passenger car transactions comprised the vast majority of total toll transactions on both the Turnpike and the Parkway. The vehicle class distribution in 2022 is presented in **Table 2-1**. Passenger cars comprised 85.3 percent of all Turnpike transactions and 98.3 percent of all Parkway transactions. On the Turnpike, five-axle trucks totaled 6.9 percent of total transactions.

On the revenue side, Turnpike passenger cars generated 65.3 percent of the 2022 annual gross toll revenue and five-axle trucks generated 21.3 percent. Parkway passenger cars generated 95.8 percent of the 2022 annual gross toll revenue.

Table 2-1 2022 Vehicle Class Distribution by Toll Transactions and Gross Toll Revenue

Vehicle Class	Description	Percent Share of 2022 Toll Transactions			Percent Share of 2022 Gross Toll Revenue		
		Turnpike	Parkway	Total System	Turnpike	Parkway	Total System
1	Passenger Cars	85.3	98.3	92.9	65.3	95.8	72.8
2	2-Axle Trucks	4.0	0.6	2.0	6.0	1.1	4.8
3	3-Axle Trucks	1.7	0.3	0.9	2.9	0.9	2.4
4	4-Axle Trucks	1.2	0.3	0.6	3.0	1.0	2.5
5	5-Axle Trucks	6.9	0.2	2.9	21.3	0.7	16.2
6	6-or-More Axle Trucks	0.2	0.0	0.1	0.8	0.0	0.6
B2	2-Axle Buses	0.2	0.2	0.2	0.1	0.2	0.1
B3	3-Axle Buses	0.5	0.2	0.3	0.6	0.3	0.5
Total		100.0	100.0	100.0	100.0	100.0	100.0
Passenger Cars (Class 1)		85.3	98.3	92.9	65.3	95.8	72.8
Commercial Vehicles (Classes 2-6, B2,B3)		14.7	1.7	7.1	34.7	4.2	27.2

Source: NJTA

2.6 2022 Mainline Traffic Volumes

The Turnpike and Parkway each serve a vast number of motorists every day. **Table 2-2** presents annual average daily traffic (AADT) volumes on mainline sections of the Turnpike in 2022 and shows the percent trucks of the total volume. The AADTs are for both directions of travel. On the Turnpike Mainline, AADTs ranged from 50,000 at the southern terminus (between Interchanges 1 and 2) to a high of 263,100 between Interchanges 13 (Elizabeth) and 13A (Newark Airport – Elizabeth Seaport). AADTs peaked at 126,800 on the Easterly Alignment and 134,600 on the Westerly Alignment in 2022. Annual average daily traffic volumes ranged from 56,900 to 83,600 in 2022 on the Newark Bay-Hudson County Extension and from 57,500 to 62,600 on the Pearl Harbor Memorial Extension.

Mainline traffic data on the Parkway is only available where there is a mainline barrier toll plaza. There are 11 mainline barrier toll plazas on the Parkway, and only one of them (Toms River) operates in both the northbound and southbound directions. 2022 mainline AADTs on the Parkway are shown in **Table 2-3** at the mainline barrier plazas. Actual AADTs are shown in the tolled direction and estimated two-directional AADTS are shown based on doubling the traffic volume in the tolled direction. Mainline 2022 AADTs ranged from 31,800 at the southernmost plaza (Cape May) to 207,000 at the Raritan Plaza.

Table 2-2 2022 Annual Average Daily Traffic Volumes on Turnpike Mainline Segments (Both Directions)

Mainline Section Between Interchanges		2022	Percent
Interchange	Interchange	AADT(1)	Commercial Vehicles
Mainline			
1	2	50,000	15.3
2	3	54,200	15.3
3	4	62,300	15.4
4	5	77,600	15.7
5	JCT(2)	84,900	15.1
JCT(2)	7	131,700	15.9
7	7A	144,600	16.1
7A	8	156,800	16.5
8	8A	160,200	15.8
8A	9	176,300	16.2
9	10	202,100	15.3
10	11	192,500	15.7
11	12	229,800	15.9
12	13	246,200	16.3
13	13A	263,100	16.5
13A	14	215,800	16.8
14	M(3)	238,500	16.4
Mainline Easterly Alignment			
M(3)	15E	116,700	15.7
15E	JE(4)	111,600	15.3
JE(4)	15X	126,800	14.6
15X	16E/18E	118,300	14.2
17	N(5)	73,800	15.7
Mainline Westerly Alignment			
M(3)	JW(6)	121,800	17.0
JW(6)	15W	134,600	18.0
15W	16W	125,300	16.6
16W	18W	86,300	17.3
19W(7)	19W(7)	5,000	4.3
Newark Bay-Hudson County Extension			
14	14A	83,600	9.3
14A	14B	62,700	5.4
14B	14C	56,900	5.0
Pearl Harbor Memorial Turnpike Extension			
JCT(2)	6	57,500	17.1
6	Bridge(8)	62,600	17.7

(1) Annual Average Daily Traffic
(2) JCT = the interchange between the Turnpike Mainline and the Pearl Harbor Memorial Turnpike Extension.
(3) M = The point where the dual-dual lanes terminate and merge into the easterly and westerly alignments.
(4) JE = southernmost access point on the easterly alignment.
(5) N = mainline section north of Interchange 17.
(6) JW = southernmost access point on the westerly alignment.
(7) 19W = American Dream Sports Complex. This is a barrier toll, AADT represents traffic exiting at this interchange and not Mainline traffic.
(8) Bridge = Delaware River Toll Bridge that connects I-95 in PA to the Pearl Harbor Memorial Extension.
Source: NJTA

Table 2-3 2022 Annual Average Daily Traffic Volumes at Parkway Mainline Toll Plazas (by Direction)

2022 Annual Average Daily Traffic				
Milepost	Mainline Toll Plaza	NB(1)	SB(2)	Both(3)
166	Pascack Valley*	-	37,300	74,600
161	Bergen*	69,400	-	138,800
151	Essex*	-	73,900	147,800
142	Union*	96,900	-	193,800
124	Raritan*	-	103,500	207,000
104	Asbury Park*	73,900	-	147,800
85	Toms River	50,900	47,100	98,000
69	Barnegat*	-	33,400	66,800
54	New Gretna*	18,300	-	36,600
29	Great Egg*	-	19,300	38,600
19	Cape May*	15,900	-	31,800

(1) NB = northbound
(2) SB = southbound
(3) These are estimated AADTs based on doubling the reported traffic in the tolled direction.
* These mainline toll plazas have one-way toll collection. Traffic volumes are not available in the non-tolled direction.
Source: NJTA

2.7 2022 Mainline Monthly and Daily Traffic Volumes

This section presents 2022 monthly and daily traffic variations on select Turnpike and Parkway mainline segments. Recall that mainline traffic volume data is only available at mainline toll barriers on the Parkway in the tolled direction. The following mainline sections were selected to illustrate the range of conditions on the facilities from the southern to the northern locations:

Turnpike mainline segments:

- Interchange 1 (Delaware Memorial Bridge) to 2 (Swedesboro-Chester);
- Interchange 7 (Bordentown-Trenton) to 7A (Allentown-Trenton);
- Interchange 9 (New Brunswick) to 10 (Edison); and
- Interchange 16W (NJ 3-Sportsplex) to 18W (George Washington Bridge).

Parkway mainline segments:

- Cape May Mainline Plaza – northbound (milepost 19);
- Toms River Mainline Plaza – northbound (milepost 85);
- Union Mainline Plaza – northbound (milepost 142); and
- Bergen Mainline Plaza – northbound (milepost 161).

The Turnpike characteristics are based on the total two-way traffic on each link and the Parkway characteristics are based on northbound traffic.

2.7.1 Monthly Traffic Variations

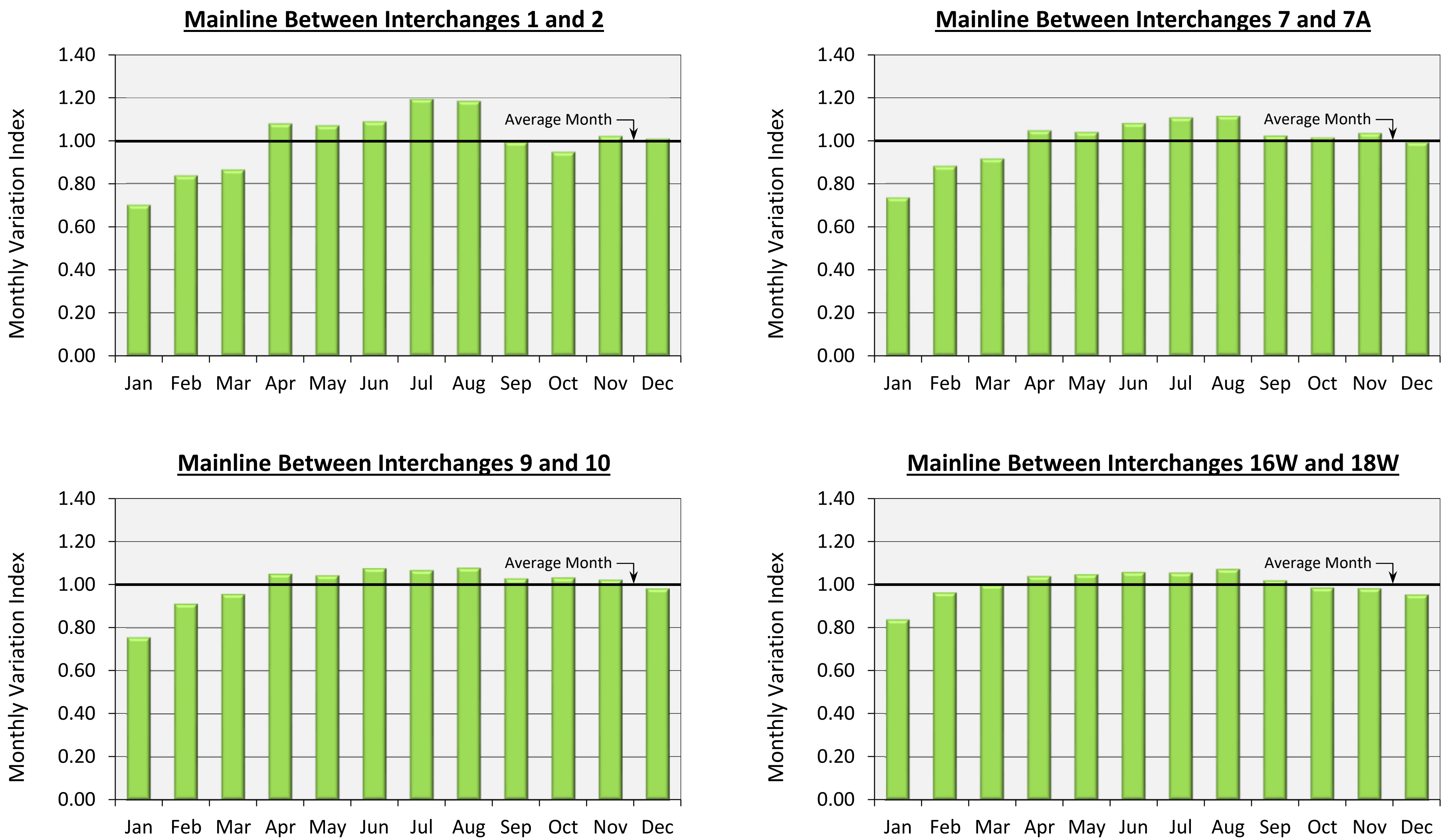
Based on the four selected Turnpike mainline locations, the 2022 daily traffic variations by month were greatest in the southern, more rural locations and less pronounced in the northern, more urban locations. These variations are shown in **Figure 2-8**. The traffic variations are based on average daily traffic (ADT) per month, and an index of 1.00 represents the "average month". In general, daily traffic volumes had their low point in January and peaked during the summer months. As shown in Figure 2-8, average daily traffic on the southernmost Turnpike link, Interchange 1 – 2, in July was 19 percent higher than the average month, while the ADT in January was 70 percent of the average month. This represents a 49-percentage point spread in monthly ADTs. The total spread at mainline sections between Interchanges 7 – 7A was 38 percentage points. The spread continued to shrink moving further north, declining to 33 and 23 percentage points at mainline sections between Interchanges 9 – 10, and 16W – 18W, respectively.

Daily traffic variations by month for the Parkway are presented in **Figure 2-9**. The variations are shown for northbound traffic at the selected mainline barrier toll plazas. Similar to the Turnpike, monthly ADTs peaked in the summer months, and reached the lowest level in January. In July, daily traffic on the southern mainline section that contains the Cape May toll plaza was 71 percentage points greater than the average day in 2022 and average daily traffic in January was only 53 percent of the average day for the entire year. This represents a 118-percentage point spread between the months with the lowest and highest average daily traffic. As on the Turnpike, the total percentage point spread in daily traffic variations by month decreased when moving north. The spread was 56 percentage points at the Toms River mainline barrier (milepost 85), 32 points at the Union mainline barrier, and 31 percentage points at the Bergen mainline barrier. In each case, January had the lowest average daily traffic, while the highest average daily traffic occurred in June, July, and/or August.

2.7.2 Daily Traffic Variations

A sample of daily mainline traffic volumes at the select mainline locations was provided by NJTA. The sample consisted of a week of traffic data in April 2023. The daily variations on the Turnpike are presented in **Figure 2-10** for passenger cars and commercial vehicles. As anticipated, commercial vehicle traffic volumes were very consistent throughout the weekdays and declined significantly on Saturdays and Sundays. Daily passenger car traffic volumes were most consistent on the northern, more urban sections, and showed more daily variation in the southern sections of the Turnpike. On the northern portion of the Turnpike, between Interchanges 16W and 18W, Saturday passenger car traffic was 11 percent greater than the average day and Tuesday passenger car traffic was 11 percent lower than the average day. On the southern mainline section between Interchanges 1 and 2, which is less reliant on commuter traffic, Sunday passenger car traffic was 40 percent greater than the average day and Tuesday passenger car traffic was 33 percent lower than the average day. In general, Turnpike passenger car traffic peaked on Saturday or Sunday and reached its lowest volume on Tuesdays.

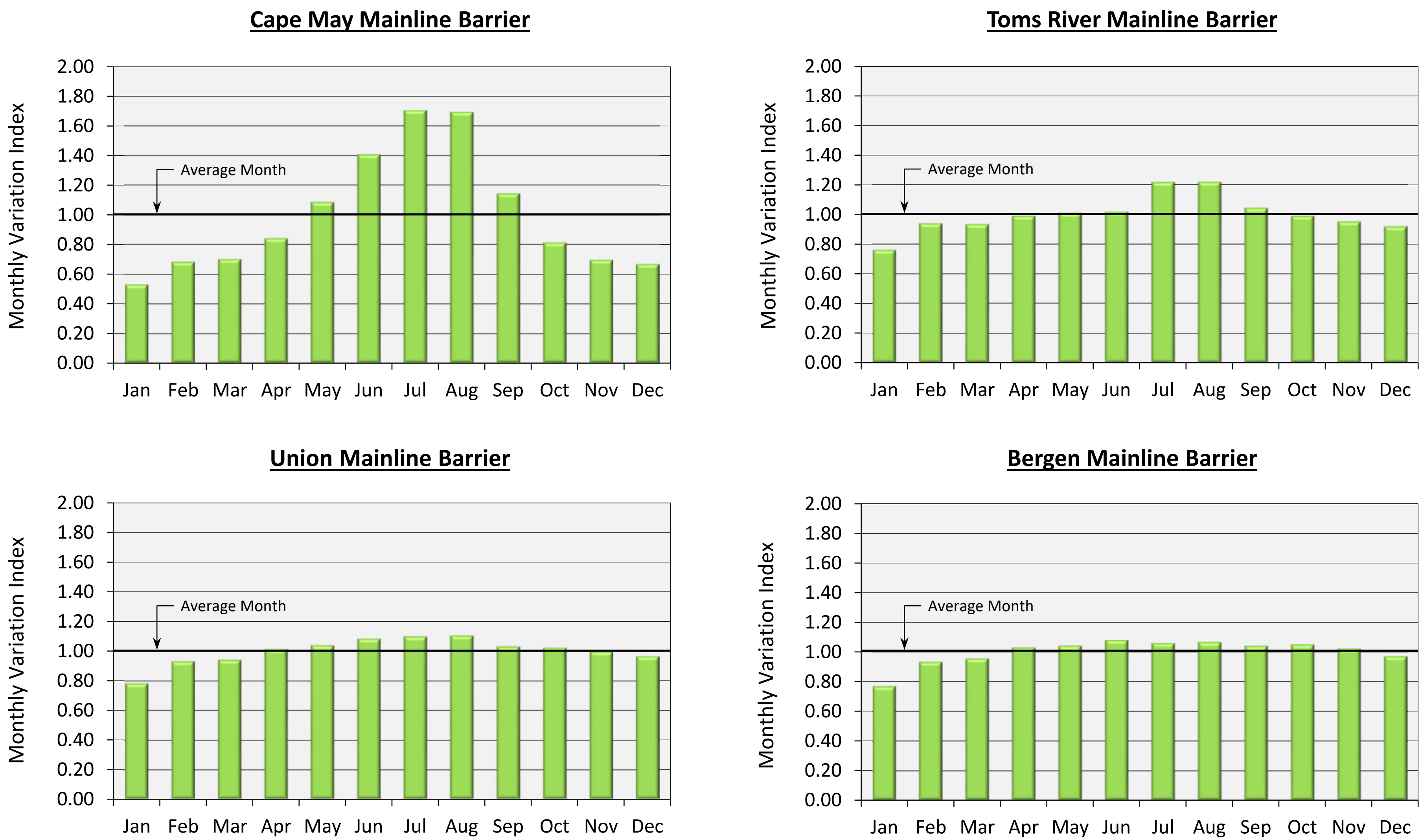
Daily traffic variations for the Parkway are shown in **Figure 2-11**. The daily variations are shown for total traffic, as the percentage of trucks is very small. At the two more northerly locations (Bergen and Union mainlines) the daily traffic volumes peaked on Friday and reached the lowest volume on Sunday. At the Toms River location, the daily traffic volumes peaked on Thursday and reached the lowest volume on Saturday. At the southernmost Cape May location, daily traffic volumes peaked on Sunday and reached the lowest volume on Saturday. Because northbound volumes are used, this is indicative of the higher proportion of tourist and recreational traffic on the southern sections of the Parkway, as relatively few travelers would be leaving the tourist locations in the vicinity of Cape May on a Saturday.



Note: Based on Two-Way Traffic Volumes.
Source: NJTA

TURNPIKE: 2022 MONTHLY TRAFFIC VARIATIONS

FIGURE 2-8



Note: Based on Northbound Traffic Volumes.
Source: NJTA

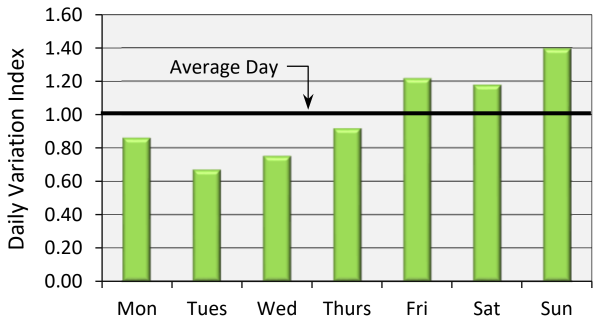
CDM Smith

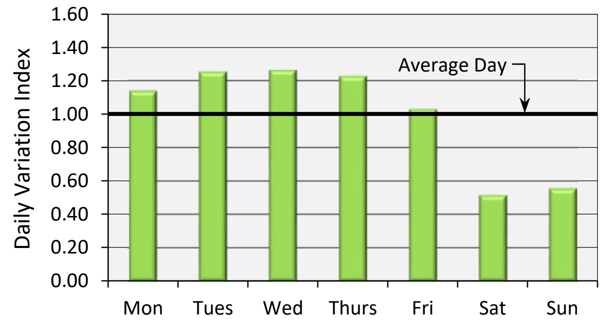
PARKWAY: 2022 MONTHLY TRAFFIC VARIATIONS

FIGURE 2-9

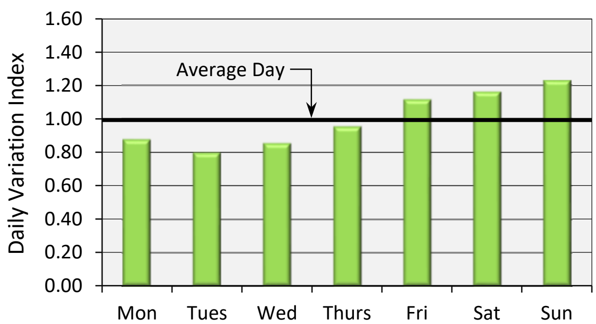
Passenger Cars | **Commercial Vehicles**

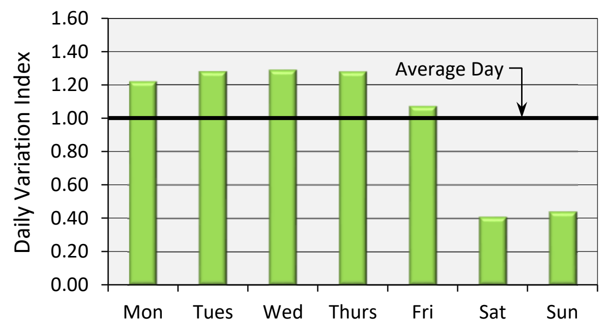
Mainline Between Interchanges 1 and 2



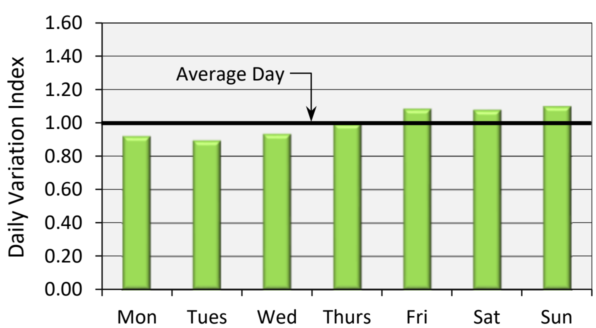


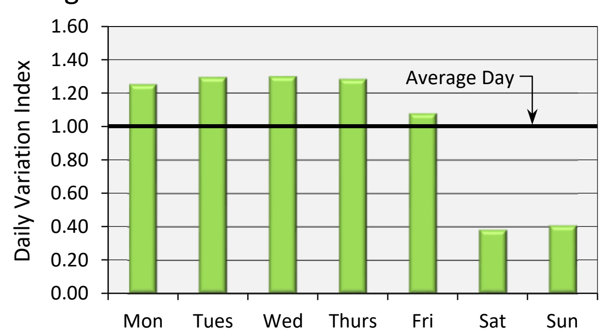
Mainline Between Interchanges 7 and 7A



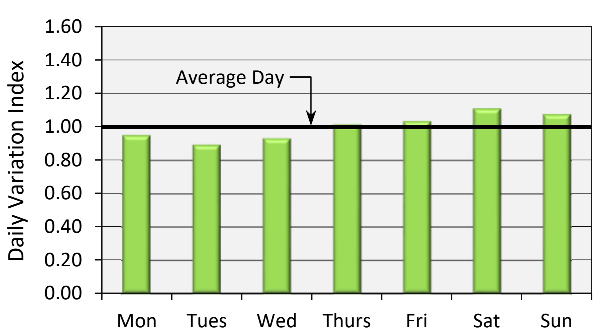


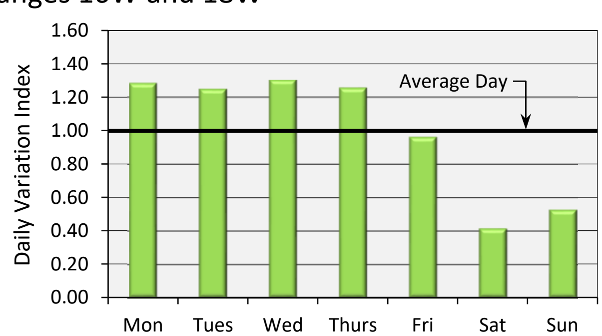
Mainline Between Interchanges 9 and 10





Mainline Between Interchanges 16W and 18W





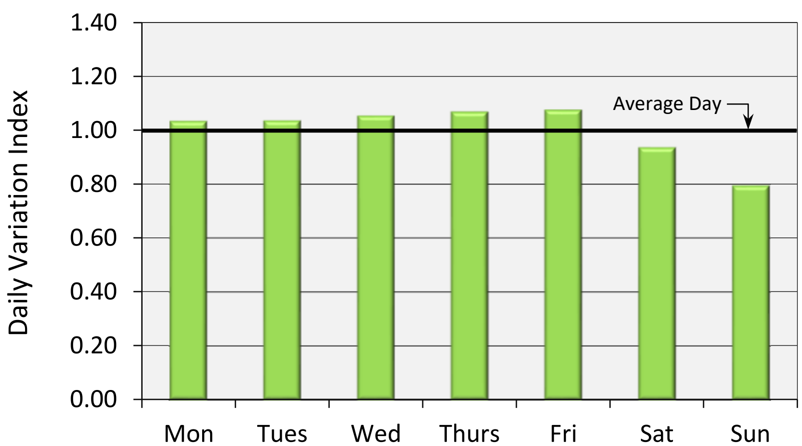
Note: Based on Two-Way Traffic Volumes.
Source: NJTA

CDM Smith

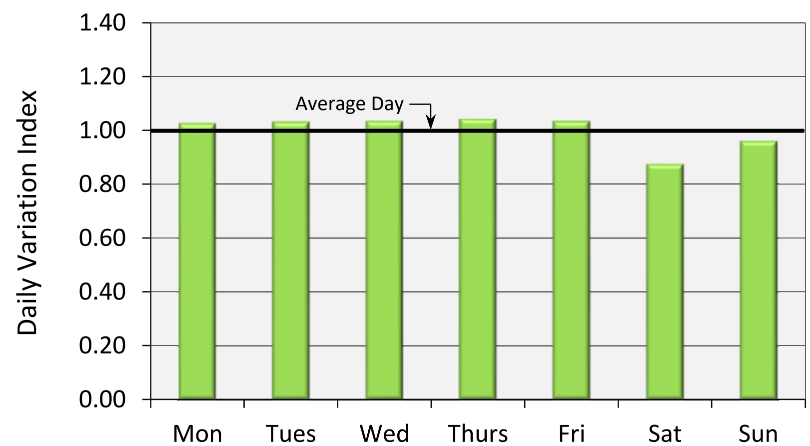
TURNPIKE: APRIL 2023 DAILY TRAFFIC VARIATIONS

FIGURE 2-10

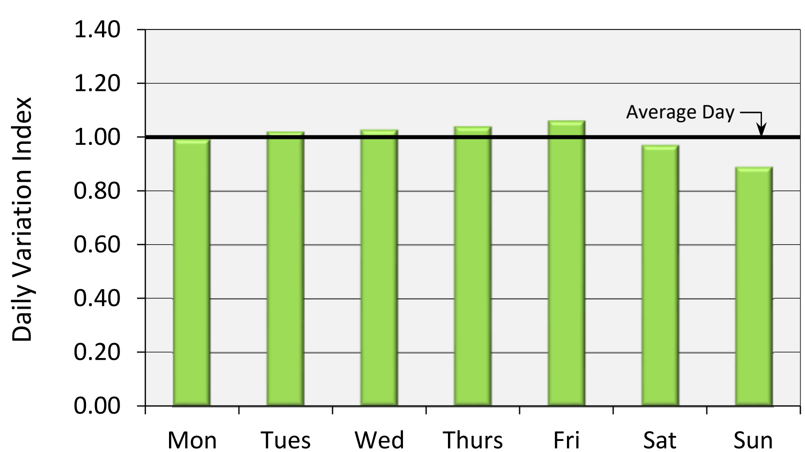
Cape May Mainline Barrier



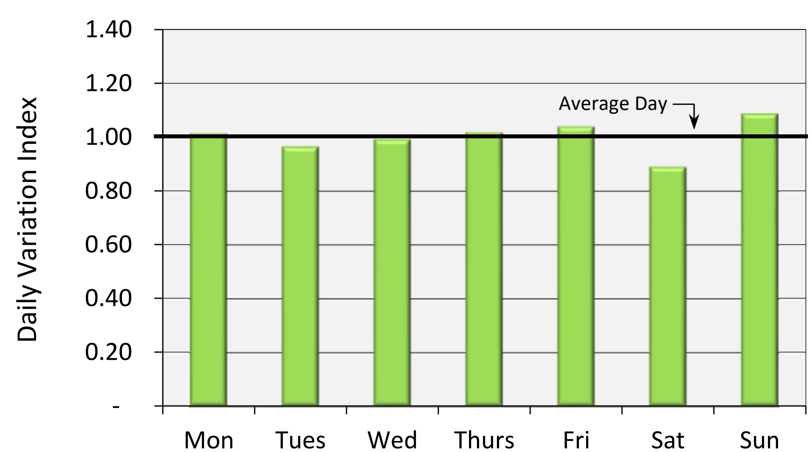
Toms River Mainline Barrier



Union Mainline Barrier



Bergen Mainline Barrier



Note: Based on Northbound Traffic Volumes
Source: NJTA

PARKWAY: APRIL 2023 DAILY TRAFFIC VARIATIONS

FIGURE 2-11

Chapter 3

Historical Transaction and Toll Revenue Trends

This chapter presents historical toll transaction and toll revenue trends that have occurred on the Turnpike and Parkway and their relationships to changes in the toll rate schedule, the conversion of toll plazas on the Parkway to one-way tolling (from two-way tolling), and the economy. Both annual and monthly trend data are presented and analyzed. Annual trends in the E-ZPass market share and the vehicle class composition are also presented. Chapter 4 (Corridor Growth Analysis) will describe how the trend data was incorporated into the development of future-year growth rate estimates for toll transactions.

3.1 Historical Changes in the Toll Schedule and Toll Collection

Toll rates were increased six times on the Turnpike and three times on the Parkway between 1991 and 2020. The 2020 toll rate increase also authorized annual three-percent toll rate indexing beginning in January 2022. In addition, ten mainline toll plazas on the Parkway were converted from two-way tolling to one-way tolling between 2004 and 2012. Toll collection was discontinued at four ramp toll plazas on the Parkway as part of the conversion to one-way toll collection, with a fifth ramp toll plaza discontinued in 2018.

3.1.1 Changes in the Toll Schedule

Table 3-1 presents historical toll schedule increases and discount program modifications on the Turnpike since 1991. The changes are shown for passenger cars and commercial vehicles, by cash and E-ZPass, and by peak and off-peak time periods. **Table 3-2** presents the same information for the Parkway. Of most significance in recent years were the toll rate increases implemented in December 2008 (40-percent increase on the Turnpike and 43-percent toll increase on the Parkway), January 2012 (53-percent increase on the Turnpike and 50-percent toll increase on the Parkway), and September 2020 (36-percent increase on the Turnpike and 27-percent toll increase on the Parkway). Each of these toll rate increases had a negative impact on transactions and a positive impact on toll revenue.

Smaller increases of three percent (on both the Turnpike and Parkway) were instituted in January of 2022 and 2023. This annual toll rate indexing is expected to occur each January 1 throughout the forecast period.

Table 3-1 Historical Toll Schedule Changes: New Jersey Turnpike

Date	Time Period(1)	Percent Change in Toll Rates			
		Passenger Cars		Commercial Vehicles	
		Cash	E-ZPass	Cash	E-ZPass
Scheduled Toll Increases					
3/17/1991	All	70	-	100	-
9/30/2000(2)	Peak	20	8	13	8
	Off-peak	20	0	13	8
1/1/2003	Peak	17	10	13	8
	Off-peak	17	5	13	8
12/1/2008	All	40	40	40	40
1/1/2012	All	53	53	53	53
9/13/2020	All	36	36	36	36
1/1/2022	All	3	3	3	3
1/1/2023	All	3	3	3	3
Discount Program Modifications					
1/1/2006(3)	Peak	0	15	0	15
	Off-peak	0	0	0	0
7/1/2011(4)	Peak	0	0	0	0
	Off-peak	0	33	0	0

(1) Peak hours are 7:00 - 9:00 AM and 4:30 - 6:30 PM through Friday and all day Saturday and Sunday. Off-peak hours are all other hours.

(2) E-ZPass and variable pricing were implemented on the Turnpike. A toll differential was implemented between cash and E-ZPass. Peak and off-peak hours were defined, and a toll differential implemented for E-ZPass between peak and off-peak periods.

(3) The E-ZPass discount was eliminated for cars and trucks that traveled during peak hours.

(4) The E-ZPass discount was eliminated for non-NJ E-ZPass passenger car accounts.

Source: NJTA

Table 3-2 Historical Toll Schedule Changes: Garden State Parkway

		Percent Change in Toll Rates					
	Time	Passenger Cars			Commercial Vehicles		
Date	Period(1)	Cash	Token(2)	E-ZPass	Cash	Token(2)	E-ZPass
Scheduled Toll Increases							
12/1/2008	All	43	0	43	43	0	43
1/1/2012	All	50	-	50	50	-	50
9/13/2020	All	27	-	27	27	-	27
1/1/2022	All	3	-	3	3	-	3
1/1/2023	All	3	-	3	3	-	3
Discount Program Modifications							
11/19/2001(3)	All	0	0	(6)	0	0	(6)
11/18/2002(4)	All	0	0	6	0	0	6
12/1/2008(5)	Peak	0	0	0	0	0	0
	Off-peak	0	0	0	0	0	(5)
1/1/2009(6)	All	0	6	0	0	6	0

(1) Peak Hours are 7:00 - 9:00 AM and 4:30 - 6:30 PM Monday through Friday and all day Saturday and Sunday. Off-peak hours are all other hours.
(2) Tokens no longer sold after January 2002, although they were still accepted for toll payment through December 2008.
(3) E-ZPass dscounts were implemented on 11/19/2001. Prior to this, cash and E-Zpass rates were the same.
(4) The E-ZPass discount was discontinued.
(5) An E-ZPass discount was implemented for commercial vehicles during off-peak time periods.
(6) Tokens were no longer accepted. Customers who previously used tokens incurred a six-percent toll increase if they paid cash.
Source: NJTA

3.1.2 Conversion to One-Way Tolling

Table 3-3 identifies the Parkway toll plaza locations that were affected as part of the conversion to one-way toll collection. When any toll plaza was converted from two-way to one-way tolling, toll collection was discontinued in the non-tolled direction and the toll rate was doubled in the tolled direction. The following are the general impacts on toll transactions and toll revenue due to the one-way toll conversion:

- The total number of tolled transactions at the affected toll plazas decreased by approximately half due to the discontinuation of tolling in the non-tolled direction;
- The toll rate was doubled in the remaining tolled direction at the affected toll plazas; and
- The net impact was a small reduction in total gross toll revenue due to a small reduction in toll transactions in the remaining tolled direction. The reduction in transactions in the tolled direction was due to the doubling of the toll rate.

Table 3-3 Toll Plaza Locations Impacted by Conversion to One-Way Toll Collection: Garden State Parkway

Year	Month	Milepost	Location[(1)]
2004	September	124	Raritan - northbound mainline
2004	September	105	Eatontown Ramp - southbound exit
2004	September	104	Asbury Park - southbound mainline
2005	March	142	Union Ramp - southbound exit
2005	March	142	Union - southbound mainline
2005	July	151	Essex - northbound mainline
2005	December	161	Bergen - southbound mainline
2005	December	159	Saddle Brook Ramp - southbound entry
2006	January	54	New Gretna - southbound mainline
2006	January	30	Somers Point Ramp - northbound entry
2006	January	29	Great Egg - northbound mainline
2006	January	19	Cape May - southbound mainline
2007	March	69	Barnegat - northbound mainline
2010	February	166	Pascack Valley - northbound mainline
2018	July	145	East Orange - northbound exit

(1) The direction identified at each location is now the toll-free direction.

Source: NJTA

3.2 Annual Toll Transaction and Toll Revenue Trends

Annual toll transaction and toll revenue data were obtained from NJTA. Data was provided from 1990 through 2022 for the Turnpike and from 1993 through 2022 for the Parkway. Turnpike data was provided by passenger car and commercial vehicle, while the Parkway data was aggregated to total vehicles as commercial vehicles comprise less than two percent of all transactions. The annual trend data was analyzed to help determine the impacts associated with toll increases, the economy, roadway improvements, and other variables. This section reviews the annual trend data for the two toll facilities.

3.2.1 Turnpike Trends

Annual Turnpike transaction data is shown in **Table 3-4**. Total toll transactions generally increased from 1992 to 2006 despite toll increases in 2000 and 2003. Annual transactions decreased by 0.2 percent in 2007 and 2.8 percent in 2008 largely due to the economy, and by 3.6 percent in 2009 due to the combined effects of the economy and the 40-percent toll increase implemented on December 1, 2008. Transaction growth remained relatively flat through 2011 due to slow economic recovery. The 53-percent toll increase in January 2012 resulted in a 4.3-percent decrease in total toll transactions during that year.

From 2013 through 2019, the Turnpike experienced positive total transaction growth each year, with an average annual growth rate of 2.6 percent and reaching a record 267.8 million in 2019. However, due to the shutdowns necessitated by the COVID-19 pandemic in the spring of 2020, transactions fell 25.8 percent in 2020. Despite strong growth of 21.6 percent in 2021 and 4.6 percent in 2022, transactions in 2022 were 5.6 percent below 2019 levels and had fallen an average of 0.6 percent annually in the five years since 2017.

Table 3-4 Annual Toll Transaction Trends (Thousands of Vehicles)

	New Jersey Turnpike						Garden State Parkway		Total System	
Calendar Year	Passenger Cars	% Change from Prev. Year	Commercial Vehicles	% Change from Prev. Year	Total	% Change from Prev. Year	All Vehicles	% Change from Prev. Year	All Vehicles	% Change from Prev. Year
1990	171,993	-	25,574	-	197,167	-	-	-	-	-
1991 (1)	162,177	(5.7)	23,016	(10.0)	185,193	(6.1)	-	-	-	-
1992	161,766	(0.3)	22,620	(1.7)	184,386	(0.4)	-	-	-	-
1993	162,458	0.4	22,609	(0.0)	185,067	0.4	516,423	-	701,490	-
1994	164,724	1.4	23,556	4.2	188,280	1.7	515,244	(0.2)	703,524	0.3
1995	166,734	1.2	23,641	0.4	190,375	1.1	529,420	2.8	719,795	2.3
1996	171,318	2.7	24,513	3.7	195,831	2.9	536,026	1.2	731,857	1.7
1997	177,268	3.5	25,584	4.4	202,852	3.6	557,697	4.0	760,549	3.9
1998	182,911	3.2	26,497	3.6	209,408	3.2	576,186	3.3	785,594	3.3
1999	185,556	1.4	27,595	4.1	213,151	1.8	583,348	1.2	796,499	1.4
2000 (2)	189,617	2.2	28,666	3.9	218,283	2.4	597,870	2.5	816,153	2.5
2001	199,318	5.1	29,453	2.7	228,771	4.8	609,551	2.0	838,322	2.7
2002	209,855	5.3	30,510	3.6	240,365	5.1	620,905	1.9	861,270	2.7
2003 (3)	208,472	(0.7)	31,151	2.1	239,623	(0.3)	628,287	1.2	867,910	0.8
2004 (5)	214,095	2.7	32,104	3.1	246,199	2.7	610,085	(2.9)	856,284	(1.3)
2005 (5)	214,687	0.3	32,701	1.9	247,388	0.5	502,575	(17.6)	749,963	(12.4)
2006 (5)	217,306	1.2	32,999	0.9	250,305	1.2	427,197	(15.0)	677,502	(9.7)
2007 (5)	216,625	(0.3)	33,163	0.5	249,788	(0.2)	417,464	(2.3)	667,252	(1.5)
2008 (4)	210,926	(2.6)	31,943	(3.7)	242,869	(2.8)	407,032	(2.5)	649,901	(2.6)
2009	205,366	(2.6)	28,737	(10.0)	234,103	(3.6)	396,269	(2.6)	630,372	(3.0)
2010 (5)	205,687	0.2	29,393	2.3	235,080	0.4	382,475	(3.5)	617,555	(2.0)
2011	203,627	(1.0)	29,601	0.7	233,228	(0.8)	377,891	(1.2)	611,119	(1.0)
2012 (6)	194,508	(4.5)	28,634	(3.3)	223,142	(4.3)	366,155	(3.1)	589,297	(3.6)
2013	195,208	0.4	29,278	2.2	224,486	0.6	368,918	0.8	593,405	0.7
2014	202,347	3.7	29,896	2.1	232,243	3.5	370,349	0.4	602,592	1.5
2015	215,358	6.4	31,237	4.5	246,595	6.2	379,283	2.4	625,878	3.9
2016	223,634	3.8	31,860	2.0	255,494	3.6	389,609	2.7	645,103	3.1
2017	227,979	1.9	32,686	2.6	260,665	2.0	392,895	0.8	653,560	1.3
2018	230,497	1.1	34,252	4.8	264,749	1.6	389,792	(0.8)	654,541	0.2
2019	233,454	1.3	34,318	0.2	267,772	1.1	386,751	(0.8)	654,523	(0.0)
2020 (7)	166,320	(28.8)	32,348	(5.7)	198,668	(25.8)	308,485	(20.2)	507,153	(22.5)
2021 (8)	205,819	23.7	35,690	10.3	241,509	21.6	352,961	14.4	594,471	17.2
2022 (8)	215,522	4.7	37,150	4.1	252,672	4.6	360,759	2.2	613,431	3.2
Average Annual Percent Change										
2017 - 2022		(1.1)		2.6		(0.6)		(1.7)		(1.3)
2012 - 2022		1.0		2.6		1.3		(0.1)		0.4
2007 - 2022		(0.0)		0.8		0.1		(1.0)		(0.6)
2002 - 2022		0.1		1.0		0.2		(2.7)		(1.7)
1993 - 2022		1.0		1.7		1.1		(1.2)		(0.5)

(1) Turnpike toll increase effective 3/17/1991. Refer to Table 3-1 for details.

(2) Turnpike toll increase effective 9/30/2000. Refer to Table 3-1 for details.

(3) Turnpike toll increase effective 1/1/2003. Refer to Table 3-1 for details.

(4) Toll increase effective 12/1/2008. Refer to Tables 3-1 and 3-2 for details.

(5) Parkway toll transactions negatively impacted due to phased conversion to one-way tolling. Refer to Table 3-3 for detailed schedule.

(6) Toll increase effective 1/1/2012. Refer to Tables 3-1 and 3-2 for details.

(7) Toll increase effective 9/13/2020. Refer to Tables 3-1 and 3-2 for details.

(8) Annual toll indexing. Refer to Tables 3-1 and 3-2 for details.

Source: NJTA

Annual Turnpike revenue data is shown in **Table 3-5**. Annual Turnpike toll revenues increased every year from 1990 to 2007 due to generally growing toll transactions and toll rate increases in 1991, 2000, and 2003. In 2008 toll revenue decreased by 0.1 percent due largely to the economy. Toll revenue increased by 24.8 percent in 2009 in response to the 2008 toll increase implemented on December 1, 2008. In 2010 and 2011, toll revenue decreased by 0.1 percent each year because of low or negative growth in transactions due to the economy, severe winter weather in both years, and Hurricane Irene in August 2011. As a result of the January 2012 toll rate increase, Turnpike revenue increased by 47.4 percent in 2012. Annual toll revenue growth from 2013 to 2019 largely mirrored toll transaction growth, with average annual growth of 2.5 percent.

However, while revenue declined 13.7 percent in 2020 because of the pandemic, the 36-percent toll rate increase instituted in September 2020 and annual 3-percent toll indexing that began in January 2022 have resulted in revenue growth that has been much stronger than revenue growth over the past three years. Revenue grew 47.2 percent in 2021 and a further 7 percent in 2022. As a result, even though annual transactions peaked in 2019, annual revenue has grown an average of 6.8 percent annually since 2017, with a record $1.6 billion recorded in 2022.

It should be noted that a retroactive revenue recognition change was implemented in March 2018 that impacted nearly all 2017 revenue data. This affected the mix of passenger car versus commercial vehicle revenue, while holding total toll revenue unchanged. This explains the divergence between positive commercial transaction growth (+2.6 percent) and negative revenue growth (-4.6 percent) from 2016 to 2017. Total revenue and toll transactions, however, were not affected by this change.

Annual trends for both transactions and gross toll revenue are displayed graphically in **Figure 3-1.**

3.2.2 Parkway Trends

Table 3-4 shows annual data for Parkway transactions. Annual transactions increased each year from 1994 to 2003 but declined every year from 2004 to 2012. These declines were impacted by one-way tolling conversion in 2004, 2005, 2006, 2007, and 2010; a 43-percent toll increase in December 2008; the economic recession of 2007-09; severe winter weather events in 2010 and 2011; Hurricane Irene in 2011; and a 50-percent toll increase in 2012. The largest impacts of the one-way toll conversion were in 2005 and 2006 when annual transactions decreased by 17.6 percent and 15.0 percent, respectively. Toll transactions then grew each year from 2013 to 2017 before slight declines in 2018 (when there was a final one-way tolling conversion) and 2019 and a significant pandemic-induced decline of 20.2 percent in 2020. Transactions rebounded with growth of 14.4 percent in 2021 and 2.2 percent in 2022 but remained below 2019 levels. Since 2012, by which time all but one one-way toll conversion had been completed, transactions have declined an average of 0.1 percent annually.

Annual gross toll revenue data is shown in **Table 3-5.** Despite many years of declining transactions, toll revenue on the Parkway has only been negative for five years between 1993 and 2022: -0.4 percent in 1994, -0.6 percent in 2002, -2.3 percent in 2005, -0.9 percent in 2011, and -14.5 percent in 2020. These were the result of either one-way toll conversion or economic

Table 3-5 Annual Gross Toll Revenue Trends (Thousands of Dollars)

	New Jersey Turnpike						Garden State Parkway		Total System	
Calendar Year	Passenger Cars	% Change from Prev. Year	Commercial Vehicles	% Change from Prev. Year	Total	% Change from Prev. Year	All Vehicles	% Change from Prev. Year	All Vehicles	% Change from Prev. Year
1990	$124,364	-	$64,366	-	$188,730	-	-	-	-	-
1991 (1)	186,046	49.6	99,592	54.7	285,638	51.3	-	-	-	-
1992	202,825	9.0	109,710	10.2	312,535	9.4	-	-	-	-
1993	204,098	0.6	112,422	2.5	316,520	1.3	$167,618	-	$484,138	-
1994	205,138	0.5	116,653	3.8	321,791	1.7	166,891	(0.4)	488,682	0.9
1995	209,739	2.2	116,564	(0.1)	326,303	1.4	171,528	2.8	497,831	1.9
1996	215,223	2.6	121,118	3.9	336,341	3.1	172,940	0.8	509,281	2.3
1997	223,575	3.9	126,862	4.7	350,437	4.2	178,923	3.5	529,360	3.9
1998	230,585	3.1	130,247	2.7	360,832	3.0	183,927	2.8	544,759	2.9
1999	234,949	1.9	134,548	3.3	369,497	2.4	185,782	1.0	555,279	1.9
2000 (2)	246,107	4.7	145,928	8.5	392,035	6.1	190,916	2.8	582,951	5.0
2001	280,108	13.8	153,656	5.3	433,764	10.6	196,085	2.7	629,849	8.0
2002	288,100	2.9	150,942	(1.8)	439,042	1.2	194,851	(0.6)	633,893	0.6
2003 (3)	321,357	11.5	168,833	11.9	490,190	11.6	202,655	4.0	692,845	9.3
2004 (5)	329,734	2.6	177,122	4.9	506,856	3.4	208,729	3.0	715,585	3.3
2005 (5)	327,228	(0.8)	180,783	2.1	508,011	0.2	203,824	(2.3)	711,835	(0.5)
2006 (5)	348,039	6.4	185,360	2.5	533,399	5.0	203,880	0.0	737,279	3.6
2007 (5)	345,249	(0.8)	196,042	5.8	541,291	1.5	204,629	0.4	745,920	1.2
2008 (4)	345,394	0.0	195,288	(0.4)	540,682	(0.1)	206,055	0.7	746,737	0.1
2009	449,897	30.3	224,738	15.1	674,635	24.8	277,783	34.8	952,418	27.5
2010 (5)	446,045	(0.9)	227,848	1.4	673,893	(0.1)	278,273	0.2	952,166	(0.0)
2011	447,434	0.3	225,716	(0.9)	673,150	(0.1)	275,730	(0.9)	948,880	(0.3)
2012 (6)	667,999	49.3	324,037	43.6	992,036	47.4	401,636	45.7	1,393,672	46.9
2013	672,828	0.7	333,892	3.0	1,006,720	1.5	407,044	1.3	1,413,763	1.4
2014	695,129	3.3	342,614	2.6	1,037,743	3.1	408,005	0.2	1,445,748	2.3
2015	745,007	7.2	361,261	5.4	1,106,268	6.6	416,866	2.2	1,523,134	5.4
2016	776,337	4.2	368,221	1.9	1,144,557	3.5	426,105	2.2	1,570,662	3.1
2017	800,478	3.1	351,260	(4.6)	1,151,739	0.6	428,157	0.5	1,579,896	0.6
2018	808,959	1.1	370,364	5.4	1,179,323	2.4	433,003	1.1	1,612,326	2.1
2019	816,271	0.9	360,205	(2.7)	1,176,476	(0.2)	435,792	0.6	1,612,268	(0.0)
2020 (7)	633,478	(22.4)	381,379	5.9	1,014,857	(13.7)	372,535	(14.5)	1,387,392	(13.9)
2021 (8)	985,132	55.5	508,450	33.3	1,493,581	47.2	505,244	35.6	1,998,825	44.1
2022 (8)	1,050,933	6.7	546,707	7.5	1,597,640	7.0	528,388	4.6	2,126,027	6.4

Average Annual Percent Change	Passenger Cars	Commercial Vehicles	Total	Garden State Parkway All Vehicles	Total System All Vehicles
2017 - 2022 (5 years)	5.6	9.3	6.8	4.3	6.1
2012 - 2022 (10 years	4.6	5.4	4.9	2.8	4.3
2007 - 2022 (15 years	7.7	7.1	7.5	6.5	7.2
2002 - 2022 (20 years	6.7	6.6	6.7	5.1	6.2
1993 - 2022 (29 years	5.8	5.6	5.7	4.0	5.2

(1) Toll increase effective 3/17/1991. Refer to Table 3-1 for details.

(2) Toll increase effective 9/30/2000. Refer to Table 3-1 for details.

(3) Toll increase effective 1/1/2003. Refer to Table 3-1 for details.

(4) Toll increase effective 12/1/2008. Refer to Tables 3-1 and 3-2 for details.

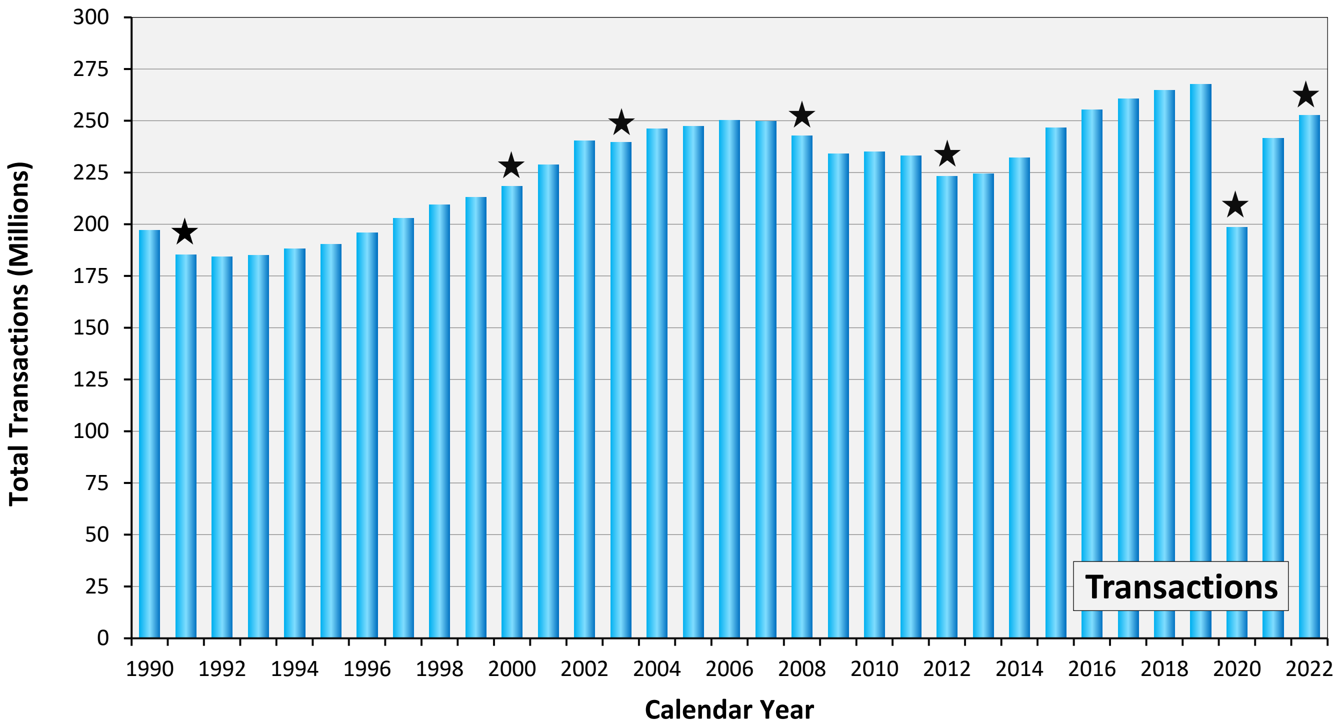
(5) Toll transactions were negatively impacted due to the phased conversion to one-way tolling. Refer to Table 3-3 for a detailed schedule.

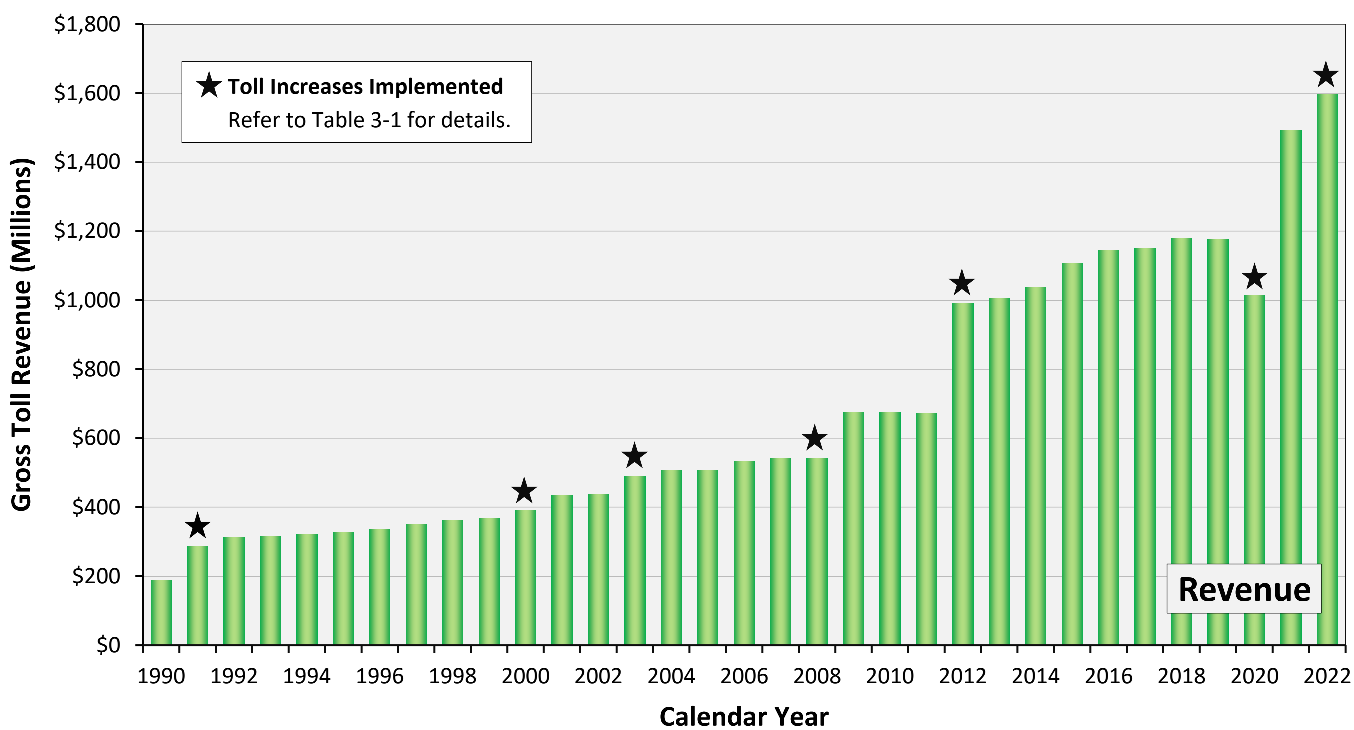
(6) Toll increase effective 1/1/2012. Refer to Tables 3-1 and 3-2 for details.

(7) Toll increase effective 9/13/2020. Refer to Tables 3-1 and 3-2 for details.

(8) Annual toll indexing. Refer to Tables 3-1 and 3-2 for details.

Source: NJTA



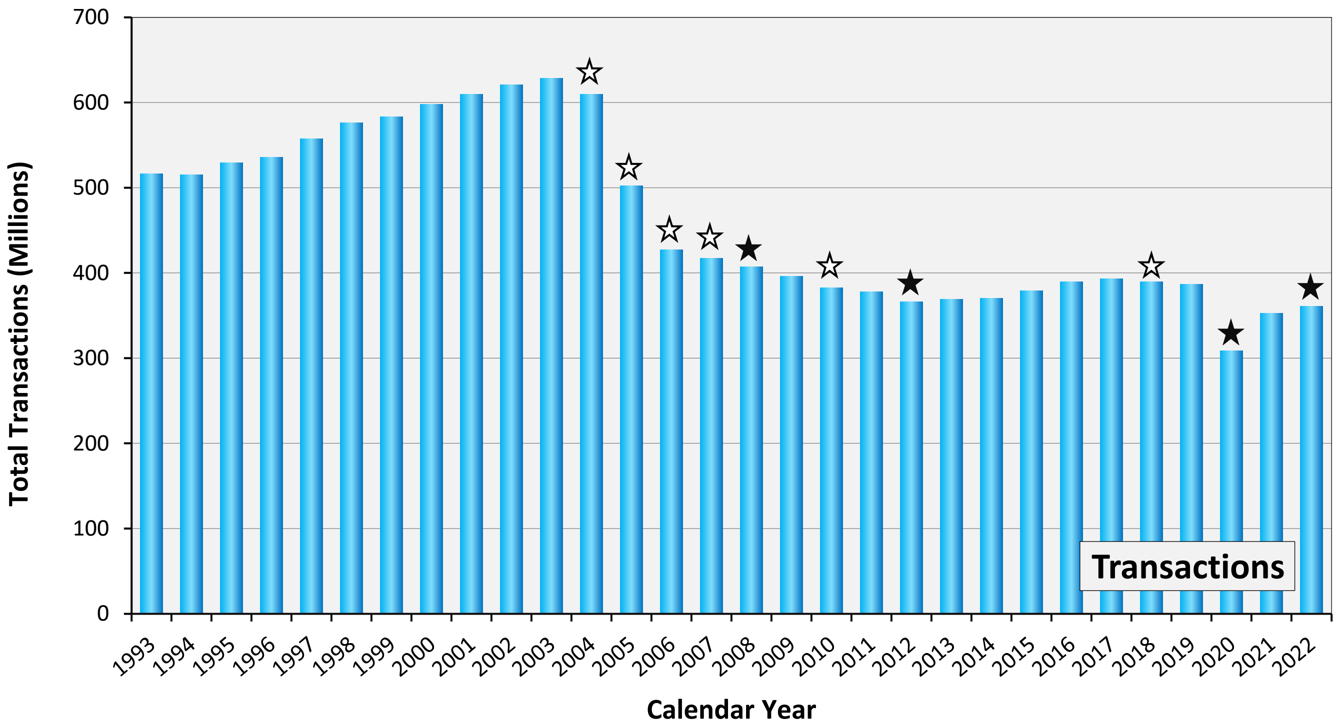


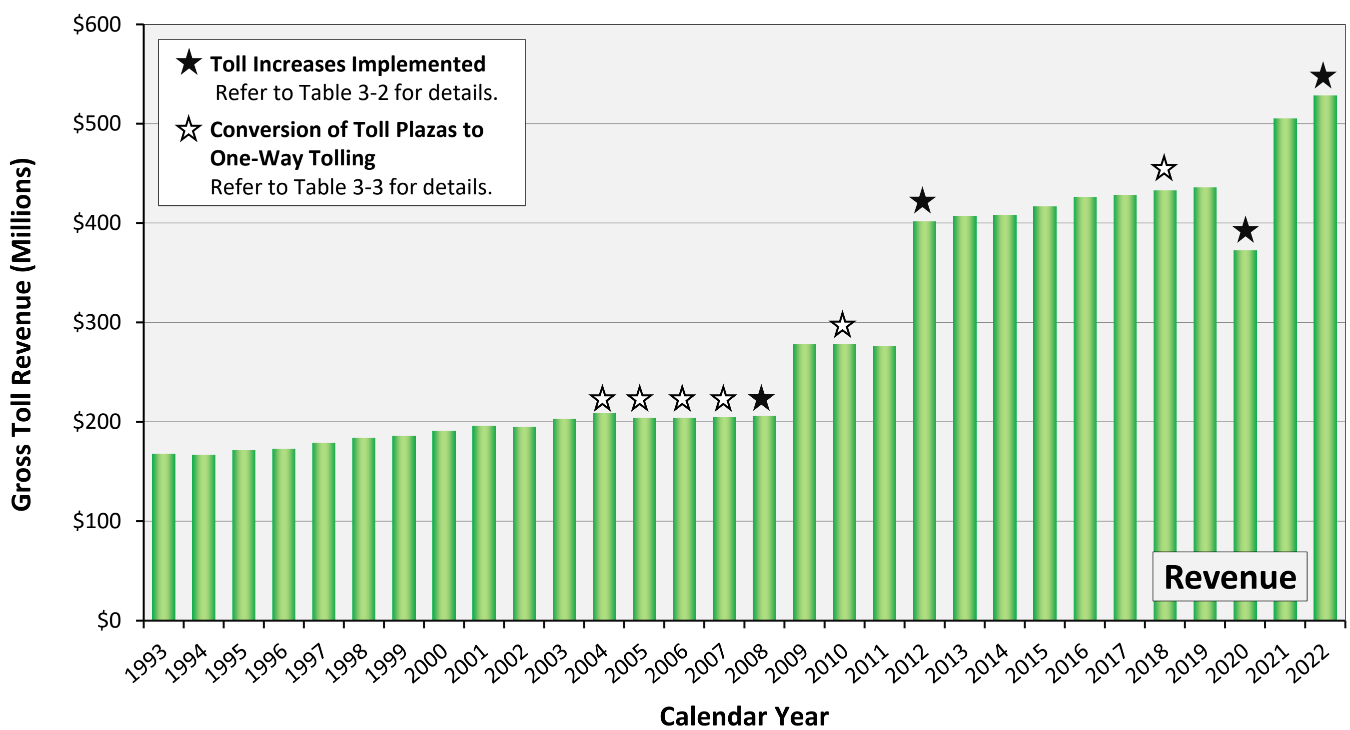
TURNPIKE: ANNUAL TOLL TRANSACTION AND TOLL REVENUE TRENDS

FIGURE 3-1

slowdowns. The positive impacts of the December 2008, January 2012, and September 2020 can be seen in toll revenue growth of 24.8 percent in 2009, 47.4 percent in 2012, and 47.2 percent in 2021. Other than the pandemic-induced decline of 14.5 percent in 2020, annual revenue growth has been positive in every year since the 2012 toll increase, averaging 2.8 percent annual growth between 2012 and 2022.

Annual trends for both transactions and gross toll revenue are displayed graphically in **Figure 3-2.**





PARKWAY: ANNUAL TOLL TRANSACTION AND TOLL REVENUE TRENDS

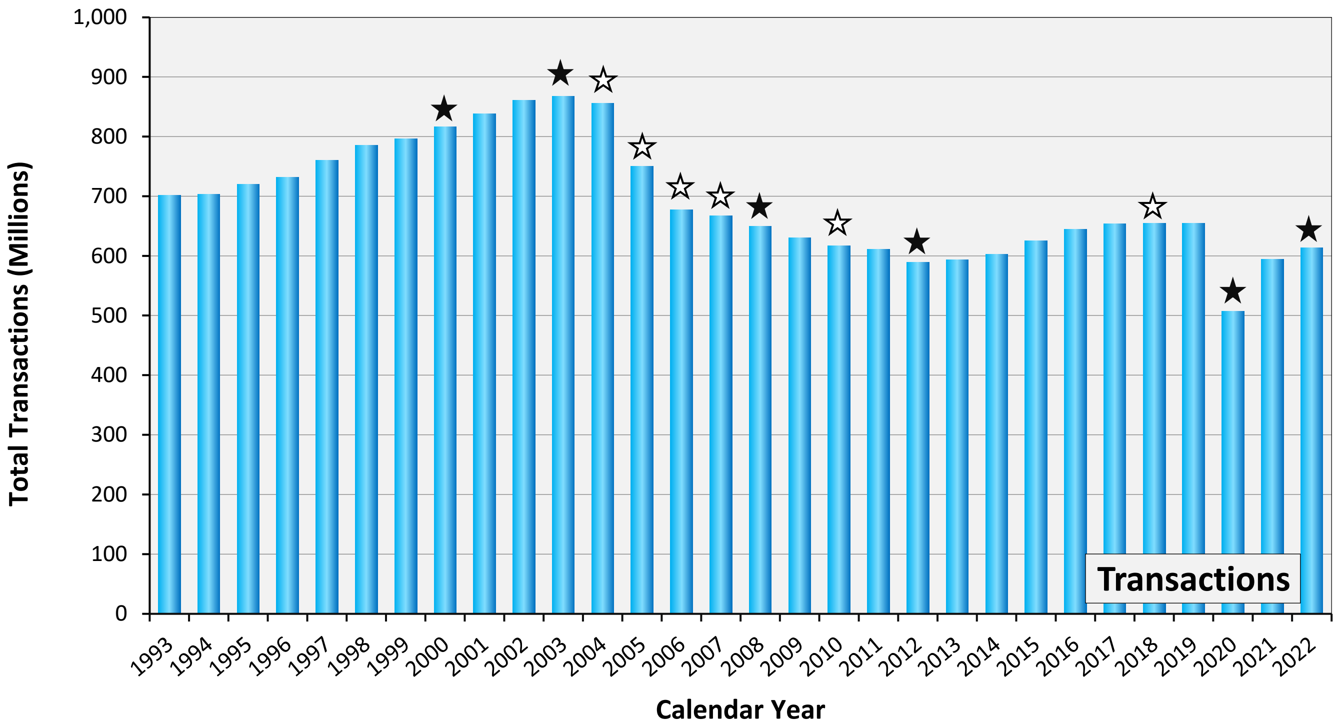
FIGURE 3-2

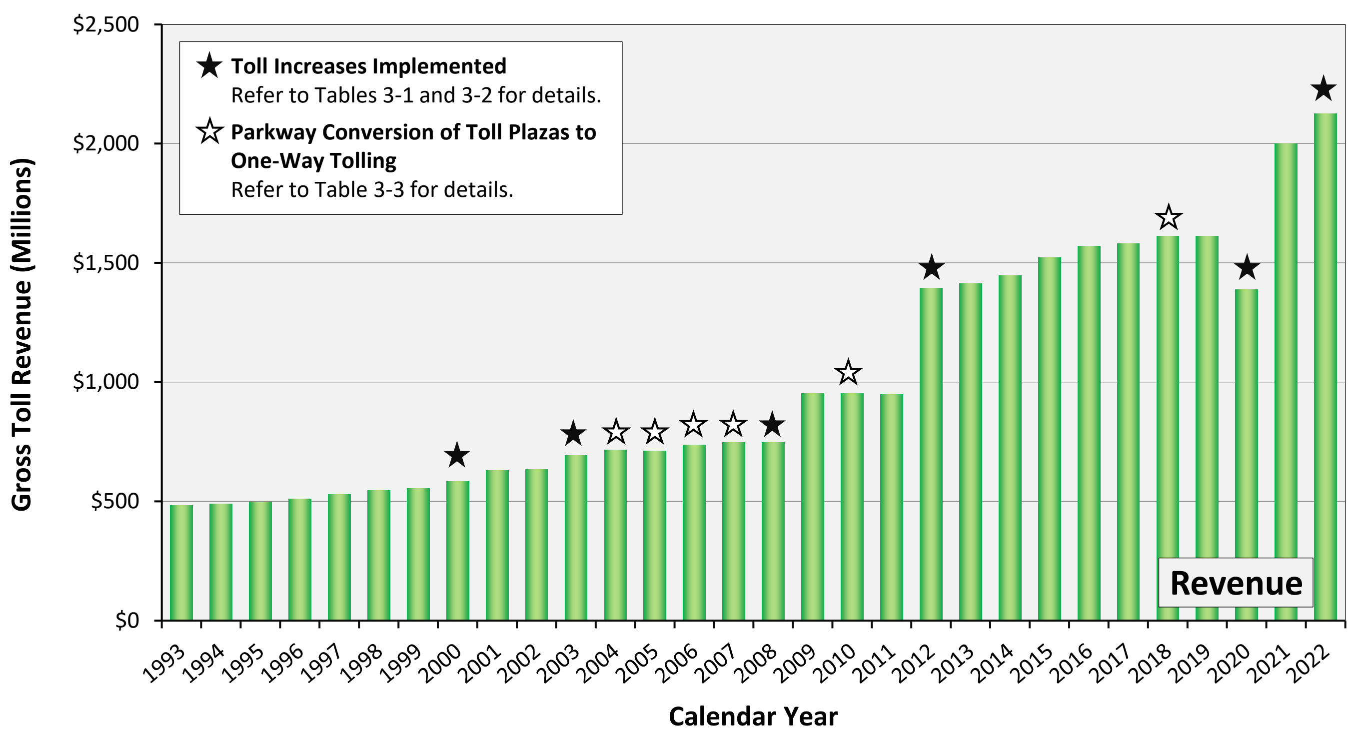
3.2.3 Total System Trends

The Total System trends reflect the combined activities of the Turnpike and Parkway. Total System annual transaction data is shown in **Table 3-4**. Total annual transactions increased each year from 1993 through 2003 and decreased each year from 2004 through 2012 largely due to the impacts on the Parkway associated with conversion to one-way tolling, the 2008 and 2012 toll increases implemented on the Turnpike and the Parkway, the 2007-2009 recession, and severe weather events in 2010 and 2011. Total annual transaction growth has been positive every year since 2012. Transactions grew each year from 2013 to 2018, stayed essentially flat in 2019, and decreased 22.5 percent in 2020 due to the COVID-19 pandemic. Although transactions grew 17.2 percent in 2021 and 3.2 percent in 2022, they have yet to recover to 2019 levels and as a result declined by an annual average of 1.3 percent between 2017 and 2022.

Annual gross toll revenue data is shown in **Table 3-5**. Total system annual toll revenue increased every year from 1994 through 2009, except for 2005, when the annual toll revenue decreased by 0.5 percent. Annual toll revenue increased by 27.5 percent in 2009, primarily due to the systemwide toll increase implemented in December 2008, when Turnpike toll rates increased by 40 percent and Parkway toll rates increased by 43 percent. Annual toll revenue decreased in 2010 by less than one tenth of a percent and decreased again in 2011 by 0.3 percent. These decreases were associated with the slow economy, the impact of the conversion to one-way tolling at the Pascack Valley mainline toll plaza on the Parkway, severe winter weather in 2011, and Hurricane Irene in 2011. Toll revenue increased by 46.9 percent in 2012 primarily due to the toll increases implemented on January 1, 2012, and then grew each year through 2018. In 2019, revenue essentially stayed flat (as did transactions) and declined 13.9 percent in 2020 due to the COVID-19 pandemic. Revenue grew 44.1 in 2021 due to both ongoing recovery from the pandemic and the toll rate increases instituted in September 2020 (36 percent on the Turnpike and 27 percent on the Parkway). Revenue grew another 6.4 percent in 2022, which outpaced the 3-percent toll indexing that went into effect in January of that year.

Annual trends for both transactions and gross toll revenue are displayed graphically in **Figure 3-3.**





TOTAL SYSTEM: ANNUAL TOLL TRANSACTION AND TOLL REVENUE TRENDS

CDM Smith

FIGURE 3-3

3.3 Monthly Toll Transaction and Toll Revenue Trends

Monthly toll transaction and toll revenue trends have been summarized from January 2018 through May 2023 by passenger car and commercial vehicles for both the Turnpike and the Parkway. The monthly trend data was used to refine the near-term toll transaction estimates developed for the Turnpike and Parkway.

3.3.1 Turnpike Trends

Monthly transaction and toll revenue trends for the New Jersey Turnpike from January 2018 through May 2023 are shown in **Tables 3-6 and 3-7**, respectively. Several events had noticeable impacts on transactions and toll revenue in this period. Lane closures on the Pulaski Skyway positively impacted both passenger car transactions and toll revenues on the Turnpike from April 2014 through early July 2018. Significant winter weather events in February 2021 and January 2022 reduced transactions and toll revenue below their normal levels. The COVID-19 pandemic began severely impacting passenger car transactions and toll revenue in March 2020. For the first year of the pandemic, impacts on commercial vehicle traffic and toll revenue were also negative, but less significant than those for passenger cars.

Since March 2021, however, commercial vehicle traffic has outperformed pre-pandemic 2019 levels in almost every month, while passenger car traffic has yet to recover to 2019 levels. Despite the reduced number of transactions experienced throughout the pandemic, revenue has grown significantly since a 36-percent toll increase went into effect in September 2020. Additional 3-percent percent toll indexings went into effect in January 2022 and January 2023.

The following summarizes major events that took place between calendar years, from January 2018 to May 2023, that impacted transaction and toll revenue trends on the New Jersey Turnpike.

- **2018-2019**: Passenger car transactions in 2019 increased by 1.3 percent and toll revenue grew 0.9 percent compared to 2018. Commercial vehicle transactions increased by 0.2 percent and toll revenue decreased by 2.7 percent. In total, transactions grew 1.1 percent and toll revenue decreased by 0.2 percent in 2019 compared to 2018.

  Between March and August 2019, there was a noticeable disconnect between commercial vehicle transaction growth and commercial vehicle revenue growth. Over this six-month period (March-August 2019), commercial toll transactions decreased by 1.1 percent versus the same period in 2018. For the same period, commercial toll revenue decreased by 5.2 percent. NJTA staff believes that this discrepancy between commercial transaction and revenue growth was due to malfunctioning AVC loops at Interchange 18W. Because of the malfunction, class 4, 5, and 6 vehicles with a class 3 transponder were not detected as having a gross class mismatch and were thus undercharged. AVC loops were re-installed at the end of August. After August, the variation between commercial transaction and revenue growth was more consistent. An estimated $7.6 million in toll revenue was lost during this six-month period due to the AVC malfunction at Interchange 18W. Absent that loss, total Turnpike toll revenue would have increased by 0.4 percent in 2019 compared to 2018 (compared to the 0.2-percent loss shown in Table 3-7).

Table 3-6 Historical Toll Transaction Trends by Month: New Jersey Turnpike

Passenger Car Transactions (Thousands of Vehicles)											
Month	2018	Percent Change	2019	Percent Change	2020	Percent Change	2021	Percent Change	2022	Percent Change	2023
January	16,960 [1]	2.4	17,369	2.0	17,716	(24.1)	13,445 [3]	4.1	13,996 [3,5,6]	19.3	16,693 [3,6]
February	16,252 [1]	0.9	16,391	4.7	17,162 [2]	(32.3)	11,621 [3,5]	32.2	15,367 [3]	2.0	15,671 [3]
March	18,244 [1]	5.2	19,186	(33.3)	12,796 [3]	23.9	15,856 [3]	12.3	17,807 [3]	1.5	18,074 [3]
April	19,287 [1]	1.6	19,592	(68.5)	6,175 [3]	165.6	16,401 [3]	11.7	18,327 [3]	0.5	18,411 [3]
May	20,395 [1]	0.7	20,544	(54.1)	9,437 [3]	89.2	17,852 [3]	6.5	19,020 [3]	4.1	19,796 [3]
June	20,434 [1]	(0.4)	20,361	(37.9)	12,641 [3]	48.1	18,718 [3]	1.8	19,048 [3]		
July	20,481	2.1	20,919	(28.4)	14,987 [3]	29.7	19,435 [3]	(1.1)	19,214 [3]		
August	20,906	0.9	21,101	(24.3)	15,972 [3]	20.3	19,209 [3]	0.6	19,316 [3]		
September	19,151	1.9	19,507	(21.0)	15,414 [3,4]	18.5	18,269 [3]	0.8	18,420 [3]		
October	20,280	(0.4)	20,195	(21.6)	15,839 [3]	20.6	19,105 [3]	(0.7)	18,964 [3]		
November	19,013	1.0	19,202	(25.8)	14,245 [3]	28.4	18,285 [3]	(1.4)	18,032 [3]		
December	19,093	(0.0)	19,087	(27.0)	13,935 [3]	26.5	17,623 [3]	2.2	18,011 [3]		
TOTAL [7]	**230,497**	**1.3**	**233,454**	**(28.8)**	**166,320**	**23.7**	**205,819**	**4.7**	**215,522**		
Subtotal Jan-May	**91,138**	**2.1**	**93,081**	**(32.0)**	**63,286**	**18.8**	**75,175**	**12.4**	**84,517**	**4.9**	**88,645**

Commercial Vehicle Transactions (Thousands of Vehicles) [8]											
Month	2018	Percent Change	2019	Percent Change	2020	Percent Change	2021	Percent Change	2022	Percent Change	2023
January	2,668	6.7	2,847	1.5	2,891	(7.7)	2,668 [3]	5.1	2,805 [3,5,6]	5.0	2,946 [3,6]
February	2,485	2.6	2,550	2.8	2,621 [2]	(13.1)	2,276 [3,5]	20.4	2,741 [3]	(2.5)	2,674 [3]
March	2,740	3.0	2,822	(3.4)	2,726 [3]	13.7	3,099 [3]	2.5	3,176 [3]	(1.6)	3,126 [3]
April	2,805	3.9	2,914	(27.2)	2,122 [3]	41.4	2,999 [3]	(0.4)	2,986 [3]	(5.7)	2,817 [3]
May	3,015	0.7	3,035	(23.5)	2,321 [3]	26.5	2,936 [3]	8.5	3,187 [3]	(1.3)	3,146 [3]
June	2,954	(5.5)	2,793	(3.1)	2,705 [3]	15.7	3,131 [3]	6.5	3,333 [3]		
July	2,940	(1.3)	2,903	(3.3)	2,806 [3]	8.1	3,034 [3]	1.8	3,089 [3]		
August	3,090	(6.9)	2,878	(2.9)	2,794 [3]	12.2	3,135 [3]	7.5	3,369 [3]		
September	2,736	3.8	2,839	(0.8)	2,815 [3,4]	9.3	3,077 [3]	4.0	3,202 [3]		
October	3,197	(2.0)	3,131	(4.6)	2,986 [3]	6.1	3,168 [3]	0.5	3,183 [3]		
November	2,898	(3.9)	2,786	(2.0)	2,731 [3]	13.8	3,108 [3]	(1.0)	3,077 [3]		
December	2,726	3.4	2,820	0.4	2,830 [3]	8.1	3,058 [3]	(1.9)	3,001 [3]		
TOTAL [7]	**34,252**	**0.2**	**34,318**	**(5.7)**	**32,348**	**10.3**	**35,690**	**4.1**	**37,150**		
Subtotal Jan-May	**13,713**	**3.3**	**14,169**	**(10.5)**	**12,680**	**10.2**	**13,978**	**6.6**	**14,896**	**(1.3)**	**14,710**

Total Transactions (Thousands of Vehicles)											
Month	2018	Percent Change	2019	Percent Change	2020	Percent Change	2021	Percent Change	2022	Percent Change	2023
January	19,627 [1]	3.0	20,216	1.9	20,607	(21.8)	16,113 [3]	4.3	16,801 [3,5,6]	16.9	19,639 [3,6]
February	18,737 [1]	1.1	18,941	4.4	19,783 [2]	(29.8)	13,897 [3,5]	30.3	18,109 [3]	1.3	18,345 [3]
March	20,984 [1]	4.9	22,008	(29.5)	15,522 [3]	22.1	18,955 [3]	10.7	20,983 [3]	1.0	21,200 [3]
April	22,092 [1]	1.9	22,506	(63.1)	8,297 [3]	133.8	19,400 [3]	9.9	21,313 [3]	(0.4)	21,229 [3]
May	23,411 [1]	0.7	23,579	(50.1)	11,758 [3]	76.8	20,789 [3]	6.8	22,207 [3]	3.3	22,942 [3]
June	23,388 [1]	(1.0)	23,153	(33.7)	15,346 [3]	42.4	21,849 [3]	2.4	22,381 [3]		
July	23,421	1.7	23,822	(25.3)	17,794 [3]	26.3	22,469 [3]	(0.7)	22,303 [3]		
August	23,995	(0.1)	23,979	(21.7)	18,766 [3]	19.1	22,344 [3]	1.5	22,685 [3]		
September	21,887	2.1	22,347	(18.4)	18,230 [3,4]	17.1	21,346 [3]	1.3	21,622 [3]		
October	23,476	(0.6)	23,326	(19.3)	18,825 [3]	18.3	22,273 [3]	(0.6)	22,148 [3]		
November	21,911	0.4	21,988	(22.8)	16,976 [3]	26.0	21,393 [3]	(1.3)	21,109 [3]		
December	21,819	0.4	21,907	(23.5)	16,765 [3]	23.4	20,682 [3]	1.6	21,011 [3]		
TOTAL [7]	**264,749**	**1.1**	**267,772**	**(25.8)**	**198,668**	**21.6**	**241,509**	**4.6**	**252,672**		
Subtotal Jan-May	**104,851**	**2.3**	**107,250**	**(29.2)**	**75,967**	**17.4**	**89,154**	**11.5**	**99,413**	**4.0**	**103,354**

(1) Construction on the Pulaski Skyway positively impacted passenger car traffic on the Turnpike.
(2) Leap year - February had 29 days.
(3) COVID-19 pandemic
(4) 36% toll increase went into effect on September 13, 2020.
(5) Severe winter weather events.
(6) 3% toll indexing implemented each January since 2022.
(7) Totals may not equal the sum of all parts due to rounding.
(8) Consists of Classes 2 through 6, B2, and B3.
Source: NJTA

Table 3-7 Historical Toll Revenue Trends by Month: New Jersey Turnpike

Month	2018	Percent Change	2019	Percent Change	2020	Percent Change	2021	Percent Change	2022	Percent Change	2023
Passenger Car Toll Revenue (Thousands of Dollars)											
January	$57,145 (1)	2.0	$58,286	1.8	$59,332	3.0	$61,100 (3)	8.4	$66,256 (3,5,7)	22.3	$81,005 (3,7)
February	55,233 (1)	0.4	55,450	4.5	57,933 (2)	(10.0)	52,111 (3,5)	40.4	73,185 (3)	2.9	75,283 (3)
March	63,077 (1)	4.2	65,718	(34.8)	42,823 (3)	69.2	72,440 (3)	16.1	84,107 (3)	3.7	87,208 (3)
April	67,506 (1)	2.6	69,287	(75.0)	17,348 (3)	348.4	77,794 (3)	16.8	90,829 (3)	1.5	92,210 (3)
May	71,045 (1)	1.5	72,095	(57.4)	30,721 (3)	182.2	86,706 (3)	7.2	92,953 (3)	5.3	97,846 (3)
June	72,069 (1)	1.3	73,014	(37.3)	45,763 (3)	98.1	90,647 (3)	3.0	93,384 (3)		
July	74,787	1.0	75,567	(28.2)	54,266 (3)	79.6	97,484 (3)	1.5	98,968 (3)		
August	76,586	1.1	77,412	(25.7)	57,544 (3)	66.4	95,756 (3)	2.0	97,657 (3)		
September	67,410	(0.3)	67,217	(4.2)	64,400 (3,4)	35.4	87,229 (3)	2.2	89,132 (3)		
October	69,544	(1.7)	68,379	8.1	73,931 (3)	25.7	92,898 (3,6)	(2.5)	90,599 (3)		
November	66,730	0.5	67,077	(1.5)	66,074 (3)	32.3	87,418 (3)	(0.6)	86,853 (3)		
December	67,826	(1.6)	66,767	(5.1)	63,341 (3)	31.9	83,548 (3)	4.1	87,009 (3)		
TOTAL (8)	**808,959**	**0.9**	**816,271**	**(22.4)**	**633,478**	**55.5**	**985,132**	**6.7**	**1,050,933**		
Subtotal Jan-May	**314,005**	**2.2**	**320,837**	**(35.1)**	**208,158**	**68.2**	**350,151**	**16.3**	**407,332**	**6.4**	**433,552**
Commercial Vehicle Toll Revenue (Thousands of Dollars) (9)											
January	$29,077	6.2	$30,867	(0.3)	$30,782	22.6	$37,724 (3)	10.5	$41,696 (3,5,7)	6.0	$44,189 (3,7)
February	26,876	0.1	26,900	4.6	28,129 (2)	15.6	32,506 (3,5)	24.1	40,351 (3)	(1.0)	39,961 (3)
March	29,831	(3.1)	28,910	2.2	29,532 (3)	47.2	43,473 (3)	7.3	46,654 (3)	0.2	46,734 (3)
April	30,427	(0.4)	30,304	(26.2)	22,372 (3)	91.5	42,849 (3)	3.7	44,438 (3)	(4.8)	42,297 (3)
May	32,669	(5.0)	31,046	(21.1)	24,487 (3)	73.2	42,411 (3)	9.7	46,519 (3)	1.1	47,022 (3)
June	31,725	(8.0)	29,181	3.5	30,191 (3)	48.0	44,690 (3)	10.3	49,280 (3)		
July	31,720	(6.6)	29,616	1.4	30,021 (3)	41.5	42,476 (3)	8.8	46,222 (3)		
August	33,048	(7.5)	30,583	(4.5)	29,219 (3)	48.5	43,399 (3)	14.1	49,516 (3)		
September	29,737	1.0	30,020	16.8	35,075 (3,4)	26.6	44,399 (3)	5.9	47,009 (3)		
October	34,379	(4.3)	32,899	29.7	42,666 (3)	10.3	47,042 (3,6)	(1.1)	46,545 (3)		
November	31,212	(3.5)	30,125	29.5	39,015 (3)	13.4	44,226 (3)	1.1	44,720 (3)		
December	29,664	0.3	29,753	34.1	39,892 (3)	8.4	43,253 (3)	1.2	43,758 (3)		
TOTAL (8)	**370,364**	**(2.7)**	**360,205**	**5.9**	**381,379**	**33.3**	**508,450**	**7.5**	**546,707**		
Subtotal Jan-May	**148,880**	**(0.6)**	**148,028**	**(8.6)**	**135,301**	**47.1**	**198,964**	**10.4**	**219,657**	**0.2**	**220,203**
Total Revenue (Thousands of Dollars)											
January	$86,222 (1)	3.4	$89,153	1.1	$90,114	9.7	$98,824 (3)	9.2	$107,952 (3,5,7)	16.0	$125,193 (3,7)
February	82,109 (1)	0.3	82,351	4.5	86,062 (2)	(1.7)	84,618 (3,5)	34.2	113,536 (3)	1.5	115,244 (3)
March	92,908 (1)	1.9	94,628	(23.5)	72,355 (3)	60.2	115,913 (3)	12.8	130,760 (3)	2.4	133,942 (3)
April	97,932 (1)	1.7	99,591	(60.1)	39,720 (3)	203.7	120,643 (3)	12.1	135,267 (3)	(0.6)	134,507 (3)
May	103,714 (1)	(0.6)	103,141	(46.5)	55,208 (3)	133.9	129,117 (3)	8.0	139,472 (3)	3.9	144,868 (3)
June	103,794 (1)	(1.5)	102,194	(25.7)	75,954 (3)	78.2	135,337 (3)	5.4	142,664 (3)		
July	106,507	(1.2)	105,183	(19.9)	84,287 (3)	66.1	139,960 (3)	3.7	145,190 (3)		
August	109,634	(1.5)	107,996	(19.7)	86,763 (3)	60.4	139,155 (3)	5.8	147,173 (3)		
September	97,147	0.1	97,238	2.3	99,475 (3,4)	32.3	131,629 (3)	3.4	136,141 (3)		
October	103,923	(2.5)	101,278	15.1	116,596 (3)	20.0	139,940 (3,6)	(2.0)	137,144 (3)		
November	97,942	(0.8)	97,203	8.1	105,089 (3)	25.3	131,644 (3)	(0.1)	131,573 (3)		
December	97,490	(1.0)	96,520	7.0	103,233 (3)	22.8	126,801 (3)	3.1	130,767 (3)		
TOTAL (8)	**1,179,323**	**(0.2)**	**1,176,476**	**(13.7)**	**1,014,857**	**47.2**	**1,493,581**	**7.0**	**1,597,640**		
Subtotal Jan-May	**462,885**	**1.3**	**468,865**	**(26.7)**	**343,459**	**59.9**	**549,115**	**14.2**	**626,989**	**4.3**	**653,755**

(1) Construction on the Pulaski Skyway positively impacted passenger car traffic on the Turnpike.
(2) Leap year - February had 29 days.
(3) COVID-19 pandemic
(4) 36% toll increase went into effect on September 13, 2020.
(5) Severe winter weather events.
(6) Due to an accounting change that was implemented in October 2021, there was a slight increase in recorded revenue during the month.
(7) 3% toll indexing implemented each January since 2022.
(8) Totals may not equal the sum of all parts due to rounding.
(9) Consists of Classes 2 through 6, B2, and B3.
Source: NJTA

- **2019-2020**: Passenger car transactions in 2020 decreased by 28.8 percent and toll revenue decreased 22.4 percent compared to 2019. Commercial vehicle transactions decreased 5.7 percent and toll revenue increased by 5.9 percent. In total, transactions fell 25.8 percent and toll revenue decreased by 13.7 percent in 2020 compared to 2019. 2020 was a leap year, with February having one additional day (a weekend day) compared to February 2019.

  Beginning in March, the dominant factor affecting traffic and revenue was the COVID-19 pandemic, which resulted in significant reductions in commuter and discretionary travel as public health recommendations resulted in government-mandated closures of non-essential commercial business, a shift to online schooling, and many workers either losing their jobs or working from home. Among the pandemic mitigation measures that had significant impacts on Turnpike traffic and revenue were a state-wide stay at home order that was in effect from March 21 to June 9 and a suspension of cash collection on all toll facilities from March 24 to May 19.

  The largest traffic and revenue impacts occurred in April, which was the first full calendar month of the pandemic and during which most restrictions were in place. During this month there was a 63.1-percent decline in transactions and a 60.1-percent decline in revenue compared to April 2019. Over the rest of the year, as some restrictions were lifted, transactions and revenue began to improve, but remained far below 2019 levels. Furthermore, while both commercial vehicle and passenger car transactions fell significantly from 2019 levels in the early months of the pandemic, commercial vehicle traffic recovered much more quickly and was only slightly below 2019 levels throughout the summer and fall.

  On September 13, 2020, NJTA instituted several operational changes impacting transactions and revenue figures on the Turnpike. The 19W ramps, which previously had been toll-free and opened only for events at the adjacent Meadowlands sports and entertainment complex, were permanently opened and tolled. Additionally, the bus toll schedule was modified. Most significantly, a toll increase of 36 percent went into effect. While transactions continued to be significantly below 2019 levels throughout the remainder of the year, the toll increase was able to stabilize revenue, and there was overall toll revenue growth in each of the last four months of the year as compared to 2019.

- **2020-2021**: Passenger car transactions in 2021 increased by 23.7 percent and toll revenue increased 55.5 percent compared to 2020. Commercial vehicle transactions increased 10.3 percent and toll revenue increased by 33.3 percent. In total, transactions rose 21.6 percent and toll revenue increased by 47.2 percent in 2021 compared to 2020. 2020 was a leap year, with February 2021 having one fewer day (a weekend day) compared to February 2020 and the year in total having one fewer weekday than 2020.

  While this growth is seemingly very strong, due to the severe impacts the COVID-19 pandemic had on traffic and revenue throughout 2020 it represents a near return to pre-COVID levels rather than exogenous growth. Although monthly commercial vehicle traffic exceeded 2019 levels for the corresponding month for each of the last seven months of the year, 2021 annual passenger car transactions were 11.8 percent below 2019 levels.

Revenue recovered more strongly than did transactions due to the toll increase that went into effect on September 13, 2020. Monthly toll revenue exceeded even pre-pandemic levels each month of the year except for February, which had several severe winter weather events that negatively impacted traffic and one fewer weekend day than February 2020.

A one-time accounting change that NJTA enacted in October 2021 increased revenue during that one month. Prior to that month, revenue received from VTOLs (invalid E-ZPass transponder reads) and ITOLs (E-ZPass accounts that go through image review) was recorded in the month payment was received. However, under the new accounting practice, VTOL and ITOL revenue is now recorded in the month the transaction was made. When the accounting practice was changed, October 2021 revenue included all ITOL and VTOL revenue received from October 2021 transactions alongside revenue received in October from transactions in September. As a result, October 2021 revenue was slightly higher than it otherwise would have been.

- **2021-2022**: Passenger car transactions in 2022 increased by 4.7 percent and toll revenue increased 6.7 percent compared to 2021. Commercial vehicle transactions increased 4.1 percent and toll revenue increased by 7.5 percent. In total, transactions rose 4.6 percent and toll revenue increased by 7.0 percent in 2022 compared to 2021. Revenue growth outpaced transaction growth due to the 3 percent toll indexing implemented in January 2022.

  The Omicron variant and severe winter weather negatively impacted transactions and revenue in January 2022. All other months in 2022 experienced transaction levels that were 6 to 9 percent below pre-pandemic volumes for passenger cars and 2 to 19 percent higher than pre-pandemic volumes for commercial vehicles. Due to annual toll rate indexing, revenue performed more strongly than transactions, although throughout the second half of the year, the gap between the growth in passenger car transactions and revenue was less than the expected 3 percent. CDM Smith's analysis found revenue to be growing by less than 3 percent more than transactions because the average trip length for passenger cars has been decreasing since May 2022.

- **2022-23:** Year to date (January through May), passenger car transactions and toll revenue increased 4.9 percent and 6.4 percent, respectively, compared to the same period in 2022. Commercial vehicle transactions declined 1.3 percent, but toll revenue increased 0.2 percent. In total, transactions grew 4.0 percent and toll revenue increased by 4.3 percent in the first five months of 2023 compared to the same period in 2022. Throughout the year the average toll for passenger cars and commercial vehicles has grown more slowly than the 3-percent toll indexing, suggesting decreasing trip lengths for passenger cars and decreasing trip lengths and/or decreasing truck sizes for commercial vehicles.

3.3.2 Parkway Trends

Monthly transaction and toll revenue trends for the Garden State Parkway from January 2018 to May 2023 are shown in **Tables 3-8 and 3-9**, respectively. It should be noted that given the commercial vehicle restrictions on the Parkway and the resulting low commercial-vehicle volumes (less than 2.0 percent of total transactions), very small changes in commercial vehicle transactions have relatively large percentage impacts. This is evident in the commercial vehicle transaction and revenue growth rates shown in Tables 3-8 and 3-9 for the Parkway.

Table 3-8 Historical Toll Transaction Trends by Month: Garden State Parkway

Passenger Car Transactions (Thousands of Vehicles)											
Month	2018	Percent Change	2019	Percent Change	2020	Percent Change	2021	Percent Change	2022	Percent Change	2023
January	28,370	(0.9)	28,118	3.3	29,033	(20.2)	23,162 (2)	(1.2)	22,886 (2,4,5)	18.8	27,186 (2,5)
February	27,443	(3.8)	26,403	7.0	28,258 (1)	(30.1)	19,765 (2,4)	25.9	24,891 (2)	2.2	25,435 (2)
March	29,971	2.0	30,581	(29.6)	21,539 (2)	24.7	26,870 (2)	6.1	28,521 (2)	3.1	29,409 (2)
April	31,659	(1.7)	31,128	(60.7)	12,226 (2)	127.8	27,852 (2)	3.8	28,924 (2)	1.2	29,257 (2)
May	34,338	(2.2)	33,594	(44.6)	18,604 (2)	65.1	30,709 (2)	0.9	30,981 (2)	5.1	32,562 (2)
June	35,525	(4.2)	34,021	(23.9)	25,902 (2)	27.0	32,897 (2)	(2.3)	32,139 (2)		
July	36,967	(2.1)	36,192	(14.6)	30,914 (2)	11.9	34,605 (2)	(1.3)	34,167 (2)		
August	36,562	0.5	36,752	(12.9)	32,026 (2)	5.8	33,883 (2)	1.8	34,479 (2)		
September	31,620	2.4	32,375	(10.9)	28,832 (2,3)	6.5	30,720 (2)	0.1	30,753 (2)		
October	32,262	(0.7)	32,038	(13.9)	27,597 (2)	10.4	30,460 (2)	(1.7)	29,946 (2)		
November	29,779	1.2	30,126	(19.3)	24,315 (2)	16.7	28,363 (2)	0.0	28,368 (2)		
December	30,013	(0.8)	29,783	(19.7)	23,925 (2)	15.9	27,718 (2)	3.0	28,552 (2)		
TOTAL (6)	**384,509**	**(0.9)**	**381,110**	**(20.5)**	**303,172**	**14.5**	**347,005**	**2.2**	**354,608**		
Subtotal Jan-May	**151,781**	**(1.3)**	**149,824**	**(26.8)**	**109,661**	**17.1**	**128,359**	**6.1**	**136,204**	**5.6**	**143,849**
Commercial Vehicle Transactions (Thousands of Vehicles) (7)											
Month	2018	Percent Change	2019	Percent Change	2020	Percent Change	2021	Percent Change	2022	Percent Change	2023
January	386	0.8	389	11.8	435	(13.5)	376 (2)	9.6	412 (2,4,5)	7.4	443 (2,5)
February	349	6.5	372	11.4	414 (1)	(18.0)	340 (2,4)	17.4	399 (2)	5.1	419 (2)
March	397	8.0	428	(5.4)	405 (2)	12.7	457 (2)	8.7	497 (2)	2.2	508 (2)
April	435	7.1	465	(32.9)	312 (2)	59.6	498 (2)	2.1	508 (2)	(2.9)	494 (2)
May	515	4.1	537	(24.9)	403 (2)	34.5	542 (2)	5.5	572 (2)	5.6	604 (2)
June	502	1.7	511	(6.8)	476 (2)	20.1	571 (2)	(6.0)	537 (2)		
July	501	9.1	546	(6.9)	508 (2)	9.8	558 (2)	(1.8)	548 (2)		
August	494	4.9	519	(3.5)	500 (2)	10.8	554 (2)	5.4	584 (2)		
September	419	16.3	488	0.7	491 (2,3)	12.0	550 (2)	9.3	602 (2)		
October	482	6.5	513	(1.6)	505 (2)	9.9	555 (2)	(5.5)	525 (2)		
November	422	5.4	445	(0.2)	444 (2)	10.8	493 (2)	0.6	496 (2)		
December	381	12.3	428	(2.4)	418 (2)	10.4	461 (2)	2.4	472 (2)		
TOTAL (6)	**5,283**	**6.8**	**5,641**	**(5.8)**	**5,313**	**12.1**	**5,957**	**3.3**	**6,152**		
Subtotal Jan-May	**2,081**	**5.3**	**2,191**	**(10.1)**	**1,970**	**12.3**	**2,213**	**7.9**	**2,389**	**3.3**	**2,467**
Total Transactions (Thousands of Vehicles)											
Month	2018	Percent Change	2019	Percent Change	2020	Percent Change	2021	Percent Change	2022	Percent Change	2023
January	28,756	(0.9)	28,507	3.4	29,468	(20.1)	23,538 (2)	(1.0)	23,299 (2,4,5)	18.6	27,629 (2,5)
February	27,792	(3.7)	26,775	7.1	28,673 (1)	(29.9)	20,105 (2,4)	25.8	25,290 (2)	2.2	25,854 (2)
March	30,368	2.1	31,009	(29.2)	21,945 (2)	24.5	27,327 (2)	6.2	29,018 (2)	3.1	29,917 (2)
April	32,093	(1.6)	31,593	(60.3)	12,538 (2)	126.1	28,350 (2)	3.8	29,433 (2)	1.1	29,750 (2)
May	34,853	(2.1)	34,130	(44.3)	19,007 (2)	64.4	31,251 (2)	1.0	31,553 (2)	5.1	33,166 (2)
June	36,027	(4.2)	34,531	(23.6)	26,378 (2)	26.9	33,468 (2)	(2.4)	32,676 (2)		
July	37,467	(1.9)	36,738	(14.5)	31,422 (2)	11.9	35,163 (2)	(1.3)	34,715 (2)		
August	37,056	0.6	37,271	(12.7)	32,526 (2)	5.9	34,438 (2)	1.8	35,063 (2)		
September	32,040	2.6	32,863	(10.8)	29,324 (2,3)	6.6	31,270 (2)	0.3	31,354 (2)		
October	32,744	(0.6)	32,551	(13.7)	28,102 (2)	10.4	31,015 (2)	(1.8)	30,470 (2)		
November	30,202	1.2	30,571	(19.0)	24,759 (2)	16.5	28,856 (2)	0.0	28,864 (2)		
December	30,394	(0.6)	30,211	(19.4)	24,343 (2)	15.8	28,179 (2)	3.0	29,024 (2)		
TOTAL (6)	**389,792**	**(0.8)**	**386,751**	**(20.2)**	**308,485**	**14.4**	**352,961**	**2.2**	**360,759**		
Subtotal Jan-May	**153,863**	**(1.2)**	**152,015**	**(26.6)**	**111,631**	**17.0**	**130,572**	**6.1**	**138,593**	**5.6**	**146,316**

(1) Leap year - February had 29 days.
(2) COVID-19 pandemic
(3) 27% toll increase went into effect on September 13, 2020.
(4) Severe winter weather events.
(5) 3% toll indexing implemented each January since 2022.
(6) Totals may not equal the sum of all parts due to rounding.
(7) Consists of Classes 2 through 6, B2, and B3.
Source: NJTA

Table 3-9 Historical Toll Revenue Trends by Month: Garden State Parkway

Passenger Car Toll Revenue (Thousands of Dollars)											
Month	2018	Percent Change	2019	Percent Change	2020	Percent Change	2021	Percent Change	2022	Percent Change	2023
January	$29,945	2.6	$30,725	2.8	$31,576	1.0	$31,896 (2)	2.1	$32,568 (2,4,6)	22.9	$40,021 (2,6)
February	29,062	(0.8)	28,840	6.8	30,814 (1)	(11.6)	27,232 (2,4)	29.9	35,364 (2)	5.7	37,374 (2)
March	31,804	5.0	33,389	(30.3)	23,258 (2)	60.1	37,231 (2)	9.1	40,612 (2)	6.6	43,285 (2)
April	33,644	1.4	34,122	(67.0)	11,271 (2)	243.9	38,764 (2)	6.8	41,418 (2)	4.2	43,171 (2)
May	36,494	1.0	36,867	(49.4)	18,653 (2)	129.3	42,764 (2)	2.2	43,723 (2)	10.0	48,096 (2)
June	38,075	(1.6)	37,480	(21.6)	29,385 (2)	56.8	46,084 (2)	(0.6)	45,785 (2)		
July	40,281	(0.1)	40,259	(14.8)	34,298 (2)	42.3	48,803 (2)	0.2	48,914 (2)		
August	40,874	0.3	40,981	(13.4)	35,474 (2)	35.2	47,945 (2)	4.8	50,255 (2)		
September	35,526	0.6	35,734	2.7	36,716 (2,3)	17.2	43,037 (2)	2.8	44,225 (2)		
October	35,327	(0.7)	35,074	9.2	38,306 (2)	11.7	42,796 (2,5)	(0.0)	42,779 (2)		
November	32,757	0.6	32,949	2.0	33,606 (2)	17.4	39,458 (2)	2.8	40,567 (2)		
December	32,844	(1.3)	32,433	1.2	32,829 (2)	16.6	38,271 (2)	6.2	40,630 (2)		
TOTAL (7)	**416,633**	**0.5**	**418,853**	**(15.0)**	**356,187**	**36.0**	**484,282**	**4.7**	**506,840**		
Subtotal Jan-May	**160,949**	**1.9**	**163,943**	**(29.5)**	**115,572**	**53.9**	**177,888**	**8.9**	**193,685**	**9.4**	**211,946**

Commercial Vehicle Toll Revenue (Thousands of Dollars) (8)											
Month	2018	Percent Change	2019	Percent Change	2020	Percent Change	2021	Percent Change	2022	Percent Change	2023
January	$1,161	(2.4)	$1,133	8.1	$1,225	4.7	$1,283 (2)	8.8	$1,397 (2,4,6)	8.1	$1,510 (2,6)
February	1,024	5.3	1,078	7.0	1,154 (1)	0.6	1,160 (2,4)	16.8	1,355 (2)	5.6	1,431 (2)
March	1,185	4.5	1,238	(5.4)	1,171 (2)	34.9	1,580 (2)	9.2	1,725 (2)	1.5	1,751 (2)
April	1,317	5.7	1,392	(40.7)	826 (2)	113.5	1,762 (2)	3.0	1,815 (2)	(1.7)	1,783 (2)
May	1,549	3.0	1,597	(29.3)	1,129 (2)	68.7	1,906 (2)	2.2	1,948 (2)	12.1	2,184 (2)
June	1,541	0.5	1,550	(2.4)	1,512 (2)	34.0	2,026 (2)	(8.0)	1,865 (2)		
July	1,585	6.6	1,689	(10.7)	1,507 (2)	32.9	2,004 (2)	(2.5)	1,953 (2)		
August	1,594	3.6	1,651	(10.4)	1,479 (2)	36.5	2,019 (2)	8.3	2,187 (2)		
September	1,365	9.7	1,498	8.8	1,630 (2,3)	21.9	1,987 (2)	9.5	2,176 (2)		
October	1,605	(3.0)	1,557	13.8	1,771 (2)	12.4	1,991 (2,5)	(8.1)	1,829 (2)		
November	1,294	1.8	1,317	16.1	1,529 (2)	11.1	1,699 (2)	0.7	1,710 (2)		
December	1,150	7.8	1,239	14.2	1,414 (2)	9.3	1,545 (2)	2.8	1,588 (2)		
TOTAL (7)	**16,371**	**3.5**	**16,938**	**(3.5)**	**16,347**	**28.2**	**20,962**	**2.8**	**21,547**		
Subtotal Jan-May	**6,237**	**3.2**	**6,439**	**(14.5)**	**5,505**	**39.7**	**7,691**	**7.1**	**8,240**	**5.1**	**8,659**

Total Toll Revenue (Thousands of Dollars)											
Month	2018	Percent Change	2019	Percent Change	2020	Percent Change	2021	Percent Change	2022	Percent Change	2023
January	$31,106	2.4	$31,859	3.0	$32,801	1.2	$33,180 (2)	2.4	$33,965 (2,4,6)	22.3	$41,531 (2,6)
February	30,086	(0.6)	29,918	6.9	31,968 (1)	(11.2)	28,393 (2,4)	29.3	36,719 (2)	5.7	38,805 (2)
March	32,989	5.0	34,627	(29.5)	24,430 (2)	58.9	38,811 (2)	9.1	42,337 (2)	6.4	45,036 (2)
April	34,961	1.6	35,514	(65.9)	12,096 (2)	235.0	40,527 (2)	6.7	43,233 (2)	4.0	44,953 (2)
May	38,044	1.1	38,464	(48.6)	19,782 (2)	125.8	44,670 (2)	2.2	45,671 (2)	10.1	50,280 (2)
June	39,616	(1.5)	39,029	(20.8)	30,897 (2)	55.7	48,110 (2)	(1.0)	47,649 (2)		
July	41,866	0.2	41,948	(14.6)	35,805 (2)	41.9	50,806 (2)	0.1	50,868 (2)		
August	42,467	0.4	42,632	(13.3)	36,953 (2)	35.2	49,965 (2)	5.0	52,441 (2)		
September	36,891	0.9	37,231	3.0	38,346 (2,3)	17.4	45,025 (2)	3.1	46,401 (2)		
October	36,931	(0.8)	36,631	9.4	40,078 (2)	11.8	44,787 (2,5)	(0.4)	44,608 (2)		
November	34,052	0.6	34,266	2.5	35,135 (2)	17.1	41,156 (2)	2.7	42,277 (2)		
December	33,994	(0.9)	33,672	1.7	34,243 (2)	16.3	39,816 (2)	6.0	42,218 (2)		
TOTAL (7)	**433,003**	**0.6**	**435,792**	**(14.5)**	**372,535**	**35.6**	**505,244**	**4.6**	**528,388**		
Subtotal Jan-May	**167,186**	**1.9**	**170,382**	**(28.9)**	**121,077**	**53.3**	**185,580**	**8.8**	**201,925**	**9.3**	**220,605**

(1) Leap year - February had 29 days.
(2) COVID-19 pandemic
(3) 27% toll increase went into effect on September 13, 2020.
(4) Severe winter weather events.
(5) Due to an accounting change that was implemented in October 2021, there was a slight increase in recorded revenue during the month.
(6) 3% toll indexing implemented each January since 2022.
(7) Totals may not equal the sum of all parts due to rounding.
(8) Consists of Classes 2 through 6, B2, and B3.
Source: NJTA

Many of the events that impacted Turnpike transactions and toll revenue also impacted Parkway transactions and toll revenue. In addition, the closure of all Atlantic City casinos from March 16 to July 2, 2020 as a public health measure during the first few months of the COVID-19 pandemic further negatively impacted transactions and toll revenue on the Parkway. The following summarizes the major events that took place between calendar years, from January 2018 to May 2023, that impacted transaction and toll revenue trends on the Garden State Parkway.

- **2018-2019**: Passenger car transactions decreased 0.9 percent and toll revenue increased 0.5 percent compared to 2018. Commercial vehicle transactions and toll revenue increased 6.8 percent and 3.5 percent, respectively. In total, transactions declined by 0.8 percent and toll revenue increased by 0.6 percent in 2019.

- **2019-2020**: Passenger car transactions decreased 20.5 percent and toll revenue decreased 15.0 percent compared to 2019. Commercial vehicle transactions and toll revenue decreased 5.8 percent and 3.5 percent, respectively. In total, transactions decreased 20.2 percent and toll revenue decreased by 14.5 percent in 2020. 2020 was a leap year, with February having one additional weekend day. As with the Turnpike, traffic and revenue during this period were impacted by normal growth, COVID-19, and a 27-percent toll increase on September 13, 2020.

- **2020-2021**: Passenger car transactions increased 14.5 percent and toll revenue increased 36.0 percent compared to 2020. Commercial vehicle transactions and toll revenue increased 12.1 percent and 28.2 percent, respectively. In total, transactions increased 14.4 percent and toll revenue increased by 35.6 percent in 2021. As noted above, 2020 was a leap year, with 2021 having one fewer weekend day in February and one fewer weekday over the entire year than 2020. Severe snowstorms in February 2021 also depressed that month's traffic volumes.

- **2021-2022**: Passenger car transactions increased 2.2 percent and toll revenue increased 4.7 percent compared to 2021. Commercial vehicle transactions increased 3.3 percent while revenue increased 2.8 percent. In total, transactions increased 2.2 percent and toll revenue increased by 4.6 percent in 2022 compared to 2021. Severe snowstorms in January depressed that month's traffic volumes.

- **2022-2023**: Year-to-date (January through May) passenger car transactions have increased 5.6 percent and toll revenue has increased 9.4 percent compared to the same period in 2022. Commercial vehicle transactions have increased 3.3 percent while toll revenue has increased 5.1 percent. In total, transactions have increased 5.6 percent and toll revenue has increased by 9.3 percent through May of 2023 compared to the same period in 2022. Total transaction and revenue growth have been positive in each month of the year thus far, with January showing atypical strength similar to the Turnpike due to depressed traffic in January 2022.

3.3.3 Total System Trends

Table 3-10 shows monthly toll revenue trends for the Authority's roadways from January 2018 through May 2023. In 2019, total toll revenue was essentially flat as compared to 2018, decreasing by less than $60,000 in total (less than 0.1%). In 2020, total toll revenue decreased by

13.9%. In 2021, total toll revenue increased by 44.1%. In 2022, total NJTA system toll revenue increased by 6.4% compared to 2021. In the first five months of 2023, total NJTA system toll revenue increased by 5.5% compared to the same period in 2022.

Table 3-10 Historical Gross Toll Revenue Trends by Month

New Jersey Turnpike Toll Revenue (Thousands of Dollars)											
Month	2018	Percent Change	2019	Percent Change	2020	Percent Change	2021	Percent Change	2022	Percent Change	2023
January	$86,222 [1]	3.4	$89,153	1.1	$90,114	9.7	$98,824 [3]	9.2	$107,952 [3,5,7]	16.0	$125,193 [3,7]
February	82,109 [1]	0.3	82,351	4.5	86,062 [2]	(1.7)	84,618 [3,5]	34.2	113,536 [3]	1.5	115,244 [3]
March	92,908 [1]	1.9	94,628	(23.5)	72,355 [3]	60.2	115,913 [3]	12.8	130,760 [3]	2.4	133,942 [3]
April	97,932 [1]	1.7	99,591	(60.1)	39,720 [3]	203.7	120,643 [3]	12.1	135,267 [3]	(0.6)	134,507 [3]
May	103,714 [1]	(0.6)	103,141	(46.5)	55,208 [3]	133.9	129,117 [3]	8.0	139,472 [3]	3.9	144,868 [3]
June	103,794 [1]	(1.5)	102,194	(25.7)	75,954 [3]	78.2	135,337 [3]	5.4	142,664 [3]		
July	106,507	(1.2)	105,183	(19.9)	84,287 [3]	66.1	139,960 [3]	3.7	145,190 [3]		
August	109,634	(1.5)	107,996	(19.7)	86,763 [3]	60.4	139,155 [3]	5.8	147,173 [3]		
September	97,147	0.1	97,238	2.3	99,475 [3,4]	32.3	131,629 [3]	3.4	136,141 [3]		
October	103,923	(2.5)	101,278	15.1	116,596 [3]	20.0	139,940 [3,6]	(2.0)	137,144 [3]		
November	97,942	(0.8)	97,203	8.1	105,089 [3]	25.3	131,644 [3]	(0.1)	131,573 [3]		
December	97,490	(1.0)	96,520	7.0	103,233 [3]	22.8	126,801 [3]	3.1	130,767 [3]		
TOTAL[8]	**1,179,323**	**(0.2)**	**1,176,476**	**(13.7)**	**1,014,857**	**47.2**	**1,493,581**	**7.0**	**1,597,640**		
Subtotal Jan-May	**462,885**	**1.3**	**468,865**	**(26.7)**	**343,459**	**59.9**	**549,115**	**14.2**	**626,989**	**4.3**	**653,755**

Garden State Parkway Toll Revenue (Thousands of Dollars)											
Month	2018	Percent Change	2019	Percent Change	2020	Percent Change	2021	Percent Change	2022	Percent Change	2023
January	$31,106	2.4	$31,859	3.0	$32,801	1.2	$33,180 [3]	2.4	$33,965 [3,5,7]	22.3	$41,531 [3,7]
February	30,086	(0.6)	29,918	6.9	31,968 [2]	(11.2)	28,393 [3,5]	29.3	36,719 [3]	5.7	38,805 [3]
March	32,989	5.0	34,627	(29.5)	24,430 [3]	58.9	38,811 [3]	9.1	42,337 [3]	6.4	45,036 [3]
April	34,961	1.6	35,514	(65.9)	12,096 [3]	235.0	40,527 [3]	6.7	43,233 [3]	4.0	44,953 [3]
May	38,044	1.1	38,464	(48.6)	19,782 [3]	125.8	44,670 [3]	2.2	45,671 [3]	10.1	50,280 [3]
June	39,616	(1.5)	39,029	(20.8)	30,897 [3]	55.7	48,110 [3]	(1.0)	47,649 [3]		
July	41,866	0.2	41,948	(14.6)	35,805 [3]	41.9	50,806 [3]	0.1	50,868 [3]		
August	42,467	0.4	42,632	(13.3)	36,953 [3]	35.2	49,965 [3]	5.0	52,441 [3]		
September	36,891	0.9	37,231	3.0	38,346 [3,4]	17.4	45,025 [3]	3.1	46,401 [3]		
October	36,931	(0.8)	36,631	9.4	40,078 [3]	11.8	44,787 [3,6]	(0.4)	44,608 [3]		
November	34,052	0.6	34,266	2.5	35,135 [3]	17.1	41,156 [3]	2.7	42,277 [3]		
December	33,994	(0.9)	33,672	1.7	34,243 [3]	16.3	39,816 [3]	6.0	42,218 [3]		
TOTAL[8]	**433,003**	**0.6**	**435,792**	**(14.5)**	**372,535**	**35.6**	**505,244**	**4.6**	**528,388**		
Subtotal Jan-May	**167,186**	**1.9**	**170,382**	**(28.9)**	**121,077**	**53.3**	**185,580**	**8.8**	**201,925**	**9.3**	**220,605**

Total Toll Revenue (Thousands of Dollars)											
Month	2018	Percent Change	2019	Percent Change	2020	Percent Change	2021	Percent Change	2022	Percent Change	2023
January	$117,328 [1]	3.1	$121,012	1.6	$122,915	7.4	$132,004 [3]	7.5	$141,917 [3,5,7]	17.5	$166,724 [3,7]
February	112,195 [1]	0.1	112,268	5.1	118,030 [2]	(4.3)	113,010 [3,5]	33.0	150,256 [3]	2.5	154,049 [3]
March	125,897 [1]	2.7	129,255	(25.1)	96,784 [3]	59.9	154,724 [3]	11.9	173,098 [3]	3.4	178,978 [3]
April	132,893 [1]	1.7	135,105	(61.6)	51,816 [3]	211.0	161,170 [3]	10.8	178,500 [3]	0.5	179,461 [3]
May	141,758 [1]	(0.1)	141,605	(47.0)	74,991 [3]	131.7	173,787 [3]	6.5	185,143 [3]	5.4	195,148 [3]
June	143,410 [1]	(1.5)	141,224	(24.3)	106,852 [3]	71.7	183,447 [3]	3.7	190,313 [3]		
July	148,373	(0.8)	147,131	(18.4)	120,092 [3]	58.8	190,766 [3]	2.8	196,057 [3]		
August	152,102	(1.0)	150,628	(17.9)	123,716 [3]	52.9	189,120 [3]	5.5	199,614 [3]		
September	134,038	0.3	134,469	2.5	137,821 [3,4]	28.2	176,653 [3]	3.3	182,542 [3]		
October	140,854	(2.1)	137,909	13.6	156,674 [3]	17.9	184,727 [3,6]	(1.6)	181,752 [3]		
November	131,993	(0.4)	131,469	6.7	140,224 [3]	23.2	172,800 [3]	0.6	173,850 [3]		
December	131,484	(1.0)	130,192	5.6	137,476 [3]	21.2	166,617 [3]	3.8	172,985 [3]		
TOTAL[8]	**1,612,326**	**(0.0)**	**1,612,268**	**(13.9)**	**1,387,392**	**44.1**	**1,998,825**	**6.4**	**2,126,027**		
Subtotal Jan-May	**630,071**	**1.5**	**639,246**	**(27.3)**	**464,537**	**58.2**	**734,695**	**12.8**	**828,914**	**5.5**	**874,360**

(1) Construction on the Pulaski Skyway positively impacted passenger car traffic on the Turnpike.

(2) Leap year - February had 29 days.

(3) COVID-19 pandemic

(4) 36% toll increase went into effect on September 13, 2020.

(5) Severe winter weather events.

(6) Due to an accounting change that was implemented in October 2021, there was a slight increase in recorded revenue during the month.

(7) 3% toll indexing implemented each January since 2022.

(8) Totals may not equal the sum of all parts due to rounding.

Source: NJTA

3.4 Annual Trends in E-ZPass Market Share

E-ZPass percent market shares of toll transactions for the Turnpike, Parkway and Total System are shown in **Table 3-11**. The market shares are provided by passenger car and commercial vehicle for the Turnpike from 2003 through 2022, and by all vehicles for the Parkway and the Total System from 2007 through 2022. In addition, the percentage point change in market share from the prior year is also provided.

The E-ZPass market share for Turnpike passenger cars has increased every year since 2003, growing from 60.2 percent in 2003 to 90.6 percent in 2012. The E-ZPass market share for commercial vehicle has always been higher than that for passenger cars and, except for 2021, has also increased every year, growing from 66.8 percent in 2003 to 96.7 percent in 2012. Parkway E-ZPass market share has generally lagged slightly behind that of Turnpike passenger cars but has also consistently grown each year, increasing from 65.7percent in 2007 to 89.7 percent in 2022. Total System E-ZPass market share increased from 67.4 percent to 90.5 percent in the same time period.

There are currently a variety of discounts available to E-ZPass customers. On the Turnpike, passenger cars using a New Jersey E-ZPass account receive an automatic discount for trips made during off-peak hours. The net discount varies depending on the particular trip. For a through trip, the passenger car discount is 25 percent. Trucks using E-ZPass on the Turnpike also receive an automatic discount from the cash rate, totaling about 9 percent for a through trip any time of the day, and about 13 percent for a trip during off-peak hours. On the Parkway, all E-ZPass transactions receive a discount up to 7 percent lower than the cash rate regardless of the state issuing the E-ZPass transponder. Additionally, trucks (classes 2 – 6) using a New Jersey E-ZPass account receive an automatic discount of about 5 percent off the E-ZPass rate for travel in off-peak periods. These toll differentials offer a financial incentive to use E-ZPass instead of cash.

While the E-ZPass market share for total vehicles has consistently grown at least 0.4 percent every year on the Turnpike since 2004, the four largest one-year increases have corresponded with the four years that have seen increases in toll rates: 2008, 2012, 2020, and 2022. Each of these years has witnessed a growth in E-ZPass market share of at least 1.9 percentage points. 2011 also had E-ZPass market share growth of 1.9 percent, likely as a result of the anticipated toll rate increase that went into effect on January 1, 2012. Other than the early years of the E-ZPass program prior to 2007, years without a toll rate increase never had market share growth greater than 1.7 percentage points.

The Parkway also exhibited larger than normal E-ZPass market share increases as a result of the toll rate increases in December 2008, January 2012, and September 2020. E-ZPass market share grew by 2.0 percentage points in 2008 and a further 2.9 percentage points in 2009. E-ZPass market share grew 3.2 percentage points in 2012 and 2.6 percentage points in 2020. In all other years, growth was between 0.6 and 1.8 percentage points.

This analysis of the E-ZPass market share trends helped develop future year estimates of E-ZPass penetration rates.

Table 3-11 Historical Trends in E-ZPass Market Share of Toll Transactions

Calendar Year	Turnpike Passenger Cars	Commercial Vehicles	All Vehicles	Parkway All Vehicles	Total System All Vehicles
Percent E-ZPass Market Share					
2003	60.2 %	66.8 %	61.1 %	-	-
2004	63.5	69.7	64.3	-	-
2005	65.5	74.7	66.7	-	-
2006	67.4	76.7	68.6	-	-
2007	69.0	78.0	70.2	65.7 %	67.4 %
2008	70.9	80.0	72.1	67.7	69.4
2009	72.3	81.5	73.5	70.6	71.7
2010	73.5	81.8	74.6	71.4	72.6
2011	75.5	83.0	76.4	72.5	74.0
2012	78.1	86.5	79.2	75.7	77.0
2013	79.5	88.2	80.6	77.2	78.5
2014	80.0	89.1	81.2	78.1	79.3
2015	80.5	89.9	81.7	78.7	79.9
2016	81.4	90.8	82.6	79.6	80.8
2017	83.2	91.6	84.2	81.4	82.5
2018	84.8	92.8	85.9	83.2	84.3
2019	85.9	93.7	86.9	84.8	85.7
2020	88.0	95.5	89.2	87.4	88.1
2021	88.6	95.5	89.6	88.2	88.8
2022	90.6	96.7	91.5	89.7	90.5
Net Change in Percentages					
2003	-	-	-	-	-
2004	3.3	2.9	3.2	-	-
2005	2.0	5.0	2.4	-	-
2006	1.8	2.0	1.9	-	-
2007	1.6	1.3	1.6	-	-
2008	1.9	2.0	1.9	2.0	2.0
2009	1.5	1.5	1.4	2.9	2.3
2010	1.2	0.2	1.1	0.8	0.9
2011	1.9	1.2	1.9	1.1	1.4
2012	2.6	3.5	2.8	3.2	3.0
2013	1.4	1.7	1.4	1.5	1.5
2014	0.5	0.9	0.6	0.9	0.8
2015	0.5	0.8	0.5	0.6	0.6
2016	0.9	0.9	0.9	0.9	0.9
2017	1.8	0.8	1.6	1.8	1.7
2018	1.6	1.2	1.7	1.8	1.8
2019	1.1	0.9	1.1	1.6	1.4
2020	2.1	1.8	2.3	2.6	2.4
2021	0.6	0.0	0.4	0.8	0.7
2022	2.1	1.2	1.9	1.5	1.7

Source: NJTA

3.5 Annual Trends in Vehicle Class Distribution

As seen in **Table 3-12, b**etween 2004 and 2019, the percentage of commercial vehicle transactions on the Turnpike and Parkway remained quite stable, although there was a bit more fluctuation in share of gross toll revenue. During this period, commercial vehicle toll transactions on the Turnpike ranged from a high of 13.9 percent of total toll transactions in 2006 and 2007 to a low of 12.5 percent in 2016 and 2017. Their share of the gross toll revenue ranged from a high of 36.5 percent of total toll revenue in 2008 to a low of 30.5 percent in 2017.

During this period, there was even less variation on the Parkway, with commercial vehicle toll transactions ranging from 1.1 percent to 1.5 percent of total transactions each year. The commercial vehicle share of gross toll revenue was also very consistent, ranging from a high of 4.1 percent of total gross toll revenue to a low of 1.1 percent. It should be noted that in 2007 the Parkway modified their vehicle class definitions to match the Turnpike's. This change impacted how transactions were divided into passenger car and commercial vehicle transactions from 2008 onward. From this point through 2019, the Parkway commercial vehicle revenue share had a narrower range of 2.8 percent to 4.1 percent.

However, commercial vehicles' share of transactions and revenue grew significantly beyond these bounds in 2020 as a result of the COVID-19 pandemic. Many schools and offices were shut down for much of the year, resulting in more telecommuting and fewer passenger cars on NJTA facilities. Conversely, as people spent more time at home, freight deliveries and commercial vehicle traffic increased, resulting in commercial vehicle shares of transactions growing to 16.3 percent on the Turnpike, 1.7 percent on the Parkway, and 7.4 percent for the total system, all of which were new highs for the respective systems. Shares of gross toll revenue also grew to new highs of 37.6 percent, 4.4 percent, and 28.7 percent on the Turnpike, Parkway, and total system, respectively. In 2021 and 2022 these shares came down somewhat but remained above pre-pandemic levels as demand for freight remained high, but businesses and schools reopened.

Table 3-12 Annual Trends in Commercial Vehicle Distribution by Toll Transactions and Toll Revenue

Calendar Year	Toll Transactions			Gross Toll Revenue		
	Turnpike	Parkway	Total System	Turnpike	Parkway	Total System
2004	13.7 %	1.4 %	4.9 %	35.4 %	1.4 %	25.7 %
2005	13.8	1.3	5.5	36.0	3.5	26.9
2006	13.9	1.1	5.8	35.0	1.1	25.8
2007 (1)	13.9	1.1	5.9	35.5	1.1	26.2
2008	13.8	1.1	5.9	36.5	2.8	27.3
2009	12.9	1.3	5.6	33.7	3.3	24.8
2010	12.8	1.2	5.7	32.6	3.4	24.0
2011	12.7	1.3	5.6	33.9	3.2	24.9
2012	12.8	1.3	5.7	32.7	4.1	24.4
2013	13.0	1.4	5.8	33.2	4.1	24.8
2014	12.9	1.4	5.8	33.0	3.7	24.8
2015	12.7	1.4	5.8	32.7	3.8	24.8
2016	12.5	1.3	5.7	32.2	3.6	24.4
2017	12.5	1.3	5.8	30.5	3.7	23.2
2018	12.9	1.4	6.0	31.4	3.8	24.0
2019	12.8	1.5	6.1	30.6	3.9	23.4
2020	16.3	1.7	7.4	37.6	4.4	28.7
2021	14.8	1.7	7.0	34.0	4.1	26.5
2022	14.7	1.7	7.1	34.2	4.1	26.7

Note: Commercial Vehicles are defined as vehicle classes 2-6 and B1 and B2.
(1) Parkway changed class structure to match Turnpike in 2007.

Source: NJTA

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Chapter 4

Corridor Growth Analysis

Historical and forecast socioeconomic data were collected and evaluated to understand how New Jersey and the major sub-state regions are growing. Discussions with local Metropolitan Planning Organization (MPO) representatives were also conducted to confirm and substantiate the socioeconomic data and understand underlying trends. This information was then used in an econometric analysis to estimate mid-term baseline travel demand on the two NJTA facilities: the New Jersey Turnpike and the Garden State Parkway.

The purpose of this chapter is: 1) to provide a description of the historical and forecasted trends in the study area socioeconomics; 2) qualitatively summarize discussions with regional MPO representatives regarding socioeconomic trends and regional developments; and 3) to describe the methodological approach and findings of the econometric growth analysis.

4.1 Socioeconomic Historical Trends and Forecasts

Socioeconomic trends and forecasts for geographies along and surrounding the New Jersey Turnpike and the Garden State Parkway were evaluated, which serve as inputs into the regression-based demand growth analysis. Subsections below summarize various demographic and economic measures, including population, employment, real retail sales, and real gross regional product (GRP).

In the subsequent tables, the socioeconomic growth rates are presented in annualized compound average growth rate (CAGR) terms, reported in five-year increments from 1995 through 2035. Geographically, the state of New Jersey is presented along with the metropolitan areas of New York City (NYC) and Philadelphia, as well as the southeastern section of the state and the entire nation.

4.1.1 Population

Historical population data were obtained from the United States Census Bureau and forecast data from other public and private sources, depending on geography, as presented in **Table 4-1.** New Jersey counties' and metropolitan areas' population data were obtained from the respective regional MPOs, and are available through at least year 2035. Metropolitan NYC (comprised of counties in Connecticut, New York, and New Jersey) population forecast data are from the New York Metropolitan Transportation Council (NYMTC) and the North Jersey Transportation Planning Authority (NJTPA). Metropolitan Philadelphia data are from the Delaware Valley Regional Planning Commission (DVRPC) and the southeastern New Jersey counties are from the South Jersey Transportation Planning Organization (SJTPO). Population forecasts for the entire state of New Jersey are the aggregation of the constituent forecasts for the combined 21 counties in the state, from the respective MPO sources. National data are presented for comparative purposes, with the forecasts from the Woods and Poole dataset[1].

As shown in **Table 4-1**, population growth in New Jersey and the surrounding metropolitan areas are lower relative to the growth in the nation, for both the historical trends and forecasts. Historically, the resident population in New Jersey increased annually by about 0.6 percent on average from 1995 through 2020, with metro Philadelphia and southeastern New Jersey having slower growth than metro New York City (NYC). Comparatively, historical population growth in the United States averaged about 0.9 percent per year over the same twenty-five-year period.

Table 4-1 Population Trends and Forecasts (CAGR,%)

Area	1995 - '00	2000 - '05	2005 - '10	2010 - '15	2015 - '20	2020 - '25	2025 - '30	2030 - '35	1995 - '20	2020 - '35
Metro NYC(1)	0.9	0.3	0.4	0.4	0.7	0.4	0.3	0.5	0.5	0.4
Metro Philadelphia(2)	0.3	0.4	0.5	0.3	0.6	0.5	0.3	0.2	0.4	0.3
Southeastern NJ(3)	0.6	0.7	0.3	(0.4)	0.2	0.1	0.1	0.1	0.3	0.1
New Jersey(4)	0.8	0.5	0.3	0.2	0.9	0.1	0.3	0.3	0.6	0.2
United States	1.2	0.9	0.9	0.7	0.7	0.5	0.6	0.6	0.9	0.6

Geographies:

(1)Metro NYC as defined by NYMTC includes the following counties: Fairfield, CT; Litchfield, CT; New Haven, CT; Bergen, NJ; Essex, NJ; Hudson, NJ; Hunterdon, NJ; Mercer, NJ; Middlesex, NJ; Monmouth, NJ; Morris, NJ; Ocean, NJ; Passaic, NJ; Somerset, NJ; Sussex, NJ; Union, NJ; Warren, NJ; Bronx, NY; Dutchess, NY; Kings, NY; Nassau, NY; New York, NY; Orange, NY; Putnam, NY; Queens, NY; Richmond, NY; Rockland, NY; Suffolk, NY; Sullivan, NY; Ulster, NY; and, Westchester, NY

(2) Metro Philadelphia as defined by DVRPC includes the following counties: Burlington, NJ; Camden, NJ; Gloucester, NJ; Mercer, NJ; Bucks, PA; Chester, PA; Delaware, PA; Montgomery, PA; and, Philadelphia, PA

(3) Southeastern NJ as defined by SJTPO includes the following counties: Atlantic, NJ; Cape May, NJ; Cumberland, NJ; and, Salem, NJ

(4) New Jersey includes an aggregation of all 21 counties in the state

Sources: Years 1995 to 2020 reflect United States Census data; MPO forecasts are from the respective MPOs; New Jersey is based on the aggregation of pertinent MPO sources; and, United States forecasts are from Woods & Poole 2023

Future resident population growth around New Jersey is forecast to remain at the relatively slow-growth historical levels. As exhibited, projections average 0.2 percent per annum through 2035. Similar to the recent historical trends, this rate would remain below the expected population growth for the nation, which, on average, is projected to be 0.6 percent per annum through 2035.

4.1.2 Employment

Employment trends are exhibited in **Table 4-2**, with historical data from the United States Bureau of Labor Statistics from 1995 through 2020, and future data based on MPO sources or Woods & Poole, depending on geography, similar to the population data.

Historical employment growth patterns are similar across the presented geographies, with a relatively robust growth in the late '90s, followed by a deceleration in the subsequent five years through 2005, and a contraction between 2005 to 2010, reflective of the economic downturn realized during the recession that officially began in late 2007. In all but the southeastern New Jersey region, employment growth rebounded in the 2010 to 2015 timeframe following the recession. COVID significantly affected all geographies, and 2020 universally declined notably. As such, the 2015-to-2020 data effectively reflects no growth, though concentrated in that last year. Nationally, historical employment growth exhibited similar patterns during the five-year

[1] Source: Woods & Poole Economics, Inc. Washington, D.C. Copyright 2023. Woods & Poole does not guarantee the accuracy of this data. The use of this data and the conclusion drawn from it are solely the responsibility of the consultant.

increments, although, similarly to population trends, the overall employment growth rates were somewhat faster for the nation than for the New Jersey areas.

Table 4-2 Employment Trends and Forecasts (CAGR, %)

Area	1995 - '00	2000 - '05	2005 - '10	2010 - '15	2015 - '20	2020 - '25	2025 - '30	2030 - '35	1995 - '20	2020 - '35
Metro NYC(1)	1.7	0.5	(0.2)	0.9	(0.7)	0.4	0.6	0.5	0.4	0.5
Metro Philadelphia(2)	1.1	0.4	(0.2)	0.8	0.1	1.4	0.4	0.2	0.4	0.7
Southeastern NJ(3)	1.9	0.7	(1.5)	(0.8)	(1.3)	0.1	0.1	0.1	(0.2)	0.1
New Jersey(4)	1.4	0.3	(0.4)	0.6	(0.1)	(0.1)	0.3	0.5	0.4	0.3
United States	1.9	0.7	(0.4)	1.4	(0.1)	2.3	1.2	1.1	0.7	1.5

Geographies:

1 Metro NYC as defined by NYMTC includes the following counties: Fairfield, CT; Litchfield, CT; New Haven, CT; Bergen, NJ; Essex, NJ; Hudson, NJ; Hunterdon, NJ; Mercer, NJ; Middlesex, NJ; Monmouth, NJ; Morris, NJ; Ocean, NJ; Passaic, NJ; Somerset, NJ; Sussex, NJ; Union, NJ; Warren, NJ; Bronx, NY; Dutchess, NY; Kings, NY; Nassau, NY; New York, NY; Orange, NY; Putnam, NY; Queens, NY; Richmond, NY; Rockland, NY; Suffolk, NY; Sullivan, NY; Ulster, NY; and, Westchester, NY

2 Metro Philadelphia as defined by DVRPC includes the following counties: Burlington, NJ; Camden, NJ; Gloucester, NJ; Mercer, NJ; Bucks, PA; Chester, PA; Delaware, PA; Montgomery, PA; and, Philadelphia, PA

3 Southeastern NJ as defined by SJTPO includes the following counties: Atlantic, NJ; Cape May, NJ; Cumberland, NJ; and, Salem, NJ

4 New Jersey includes an aggregation of all 21 counties in the state

Sources: Years 1995 to 2020 reflect Bureau of Labor Statistics (BLS) data; MPO forecasts are from the respective MPOs; New Jersey is based on the aggregation of pertinent MPO sources; and, United States forecasts are from Woods & Poole 2023

Future employment is forecast to grow relatively similar to history since 1995, with New Jersey at 0.3%, NYC at 0.5%, Philadelphia at 0.7% (slightly higher than history), and Southeast New Jersey at 0.1%. Nationally, employment is forecast to grow 1.5%.

4.1.3 Real Retail Sales

Real retail sales historical trends and forecast are presented below in **Table 4-3**, sourced from Woods & Poole. Both New Jersey and the metropolitan areas along the two facilities exhibit similar growth patterns. Since 1995, growth was between 1.2 and 1.9 annually, depending on geography, with NYC exhibiting the highest relative growth. During that period, the change in real retail sales varied from strong growth of over 4.0% in the late '90s, to deceleration in the subsequent five years, followed by contraction between 2005 and 2010 due to recession. Since 2010, real retail sales rebounded then decelerated resulting from COVID in 2019/2020.

Table 4-3 Real Retail Sales Trends and Forecasts (CAGR, %)

Area	1995 - '00	2000 - '05	2005 - '10	2010 - '15	2015 - '20	2020 - '25	2025 - '30	2030 - '35	1995 - '20	2020 - '35
Metro NYC(1)	4.1	2.3	(0.9)	3.2	1.0	2.5	1.2	1.1	1.9	1.6
Metro Philadelphia(2)	3.8	2.0	(1.9)	2.4	1.3	2.6	1.3	1.2	1.5	1.7
Southeastern NJ(3)	4.2	2.7	(1.9)	1.2	0.1	2.3	1.0	1.0	1.2	1.4
New Jersey(4)	4.1	1.8	(1.5)	2.4	0.9	2.5	1.2	1.1	1.5	1.6
United States	4.1	2.1	(1.0)	3.0	1.5	2.8	1.6	1.5	1.9	2.0

Geographies:

1 Metro NYC as defined by NYMTC includes the following counties: Fairfield, CT; Litchfield, CT; New Haven, CT; Bergen, NJ; Essex, NJ; Hudson, NJ; Hunterdon, NJ; Mercer, NJ; Middlesex, NJ; Monmouth, NJ; Morris, NJ; Ocean, NJ; Passaic, NJ; Somerset, NJ; Sussex, NJ; Union, NJ; Warren, NJ; Bronx, NY; Dutchess, NY; Kings, NY; Nassau, NY; New York, NY; Orange, NY; Putnam, NY; Queens, NY; Richmond, NY; Rockland, NY; Suffolk, NY; Sullivan, NY; Ulster, NY; and, Westchester, NY

2 Metro Philadelphia as defined by DVRPC includes the following counties: Burlington, NJ; Camden, NJ; Gloucester, NJ; Mercer, NJ; Bucks, PA; Chester, PA; Delaware, PA; Montgomery, PA; and, Philadelphia, PA

3 Southeastern NJ as defined by SJTPO includes the following counties: Atlantic, NJ; Cape May, NJ; Cumberland, NJ; and, Salem, NJ

4 New Jersey includes an aggregation of all 21 counties in the state

Source: Woods & Poole 2023

Real retail sales growth is projected to be similar to the historical average growth, at about 2.0% nationally and 1.6% for New Jersey.

4.1.4 Real Gross Regional Product (GRP)

Historical and forecast growth rates for real GRP are shown in **Table 4-4**, sourced from Woods & Poole. National real gross domestic product historically decelerated from an annual average rate of 4.5 percent in the late '90s to 2.7 percent over the first five years of the new millennium, to 0.9 percent between 2005 and 2010. Since that recession period, national real GDP grew 2.4 percent from 2010 to 2015 and then 1.4 percent through 2020, including the 2020 COVID-related shutdown. New Jersey's real gross state product growth also decelerated similarly over the same period from 3.6 percent in the late '90s to 1.6 percent per annum in the subsequent five years and then 0.5 percent during the recessionary timeframe. Annual average growth rebounded to 1.2 percent from 2010 to 2015 and then fell to 0.4 percent from 2015 to 2020. Metropolitan NYC and Philadelphia exhibited similar average growth rates since 1995, about 0.7 percent above the New Jersey's annual average, while southeastern New Jersey experienced growth substantially slower than the other geographies in the study area at less than 1 percent per year.

Historically, the 14 metro NYC counties in New Jersey exhibited relatively slower real GRP growth than the 17 non-New Jersey counties, with average annual growth of 1.5 percent versus 2.5 percent, respectively, from 1995 to 2020. Woods and Poole forecasts very similar average annual growth of 2.3 percent through 2035 for both sub-metro regions. Similar patterns are also evident for metro Philadelphia, with the four New Jersey counties exhibiting relatively slower average annual historical real GRP growth from 1995 to 2020 of 1.9 percent compared to 2.1 percent growth for the five non-New Jersey counties.

Table 4-4 Real Gross Regional Product Trends and Forecasts (CAGR, %)

Area	1995 - '00	2000 - '05	2005 - '10	2010 - '15	2015 - '20	2020 - '25	2025 - '30	2030 - '35	1995 - '20	2020 - '35
Metro NYC(1)	4.7	1.6	1.4	2.2	1.4	3.2	2.0	1.8	2.3	2.3
NYC - NJ	*4.0*	*1.3*	*0.6*	*1.3*	*0.5*	*3.4*	*1.8*	*1.7*	*1.5*	*2.3*
NYC - non-NJ	*5.0*	*1.7*	*1.6*	*2.6*	*1.7*	*3.2*	*2.1*	*1.8*	*2.5*	*2.3*
Metro Philadelphia(2)	3.5	2.9	1.3	1.9	0.5	3.0	1.9	1.7	2.0	2.2
Philadelphia - NJ	*3.0*	*3.1*	*0.4*	*1.3*	*1.8*	*2.5*	*1.9*	*1.8*	*1.9*	*2.1*
Philadelphia - non-NJ	*3.7*	*2.8*	*1.6*	*2.1*	*0.0*	*3.2*	*1.9*	*1.7*	*2.1*	*2.3*
Southeastern NJ(3)	0.7	3.5	(0.7)	(0.3)	(0.7)	2.4	1.4	1.3	0.5	1.7
New Jersey(4)	3.6	1.6	0.5	1.2	0.4	3.2	1.8	1.7	1.5	2.2
United States	4.5	2.7	0.9	2.4	1.4	3.1	2.0	1.9	2.4	2.3

Geographies:

1 Metro NYC as defined by NYMTC includes the following counties: Fairfield, CT; Litchfield, CT; New Haven, CT; Bergen, NJ; Essex, NJ; Hudson, NJ; Hunterdon, NJ; Mercer, NJ; Middlesex, NJ; Monmouth, NJ; Morris, NJ; Ocean, NJ; Passaic, NJ; Somerset, NJ; Sussex, NJ; Union, NJ; Warren, NJ; Bronx, NY; Dutchess, NY; Kings, NY; Nassau, NY; New York, NY; Orange, NY; Putnam, NY; Queens, NY; Richmond, NY; Rockland, NY; Suffolk, NY; Sullivan, NY; Ulster, NY; and, Westchester, NY

2 Metro Philadelphia as defined by DVRPC includes the following counties: Burlington, NJ; Camden, NJ; Gloucester, NJ; Mercer, NJ; Bucks, PA; Chester, PA; Delaware, PA; Montgomery, PA; and, Philadelphia, PA

3 Southeastern NJ as defined by SJTPO includes the following counties: Atlantic, NJ; Cape May, NJ; Cumberland, NJ; and, Salem, NJ

4 New Jersey includes an aggregation of all 21 counties in the state

Source: Woods & Poole 2023

Future real GRP growth rates are estimated to average 2.3 percent for the United States, through 2035, per annum, with New Jersey averaging about a 2.2 percent real increase per year. In the surrounding areas, similarly to the entire state, the real GRP growth is projected to be 1.7 to 2.3

percent per annum, with slower growth expected in the southeastern portion of the state as compared to metro NYC and Philadelphia.

4.2 MPO Outreach and Regional Economic Conditions

To supplement the socioeconomic data analysis, additional qualitative inputs were collected through discussions with representatives from the major metropolitan planning organization (MPO) areas within, or near, the New Jersey Turnpike and Garden State Parkway. Additionally, information from annual reports and news articles identified by the MPOs were reviewed and incorporated. While topics discussed varied by MPO, they generally included socioeconomic data (i.e., population and employment), development, and tolling perspectives. The four entities included:

- *NJTPA* – North Jersey Transportation Planning Authority
- *DVRPC* – Delaware Valley Regional Planning Commission
- *SJTPO* – South Jersey Transportation Planning Organization
- *NYMTC*– New York Metropolitan Transportation Council

4.2.1 NJTPA

The North Jersey Transportation Planning Authority MPO includes thirteen New Jersey counties. In addition to the dense urban counties around New York City, the MPO extends west to the rural counties bordering Pennsylvania and south to Ocean County. Closely tied with the New York City economy, the NJTPA coordinates planning and development with the NYMTC and PANYNJ.

CDM Smith was unable to engage with NJTPA staff as part of this project due to NJTPA's rules surrounding an open solicitation for which CDM Smith could have submitted a proposal. However, CDM Smith reviewed the conversation that took place as part of the 2018 study and reviewed many of the documents available on NJTPA's website to evaluate socioeconomic trends and developments in the region.

Over the past five years, regional population growth has reverted to more balanced regional growth as opposed to the centralization in inner ring suburbs that occurred through much of the 2010s. Despite this, Hudson County is the only county in the region whose employment and population forecast was revised upwards from the last set of forecasts conducted by NJTPA.

CDM Smith was also able to speak with staff at NYMTC, which has some overlap with NJTPA's coverage area. Results of that conversation are summarized below.

4.2.2 DVRPC

The Delaware Valley Regional Planning Commission comprises four counties (Burlington, Camden, Gloucester, and Mercer) in southern New Jersey, as well as five counties in the Philadelphia area. Toll facilities operate on both the New Jersey and connecting Pennsylvania highway facilities.

The region's population is growing slowly but steadily, with more growth generally occurring on the Pennsylvania side than the New Jersey side. In percentage terms, Gloucester County is the fastest growing county on the New Jersey side of the region as a result of development extending further from Philadelphia as more inner suburbs become built out.

Commuters have been slowly returning to the office, although telecommuting remains prevalent. While transit ridership is still significantly below pre-pandemic levels, daily roadway traffic is at or above 2019 levels. However, traffic is more dispersed throughout the day, with peak hour volume being lower than prior to the pandemic.

Distribution centers are in demand in the region. The largest such project in development is across the Delaware River in Bucks County, Pennsylvania, where a former U.S. Steel site is being redeveloped into the Keystone Trade Center. This is an 1,800-acre property, with the first warehouses scheduled to open in fall 2023. At completion, it will have more than four million square feet of warehouse space and is being marketed as the largest Class A industrial park on the east coast. DVRPC planners speculate that it could be a more appealing distribution center than ones further inland in the Allentown area due to its closer location to the Port of New York and New Jersey.

There have been small improvements, such as upgraded access roads, to the port area on the New Jersey side of the Delaware River. There have been proposals for port expansion or the construction of a liquified natural gas (LNG) terminal there, although there are no developments currently approved or underway.

4.2.3 SJTPO

The South Jersey Transportation Planning Organization MPO includes four New Jersey counties: Atlantic, Cape May, Cumberland, and Salem. Predominantly influenced by the Parkway, the northern tip of rural Salem County is also affected by the Turnpike. CDM Smith reached out the MPO several times but were unable to engage. CDM Smith did speak to SJTPO planners as part of the 2018 study, and many of the points discussed then still hold true.

As a seasonal-based destination, Atlantic City population is generally perceived to increase by 300 percent during the three summer months of June, July, and August. Such population swings between the on- and off-seasons significantly affect Parkway traffic volumes.

While tourism remains the historical economic lynchpin to the region, other developments demonstrate a concerted attempt to revitalize and diversify the economy. The National Aviation Research and Technology Park is a planned facility to create a research center around the joint-use commercial/military airport in Egg Harbor Township. The build-out plan includes a seven-building research technology park, air cargo operation, and an aviation maintenance and repair academy and company.

4.2.4 NYMTC

The New York Metropolitan Transportation Council provides a collaborative transport planning forum, develops regional plans, and coordinates local decisions regarding federal transportation fund allocations. NYMTC'S primary focus area includes New York City, Long Island, and the lower Hudson River Valley. NYMTC's planning effort incorporates metro Connecticut (three counties) and nine northern New Jersey counties (Bergen, Essex, Hudson, Middlesex, Monmouth, Morris, Passaic, Somerset, and Union).

NYMTC also coordinates planning and development with the NJTPA and the PANYNJ. Northern New Jersey sociodemographic data and trends provided by the NJTPA are incorporated into transportation modeling and planning decisions, as are Port Authority transport infrastructure development programs and policies.

A Clean Freight Corridors Study conducted for the region indicates that the New Jersey Turnpike has high readiness for clean freight, which means that there is substantial infrastructure for fueling and charging to support a transition to electric vehicles within five miles of the corridor.

Like in the Philadelphia region, both residents and commuters have been slowly returning to the city after an initial exodus during the early stage of the pandemic.

Just prior to CDM Smith's conversation with NYMTC, the Metropolitan Transportation Authority (MTA) announced that it would begin a congestion pricing program for vehicles entering Manhattan's central business district (CBD) as early as 2024. Details of implementation have yet to be worked out, but NYMTC staff indicated that vehicles that remain on highways through the CBD will not be charged a toll. However, both the Lincoln and Holland Tunnel direct vehicles traveling from New Jersey into Manhattan's street grid, meaning that, as currently envisioned, all eastbound traffic through these tunnels will incur an additional toll once the congestion pricing program is implemented.

4.2.5 Conclusion

The qualitative MPO outreach discussions of local economic conditions confirmed the quantitative analysis of socioeconomic trends that went into the subsequent econometric growth analysis. The due diligence outreach found nothing that would alter the quantitative forecasting process. Rather, the outreach collaborated and substantiated the socioeconomic trends with local depictions of where residential and/or business growth was (or was not) occurring and why.

4.3 Econometric Growth Analysis

An econometric analysis was conducted to forecast mid-term (ten-year) baseline travel demand on the Turnpike and Parkway. Historical travel demand was econometrically estimated via regression equations for toll plaza groupings. Regional socioeconomics and other variables were tested as explanatory factors. With statistically significant historical equations, independent variable forecasts were applied to equation coefficients to estimate future travel demand. Eighteen equations were tested for groups of proximate plazas: seven groupings for Turnpike passenger cars, seven for Turnpike commercial vehicles, and four for Parkway total vehicles. All eighteen equations yielded statistically significant, logical results. Forecasts were conducted from 2023 through 2033.

An econometric analysis as such was conducted in 2018 and revisited in 2023 to determine the current reasonableness of previously estimated equations and updated, as necessary. Factors differing from the 2018 estimations include the following, which are elaborated upon in subsections:

- additional historical timeframe (2018 through 2022, inclusively)
- revised historical socioeconomic data (e.g., Census's population retrospective revisions)
- updated dollar denomination for real retail sales and gross regional product (2009$ to 2012$)
- consideration of a COVID-19 explanatory index variable(s)
- incorporating an index for 2018 I-95 ramp developments in Bristol

Subsequent toll modeling analyses conditionally incorporate these econometrically-derived baseline travel demand forecasts, which additionally consider short-term adjustments and future toll policies and rate structures in estimating future revenue potential.

4.3.1 Econometric Modeling

An econometric model was developed using multivariate regression analysis to estimate mid-term toll-transaction growth forecasts. In econometric modeling, the objective is identifying an independent variable (or variables) with historical trends that can explain, by way of statistical significance, corresponding facility traffic trends. In each regression equation, an analysis of variation (ANOVA) output table explains statistical parameters, such as adjusted R^2 (coefficient of determination) and t-statistics/p-values, which indicate the overall robustness of the equation and independent variable(s), respectively. A regression equation can be leveraged for forecasting the dependent variable if ANOVA metrics are statistically significant, the equation's relationships are conceptually valid, and independent variable forecasts are credibly available.

4.3.1.1 Regression Testing and Independent Variables

Individual highway travel occurs for various reasons, such as recreation, commuting, trade, etc., and is influenced by factors such as fuel prices, other travel costs, weather, trip urgency, and economics. Aggregate highway travel, however, typically trends closely with regional socioeconomic variables (although, not always). As such, conceptually relevant socioeconomic data were hypothesized, compiled, and regression tested for explaining annual travel demand.

Data inputs include historical and forecast data for the possible explanatory independent variables, including socioeconomics for geographies surrounding the facilities (i.e., New Jersey and surrounding states' counties):

- New Jersey Turnpike Authority – historical transactions and revenues (and thus, average annual toll rates)
- United States Census Bureau – historical population
- United States Bureau of Economic Analysis (BEA) – historical employment
- United States Energy Information Administration (EIA) – historical and forecast fuel prices
- Woods & Poole Economics, Inc. – historical and forecast population, employment, real gross regional product (GRP), and real retail sales

In addition to regional socioeconomic variables, average fuel prices and average annual toll variables (by grouping) were tested as explanatory factors for historical travel. A dummy variable reflecting Turnpike widening from 2014 to 2015 was included and tested. An index for the I-95 ramps in Bristol was included and tested against groupings proximate to the improvements. The index is based on ramp-up observational monthly traffic data over a three-year period starting at 2018 = 0.15 and annually escalating to 2022 = 1.0.

With an extended historical timeframe since the 2018 analysis (2018 through 2022) and the corresponding transaction declines following the COVID-19 pandemic, an additional variable warranted consideration: a COVID-19 pandemic normalcy index. Based on aggregate travel volumes observed in 2019 through 2022, separate indexes were tested for Turnpike passenger cars, Turnpike commercial vehicles and Parkway total vehicles. Prior to COVID-19 (2019 and previously) the index is 1.0 (e.g., "normal" full-demand behavior). In general, the indexes estimated are close but not universal due to different characteristics of COVID-19 institutional behavioral shifts (increased remote work proportions for passenger cars, shifted supply chain patterns and from in-store to online purchasing, etc.). Resulting differences in the index are as follows:

- Parkway: declines to 0.80 in 2020, then 0.90 thereafter
- Turnpike passenger cars (northern): declines to 0.70 in 2020, then 0.90 thereafter
- Turnpike passenger cars (southern): 0.70 in 2020, 0.90 in 2021, then 0.95 thereafter
- Turnpike commercial vehicles: 0.95 in 2020, then rebounded to 1.05 in 2021 and 1.10 thereafter

Such COVID-19 indexes were tested in conjunction with the regional socioeconomics, as the socioeconomic data typically did not fully explain the amplified reductions in traffic relative to socioeconomic activity (e.g., national real GDP declined 2.8 percent in 2020, while national traffic contracted by a much larger proportion) or the recovery period fully.

Multiple regression equations were tested and evaluated for each toll plaza grouping to account for the numerous possible combinations of relevant geographies (county clusters) for each possible socioeconomic variable and combinations with fuel, toll index, Turnpike expansion or I-95 ramp indexes, and/or COVID-19 factors. A final equation was selected based on multiple criteria, including but not limited to, overall equation robustness (adjusted R^2), independent variable robustness (t-statistics and p-values), logic and reasonableness of equation coefficients, logic and reasonableness of geographic catchment area relative to the physical location of the toll plaza(s), and the credibility of the independent variable(s) and source(s). Additional consideration of the 2018 econometric structures and results framed subsequent adjustments.

4.3.1.2 Toll Plaza Groupings (Dependent Variables)

Plazas were clustered into eleven groupings (from 65 individual plazas) to reduce regression testing to a reasonably manageable data universe and to aggregate transactions to minimize possible data outliers at any one individual plaza that may be uninfluenced by sociodemographic trends. Plazas were grouped based on geographic proximity, similarities in historical travel demand patterns, data availability, and other characteristics such as operating history.

For the Parkway, 35 plazas were divided into four groupings. For the Turnpike, 30 plazas were divided into seven groupings, as identified in **Table 4-5**. Some individual toll plazas were excluded from the groupings due to staggered plaza openings/closings, which, if included, would result in discontinuity and inconsistency within the timeseries. Also, some plazas were excluded due to outlier data patterns influenced by non-recurring factors unrelated to sociodemographic trends (e.g., exits 14, 14A, 14B, and 14C in the New Jersey Turnpike due to traffic diverted from the Pulaski Skyway closure). Of the 65 individual toll plazas, 47 were included in the groupings. Historical transaction data were used as continuous annual time series from 1992 through 2022 (31 years) for the Turnpike and from 1995 through 2022 (28 years) for the Parkway.

Table 4-5 Toll Plaza Groupings

	Grouping Name	Incl.	Excl.
Parkway	Northern New Jersey	10	3
	Monmouth	9	4
	Ocean	2	3
	Atlantic/Cape May	3	1
Turnpike	Delaware Memorial Bridge	1	0
	Pennsylvania	2	0
	George Washington Bridge	2	0
	Camden/Philadelphia	4	0
	Trenton	4	0
	Middlesex County	4	0
	Newark/NYC	6	7

Source: CDM Smith

4.3.1.3 Regression Caveats

Econometrically derived mid-term demand forecasts served as basis for further transaction and toll revenues estimates. Growth forecasts from the regressions do not explicitly consider route choice assumptions, existing roadway network and planned improvements, existing and anticipated roadway capacities, origin-destination pairing, peak and directional factors, or traffic diversions. As such, the regression based forecast growth rates are conditionally incorporated into further modeling.

As this regression analysis attempted to estimate aggregate travel demand, the equations cannot account for all potentially influencing factors, especially any small-scale, qualitative/difficult-to-quantify, and/or irregularly occurring factors. Also, a regression analysis is incapable of forecasting unprecedented factors (positive or negative influence) such as catastrophic climate change, health epidemics, terrorism, natural disasters, or any other significantly destabilizing factors.

Forecasts are estimates, limited by the availability and robustness of input data, both historical and projected. Data unavailability, discrepancies, aberrations, and inaccuracies can hinder the robustness and results of econometric forecasting.

4.3.1.4 Regression Equations and Forecasting

A final regression equation was estimated for each plaza grouping, relating historical annual travel demand with a regional socioeconomic variable, and mostly with average annual tolls, a COVID index, and in a few instances, an I-95 index/Turnpike expansion dummy variable. A regression summary for the groupings is provided in **Table 4-6**. After testing the compiled socioeconomics at various regional county clusters, it was determined that real GRP was the best-suited explanatory variable for all equations. In most equations, the average annual toll rates for the groupings were statistically significant, with the only two exceptions being the Delaware Memorial Bridge and Camden/Philadelphia passenger cars). For two Turnpike groupings for passenger cars, the widening dummy variable was statistically significant. The I-95 index variable was necessary for the two Turnpike Pennsylvania groupings (positive impact for both passenger cars and commercial vehicles), and Camden/Philadelphia passenger cars (negative impact). Fuel prices were statistically irrelevant in all equations.

Geographically, regional combinations of contiguous counties in New Jersey, Pennsylvania, Delaware, and New York served as logical and statistically acceptable catchment areas for regional real GRP relating to historical transactions. Although each equation has a unique county combination, anchored around the respective plaza groupings, the counties included in each equation are along and adjacent to the New Jersey Turnpike and Garden State Parkway. While the catchment areas regionalize socioeconomic variables for relationships with travel demand, the catchment areas should not imply that travel demand is only from those geographies, but rather that the catchment is a logical, statistically significant representation for the aggregate demand.

All eighteen equations exhibited sensible relationships with acceptable statistics; the overall equations' robustness, measured by the adjusted R^2, are between 90.5 percent and 98.3 percent, with the individual coefficients' statistically significant with correct directional relationships (i.e., positive relationships with regional GRP, negative with average toll rates, positive with dummy variable Turnpike widening, negative with COVID, positive/negative with I-95 depending on grouping). Such relatively high statistical fits indicate good relationships.

Compared with 2018 equations, this 2023 update mostly retains the same general form, with the same explanatory real GRP socioeconomic data (SED) variables (albeit with slight modifications to the 2018 geographic clustering, mostly the addition or subtraction of peripheral counties). Also, the groupings incorporating/excepting the toll variable in 2018 were unchanged. Ultimately, the timeseries expansion warranted the inclusion of exogenous, non-SED factors, such as the COVID and I-95 indexing to reconcile relatively large pattern shifts in recent years not (or not entirely) explainable by macroeconomic trends via SEDs and effective toll rate changes. While estimated coefficients and statistical parameters changed since 2018 with the timeseries expansion and adjusted equations to reflect recent pattern shifts, the model is mostly the same as previously, but with the recent add-ons.

Table 4-6 Regression Summary

		Plaza Groupings	Results	Variables					Geographies (Counties)		
		Name/Area	Adj. R2	Socio	Toll	COVID	Index	Fuel	NJ	Other	Total
Parkway	Total	Northern New Jersey	95.1%	GRP	Incl.	Incl.	Excl.	Excl.	10	1	11
		Monmouth	93.9%	GRP	Incl.	Incl.	Excl.	Excl.	6	0	6
		Ocean	92.5%	GRP	Incl.	Incl.	Excl.	Excl.	4	0	4
		Atlantic/Cape May	90.5%	GRP	Incl.	Incl.	Excl.	Excl.	4	1	5
Turnpike	Passenger Cars	Delaware Memorial Bridge	97.0%	GRP	Excl.	Incl.	Incl.	Excl.	7	0	7
		Pennsylvania	97.6%	GRP	Incl.	Incl.	Incl.	Excl.	5	0	5
		George Washington Bridge	95.6%	GRP	Incl.	Incl.	Excl.	Excl.	4	2	6
		Camden/Philadelphia	95.1%	GRP	Excl.	Incl.	Incl.	Excl.	5	0	5
		Trenton	95.0%	GRP	Incl.	Incl.	Incl.	Excl.	5	0	5
		Middlesex County	97.1%	GRP	Incl.	Incl.	Excl.	Excl.	7	0	7
		Newark/NYC	98.3%	GRP	Incl.	Incl.	Excl.	Excl.	5	4	9
	Commercial Vehicles	Delaware Memorial Bridge	93.9%	GRP	Incl.	Incl.	Excl.	Excl.	6	2	8
		Pennsylvania	97.5%	GRP	Incl.	Excl.	Incl.	Excl.	10	0	10
		George Washington Bridge	92.4%	GRP	Incl.	Incl.	Excl.	Excl.	3	4	7
		Camden/Philadelphia	94.9%	GRP	Incl.	Excl.	Excl.	Excl.	3	1	4
		Trenton	94.0%	GRP	Incl.	Excl.	Excl.	Excl.	2	0	2
		Middlesex County	96.0%	GRP	Incl.	Incl.	Excl.	Excl.	7	0	7
		Newark/NYC	95.2%	GRP	Incl.	Excl.	Excl.	Excl.	7	2	9

Source: CDM Smith

With the final equations, regionalized real GRP forecasts were applied to the regression coefficients to estimate future mid-term travel demand. Forecasts for the non-SED variables, i.e., average annual toll rates, dummy variables, and respective indexes were assumed to remain at 2022 levels through the analysis horizon (forecasted toll sensitivity is incorporated in post-processing these econometrics results, and the dummy/indexing variables were necessary to explain historical transaction variation, but not as an independent forecasting exercise). As such, the resultant transaction forecasts are related to real GRP growth, holding all else constant. Real GRP forecasts were obtained from Woods & Poole Economics, Inc. at a county level and aggregated into regional clusters.

4.3.2 Demand Growth Results

Econometrically derived travel demand forecasts for the Turnpike and Parkway are summarized in **Table 4-7**, based on applied forecasts for regional real GRP, constant average toll rates, and constant index/dummy variables, as applicable, to the respective regression coefficients. Compound average growth rates (CAGR) for the plaza grouping transactions are shown for incremental historical timeframes as comparative context.

Average annual growth rates vary by facility, toll plaza grouping, and vehicle category (hence, subcategorizing the facilities as conducted). Generally, transaction growth occurred through 2004, then tapered for roughly a decade, affected by the 2007-09 recession and other factors, then generally resumed growth until the COVID-19 pandemic. Forecast demand is similar to pre-COVID growth, with slightly accelerated growth for the Parkway and decelerated for the Turnpike, relative to pre-COVID.

Table 4-7 Transaction Growth Summary (CAGR)

		Plaza Groupings	History					Forecasts
		Name/Area	'92-'/'95-'04	'04-'14	'14-'19	'19-'22	'92-'/'95-'19	'22-'33
Parkway	Total	Northern New Jersey	1.7%	-0.5%	0.2%	-2.1%	0.5%	1.1%
		Monmouth	2.5%	-0.7%	0.7%	-2.3%	0.8%	1.6%
		Ocean	3.5%	-1.9%	1.0%	-1.1%	0.7%	1.8%
		Atlantic/Cape May	3.1%	-1.4%	1.0%	-0.9%	0.7%	1.7%
Turnpike	Passenger Cars	Delaware Memorial Bridge	0.3%	0.4%	2.7%	-1.0%	0.1%	1.3%
		Pennsylvania	0.7%	-1.0%	8.1%	1.1%	0.3%	1.9%
		George Washington Bridge	0.0%	0.0%	3.8%	0.0%	0.0%	2.3%
		Camden/Philadelphia	0.4%	0.0%	2.1%	-5.7%	0.2%	2.3%
		Trenton	0.9%	-1.5%	6.5%	-5.9%	0.4%	2.1%
		Middlesex County	0.5%	-0.6%	2.2%	-2.7%	0.2%	1.7%
		Newark/NYC	0.1%	-0.4%	2.9%	-2.3%	0.0%	2.0%
	Commercial Vehicles	Delaware Memorial Bridge	0.6%	-1.6%	3.9%	6.6%	0.3%	2.7%
		Pennsylvania	0.7%	-1.3%	8.9%	7.1%	0.3%	3.8%
		George Washington Bridge	0.2%	0.1%	1.4%	6.9%	0.1%	1.9%
		Camden/Philadelphia	1.2%	-2.1%	3.9%	-1.2%	0.5%	3.6%
		Trenton	1.4%	-2.3%	5.7%	5.5%	0.6%	2.7%
		Middlesex County	0.7%	-0.6%	1.9%	-3.7%	0.3%	2.0%
		Newark/NYC	0.3%	-0.7%	2.4%	0.1%	0.1%	1.9%

Source: CDM Smith

Generally, the Parkway is forecast to exhibit relatively slower average growth (1.4 percent) than the Turnpike (2.0 percent), with commercial vehicles forecast to grow relatively faster (2.3 percent) than passenger cars (1.9 percent) on that facility. Also, the plaza groupings in the northern half of the state (e.g., nearer to NYC) are forecast to have relatively slower transactions growth than plaza groupings in the southern half of the state, regardless of facility or vehicle type.

A refined traffic and revenue analysis is the last component of the forecasting analysis. Growth rates developed from this econometric regression analysis are conditionally applied to further traffic and revenue modeling. Adjustments to econometric forecasts consider and apply additional factors such as mid-term roadway capacities, recent short-term trends, E-ZPass adoption rates, toll rate policy and changes, and various other factors, such as fuel price, recession risks, etc.

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Chapter 5

Transaction and Gross Toll Revenue Forecasts

Transaction and gross toll revenue estimates are provided in this chapter for the New Jersey Turnpike and the Garden State Parkway, separately, and for the total system. These forecasts extend from 2023, including five months of actual transaction and revenue data, through 2033. The forecasts developed for this study consider the underlying normal growth forecasts identified in Chapter 4, adjusted to reflect relevant committed roadway improvements and other forecasting considerations.

5.1 Committed Roadway Improvements

CDM Smith identified the major committed roadway projects that were taken into consideration for this study through discussions with the NJTA staff and by reviewing the following documents:

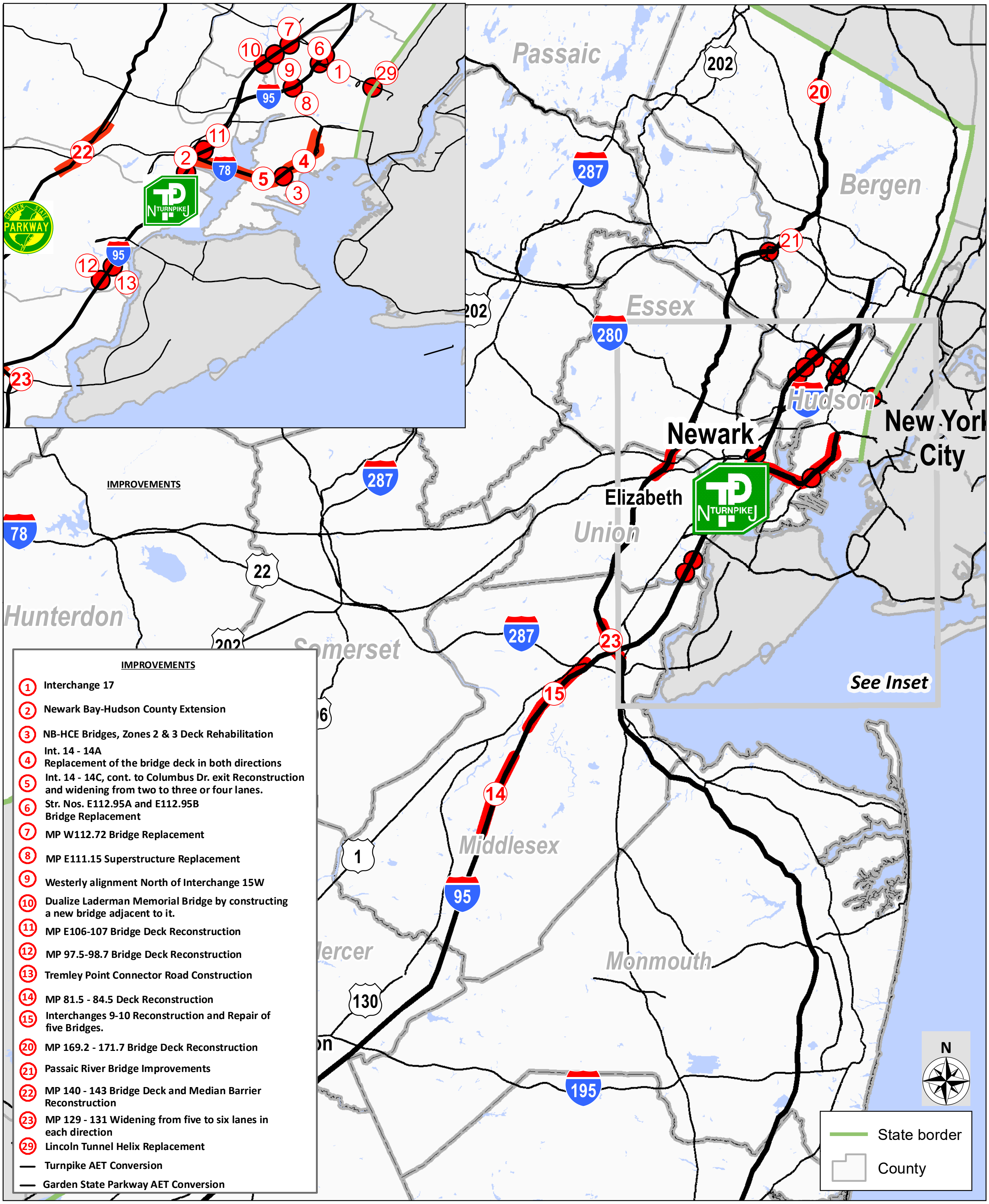
1. New Jersey Turnpike Authority 2024 Budget Book;
2. North Jersey Transportation Authority (NJTPA) FY 2022-2025 Transportation Improvement Program (TIP);
3. Delaware Valley Regional Planning Commission (DVRPC) FY 2022-2025 TIP For New Jersey;
4. DVRPC FY 2021-2024 TIP for Pennsylvania;
5. South Jersey Transportation Planning Organization (SJTPO) FY 2022-31 TIP; and
6. FY 2020 - 2029 New Jersey Statewide Transportation Improvement Program.

The roadway improvement projects listed in **Table 5-1** represent capital projects that CDM Smith identified during review of these documents as having potential traffic and revenue impacts to NJTA facilities during the forecast period, either by expanding capacity on the Turnpike or Parkway or due to lane closures that would temporarily restrict capacity during construction. **Figure 5-1** (Northern New Jersey) and **Figure 5-2** (Southern New Jersey) illustrate these projects' locations.

Table 5-1 Summary of Major Committed Improvements Considered for Transaction and Toll Revenue Analysis

Project Key	Location	Description	Actual or Assumed Start Date	Assumed Completion Date
New Jersey Turnpike				
(1)	Interchange 17	Ramp bridge replacement	2024	2028
(2)	Newark Bay-Hudson County Extension	NB-HCE Bridge Redecking	-	-
(3)	NB-HCE Bridges, Zones 2 and 3	Deck Rehabilitation	2024	2028
(4)	Int. 14 - 14A	Two new bridge structures in both directions and widening from two to four lanes in each direction	2026	2036
(5)	Int. 14A - 14C, cont. to Jersey Ave.	Reconstruction and widening from two to three lanes.	2030	2039
(6)	Str. Nos. E112.95A and E112.95B	Bridge Replacement	2024	2024
(7)	MP W112.72	Bridge Replacement	2023	2023
(8)	MP E111.15	Superstructure Replacement	2025	2025
(9)	Westerly alignment north of Interchange 15W	Deck rehabilitation of westerly alignment bridges	2024	2028
(10)	Westerly alignment north of Interchange 15W	Dualize Laderman Memorial Bridge by constructing a new bridge adjacent to it	-	-
(11)	MP 106 - 107 eastern spur	Bridge deck reconstruction	-	2023
(12)	MP 97.5 - 98.7	Bridge deck reconstruction	2027	2027
(13)	Tremley Point	Tremley Point Connector Road construction	-	2030
(14)	MP 81.5 - 84.5	Deck Reconstruction	2027	-
(15)	Interchanges 9-10	Reconstruction and repair of five bridges	2022	2025
(16)	Interchange 3-4	Widening from two lanes to three lanes in each direction	2026	2030
(17)	Interchange 2-3	Widening from two lanes to three lanes in each direction	-	-
(18)	Interchange 1-2	Widening from two lanes to three lanes in each direction	-	-
(19)	Entire Turnpike	Turnpike AET conversion	2030	2037
Garden State Parkway				
(20)	MP 169.2 - 171.7	Bridge Deck Reconstruction	-	2023
(21)	Passaic River Bridge	Bridge improvements	2021	2025
(22)	MP 140-143	Bridge deck and median barrier reconstruction	2020	2023
(23)	MP 129 - 131	Widening from five to six lanes in each direction	2026	2026
(24)	Interchange 83	Add missing movements	2022	2025
(25)	MP 80 - 83	Completion of missing moves at interchange 80 and widening to four lanes in both directions	2026	2030
(26)	Entire Parkway	Parkway AET conversion	2025	2029
Other Roadways				
(27)	I-295/42	New ramps for direct connections from I-295 north to Route 42 south and Route 42 north to I-295 south	2022	2024
(28)	I-295/42/I-76	Direct connection on I-295 with six-lane mainline through interchange	2023	2029
(29)	Lincoln Tunnel	Lincoln Tunnel Helix Replacement	-	-

Sources: NJTA 2024 Budget Book
NJTPA FY 2022-2025 TIP
DVRPC FY 2022 TIP for New Jersey (FY22-25)
DVRPC FY 2021 TIP for Pennsylvania (FY21-24)
SJTPO FY 2022-2031 TIP
FY 2020-2029 Statewide TIP



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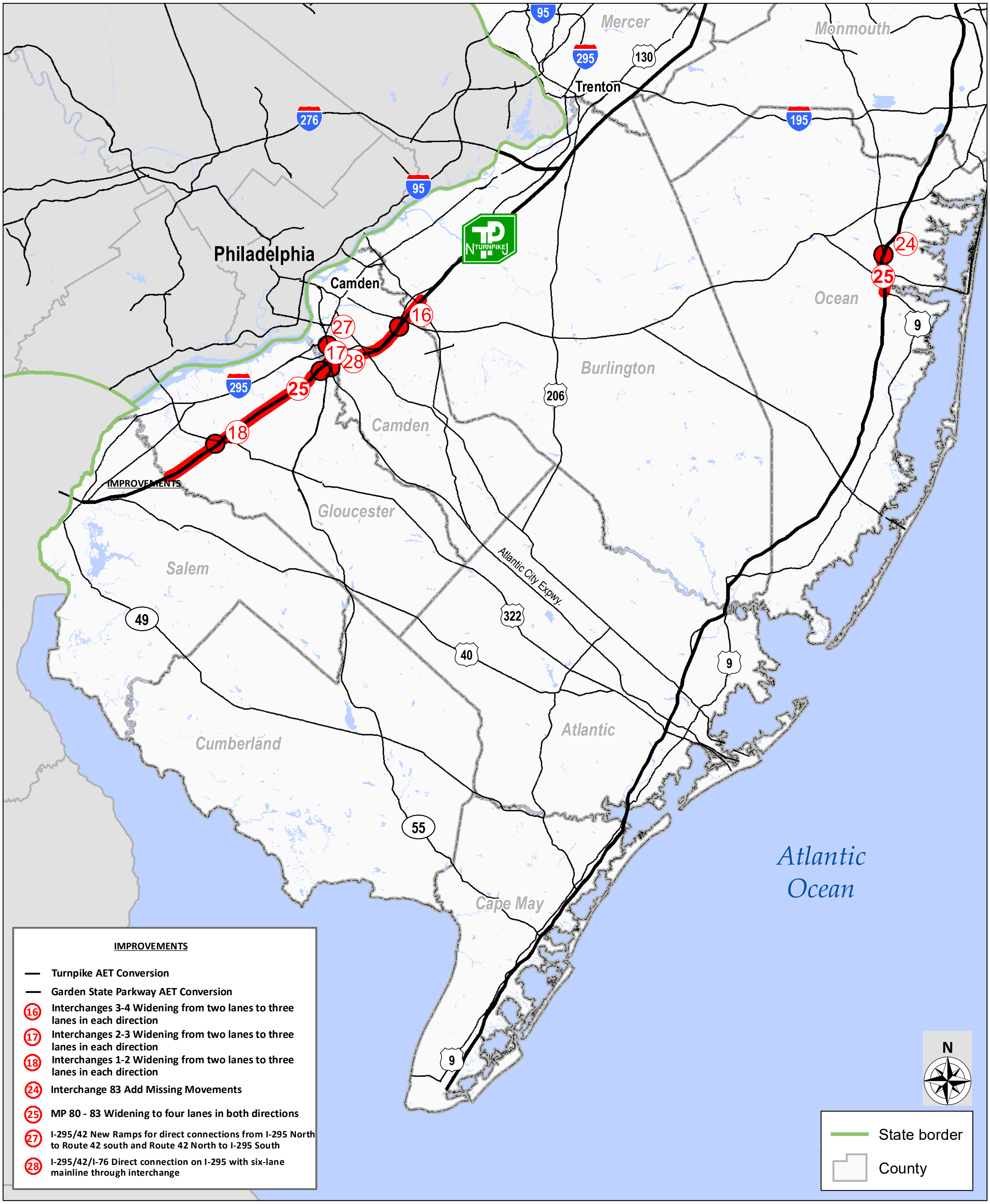
ROADWAY IMPROVEMENTS: NORTHERN NEW JERSEY

FIGURE 5-1



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ROADWAY IMPROVEMENTS: SOUTHERN NEW JERSEY

FIGURE 5-2

CDM Smith then reviewed these projects with staff from NJTA's Engineering, Operations, and Finance departments and NJTA's engineering consultant, HNTB. While most of the listed projects are not expected to have significant impacts, four projects were identified for further investigation. These selected projects are those that have the potential to either increase transactions or have significant enough temporary construction-related lane closures to require a detailed traffic management plan during the forecast period.

CDM Smith obtained more details about these four projects for further investigation from NJTA and HNTB in order to determine potential traffic and revenue impacts. These further details and any impacts on forecast transactions are discussed below.

5.1.1 Turnpike Interchange 17 Ramp Bridge Replacement

This project, item (1) in Table 5-1 and Figure 5-1, will last from June 2024 to June 2028 and will replace the bridge that carries exit ramp traffic at Interchange 17 on the Eastern Spur over the Turnpike. Two lane closure options are currently under review. Option 1 will close one southbound lane for approximately 2 ½ years, while option 2 will require 50 separate one-night mainline roadway closings along the Eastern Spur in both the northbound and southbound directions over a two-year period. These lane closures are expected to cause minimal diversions, with most lost transactions on the Eastern Spur shifting to the Western Spur instead. This would result in no net change to total transactions, and therefore no additional impacts were considered in the forecast.

5.1.2 Turnpike Deck Rehabilitation of Newark Bay-Hudson County Extension Bridges, Zones 2 and 3

This project, item (3) in Table 5-1 and Figure 5-1, will last from September 2024 to January 2028 and rehabilitate the existing bridge deck that comprises most of the Turnpike's Newark Bay – Hudson County Extension (NB-HCE) from Interchange 14C to the Holland Tunnel. Construction will necessitate various single lane eastbound closures between mileposts 6.0 and 8.2 for a total of 12 months between 2025 and 2027. While bridge rehabilitation will also occur from Interchange 14 to 14C, this portion of the project will not be completed before the end of the forecast period in 2033 and was therefore not considered. Small negative impacts of these lane closures are reflected in the forecast for calendar years 2025, 2026, and 2027. Projects (4) and (5) are later phases of the NB-HCE project that will not be completed until after the 2033 forecast horizon of this study. Therefore, impacts of these remaining phases are not considered in this study.

5.1.3 Turnpike Interchange 3-4 Capacity Enhancements

This project, item (16) in Table 5-1 and Figure 5-2, will last from April 2026 to May 2030 and widen the Turnpike from two lanes to three lanes both northbound and southbound between Interchanges 3 and 4. While the Turnpike will also be widened between Interchanges 1 and 3, this portion of the project will not be completed before the end of the forecast period in 2033 and was therefore not considered. This project will increase Turnpike capacity once complete, and the forecast has therefore been adjusted to account for the anticipated additional transactions beginning mid-2030.

5.1.4 Parkway Interchange 80-83 Capacity Enhancements

This project, item (25) in Table 5-1 and Figure 5-2, will last from January 2026 to December 2030 and widen the Parkway from three lanes to four lanes both northbound and southbound between Interchanges 80 and 83, provide full shoulders along the same length, and add a northbound exit ramp and southbound entrance ramp at Interchange 80 in South Toms River. While these improvements will improve traffic flow for drivers, impacts to transactions and revenue are expected to be minimal. The new movements that will be allowed at Interchange 80 are likely to shift vehicles from nearby interchanges rather than draw additional transactions to the Parkway. Therefore, no additional impacts were considered for this forecast.

5.2 Other Forecasting Considerations

In addition to construction-related impacts, CDM Smith considered a number of other factors that will likely impact traffic and revenue on the Turnpike and Parkway during the forecast period. These additional factors are discussed below.

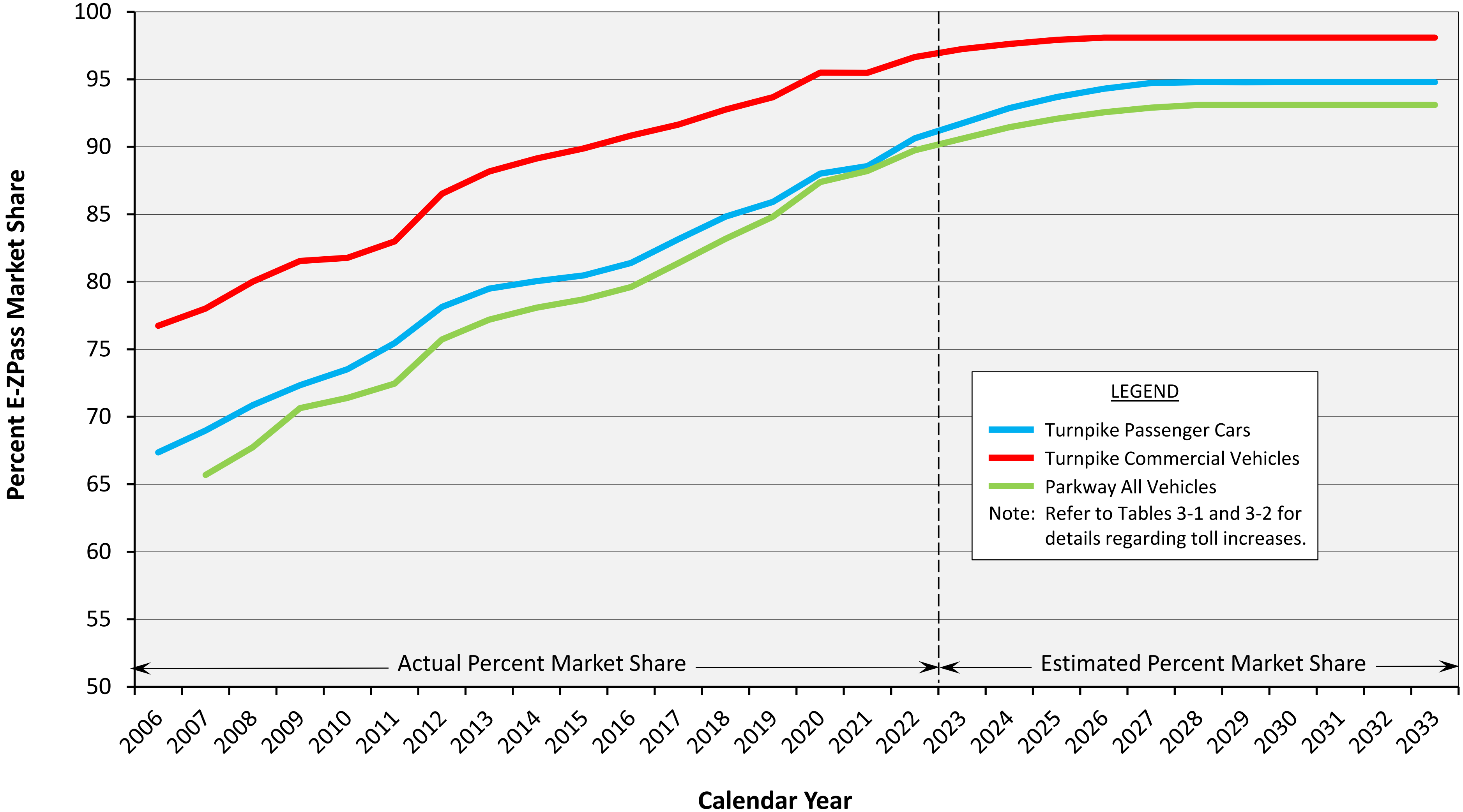
5.2.1 Estimated E-ZPass Market Share

A key element in developing estimates of transactions and toll revenue is the future market share for E-ZPass. CDM Smith conducted a detailed review of historical growth trends in E-ZPass market share over the last several years. Table 3-11 summarized those historical trends through the end of 2022. In 2022, the E-ZPass market share on the Turnpike totaled 90.6 percent for passenger cars, 96.7 percent for commercial vehicles, and 91.5 percent for all vehicles. 2022 E-ZPass market share on the Parkway totaled 89.7 percent for all vehicles.

Figure 5-3 shows the historical trends in E-ZPass market share, as well as estimated future market share through 2033. Separate estimates have been developed for Turnpike passenger cars and commercial transactions and for total Parkway transactions. E-ZPass penetration is already very high for all market segments and is expected to growth slowly over the coming years before reaching saturation during the middle of the forecast period. The E-ZPass market share for Turnpike passenger cars is expected to grow each year until reaching 94.8 percent in 2028 and then remaining stable at that level through 2033. Similarly, E-ZPass market share for commercial vehicles is expected to continue growing each year until reaching 98.1 percent in 2026 and then remaining stable at that level through 2033. Like Turnpike passenger cars, E-ZPass market share for the Parkway is forecast to grow slowly for the next few years before stabilizing in 2028 and beyond at 93.1 percent.

5.2.2 Interchange 18E Ramp P Toll Adjustment

CDM Smith considered the revenue impacts of NJTA's plan to expand the existing Paterson Plank Road toll rate adjustment. Under the current system that was instituted in 2022, all E-ZPass transactions at Interchange 18E conducted by a New Jersey E-ZPass account registered to select ZIP codes receive the 16E toll rate. However, under the proposed plan, NJTA will construct a gantry at Interchange 18E Ramp P to Paterson Plank Road and provide the 16E toll rate to all vehicles passing under the gantry with a New Jersey-issued E-ZPass. CDM Smith estimates that this will have no impact on transactions and negatively affect revenue by 0.2 percent each year.



CDM Smith

ACTUAL AND ESTIMATED PERCENT E-ZPASS MARKET SHARE

FIGURE 5-3

5.2.3 COVID-19 Impacts

Since March 2020, traffic and revenue on the Turnpike, Parkway, and all other highways have been impacted by the COVID-19 pandemic. Generally speaking, passenger car traffic has been negatively impacted as rates of telecommuting increased substantially and, at least in the early stages of the pandemic, social distancing and closure and capacity limitations of many businesses, public facilities, and events discouraged recreational travel. However, after an initial decline in the spring and summer of 2020, commercial vehicle traffic has been positively impacted as freight traffic grew due to increased consumer demand for ecommerce. While most of these impacts have now been reflected into baseline growth, CDM Smith has made minor adjustments to future year passenger and commercial vehicle traffic to account for additional normalization that is expected to occur.

Passenger car traffic on the New Jersey Turnpike System and other peer systems in the northeast and Midwest have not yet returned to 2019 levels due to shifts in commuting and travel patterns caused by the pandemic. While much of these changes are likely to be permanent, this forecast accounts for some modest additional recovery from lingering COVID-19 impacts by assuming an additional 0.8 percent growth in baseline passenger car traffic by 2027, which will still be below 2019 levels.

Conversely, the high levels of growth experienced by commercial vehicle traffic since 2020 were impacted by the pandemic as demand for consumer goods increased. This level of demand likely cannot be sustained over the long-term, and COVID-19's positive impacts to commercial traffic have begun to weaken. Therefore, this forecast assumes a further 1.8 percent decline in baseline commercial vehicle traffic by 2027, which will still keep it above 2019 levels.

5.2.4 Short-term Economic Outlook

The forecast presented in this chapter includes a small adjustment to account for a mild recession. The Federal Reserve staff have outlined their projections for a recession during the June Federal Open Market Committee (FOMC). According to the meeting minutes, the staff expects "a mild recession starting later this year, followed by a moderately paced recovery". In addition, the median projection for real GDP growth is 1.0 percent in 2023 and 1.1 percent in 2024. Based on this FOMC forecast, CDM Smith is expecting the recovery period to last for two years.

This forecast accounts for the latest recession probability forecasts by including a 40 percent probability of the Federal Reserve recession level taking place over the next year. The assumption for this forecast was that in the event of a recession, commercial vehicles would be more negatively impacted than passenger cars. The forecast assumes that recessionary impacts would negatively impact traffic in the short-term, lasting from the fourth quarter of 2023 through the fourth quarter of 2025, but have no impact on transactions and revenue in the long-term.

5.2.5 Manhattan Central Business District Tolling

As discussed briefly in Chapter 4, the Metropolitan Transit Authority (MTA) recently announced plans to begin congestion tolling in Manhattan's Central Business District (CBD) as early as 2024. This will result in an additional toll for all vehicles traveling eastbound from New Jersey to Manhattan through the Lincoln and Holland Tunnels. In 2022, CDM Smith conducted an analysis to estimate possible impacts that New York City congestion pricing could have on NJTA transactions and revenue. Based on the results of that study and updates made to account for an additional year's worth of data, CDM Smith now estimates that such a program could reduce NJTA gross toll revenue by 12 to 24 million dollars in 2025, depending on the exact parameters of the program. Although congestion pricing could begin as early as the spring of 2024, there are pending lawsuits and many details that have yet to be worked out. Therefore, effects of congestion pricing are not reflected in the current forecast, but CDM Smith will continue to work with NJTA to decide what assumptions to use for this study and any future Draw Down Letters.

5.3 Transaction and Gross Toll Revenue Forecasts

Annual estimates of toll transactions and gross toll revenue were developed by applying the estimated roadway improvement impacts (discussed previously in this chapter) to the underlying normal growth rates discussed in Chapter 4. Finally, the resulting travel demand was divided into its respective cash and E-ZPass market segments so that the differing average toll rates for each could be applied. The forecast assumes annual three percent toll indexing will occur each January, but no other future toll increases have been assumed during the forecast period.

Table 5-2 identifies the resulting toll transaction and toll revenue growth rates. The growth rates for 2022 are based on actual data and 2023 figures include five months of actual data. For 2023, Turnpike transactions are expected to grow 2.3 percent for passenger cars and decline 1.4 percent for commercial vehicles, with total vehicle growth of 1.8 percent. These numbers reflect moderation from the depressed passenger car and elevated commercial vehicle transaction levels that occurred during the COVID-19 pandemic. Growth rates for both passenger cars and commercial vehicles are forecast to decline in 2024 and increase in 2025, reflective of economic uncertainty over that period. From 2026 to 2033, growth rates are forecast to remain between 0.9 and 1.7 percent for passenger cars and 1.2 and 2.0 percent for commercial vehicles.

Revenue is expected to follow a similar pattern, although at ranges about three percentage points higher due to annual toll indexing. For full year 2023, passenger car toll revenue is expected to growth 3.9 percent, while commercial vehicle toll revenue is forecast for 0.3 percent growth, with 2.7 percent growth for all vehicles. From 2026 to 2033, growth rates are forecast to remain between 3.9 percent and 4.7 percent passenger cars and 4.2 percent and 5.1 percent for commercial vehicles.

Total vehicle transactions growth on the Parkway is expected to follow a similar pattern, with strong growth of 2.7 percent in 2023, before a decline to 0.8 percent in 2024 and a steady rate of between 0.5 and 1.1 percent from 2025 to 2033. Revenue growth rates are generally forecast to be about three percentage points higher due to toll indexing, growing 6.2 percent in 2023, 3.7 percent in 2024, and between 3.5 and 4.1 percent from 2025 to 2033.

When the Turnpike and Parkway are combined, Total System transactions are forecast to grow 2.3 percent in 2023, 0.6 percent in 2024, and between 0.7 and 1.4 percent from 2025 to 2033. Total system revenue is forecast to grow 3.6 percent in 2023, 2.9 percent in 2024, and between 3.9 and 4.7 percent from 2025 to 2033.

Table 5-3 shows the resulting toll transaction and revenue estimates for Turnpike passenger cars, commercial vehicles, total Parkway, and the Total System through 2033. As noted, actual transactions and revenue are included through May 2023. As shown, total Turnpike toll transactions are expected to increase from 252.7 million in 2022 to 288.9 million by 2033. Total Parkway toll transactions are estimated to increase from 360.8 million to about 403.7 million over the same period. For the Total System, toll transactions amounted to 613.4 million in 2022 and are expected to rise to 692.5 million in 2023, an average annual increase of 1.1 percent.

Total Turnpike toll revenue is estimated to increase from $1,597.6 million in 2022 to $2,460.9 million by 2033. Parkway toll revenue is forecast to increase from $528.4 million to about $820.7 million between 2022 and 2033. For the Total System, toll revenue is estimated to increase from $2,126.0 million in 2022 to $3,281.6 million by 2033, an average annual increase of 4.0 percent.

Figure 5-4 shows the historical and forecast toll transactions for the Turnpike and Parkway from 2000 through 2033, while **Figure 5-5** shows historical and forecast gross toll revenue. Prior year toll increases are noted. It should also be reiterated that the significant toll transaction decreases experienced on the Parkway between 2004 and 2010 are the result of the conversion of two-way toll collection to one-way toll collection (see Table 3-3 for the conversion schedule). No additional toll plaza conversions or toll increases (other than annual three percent indexing) are assumed during the forecast period.

Table 5-2 Estimated Annual Toll Transaction and Gross Toll Revenue Growth Rates

Year	Annual Toll Transactions (Percent Change over Previous Year)(1)				
	Turnpike				
	Passenger Cars	Commercial Vehicles	Turnpike Total	Parkway Total	System Total
2022 (2)	4.7%	4.1%	4.6%	2.2%	3.2%
2023 (3)	2.3	(1.4)	1.8	2.7	2.3
2024	0.8	(1.8)	0.4	0.8	0.6
2025	1.1	0.3	1.0	1.0	1.0
2026	1.4	1.6	1.5	1.1	1.3
2027	1.2	1.5	1.3	0.9	1.1
2028	1.7	2.0	1.7	1.1	1.4
2029	1.0	1.2	1.0	0.6	0.8
2030	1.2	1.5	1.3	0.8	1.0
2031	1.2	1.5	1.3	0.8	1.0
2032	1.4	1.7	1.4	1.0	1.2
2033	0.9	1.2	0.9	0.5	0.7
Year	Annual Toll Revenue (Percent Change over Previous Year)(1)				
	Turnpike				
	Passenger Cars	Commercial Vehicles	Turnpike Total	Parkway Total	System Total
2022 (2)	6.7%	7.5%	7.0%	4.6%	6.4%
2023 (3)	3.9	0.3	2.7	6.2	3.6
2024 (4)	3.4	1.0	2.6	3.7	2.9
2025	4.0	3.4	3.8	4.0	3.9
2026	4.4	4.6	4.5	4.1	4.4
2027	4.2	4.5	4.3	3.9	4.2
2028	4.7	5.1	4.8	4.1	4.7
2029	4.0	4.3	4.1	3.6	4.0
2030	4.3	4.6	4.4	3.8	4.2
2031	4.3	4.5	4.3	3.8	4.2
2032	4.4	4.8	4.5	4.0	4.4
2033	3.9	4.2	4.0	3.5	3.9

(1) Reflects 3% annual toll indexing applied in January of each year beginning 2022.
(2) Reflects actual traffic and revenue experience.
(3) Data through May 2023 is actual.
(4) Reflects Turnpike Paterson Plank Ramp P NJ E-ZPass toll adjustment starting January 2024.

Table 5-3 Estimated Annual Toll Transactions and Gross Toll Revenue

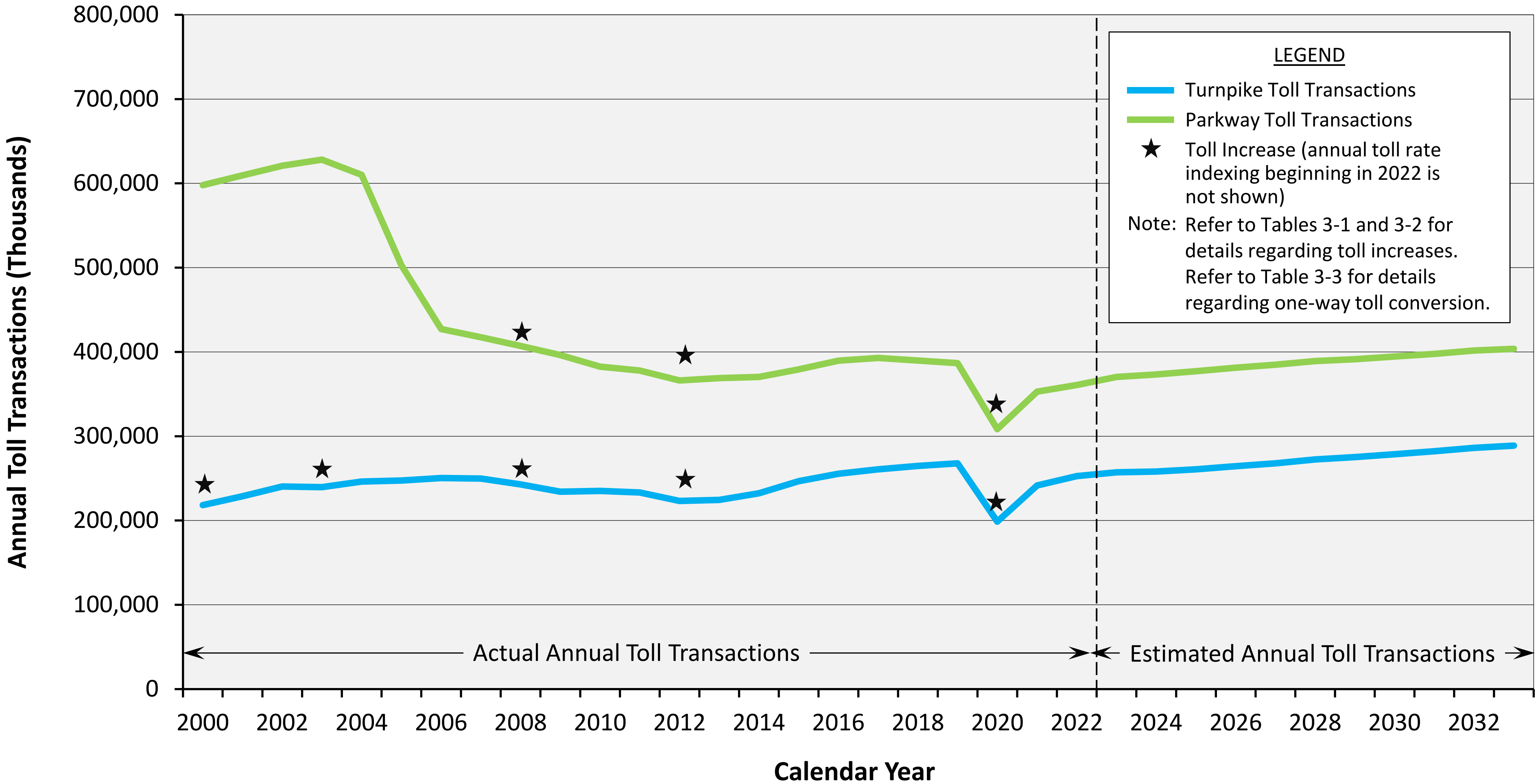
Year	Annual Toll Transactions (in thousands)(1)				
	Turnpike				
	Passenger Cars	Commercial Vehicles	Turnpike Total	Parkway Total	System Total
2022 (2)	215,522	37,150	252,672	360,759	613,431
2023 (3)	220,508	36,635	257,142	370,358	627,501
2024	222,192	35,960	258,152	373,257	631,409
2025	224,654	36,062	260,716	377,079	637,795
2026	227,876	36,624	264,500	381,315	645,815
2027	230,664	37,168	267,832	384,790	652,622
2028	234,599	37,914	272,513	389,092	661,605
2029	236,831	38,383	275,214	391,394	666,608
2030	239,716	38,959	278,675	394,575	673,250
2031	242,630	39,541	282,171	397,691	679,862
2032	246,035	40,214	286,249	401,703	687,952
2033	248,180	40,677	288,857	403,691	692,548
Year	Annual Toll Revenue (1)				
	Turnpike				
	Passenger Cars	Commercial Vehicles	Turnpike Total	Parkway Total	System Total
2022 (2)	1,050,933	546,707	1,597,640	528,388	2,126,027
2023 (3)	1,092,223	548,562	1,640,785	560,939	2,201,724
2024 (4)	1,129,722	553,830	1,683,552	581,951	2,265,503
2025	1,175,412	572,460	1,747,872	605,389	2,353,261
2026	1,227,093	599,052	1,826,145	630,448	2,456,593
2027	1,278,700	626,169	1,904,869	655,221	2,560,090
2028	1,339,315	657,900	1,997,215	682,363	2,679,578
2029	1,392,723	685,982	2,078,705	707,004	2,785,709
2030	1,451,977	717,205	2,169,182	734,136	2,903,318
2031	1,513,708	749,782	2,263,490	762,132	3,025,622
2032	1,580,894	785,400	2,366,294	792,900	3,159,194
2033	1,642,631	818,219	2,460,850	820,743	3,281,593

(1) Reflects 3% annual toll indexing applied in January of each year beginning 2022.

(2) Reflects actual traffic and revenue experience.

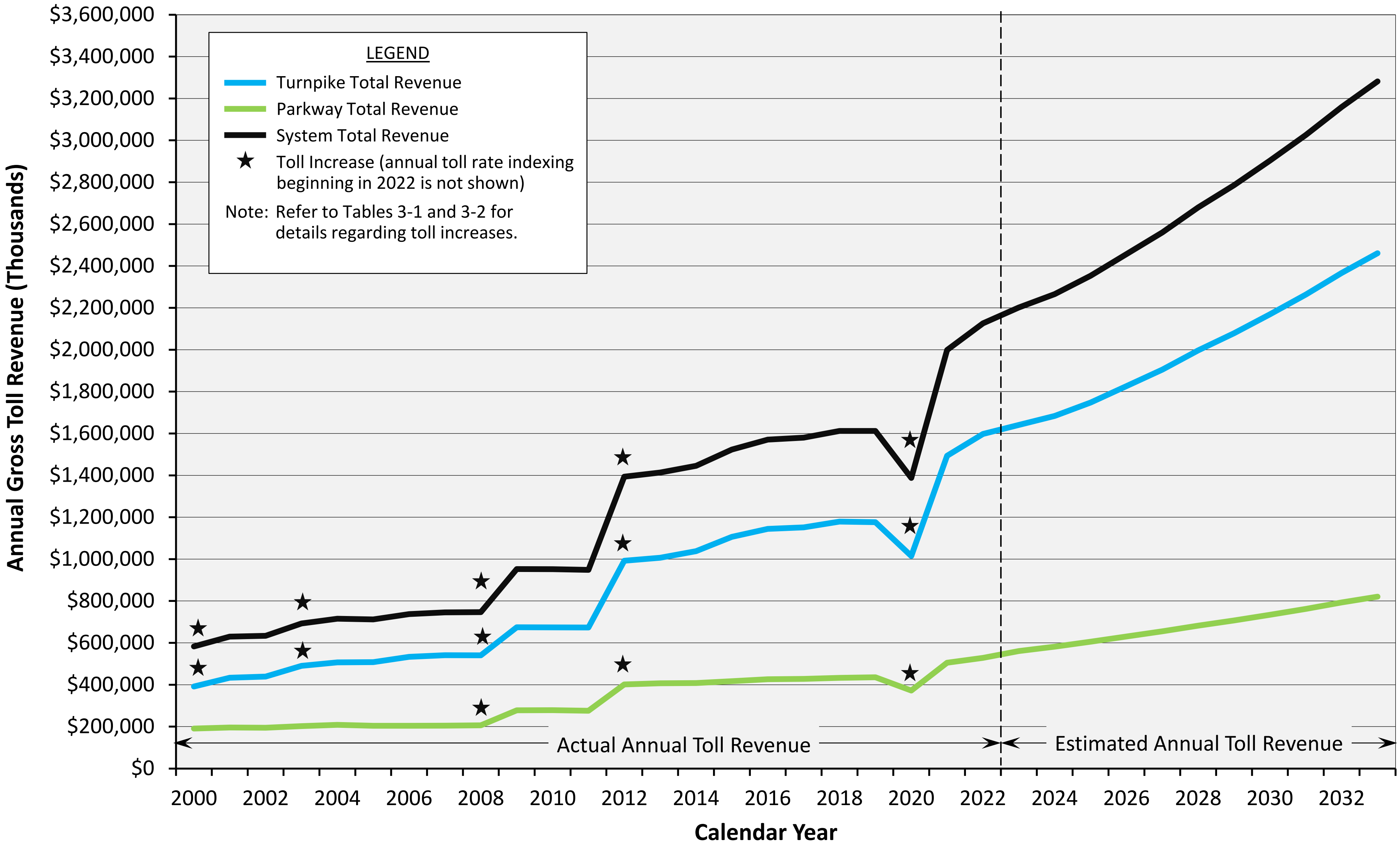
(3) Data through May 2023 is actual.

(4) Reflects Turnpike Paterson Plank Ramp P NJ E-ZPass toll adjustment starting January 2024.



ACTUAL AND ESTIMATED ANNUAL TOLL TRANSACTIONS

FIGURE 5-4



ACTUAL AND ESTIMATED ANNUAL GROSS TOLL REVENUE

FIGURE 5-5

5.4 Disclaimer

CDM Smith used currently accepted professional practices and procedures in the development of the traffic and revenue estimates in this report. However, as with any forecast, it should be understood that differences between forecasted and actual results may occur, as caused by events and circumstances beyond the control of the forecasters. In formulating the estimates, CDM Smith reasonably relied upon the accuracy and completeness of information provided (both written and oral) by NJTA. CDM Smith also relied upon the reasonable assurances of independent parties and is not aware of any material facts that would make such information misleading.

CDM Smith made qualitative judgments related to several key variables in the development and analysis of the traffic and revenue estimates that must be considered as a whole; therefore, selecting portions of any individual result without consideration of the intent of the whole may create a misleading or incomplete view of the results and the underlying methodologies used to obtain the results. CDM Smith gives no opinion as to the value or merit of partial information extracted from this report.

All estimates and projections reported herein are based on CDM Smith's experience and judgment and on a review of information obtained from multiple agencies, including but not limited to NJTA, Moody's, Woods & Poole, BEA, and EIA. These estimates and projections may not be indicative of actual or future values and are therefore subject to substantial uncertainty. Certain variables such as future developments, economic cycles, pandemics, government actions, climate change related events, or impacts related to advances in automotive technology etc. cannot be predicted with certainty and may affect the estimates or projections expressed in this report, such that CDM Smith does not specifically guarantee or warrant any estimate or projection contained within this report.

While CDM Smith believes that the projections and other forward-looking statements contained within the report are based on reasonable assumptions as of the date of the report, such forward-looking statements involve risks and uncertainties that may cause actual results to differ materially from the results predicted. Therefore, following the date of this report, CDM Smith will take no responsibility or assume any obligation to advise of changes that may affect its assumptions contained within the report, as they pertain to socioeconomic and demographic forecasts, proposed residential or commercial land use development projects and/or potential improvements to the regional transportation network.

The report and its contents are intended solely for use by NJTA and designated parties approved by NJTA and CDM Smith. Any use by third-parties, other than as noted above, is expressly prohibited. In addition, any publication of the report without the express written consent of CDM Smith is prohibited.

CDM Smith is not, and has not been, a municipal advisor as defined in Federal law (the Dodd Frank Bill) to NJTA and does not owe a fiduciary duty pursuant to Section 15B of the Exchange Act to NJTA with respect to the information and material contained in this report. CDM Smith is not recommending and has not recommended any action to NJTA. NJTA should discuss the information and material contained in this report with any and all internal and external advisors that it deems appropriate before acting on this information.

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THRU TRAFFIC
NEXT EXIT 3 MILES
EXIT 13
INTERSTATE
278
Elizabeth
Goethals Br.
Verrazano Br.
EXIT
13

CDM Smith

APPENDIX C

REPORT OF CONSULTING ENGINEER

CONSULTING ENGINEER'S REPORT

New Jersey Turnpike Authority

Turnpike Revenue Bonds, Series 2022 B

OPS No. A3785, Task No. FB-23
Revenue Bond Technical Support Services

Prepared by:

HNTB Corporation
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Date Prepared: September 25, 2022

HNTB

Contents

CONSULTING ENGINEER'S REPORT

New Jersey Turnpike Authority

Turnpike Revenue Bonds – Series 2022 B

INTRODUCTION

As Consulting Engineer to the New Jersey Turnpike Authority (Authority), HNTB Corporation is pleased to submit this engineering report in support of the Authority's ongoing capital improvement programs (CIPs). In this report, we provide our professional opinions of the Authority's operations and maintenance performance, descriptions and status of the projects included in the current CIPs, discussion of cost and schedule risks, and recent Authority initiatives. The projects that are included in the CIPs generally serve to repair or replace existing capital assets and provide new assets to improve and enhance both the New Jersey Turnpike (Turnpike) and the Garden State Parkway (Parkway). We also present our estimates of operating expenses to operate and maintain the Turnpike and the Parkway for the period 2023 through 2032. Finally, we present our recommendations for reserve fund deposits over the same time period.

The capital assets of the Authority include approximately 316 centerline miles of mainline roadway, 4,477 lane miles (mainline, shoulders, and ramps) of roadway, 1,116 bridges, and various safety and operational appurtenances, as well as service area facilities to accommodate customer services, maintenance facilities, toll collection operations facilities, materials storage, salt storage, and State Police offices.

ORGANIZATION AND MANAGEMENT

The character of the two roadways, the Turnpike and the Parkway, is remarkably different in several important aspects. These differences are a direct result of the type and volume of traffic using each roadway and the purposes and needs of an interstate road (the Turnpike with significant truck traffic) and an intrastate road (the Parkway with mainly automobile traffic). The disparity in the level of resources required to operate, maintain, enhance, and expand the two facilities is reflective of these inherent differences. The Authority has adequately organized their agency and is executing their operations and maintenance plans to address the infrastructure and operational needs of both roadways in a highly effective and cost-efficient manner. One common thread for the entire roadway system is proper maintenance. The following is a brief description of the Authority's recent and ongoing efforts to preserve the condition of their assets.

STATE OF GOOD REPAIR

An enduring policy of the Authority has been to maintain its assets in a state of good repair. To this end, the Authority, since its inception, has implemented an aggressive annual inspection program of the bridges, pavement, buildings, toll plazas, and ancillary facilities and safety devices. HNTB performs the annual inspections and has firsthand knowledge of the condition of the assets and the level of maintenance expended to achieve the state of good repair.

TECHNOLOGY

The Authority has implemented Enterprise Geographic Information System (eGIS) hardware and software throughout the agency to electronically record and store their infrastructure asset types, locations, condition statuses, and photos, where applicable. The assets that are currently included in the system include, but are not limited to, bridges, pavement, buildings, toll plazas, light poles, guide rail, median barrier, and drainage features. The eGIS information is maintained and updated during the annual inspections performed for the Authority's assets. The inspection field teams utilize handheld devices to identify, locate, and update condition statuses for the Authority's assets quickly and efficiently. Assets that require immediate attention are noted and recorded during the field inspections. This allows the Engineering and Operations & Maintenance Departments to access and respond to the critical items noted in the eGIS inventory during the annual inspections. In the future, the eGIS inventories will be used to populate an online work order tracking system for roadway and facility maintenance crews.

The Authority utilizes a bridge inspection software system for annual bridge and structure inspections on Authority facilities. Bentley's AssetWise Inspections (AWI) CONNECT Edition is used for collecting inspection data for the Authority's structural assets (bridges, culverts, signs, high mast light poles, retaining walls/noise barriers and antenna towers). This software is a vital component of the Bridge and Culvert Inspection Programs and provides a data management application which facilitates the management and creation of inspection reports for all assets in the Authority's inventory. Query exports of the data are used to support the Authority's Maintenance Reserve and CIPs.

The Authority has developed and implemented an integrated Pavement Management System (PMS). The PMS is an effective means of assembling large volumes of data regarding pavement condition and other factors that affect pavement life and performance. Through the application of these software systems, the Authority obtains an objective analysis and vital information with which to manage the maintenance and repair of Turnpike and Parkway pavements for long-term sustainability.

The PMS Decision Support System (DSS) software provides a unique user interface for pavement management. The DSS uses American Association of State Highway Transportation Officials (AASHTO) Pavement Design Software to analyze pavement conditions and determine lifecycle performance for various sections of both the Turnpike and Parkway. This provides Authority staff with a set of tools to quantify the current pavement level of service provided on each toll road and it provides guidance for optimizing pavement performance and the annual allocation of repair funds.

The PMS leverages the value of the Authority's eGIS system. Pavement asset ratings are displayed on maps or charts and compared over multiple years, so trends can be identified.

The eGIS system is currently incorporated with the PMS to allow use of the following tools for pavement management:

- Pavement Condition Viewer (PCV)
- Annual Visual Inspection
- Staff Reporting Capability
- Virtual Drive Tool
- Mobile Inspection Capability
- Pavement Repair History Data Base
- Identify Interim Maintenance Needs
- Interactive Capability with Trigger Points

INSPECTIONS

Beginning in 2016, the Authority increased the level of detail for its annual inspection program to cover more items and provide a greater depth of inspection. For the period 2023 – 2027, the Authority anticipates spending nearly $10 million per year for structural inspections which include major and routine bridges, sign structures, antenna towers, retaining walls, noise barriers, high mast lighting poles, and other structural roadway features. Pavements are surveyed annually with state-of-the-art technology to identify areas where resurfacings are warranted to maintain serviceability. In addition, various other supporting infrastructure features are annually inspected which include stormwater basins, guide rail, concrete median barrier, drainage structures, building structures, parking facilities, and miscellaneous other items. Detailed reports of the results of all inspections are prepared and analyzed to develop projects to address identified deficiencies. To ensure that maintenance funds are spent wisely and cost-effectively, the annual maintenance programs are comprised of projects prioritized in order of urgency in a manner that maintains public safety and the serviceability of the roadways, bridges, other structures, and other supporting features.

MAINTENANCE OF INFRASTRUCTURE

Preventive maintenance and repairs are carried out through annual maintenance-related contracts with the use of the CIPs for more significant projects to result in highly improved assets. Annual revenue-funded contracts are awarded for all categories of bridge repairs -- deck replacements, superstructure repairs, and substructure repairs. In the past five years, , the amount awarded for this purpose was about $60 million in 2018 and is planned to be approximately $80 million annually for 2023 to 2027. Because of the increased diligence in bridge inspections and repairs, the condition ratings of the Authority's 1,116 bridges range from "fair" to "excellent"; terms that are defined in the Federal Highway Administration (FHWA) Coding Guide for the Inventory and Appraisal of the Nation's Bridges. In addition, there currently is only one structurally deficient bridge (0.09 percent of the Authority's bridge inventory) which compares extremely favorable to the national average of about 7 percent. The continuation of the CIPs coupled with the aggressive annual maintenance program will reduce that number to zero in a few years. All bridges are capable of safely supporting the heaviest legal loads of New Jersey and other states .

The Authority also takes very good care of its pavements. It starts with the design criteria that the Authority has adopted. The design of the pavement section for both the Turnpike and the Parkway ensures that the roadways can withstand the daily impact of traffic thereby helping to minimize future capital expenditure needs. Both the Turnpike and Parkway have been recognized in the past for their pavement designs as "Perpetual Pavements" by the National Asphalt Pavement Association. A major requirement for this designation includes a minimum of a 50-year pavement life requiring only periodic resurfacings.

Based on the results of the annual pavement analyses and the output of the PMS, annual contracts are awarded each year for pavement resurfacing projects on both the Turnpike and Parkway. Pavement resurfacing funding has been constantly increasing in recent years. In fact, annual resurfacing expenditures covering both roadways were approximately $50 million in 2018 and that amount is expected to increase to an average of $125 million annually for 2023 to 2027. Pavement resurfacing involves milling a minimum of two inches of existing asphalt surfacing and replacing it with a minimum of two inches of new hot mix asphalt. The resurfacing cycle generally has been every 15 years, but the increased maintenance reserve funding policies recently adopted by the Authority have resulted in reducing that cycle down to 12 years which compares very favorably with other transportation agencies in the Northeast.

Finally, the Authority has increased its attention to the maintenance of minor infrastructure assets such as lighting and electrical systems, drainage systems, guide rail, signing, roofing, HVAC systems, and similar items. In the past five years, the annual budgets for these items have increased from about $15 million in 2018 to an average of $25 million per year from 2023 to 2027.

Conclusions

It is our professional opinion that the Authority is organized and has procedures in place to efficiently determine its infrastructure conditions and to carry out the necessary projects to keep all its assets in a state of good repair. They Authority utilizes technology, subject matter experts, and its revenue-funded funds to maintain their assets effectively and diligently.

RESILIENCY AND SUSTAINABILITY

The Authority is currently preparing an Authority-wide Resiliency Plan in accordance with New Jersey Department of Environmental Protection (NJDEP) regulations. The Plan will establish procedures for integrating resiliency into capital projects and day-to-day operations and maintenance to withstand severe natural-occurring weather events and the ongoing effects of climate change.

In addition, the Authority is integrating sustainability concepts into its overall operation through the implementation of hybrid and electric fleet vehicles, sustainable construction materials, solar electric pilot projects, wildflower programs, water resources considerations, and similar environmentally friendly actions.

COVID-19 IMPACTS

The impacts associated with the COVID-19 pandemic generally appear to have subsided. Traffic levels, operations, maintenance, and the carrying out of construction projects all appear to be near normal when compared to pre-COVID time periods for these activities. The Authority has implemented revised work policies to allow office-based employees to work from home periodically in accordance with State of New Jersey policies, but otherwise Authority operations are fully back to normal.

STRATEGIC PLAN

In September 2019, the Authority adopted its first Strategic Plan that covers a 10-year period, 2020-2029. The Strategic Plan details the Authority's vision, mission, and core values, and provides clear direction and measurable goals for 10-year period. The Authority is working to measure, monitor and report its performance as compared to the key goals on a quarterly basis.

The Strategic Plan identifies three key tenets of the Authority's philosophy:

- Vision Statement
  To be the premier toll road agency in the Unites States of America
- Mission Statement
  To prudently manage the finances and operations of the New Jersey Turnpike Authority to provide 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
  Safety, Diversity, Innovation, Transparency, State of Good Repair, Customer Satisfaction, Resiliency & Sustainability, and Long-Term Financial Stability

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 the 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.
- *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.
- *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.

- *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.
- *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.

The Strategic Plan is reviewed annually and updated to accurately reflect the vision, mission, and core values of the Authority and to ensure the Authority is aligned with the most successful trends in the industry. The Plan provides clear and consistent direction to allow management and staff to all work with the same philosophy and consistency, constantly improving the Authority. The Strategic Plan is available on the Authority's website at www.njta.com/media/6651/njta-stratplan_public-v31-revised-april-12-2022.pdf

20-YEAR LONG-RANGE PLAN

In late 2019 and early 2020, the Authority developed a 20-Year Long-Range Capital Plan (LRCP) that identifies long term needs, capital improvements, and safety enhancements for the Parkway and Turnpike. The LRCP identifies the projects and initiatives necessary to achieve the goals and strategies identified in the Strategic Plan. This is the first time the Authority has employed such long-range planning practices and provided detailed documentation of the results. The LRCP will be reviewed and updated annually to ensure the long term needs of the Authority's assets are addressed in the most efficient and thorough ways. The LRCP is available on the Authority's website at
www.njta.com/media/5832/2020_njtalongrangecapitalplan_v1-as-approved-may-2020.pdf

INFLATION AND ESCALATION

The Authority has experienced inflation over the past several years in general materials and vehicle purchasing, construction costs, and labor-related items such as health insurance and other similar items. HNTB performed research and analyses to assist the Authority in understanding the inflationary trends and to estimate escalation factors for future budget planning purposes. HNTB's research yielded annual inflation rates for construction costs of 7 percent to 8 percent from 2021 to June 2022. In order to plan for future inflation, HNTB recommended annual escalation rates for construction projects to be 7 percent from June 2022 to June 2023, 5 percent from June 2023 to June 2024, 4.5 percent from June 2024 to June 2025, 4 percent from June 2025 to June 2026, and dropping to 3.5 percent by June 2026 and for future years.

As a result of the inflationary trends and the recommended escalation rates, the Authority updated project costs for all construction projects by escalating costs from current-day dollars based on the mid-point of the construction schedule. As a result of these updates, project schedules, priorities, and costs were reviewed and modified appropriately to continue to abide by the Strategic Plan, Long-Range Capital Plan, and the overall philosophy of the Authority to maintain a state of good repair and to ensure safe and efficient travel for its customers.

PROJECTS TO BE FUNDED

The projects to be funded by the Series 2022 B Turnpike Revenue Bonds include active projects as identified in the various CIP descriptions shown below. The Authority currently has three active CIPs, each of which contain active projects. As the projects within the 2008 and 2019 CIPs come to completion, the CIPs will be retired and eventually all capital improvement projects will be carried out under a single rolling five-year CIP in perpetuity. The rolling five-year CIP is reviewed and updated annually and is approved by the Board of Commissioners along with the annual budgets that the Authority develops.

When projects are added to the rolling five-year CIP, they remain there until completed. At completion, projects drop out and other projects are added, as appropriate. The rolling five-year CIP is maintained at an overall cost level that can be afforded by the Authority through a combination of revenue-funded and bond-funded financing.

CAPITAL IMPROVEMENT PROGRAMS

The Authority is currently implementing three active CIPs:

- 2022-2026 CIP
- 2019 CIP
- 2008 $7 Billion CIP

The 2008 CIP is nearing completion and has only a few active projects. The Program was very successful, having implemented more projects than anticipated at the original program cost. The 2019 CIP was started in 2019 and will be active for the next four to five years. Finally, the most recent CIP, the 2022-2026 CIP, was approved in October 2021 and is the basis for this document. We describe each CIP separately, although they are being carried out and funded concurrently.

The Authority's 2022 Annual Budget includes its Capital Spending Program Budget presented on a rolling five-year basis for all capital project spending for the years 2022-2026, which includes all three CIPs and the capitalized projects included in the Maintenance Reserve Fund, Special Project Reserve Fund, and Supplemental Capital Program. 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) 2022-2026 CIP, (ii) 2019 CIP, and (iii) 2008 $7 Billion CIP. These spending budgets for capital projects are presented on a rolling five-year (2022-2026) spending basis. Each year a new rolling five-year spending plan will be approved with the changes, if any, to the total project budgets, as part of the annual budget approval process.

The 2022 rolling five-year Capital Spending Program Budget includes $5.8 billion to be spent during 2022-2026, or an average of over $1.0 billion/year. Of this, 34 percent is budgeted to be spent on Bridge Construction, Preservation and Security, while 25 percent is budgeted to be spent on Capacity Enhancements on both roadways, 9 percent on Pavement Resurfacing, and 7 percent on Drainage Structures, all combining for a total of 75 percent of budgeted spending. Approximately 29 percent, or $1.7 billion, will be funded by revenue, while 71 percent, or $4.1 billion will be funded by bond proceeds. This information is provided to present the overall capital spending the Authority is anticipating over the next five years.

2022 - 2026 Rolling 5-Year Capital Spending Plan
Revenue Funded and Bond Funded Funding Sources
Spending Plan ($ in Thousands)

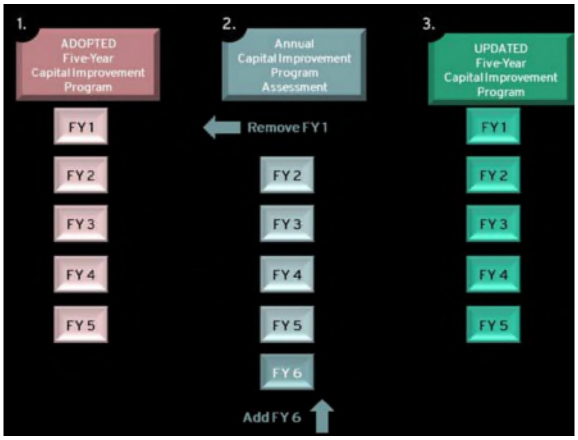
	2022	2023	2024	2025	2026	Total
Revenue Funded						
Maintenance Reserve Fund Special	$ 218,787	231,666	207,975	218,297	227,263	1,104,989
Project Reserve Fund	76,137	58,172	44,342	43,496	44,502	275,348
Supplemental Capital Program Fund	74,950	64,227	58,750	58,750	58,750	201,315
Total Revenue Funded	**$ 370,875**	**354,064**	**311,068**	**320,543**	**330,515**	**1,687,065**
Bond Funded						
2022-2026 Capital Improvement Program	351,630	655,182	813,623	831,661	1,024,973	3,677,070
2019 Capital Improvement Program	172,507	119,482	36,339	18,854	5,000	352,173
2008 $7B Capital Improvement Program	74,160	22,512	1,754	1,648	1,542	101,617
Total Bond Funded	**$ 598,297**	**797,177**	**851,716**	**852,155**	**1,031,515**	**4,130,859**
Total Capital Spending	**$ 969,173**	**1,151,241**	**1,162,784**	**1,172,698**	**1,362,030**	**5,817,925**
Percentage Revenue Funded	38%	31%	27%	27%	24%	29%
Percentage Bond Funded	62%	69%	73%	73%	76%	71%

2022-2026 CAPITAL IMPROVEMENT PROGRAM

The 2022-2026 CIP, which is derived from the 2020 Long-Range Capital Plan that was approved in May 2020, is starting with total project budgets (program budget) of $9.0 billion, and a rolling five-year spending plan of $3.7 billion, or an average spending of approximately $740 million each year. It should be noted that the estimated project costs are higher than the five-year spending plan because many of the projects in the 2022-2026 CIP last more than five years or begin later in the five-year Program.

Now that the Authority has a Strategic Plan and LRCP, they have adopted a new method of implementing the capital projects that are identified through the long-range planning process.

The implementation method utilized to implement the capital projects is a five-year rolling CIP, reviewed and updated each year.



This method results in essentially a perpetual CIP with both short-term and long-term projects, which allows for constant fine-tuning of the CIP resulting in more accurate costs and schedules and reduced risk because the CIP is reviewed on an annual basis.

Included in this current program are several projects focusing on bridge rehabilitation and replacement on both roadways, capacity enhancements such as the Newark Bay Hudson County Extension Program and Turnpike Interchange 1 to 4 Program, culvert rehabilitations on both roadways, and the Turnpike Interchange 17 ramp bridge replacement.

The 2022-2026 CIP will be funded primarily through bond proceeds. It is expected that several bond issues will occur each year to fund the ongoing spending needs of the program.

As Consulting Engineers to the Authority, HNTB has assisted with project planning; provided oversight of design, preparation of construction documents and cost estimates; and monitored construction schedules and costs for the Authority's 2022-2026 CIP. Furthermore, we have reviewed the estimated total construction costs and the schedules for the projects included in the 2022-2026 CIP and consider the estimated costs and schedules for the projects reasonable based on currently available engineering studies, construction bid trends, inflation trends, escalation factors, and construction statuses.

The projects that comprise the Authority's 2022-2026 CIP can generally be separated into ten categories as shown below. As seen in the breakdown of the 2022-2026 CIP, it is a mix of projects which enhance traffic capacity and operational efficiencies, increase safety, and maintain the system in a state of good repair. The breakdown of the 2022-2026 CIP is as follows:

Project Category	Estimated Total Project Spending during 2022 - 2026 (millions)	% of Program
Bridge Construction, Preservation & Security	$1,313	35.7%
Capacity Enhancements - Turnpike	1,432	38.9%
Capacity Enhancements - Parkway	8	0.0%
Interchanges	40	1.1%
Concrete Barrier	33	0.9%
Drainage Structures	365	9.9%
Roadway Lighting	129	3.5%
Other Roadway Improvements	250	6.8%
Facilities	45	1.2%
Technology Improvements	61	1.7%
TOTAL	$3,676	

A summary table followed by a more detailed description of the individual projects for the 2022-2026 CIP is presented below. It is important to note that the total project budget is the budget for the life of the project and may not be fully reflected in the spending plans for the period 2022-2026 if the project duration extends beyond 2026. The summaries presented above only reflect the spending that will occur during the five-year period from 2022-2026.

All projects listed below have either started or are anticipated to start within 2022-2026. Generally, the projects listed below that show 0 percent complete will start later in the five-year period.

2022-2026 Capital Improvement Program
as of June 30, 2022

Project No.	Project Name	Total Project Budget	Approx. % Complete through 6/30/22
5000000001	TPK Bridges (W110.42, W111.48, W112.72B)	$88,357,000	2%
5000000002	TPK Interchange 17 Ramp Bridge Replacement	$134,185,000	4%
5000000003	TPK Rehabilitation of Str. Nos. W107.87, E107.88 and 84.24N&S	$328,566,000	5%
5000000004	Bridge Deck, Superstructure Reconstruction & Median Barrier Reconstruction, MP 35.5 to 44.1; MP 74.3 to 76.5	$61,242,000	29%
5000000005	TPK MP 85.77 TO 87.1 Deck and Superstructure Reconstruction	$6,351,000	65%
5000000006	TPK Deck Recon. 98.48 to 98.76	$85,596,000	5%
5000000007	Interim Repairs to Waterway Pier for TPK Str. No. W115.36	$2,168,000	77%
5000000008	Reconstruction of Waterway Pier for TPK Str. No. W115.36	$27,300,000	2%
5000000009	Rehabilitation of Structure Nos. E113.00, E113.16, E114.52 and E115.21	$52,581,000	12%
5000000010	TPK Deck Reconstruction, MP P2.0 to P5.0	$63,500,000	0%
5000000012	Deck Rehabilitation of NBHCE Bridges, Zones 2 and 3	$91,500,000	0%
5000000013	TPK Deck Reconstruction, MP 105.1 to W106.68	$110,000,000	0%
5000000014	TPK Deck Reconstruction, MP 81.5 to 84.5	$46,800,000	0%

Project No.	Project Name	Total Project Budget	Approx. % Complete through 6/30/22
5000000015	Deck Rehabilitation of Turnpike Westerly Alignment Bridges	$91,500,000	0%
5000000016	TPK Deck Reconstruction, MP 44.7 to MP 50.3	$65,000,000	0%
5000000017	TPK Superstructure Replacement, Str. No. E111.15	$90,500,000	0%
5000000018	TPK Non-Redundant Pier Reconstruction and Bearing Imp., MP 99.0 to 100.0	$27,000,000	0%
5000000019	TPK Deck Reconstruction, MP 40.34	$21,750,000	1%
5000000020	TPK Deck Reconstruction, MP 97.5 to 98.7	$53,300,000	0%
5000000021	TPK Deck Reconstruction, MP 88.0 to MP 88.9	$59,800,000	0%
5000002001	GSP Bridge Superstructure Replacement, MP 106.3 to 106.5 (three bridges)	$21,109,000	23%
5000002002	GSP Str. Nos. 128.0A and 128.0B Superstructure Replacement, TPK Deck Reconstruction, MP 90.0 to 91.37, and GSP Str Nos. 154.2N and 6.6S Beam Replacement	$115,660,000	13%
5000002003	GSP Deck Reconstruction, MP 169.2 to 171.7	$69,612,000	1%
5000002004	GSP Superstructure Replacement, MP 150.3 to 150.4	$51,400,000	0%
5000004002	TPK Rehabilitation of Concrete Median Barrier MP 89 to 122	$7,186,000	50%
5000004003	TPK Median Barrier Repairs, MP 0-48 and 72-89	$794,000	30%
5000006000	GSP Median Barrier Improvements, MP 134-140	$23,409,999	0%
5000008000	TPK Culvert Rehabilitation, MP 112.7	$7,230,000	0%
5000008001	TPK Drainage Cleaning and Video Inspection, MP 77-97	$15,525,000	0%
5000008002	GSP & TPK Corrugated Metal Pipe Rehabilitation (Various Locations)	$28,000,000	0.1%
5000010000	GSP CMP Rehabilitation MP 110.6 to 116.4	$13,069,000	6%
5000010001	GSP Culvert Rehab MP 111.5	$8,143,000	75%
5000010002	GSP Culvert Repairs MP 112.7	$12,129,000	43%
5000010003	Culvert Repairs MP 115 to 116	$16,130,000	44%
5000010004	Heards Brook Improvements	$10,337,000	40%
5000010005	Culvert Repairs Interchange 100	$31,400,000	8%
5000010006	Culvert Repairs MP 109 to 111, and MP 123 to 128	$29,525,000	10%
5000010008	GSP Culvert Rehabilitation, MP 112.7	$525,000	0%
5000010009	GSP Culvert Rehabilitation, MP 33.6, 62.85S and 116.74	$15,600,000	0%
5000010010	GSP Drainage Cleaning and Video Inspection	$25,750,000	0.4%
5000010012	GSP Drainage Cleaning and Video Inspection, MP 116-120.6	$3,175,000	0%
5000010013	GSP Corrugated Metal Pipe Rehabilitation, MP 120.6-123.6	$7,700,000	0%
5000010014	GSP Culvert Rehabilitation, MP 156 to 163	$29,700,000	0%
5000010015	GSP Culvert Rehabilitation, MP 164 to 172	$39,000,000	0%
5000012000	TMC Administration Building	$17,700,000	0%
5000012001	TMD 5 - Milltown Equipment Storage Building	$1,750,000	0%
5000012002	TMD 3 - Storage Building	$2,400,000	0%
5000012003	TMD 9 - Storage Building	$2,800,000	0%
5000012004	Facilities Program 2022	$500,000	0%
5000014000	Maintenance Lean-to Replacement at Paramus, Clifton, Telegraph Hill and Ocean	$1,890,000	0%
5000014002	Chevalier Maintenance Sub Yard (Westside)	$12,390,000	0%
5000020001	GSP Mainline Capacity Enhancements between Interchange 129-142	$189,000,000	0%

Project No.	Project Name	Total Project Budget	Approx. % Complete through 6/30/22
5000020002	GSP Mainline Capacity Enhancements between Interchange 154-163	$3,255,000	0%
5000026001	GSP Interchange 80 Completion & Capacity Enhancements between 80-83	$75,076,000	3%
5000026002	Interchange 13 Completion	$2,400,000	7%
5000026003	Interchange 29 Completion	$3,200,000	7%
5000026004	GSP Interchange 168 Completion	$5,000,000	0%
5000026005	GSP Interchange 153 Completion	$20,000,000	0%
5000028000	Roadway Improvements Milepost 97.1 to 98 and 102 to 104.5	$74,300,000	2%
5000028001	Rehabilitation of the Turnpike Secaucus Interchange MSE Walls	$34,600,000	0%
5000028002	Repair or Replacement of Various MSE Walls	$46,400,000	0%
5000028003	TPK Grade Separated Median U-Turns	$16,000,001	0%
5000028004	TPK Interchange 69 Improvements	$7,500,000	0%
5000028005	TPK TMD #2 Southern Division Underground Storage Tank Replacement	$700,000	0%
5000028006	TPK TMD #7 Northern Division Underground Storage Tank Replacement	$850,000	0%
5000028007	TPK TMD #6 Elizabeth Underground Storage Tank Replacement	$850,000	0%
5000028008	TPK TMD #9 Jersey City Underground Storage Tank Replacement	$850,000	0%
5000030000	Rehabilitation of the Parkway Driscoll Bridge MSE Walls, MP 127.2	$40,000,000	0%
5000030001	GSP Service Area Ramp Widenings	$37,874,000	9%
5000030002	GSP PMD #8 Paramus Underground Storage Tank Removal	$600,000	0.1%
5000040000	TPK Lighting Mixing Bowls North and South	$27,000,000	0%
5000040001	Lighting Improvements at Interchange Nos. 12 and 13	$20,086,000	23%
5000040002	TPK Lighting Repairs at Interchange 14 & NBHCE	$14,160,000	54%
5000040003	TPK Lighting Repairs at Interchange 10S & 13A	$26,700,000	5%
5000040004	TPK Interchange Nos. 7A, 8A, 10 & 11	$44,756,000	1%
5000040006	TPK Lighting Upgrades, Interchange 10 & 11	$4,800,000	0%
5000040007	TPK Lighting Upgrades, Interchange 17E	$7,300,000	1%
5000040008	TPK Lighting Upgrades, Interchange 14	$4,625,000	0%
5000040009	TPK Lighting Upgrades, Interchanges 6 & 6A	$10,500,000	0%
5000040010	TPK Lighting Improvements, Route 46, Interchange Nos. 68 & 69 and Load Center H	$17,600,000	0%
5000040011	TPK Lighting Improvements, Interchange Nos. 70A, 70B, 71, 72 & 73	$17,600,000	0%
5000040012	TPK Lighting Improvements, Interchange Nos. 16E, 18E & 18W	$13,200,000	0%
5000040013	TPK Service Area 6N, 8N & 10N Lighting Improvements	$9,000,000	0%
5000042001	GSP Interchange 120 Lighting Improvements	$2,700,000	73%
5000042002	Lighting Improvements at GSP Interchange Nos. 117 and 118	$4,218,000	70%
5000042003	Lighting Improvements at GSP Interchange Nos. 102 and 105	$2,919,000	85%
5000052000	Horizontal Curve Warning Signs	$13,400,000	10%
5000052001	Installation of Hybrid Changeable Message signs at Various Locations on the New Jersey Turnpike	$42,049,000	43%
5000052002	Guide Sign Improvements on the New Jersey Turnpike	$19,644,000	2%
5000052003	CIP Support Services	$2,000,000	47%
5000056001	TPK Newark Bay Hudson County Extension Capacity Enhancements	$4,693,426,000	0.3%
5000056002	Westerly Alignment Mainline Capacity Enhancements	$50,000,000	0%
5000056003	TPK Mainline Capacity Enhancements between Interchange Nos. 1-4	$1,139,467,000	1%

Project No.	Project Name	Total Project Budget	Approx. % Complete through 6/30/22
500CONTNGY	Contingency	$6,940,000	0%
500FACILTY	Facilities Program 2023-2026	$5,500,000	0%
500GSPCMPR	GSP Corrugated & Culvert Rehab	$131,550,000	0%
500LIGHTNG	GSP & TPK Lighting Upgrades	-	0%
500MDBARR	GSP Median Barrier Improvements	$4,500,000	0%
500USTUPDG	GSP & TPK UST Upgrades	-	0%
	Total	$9,022,630,000	5.3%

A detailed description of the projects contained in the 2022-2026 CIP and the status of each are provided below. It should be noted that many projects will consist of multiple Orders for Professional Services (OPSs) for various engineering services and multiple construction contracts. Only currently active projects are shown below.

5000000001 TPK Bridges (W110.42, W111.48, W112.72B)

Contract No. T100.564, TPK Replacement of Str. No. W112.72B

This contract provides for the replacement of Turnpike Str. No. W112.72B at Interchange 16W as well as operational improvements.

Design Start Date: September 28, 2021
Estimated Design Completion Date: May 2023
Estimated Construction Start Date: September, 2023
Estimated Construction Completion Date: TBD
Remarks: -

5000000002 TPK Interchange 17 Ramp Bridge Replacement

Contract No. T100.580, TPK Replacement of Str. Nos. E112.95A and E112.95B

This contract provides for the replacement of Turnpike Str. Nos. E112.95A and E112.95B at the Interchange 17 toll plaza.

Design Start Date: December 22, 2020
Estimated Design Completion Date: November 2022
Estimated Construction Start Date: March 2023
Estimated Construction Completion Date: TBD
Remarks: -

5000000003 TPK Rehabilitation of Bridge Nos. W107.87, E107.88 and 84.24N&S

Contract No. T100.523, Bridge Deck Reconstruction, Milepost 83 to 88

This contract provides for the design and construction for the reconstruction of the bridge deck, structural steel repairs, superstructure strengthening, and miscellaneous repairs of the Turnpike Raritan River Bridge Str. Nos. 84.24N&S, 84.55N&S and 85.77N.

Percent Complete 7%

Original Contract Value: $172,657,000
Present Contract Value: $173,255,973
Construction Start Date: December 21, 2021
Original Completion Date: July 15, 2025
Remarks: Contract is on schedule.

5000000004 BRIDGE DECK, SUPERSTRUCTURE RECONSTRUCTION & MEDIAN BARRIER RECONSTRUCTION, MILEPOST 35.5 TO 44.1; MILEPOST 74.3 TO 76.5

This project provides design and construction for the rehabilitation and/or replacement of high priority Turnpike bridges between Milepost 35.5 to 44.1 and 74.3 to 76.5.

Contract No. T100.586, TPK Bridge Superstructure and Median Barrier Reconstruction, Milepost 74.3 to 76.5

This contract provides for the rehabilitation of structural steel members and bearings, and repair to substructure units for two Turnpike bridges, Milepost 74.31 to 74.39, which exhibit advanced deterioration of their bridge decks. The contract also includes evaluation and rehabilitation of roadway features and median barrier reconstruction within the project limits.

Percent Complete 5%
Original Contract Value: $25,985,430
Present Contract Value: $25,985,430
Construction Start Date: July 27, 2021
Original Completion Date: October 18, 2024
Remarks: Contract is on schedule.

Contract No. T100.588, TPK Bridge Deck and Superstructure Reconstruction, Milepost 35.5 to 44.1

This contract provides for the reconstruction of bridge decks, superstructure replacement, structural steel painting and bridge repairs of routine Turnpike bridges, Structure Nos. 35.53, 37.02A, 43.56, and 44.05A which exhibit advanced deterioration of two bridge decks and one superstructure. The contract also includes evaluation and rehabilitation of roadway features within the project limits.

Percent Complete 20%
Original Contract Value: $20,136,533
Present Contract Value: $20,136,533
Construction Start Date: August 31, 2021
Original Completion Date: November 17, 2023
Remarks: Contract is on schedule.

5000000006 TPK DECK RECONSTRUCTION 98.48 TO 98.76

This project provides design and construction for bridge deck reconstruction of Structure Nos. 98.48 and 98.76 on the Turnpike.

Contract No. T100.582, Deck Reconstruction, Milepost 98.4 To 98.7

This contract provides for the superstructure replacement of routine Turnpike Structure Nos. 98.48 and 98.76 and the superstructure strengthening of Turnpike Structure No. 98.76. Other work includes miscellaneous roadway improvements.

Percent Complete	0%
Original Contract Value:	$72,756,960
Present Contract Value:	$72,756,960
Construction Start Date:	May 24, 2022
Original Completion Date:	April 4, 2025

Remarks: Contract was authorized at the May 24, 2022 Board Meeting.

5000000007 TPK Interim Repairs to Waterway Pier for Str. No. W115.36

Contract No. T100.563, TPK Interim Repairs to Waterway Pier for Str. No. W115.36, Western Hackensack River Bridge

This contract provides for interim repairs of waterway Pier 18 at Turnpike Str. No. W115.36 (Major bridge), which exhibits wide structural cracks in the pier pedestal. Work includes grouting of structural cracks, installation of an external post-tensioning system around the pier pedestal, and installation of displacement monitoring instrumentation on the pedestal.

Percent Complete	98%
Original Contract Value:	$1,337,890
Present Contract Value:	$1,337,890
Construction Start Date:	August 31, 2021
Original Completion Date:	February 28, 2022
Substantial Completion Date:	May 20, 2022

Remarks: Final Inspection was performed on May 20, 2022, contract is substantially complete.

5000000008 TPK Reconstruction of Waterway Pier for TPK Str. No. W115.36

Contract No. T100.581, Replacement of Two Waterway Piers, Turnpike Str. No. W115.36

OPS No. T3823 provides for preliminary and final design services for the complete replacement of the severely deteriorated Waterway Piers 15 and 18 at Turnpike Major Bridge Str. No. 115.36 – Western Hackensack River Bridge.

Design Start Date:	November 23, 2021
Estimated Design Completion Date:	April 2023
Estimated Construction Start Date:	July 2023
Estimated Construction Completion Date:	December 2024

Remarks: -

5000000009 REHABILITATION OF STRUCTURE NOS. E113.00, E113.16, E114.52 AND E115.21

Contract No. T100.584, TPK Rehabilitation of Structure Nos. E113.00, E113.16, E114.52 and E115.21

This contract provides for the reconstruction of bridge decks, structural steel repairs, and superstructure strengthening of routine Turnpike bridge Str. Nos. E113.00, E113.16, E114.52 and E115.21. The work also includes roadway improvements and other miscellaneous work.

Percent Complete	5%
Original Contract Value:	$42,120,784
Present Contract Value:	$42,120,784
Construction Start Date:	August 31, 2021
Original Completion Date:	January 11, 2025

Remarks: Contract is on schedule.

5000000012 TPK DECK REHABILITATION OF NBHCE BRIDGES, ZONES 2 AND 3

Contract No. T100.638, TPK Deck Rehabilitation of Newark Bay-Hudson County Extension (NB-HCE) Bridges Zones 2 and 3

OPS No. T3898 provides for final and post design services for the rehabilitation of severely deteriorated high priority major and routine bridge decks (totaling 4 and 7 respectively) located between interchange 14 and the eastern terminus of the Newark Bay-Hudson County Extension (NB-HCE). Additional improvements include substructure repairs and approach roadway paving.

Design Start Date:	April 26, 2022
Estimated Design Completion Date:	September 2022
Estimated Construction Start Date:	December 2022
Estimated Construction Completion Date:	TBD

Remarks: -

5000000019 TPK DECK RECONSTRUCTION, MILEPOST 40.34

This project provides design and construction for bridge deck reconstruction of Structure No. 40.34 Creek Road over the Turnpike.

Contract No. T100.663, Preliminary Design Structure No. 40.34 Creek Road over the Turnpike

This contract provides for the reconstruction of Structure No. 40.34 Creek Road over the Turnpike. Preliminary design services are currently underway which include data collection, assessment of existing conditions, development of feasible alternative solutions and determination of impacts associated with each alternative.

Preliminary Design Start Date:	October 23, 2021
Estimated Preliminary Design Completion Date:	September 2022

Remarks: -

5000002001 GSP Bridge Superstructure Replacement, Milepost 106.3 to 106.5

Contract No. P100.590, GSP Bridge Superstructure Replacement, Milepost 106.3 to 106.5

This contract provides for the superstructure replacement and substructure rehabilitation of four routine Parkway bridges at Interchange 105. The work also includes roadway improvements and other miscellaneous work. The three bridges exhibit advanced deterioration of the superstructures.

Percent Complete	3%
Original Contract Value:	$16,999,613
Present Contract Value:	$16,999,613
Construction Start Date:	September 28, 2021
Original Completion Date:	November 9, 2023

Remarks: Contract is on schedule.

5000002002 GSP Str. Nos. 128.0A and 128.0B Superstructure Replacement, TPK Deck Reconstruction, Milepost 90.0 to 91.37, and GSP Str. Nos. 154.2N and 6.6S Beam Replacement

This project provides design and construction for the rehabilitation and/or replacement of high priority Turnpike and Parkway mainline bridges.

Contract No. P100.579, GSP Bridge Deck and Superstructure Reconstruction, Milepost 124.4 to 128.1

This contract provides for the rehabilitation of structural steel members and bearings, and repair to substructure units for six Parkway bridges, Str. Nos. 124.4NO, 124.5SO, 124.5SI, 124.6NI, 128.0A, and 128.0B, which exhibit advanced deterioration of their superstructures. The contract also includes evaluation and rehabilitation of roadway features within the project limits.

Percent Complete	1%
Original Contract Value:	$60,950,733
Present Contract Value:	$60,950,733
Construction Start Date:	January 25, 2022
Original Completion Date:	March 2, 2026

Remarks: Contract is on schedule.

Contract No. P100.589, Parkway Str. Nos. 154.2N and 6.6S Beam Replacement

This contract provides for the rehabilitation of structural steel members and bearings, and repair to substructure units for Parkway Str. Nos. 154.2N and 6.6S which were critically damaged by a vehicle impact. The contract also includes evaluation and rehabilitation of roadway features within the project limits.

Percent Complete	100%
Original Contract Value:	$1,485,735
Present Contract Value:	$1,202,514
Construction Start Date:	February 23, 2021

Original Completion Date: November 30, 2021
Substantial Completion Date February 9, 2022
Completion Date: May 24, 2022
Remarks: Final Acceptance was authorized at the May 24, 2022 Board Meeting.

Contract No. T100.587, TPK Deck Reconstruction, Milepost 90.0 to 91.37

This contract provides for the rehabilitation of structural steel members and bearings, and repair to substructure units for five bridge structures on the Turnpike, Mileposts 90.0 to 91.37. The contract also includes evaluation and rehabilitation of roadway features within the project limits.

Percent Complete 8%
Original Contract Value: $31,472,110
Present Contract Value: $31,472,110
Construction Start Date: November 23, 2021
Original Completion Date: July 31, 2024
Remarks: Contract is on schedule.

5000002003 GSP Deck Reconstruction, Milepost 169.2 to 171.7

This project provides design and construction for the rehabilitation and/or replacement of the eight high priority Parkway mainline bridges.

Contract No. P100.583, Deck and Superstructure Replacement, Milepost 169.2 to 171.7

This contract provides for replacement of severely deteriorated deck and prestressed concrete girder superstructures of eight high priority routine Parkway bridges between Milepost 169.2 and 171.7. Additional improvements include approach roadway paving, drainage pipe cleaning, guide rail upgrades and roadway lighting upgrades.

Design Start Date: December 22, 2020
Estimated Design Completion Date: June 2023
Estimated Construction Start Date: September 2023
Estimated Construction Completion Date: TBD
Remarks: -

5000004002 TPK Rehabilitation of Concrete Median Barrier, Milepost 89 to 122

This project provides design and construction for the rehabilitation of and replacement of median Barrier along the Turnpike from Milepost 89 to 122.

Contract No. T200.593, Construction of Concrete Barrier at Maintenance District TMD 3 and TMD 5

This contract provides for the construction of concrete barrier at Turnpike Maintenance District 3 at Milepost 56.0 NB in Burlington County and Turnpike Maintenance District 5 at Milepost 81.0 SB in Middlesex County.

Percent Complete	100%
Original Construction Value:	$1,140,289
Present Construction Value:	$1,098,503
Construction Start Date:	February 23, 2021
Original Completion Date:	August 11, 2021
Substantial Completion Date:	October 12, 2021
Completion Date	April 26, 2022

Remarks: Final Acceptance was authorized at the April 26, 2022 Board Meeting.

Contract No. T200.596, Rehabilitation of Concrete Median Barrier, Milepost 89 to 122

This contract provides for the removal and replacement of concrete median barrier exhibiting moderate to severe deterioration at various locations along the Turnpike from Milepost 89 to 122.

Percent Complete	40%
Original Contract Value:	$2,895,472
Present Contract Value:	$2,895,472
Construction Start Date:	September 28, 2021
Original Completion Date:	December 9, 2022

Remarks: Contract is on schedule.

5000004003 TPK MEDIAN BARRIER REPAIRS, MILEPOST 0-48 AND 72-89

This project provides design and construction for the rehabilitation of and replacement of median Barrier along the Turnpike from Milepost 0 to 48 and 72 to 89.

OPS No. P3734 Supplement A, Design Services for Contract No. P200.522, Rehabilitation of Concrete Median Barrier, Milepost 129 to 140

The work to be performed under this contract includes the removal and replacement of concrete median barrier exhibiting moderate to severe deterioration at various locations along the Turnpike from Milepost 0 to 48 and 72 to 89 as well as the Parkway Milepost 134 to 140.

Design Start Date:	September 22, 2020
Estimated Design Completion Date:	November 2022
Estimated Construction Start Date:	February 2023
Estimated Construction Completion Date:	TBD

Remarks: -

5000008002 GSP & TPK Corrugated Metal Pipe Rehabilitation (Various Locations)

This project provides design and construction for the rehabilitation of corrugated metal pipe rehabilitation at various locations along the Parkway and Turnpike.

Contract No. P200.626, Drainage Video Inspection and Cleaning, Parkway Milepost 120.6 to 123.6

The work to be performed under this contract includes the inspection and cleaning of 46,000 linear feet of drainage pipe including 10 culverts on the Parkway between Milepost 120.6 and 123.6. Video will also be used for future drainage repair designs.

Percent Complete	1%
Original Construction Value:	$1,463,431
Present Construction Value:	$1,463,431
Construction Start Date:	April 26, 2022
Original Completion Date:	January 5, 2023

Remarks: The Pre-Construction Meeting was held on May 20, 2022.

5000010000 GSP CMP Rehabilitation MP 110.6 to 116.4

Contract No. P200.568, Drainage Rehabilitation and Slip Lining, Milepost 110.6 to 116.4

This contract provides for the drainage rehabilitation and slip-lining of 16 culverts between Milepost 110.6 to 116.4. The work also includes construction of manholes, inlets, headwalls, installation of cured in place pipe or fiberglass reinforced polymer pipe lining, and jack and bore replacements at two locations.

Percent Complete	1%
Original Contract Value:	$9,154,559
Present Contract Value:	$9,154,559
Construction Start Date:	April 26, 2022
Original Completion Date:	July 13, 2023

Remarks: The Pre-Construction Meeting was held May 20, 2022.

5000010001 GSP Culvert Rehabilitation, Milepost 111.5

This project provides design and construction for the rehabilitation of the high priority Parkway culverts at Milepost 111.5.

Contract No. P200.491, GSP Culvert Rehabilitation, Milepost 111.5

This contract provides for the structural rehabilitation of twin 132" diameter corrugated metal pipe (CMP) culverts under GSP Northbound and Southbound, Express and Local Roadways at Milepost 111.5. The work also includes the rehabilitation of a 48" diameter CMP, rip rap installation, headwall repairs and other miscellaneous work.

Percent Complete	87%
Original Contract Value:	$5,670,490
Present Contract Value:	$6,198,732

Construction Start Date: November 24, 2020
Original Completion Date: May 9, 2022
Revised Completion Date: July 8, 2022
Remarks: Contract is on schedule.

5000010002 GSP CULVERT REHABILITATION, MILEPOST 112.7

This project provides design and construction for the rehabilitation of the high priority Parkway culverts at Milepost 112 to 113.

Contract No. P200.545, GSP Culvert Repairs Milepost 112 to 113

This contract provides for the structural rehabilitation of existing 120" corrugated metal pipe (CMP) culverts under the Parkway Northbound and Southbound, Express and local Roadways at Milepost 112.17. Work also includes drainage repairs and replacements, concrete headwall installation, and other miscellaneous work.

Percent Complete 20%
Original Contract Value: $7,828,594
Present Contract Value: $7,828,594
Construction Start Date: November 23, 2021
Original Completion Date: September 15, 2023
Remarks: Contract is on schedule.

5000010003 GSP CULVERT REPAIRS, MILEPOST 115 TO 116

Contract No. P200.546, GSP Culvert Repairs, Milepost 115 to 116

This contract provides for the replacement of existing 66" diameter corrugated metal pipe (CMP) culvert under the Parkway Southbound at Milepost 115.13S and modification/repair of existing headwalls, stormwater drainage features, rip-rap installation and other miscellaneous work.

Percent Complete 95%
Original Contract Value: $3,302,913
Present Contract Value: $3,302,913
Construction Start Date: April 27, 2021
Original Completion Date: April 19, 2022
Estimated Substantial Completion Date: July 25, 2022
Remarks: Contract is approximately two months behind schedule; an extension of time is being evaluated. Final Inspection is scheduled for July 25, 2022.

Contract No. P200.609, GSP Culvert Rehabilitation, Mileposts 115.8, 115.80A and 115.81

This contract provides for the structural rehabilitation of corrugated metal pipe culverts located at Parkway Mileposts 115.80, 115.80A and 115.81 and repair/replacement of adjacent stormwater collection facilities. The culverts are rated in poor structural condition and exhibit corrosion, deformation, and section loss.

Percent Complete	20%
Original Contract Value:	$9,440,645
Present Contract Value:	$9,440,645
Construction Start Date:	September 28, 2021
Original Completion Date:	April 16, 2023

Remarks: Contract is on schedule.

5000010004 HEARDS BROOK IMPROVEMENTS

This project provides design and construction for improvements to Heards Brook.

Contract No. A900.557, Heards Brook Improvements

This OPS will provide for preliminary and final design services and permitting for improvements along Heards Brook adjacent to the Authority's Headquarters property in Woodbridge Township, Middlesex County. Specific design services include bank stabilization; rehabilitation of the Heards Brook culvert; stormwater management implementation near Turnpike Interchange 11 for flood mitigation, post design services, and other related work.

Design Start Date:	February 23, 2021
Estimated Design Completion Date:	November 2022
Estimated Construction Start Date:	January 2023
Estimated Construction Completion Date:	September 2023

Remarks: -

5000010005 CULVERT REPAIRS INTERCHANGE 100

This project provides for the design and construction of structural rehabilitation or repair of culverts at Parkway Interchange 100.

Contract No. P200.604, Culvert Repairs Interchange 100

This contract provides for culvert repairs at Parkway Interchange 100. Current design services provide for the preparation of preliminary and final design engineering and permitting services for the structural rehabilitation or repair of the Parkway culverts.

Design Start Date:	April 27, 2021
Estimated Design Completion Date:	July 2022
Estimated Construction Start Date:	September 2022
Estimated Construction Completion Date:	TBD

Remarks: -

5000010006 CULVERT REPAIRS, MILEPOST 109 TO 111 AND MILEPOST 123 TO 128

This project provides the design and construction for the structural rehabilitation or repair of Turnpike and Parkway culverts.

OPS No. A3849, Design Services for Contract No. T200.605, Culvert Repairs Milepost W112.72N; Contract No. P200.606, Culvert repairs Milepost 109 to 111; and Contract No. P200.607, Culvert Repairs Milepost 123.7S

This OPS provides for the preparation of preliminary and final design engineering and permitting services for the structural rehabilitation or repair of Parkway culverts between Mileposts 109 to 111, at Milepost 123.7S, and Turnpike Milepost W112.72N.

Design Start Date:	April 27, 2021
Estimated Design Completion Date:	August 2022
Estimated Construction Start Date:	September 2022
Estimated Construction Completion Date:	TBD

Remarks: -

5000026001 GSP Interchange 80 Completion and Capacity Enhancements between 80-83

This project provides for operational improvements to mitigate ramp queuing impacts on mainline traffic along the Parkway between Interchanges 80 and 83 and completion of missing ramp movements at Interchange 80.

OPS No. P3828, GSP Preliminary Engineering and Environmental Permitting for Operational Improvements, Milepost 80 to 83

This OPS provides for the preparation of preliminary design documents, environmental studies, and environmental permit applications to obtain agency approvals for operational improvements to mitigate ramp queuing impacts on mainline traffic along the Parkway between Interchanges 80 and 83 and completion of missing ramp movements at Interchange 80.

Design Start Date:	December 22, 2020
Estimated Design Completion Date:	June 2023

Remarks: Permits are anticipated to be secured by June 2023.

5000026002 Interchange 13 Completion

This project provides for the advancement of preliminary engineering improvements at Parkway Interchange 13.

OPS No. P3421 Supplement B, Program Management Services for the GSP Widening between Interchanges 30 and 48

This Supplement B to OPS No. P3421 provides for the advancement of preliminary engineering design services, including data collection, additional mapping, and advanced utility coordination at GSP Interchange 13.

Design Start Date:	May 25, 2021
Estimated Design Completion Date:	TBD

Remarks: -

5000026003 INTERCHANGE 29 COMPLETION

This project provides for the advancement of preliminary engineering improvements at Parkway Interchange 29.

OPS No. P3421 Supplement B, Program Management Services for the GSP Widening between Interchanges 30 and 48

This Supplement B to OPS No. P3421 provides for the advancement of preliminary engineering design services, including data collection, additional mapping, and advanced utility coordination at GSP Interchanges 29 and 30 including the roadway between Interchange 29 and 30.

Design Start Date: May 25, 2021
Estimated Design Completion Date: TBD
Remarks: -

5000028000 ROADWAY STABILIZATION AND REPROFILING IMPROVEMENTS MP 97.1 TO 98 AND 102 TO 104.5

OPS T3851 Design Services for Contract No. T200.608, Roadway Stabilization and Reprofiling Improvements Milepost 97.1 to 98.0 NSI, NSO, SNI, SNO and 102.0 to 104.5 SNO

This OPS provides for detailed inspections and final design services for the preparation of contract documents to stabilize subsurface soils supporting existing roadway pavements and the reprofiling of all Turnpike mainline roadways from Milepost 97.1 to 98.0 and only the SNO from Milepost 102.0 to 104.5.

Design Start Date: September 28, 2021
Estimated Design Completion Date: March 2023
Remarks: -

5000030001 GSP SERVICE AREA RAMP WIDENINGS

This project provides design and construction for the widening of Parkway Service Area ramps.

Contract No. P200.578, GSP Service Area Ramp Widenings

This contract provides for improvements at 23 ramps that facilitate access to 9 Service Areas along the Parkway. Work includes the lengthening of auxiliary lanes, increased shoulder widths, pavement resurfacing, roadway lighting upgrades, signing, striping, and other miscellaneous work.

Percent Complete 0%
Original Contract Value: $27,997,000
Present Contract Value: $27,997,000
Construction Start Date June 28, 2022
Original Completion Date: January 31, 2024
Remarks: Contract was authorized at the June 28, 2022 Board Meeting.

5000030002 GSP PMD #8 PARAMUS UNDERGROUND STORAGE TANK REMOVAL

This project provides for the removal and installation of Underground Storage Tanks (USTs) associated with fueling operations at Parkway Maintenance District 8 in Paramus.

Contract No. P700.613, Underground Storage Tank Removal and Replacement PMD 8, Milepost 164.1 SB

This contract provides for the removal of a 30-plus year old, 8,000-gallon double-wall fiberglass fuel tank and installation of a new 8,000-gallon double-wall fiberglass tank as well as sensors, piping, sumps, spill buckets, leak detection monitoring console and all ancillary equipment for a complete fuel distribution system.

Percent Complete	1%
Original Contract Value:	$526,321
Present Contract Value:	$526,321
Construction Start Date	March 29, 2022
Original Completion Date:	July 11, 2023

Remarks: The Pre-Construction Meeting was held on May 19, 2022.

5000040001 TPK LIGHTING IMPROVEMENTS AT INTERCHANGES NOS. 12 AND 13

This project provides design and construction for lighting upgrades on the Turnpike at Interchanges Nos. 12 and 13.

Contract No. T200.575, TPK Roadway Lighting Repairs Interchanges 12 and 13, Milepost 95.3 to 96.5 and 97.8 to 100.2

This contract provides upgraded roadway lighting systems at Turnpike Interchanges Nos. 12 and 13. The work includes replacement of HPS luminaires with LED luminaires on existing poles, installation of conduit, wiring and load centers.

Percent Complete	6%
Original Contract Value:	$8,988,000
Present Contract Value:	$8,988,000
Construction Start Date	October 26, 2021
Original Completion Date:	July 21, 2023

Remarks: Contract is on schedule.

5000040002 TPK LIGHTING REPAIRS AT INTERCHANGE 14 AND NBHCE

This project provides design and construction for lighting upgrades on the Turnpike at Interchange 14 and the Newark Bay-Hudson County Extension.

Contract No. T200.508, TPK Roadway Lighting Repairs Interchange 14 and NBHCE

This contract provides upgraded roadway lighting systems at Turnpike Interchange 14 and the Newark Bay-Hudson County Extension. Existing lighting systems will be updated to LED lighting.

Percent Complete	50%
Original Contract Value:	$11,683,220

Present Contract Value:	$11,683,220
Construction Start Date	January 19, 2021
Original Completion Date:	August 16, 2022
Estimated Completion Date:	January 15, 2023

Remarks: Contract is approximately five-months behind schedule due to material delays caused by the pandemic and changes of plans added to the contract. An extension of time is being evaluated.

5000040003 TPK Lighting Repairs at Interchange 10S & 13A

This project provides design and construction for lighting upgrades on the Turnpike at Service Area 10S & Interchanges 13A, 15E and 15W.

OPS No. T3877, Design Services for Contract No T200.603, Lighting Improvement at TPK Interchanges 15E & 15W and Contract No T200.619, Lighting Improvement at TPK Service Area 10S and Interchange 13A

This OPS provides for final design services for the preparation of two construction contracts to replace the existing lighting at Interchanges 15E & 15W and Service Area 10S & Interchange 13A. Existing lighting is to be replaced with LED light fixtures.

Design Start Date:	September 28, 2021
Estimated Design Completion Date:	February 2023
Estimated Construction Start Date:	April 2023
Estimated Construction Completion Date:	TBD

Remarks: -

5000040004 TPK Lighting Repairs at Interchange Nos. 7A, 8A, 10 and 11

Contract No. T200.569, Lighting Repairs TPK Interchanges 7A and 8A

This contract provides upgraded roadway lighting systems at Interchanges 7A and 8A. Existing lighting systems will be updated to LED lighting.

Percent Complete	2%
Original Contract Value:	$6,948,000
Present Contract Value:	$6,948,000
Construction Start Date:	December 21, 2021
Original Completion Date:	June 2, 2023

Remarks: Contract is on schedule.

Contract No. T200.570, Lighting Repairs TPK Interchanges 10 and 11

This contract provides upgraded roadway lighting systems at Interchanges 10 and 11. Existing lighting systems will be updated to LED lighting.

Design Start Date:	September 22, 2020
Estimated Design Completion Date:	September 2022

Estimated Construction Start Date: November 2022
Estimated Construction Completion Date: 2023
Remarks: -

5000040007 TPK LIGHTING UPGRADES AT INTERCHANGE 17E

This project provides design and construction of roadway lighting improvements to the Turnpike at Interchange 17E.

Contract No. T200.637, Lighting Improvements and Standby Generator Replacement at Turnpike Interchange 17E, Milepost E112.8

This contract will provide for the replacement of the existing diesel emergency generator at Turnpike Interchange 17E and installation of a new LED lighting system between Turnpike Milepost E112.8 and E113.8.

Percent Complete	0%
Original Contract Value:	$8,788,870
Present Contract Value:	$8,788,870
Construction Start Date:	June 28, 2022
Original Completion Date:	June 30, 2024
Remarks:	Contract was authorized at the June 28, 2022 Board Meeting.

5000042001 GSP INTERCHANGE 120 LIGHTING IMPROVEMENTS

This project provides design and construction of roadway improvements to the Parkway at Interchange 120.

Contract No. P200.610, Interchange 120 Lighting Improvements

This contract consists of removing Utility owned lighting and installing new Authority owned lighting at Parkway Interchange 120 in Old Bridge, New Jersey.

Percent Complete	90%
Original Contract Value:	$2,035,940
Present Contract Value:	$2,035,940
Construction Start Date:	March 23, 2021
Original Completion Date:	May 31, 2022
Estimated Substantial Completion Date:	July 25, 2022
Remarks:	Contract is approximately one-month behind schedule. Final Inspection is scheduled for July 25, 2022.

5000042002 LIGHTING IMPROVEMENTS AT GSP INTERCHANGE NOS. 117 AND 118

This project provides design and construction of roadway lighting improvements to the Parkway at Interchanges 117 and 118.

Contract No. P200.537, Lighting Improvements at Interchanges 117 and 118, Milepost 118

This contract provides for the removal and replacement of utility owned lighting and installation of new Authority owned lighting at Interchanges 117 and 118.

Percent Complete	32%
Original Contract Value:	$4,053,063
Present Contract Value:	$4,053,063
Construction Start Date:	May 25, 2021
Original Completion Date:	August 28, 2022

Remarks: Contract is on schedule.

5000042003 GSP INTERCHANGE 102 & INTERCHANGE 105

This project provides design and construction of roadway improvements to the Parkway at Interchanges 102 and 105.

Contract No. P200.566, Lighting Improvements at Interchange 102 & Interchange 105

This contract will provide for the removal of Utility owned lighting and installing new Authority owned lighting at Parkway Interchanges 102 and 105 in Tinton Falls, New Jersey.

Percent Complete	85%
Original Contract Value:	$2,268,000
Present Contract Value:	$2,288,036
Construction Start Date:	March 23, 2021
Original Completion Date:	May 13, 2022
Estimated Substantial Completion Date:	August 24, 2022

Remarks: Contract is on schedule. Final Inspection is scheduled for August 24, 2022.

5000052000 HORIZONTAL CURVE WARNING SIGNS

This project provides for the design and construction of Horizontal Curve Warning Signs at site-specific ramp bridges and associated approaches on the Turnpike and Parkway.

OPS No. A3872, Design Services for Contract No. A100.614, Curve Advisory Sign Installation, New Jersey Turnpike Milepost 90.9 to 119.1, and Milepost N7.7 to N7.9, and Garden State Parkway Milepost 130.0 to 160.2

This OPS provides final design services for the installation of site-specific curve advisory signs on 44 ramp bridges and associated approaches of the Turnpike Milepost 90.9 to 119.1 and Milepost N7.7 to N7.9, and the Parkway Milepost 130.0 to 160.2.

Design Start Date:	June 22, 2021
Estimated Design Completion Date:	April 2022
Estimated Construction Start Date:	July 2022
Estimated Construction Completion Date:	November 2023

Remarks: -

5000052001 TPK Installation of Hybrid Changeable Message Signs at Various Locations

This project provides design and construction for the rehabilitation and/or replacement of Turnpike Changeable Message Signs and Sign Structures.

Contract No. T600.481B, Installation of Hybrid Changeable Message Signs at Various Locations on the New Jersey Turnpike

This contract includes the replacement of existing Changeable Message Sign (CMS) with new Hybrid Changeable Message Signs (HCMS) and structures at various Turnpike locations. The project provides for design and construction of the HCMS supports, provision and installation of HCMS, and connectivity utilizing fiber optic communications networks back to the Statewide Traffic Management Center (STMC). All signs will be monitored and controlled from the STMC. Work also includes the removal of existing sign structures and the construction of new overhead sign structures along with associated roadside safety features.

Percent Complete	45%
Original Contract Value:	$31,791,714
Present Contract Value:	$31,791,714
Construction Start Date:	February 23, 2021
Original Completion Date:	August 31, 2023

Remarks: Contract is on schedule.

5000052002 Guide Sign Improvements on the New Jersey Turnpike

Contract No. T600.595, Guide Sign Improvements on the New Jersey Turnpike

This contract provides for the removal of existing overhead guide sign structures and sign panels and replacement with new guide sign structures and sign panels. The proposed work also includes foundation construction, furnishment and installation of overhead sign support structures, installation of roadway safety features and associated roadway and sign lighting. The work is being done at 19 locations along the Turnpike from Milepost 34.33N to Milepost 121.70.

Percent Complete	10%
Original Contract Value:	$13,374,467
Present Contract Value:	$13,374,467
Construction Start Date:	August 31, 2021
Original Completion Date:	February 28, 2023

Remarks: Contract is on schedule.

5000052003 CAPITAL IMPROVEMENT PROGRAM SUPPORT SERVICES

OPS No. A3785, Task D04, Capital Improvement Program Support Services

This project provides support services to the authority for the development, management, and implementation of the 5-year Rolling Capital Improvement Program.

Task Start Date: March 23, 2021
Estimated Task Completion Date: December 2025
Remarks: -

5000056001 TPK NEWARK BAY-HUDSON COUNTY EXTENSION CAPACITY ENHANCEMENTS

This project provides design and construction for widening and rehabilitation of the entire 8.1-mile Newark Bay-Hudson County Extension.

OPS No. T3820, Preliminary Design and Environmental Services for Newark Bay-Hudson County Extension

This OPS provides for preliminary design and comprehensive environmental services for the widening/rehabilitation of the entire 8.1-mile Newark Bay-Hudson County Extension from Interchange 14 in Newark, exclusive of the interchange itself, to the eastern terminus of the Authority's jurisdiction at Jersey Avenue in Jersey City.

Design Start Date: January 26, 2021
Estimated Design Completion Date: February 2023
Remarks: -

5000056003 TPK MAINLINE CAPACITY ENHANCEMENTS BETWEEN INTERCHANGES NOS. 1 TO 4

This project provides program management, design, and construction for capacity enhancements for the Turnpike between Interchanges 1 to 4.

OPS No. T3839, Program Manager and Environmental Services for New Jersey Turnpike Interchange 1 to 4 Widening Program

This OPS provides for program management, preparation of preliminary design documents and comprehensive environmental services for the one lane widening in each direction of the existing four-lane New Jersey Turnpike from the southern terminus of Interchange 1 (Route 49) to just north of Interchange 4, connecting to the existing six-lane roadway. The proposed Turnpike mainline widening is approximately 36.5 miles through 16 municipalities, in four counties within southern New Jersey. Environmental studies and environmental permit applications will be prepared and submitted to obtain required agency approvals.

Design Start Date: March 23, 2021
Estimated Design Completion Date: 2029
Remarks: This is the only active

2019 CAPITAL IMPROVEMENT PROGRAM

The Authority adopted a 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, shoulder widening and reconstruction of the Parkway between mileposts 30 and 35, the first phase of the replacement of the hybrid changeable message signs on the Turnpike, and rehabilitation of three bridges that cross the Passaic River on both roadways. The total value of the 2019 CIP is $716 million.

As Consulting Engineers to the Authority, HNTB has assisted with project planning; provided oversight of design, preparation of construction documents and cost estimates; and monitored construction schedules and costs for the Authority's 2019 CIP. Furthermore, we have reviewed the estimated total construction costs and the schedules for the projects included in the 2019 CIP and consider the estimated costs and schedules for the projects reasonable based on currently available engineering studies, construction bid trends, inflation trends, escalation factors, and construction statuses.

The projects that comprise the Authority's 2019 CIP can generally be separated into six categories as shown below. As seen in the breakdown of the 2019 CIP, it is a mix of projects which increase operational efficiencies and safety while also maintaining the system in a state of good repair. The breakdown of the 2019 CIP is as follows:

Project Category	Estimated Total Project Spending during 2022 – 2026 (thousands)	% of Program
Bridge Construction, Preservation & Security	$213,325	60.6%
Interchanges	-	-
Concrete Barrier	3,802	1.1%
Other Roadway Improvements	53,229	15.1%
Service Areas & Arts Center	62,521	17.8%
Technology Improvements	19,295	5.5%
TOTAL	$138,847	

A summary table followed by a more detailed description of the individual projects for the 2019 CIP is presented below. It is important to note that the total project budget is the budget for the life of the project and may not be fully reflected in the spending plans for the period 2022-2026 if the project duration extends beyond 2026. The summaries presented above only reflect the spending that will occur during the five-year period from 2022-2026.

2019 Capital Improvement Program
as of June 30, 2022

Project No.	Project Name	Total Project Budget	Approx. % Complete through 6/30/22
39200001	GSP Rehabilitation of Concrete Median Barrier	$32,702,000	80%
39200002	TPK Installation of New Hybrid Changeable Message Signs	$67,990,000	57%
39200003	GSP Weathering Guide Rail Replacement	$17,489,000	71%
39200004	GSP Shoulder Widening and Reconstruction, MP 30 to 35	$112,938,000	66%
39200005	TPK Redecking Str. Nos. E106.68 and E106.92	$27,895,000	57%
39200006	TPK Redecking Str. No. 87.27S (NSI)	$4,639,000	95%
39200007	TPK Foundation Improvements to Str. No. N2.01 Piers E6 to E9	$13,170,000	79%
39200008	TPK Bridge Lengthening of Str. Nos. 30.75 and 33.94	$27,973,000	74%
39200009	GSP Str. No. 160.6 to 161.9 (6 Bridges both NB & SB)	$78,462,000	43%
39200010	GSP PNC Arts Center Traffic Signals and Parking Lot Expansion	$11,528,000	85%
39200011	TPK Interchange 6 Express E-ZPass Improvements	$8,294,000	98%
39200012	TPK Bridge Fender Reconstruction	$8,940,000	95%
39200013	TPK Interchange 18E Express E-ZPass/Interchange 16E Improvements	$29,106,000	87%
39200014	GSP and TPK Horizontal Curve Warning Signs Installation	$13,000	99%
39200015	TPK Rehabilitation of Bridge Nos. W107.87, E107.88 and 84.24N&S	$3,578,000	86%
39200016	GSP Bridge Deck Reconstruction, MP 140 to 143	$63,264,000	32%
39200017	TPK 6 to 9 Berm Surfacing Revisions	$8,915,000	93%
39200018	Service Areas - HMS Host & Sunoco	$63,512,000	33%
39200019	Passaic River Bridge Rehabilitation	$121,554,000	16%
39200020	Laderman Bridge Repair Project	$8,231,000	67%
39200021	Washington Bridge Repair Project	$5,772,000	93%
39299999	Contingency	-	0%
Total		$715,965,000	71.5%

A detailed description of the projects contained in the 2019 CIP and the status of each are provided below. It should be noted that many projects consist of multiple Orders for Professional Services (OPSs) for various engineering services and multiple construction contracts. Only currently active projects are shown below.

39200001 PARKWAY REHABILITATION OF CONCRETE MEDIAN BARRIER

Contract No. P200.522, Rehabilitation of Concrete Median Barrier, Milepost 129 to 134

This contract provides for the removal and replacement of damaged, misaligned, deteriorated, and substandard height concrete median barrier along with drainage repairs, paving and other incidental work on the Parkway between Milepost 129 and 134.

Percent Complete 98%
Original Contract Value: $24,488,888
Present Contract Value: $24,825,176

Construction Start Date:	June 23, 2020
Original Completion Date:	October 8, 2021
Substantial Completion Date:	June 14, 2022
Remarks:	Final Inspection was performed on June 14, 2022. Contract work is substantially complete. An extension of time is being evaluated due to extra work added to the contract.

39200002 TURNPIKE INSTALLATION OF NEW HYBRID CHANGEABLE MESSAGE SIGNS

Contract No. ITS-2019, Fabrication of Hybrid Changeable Message Signs

This contract provides for the design and fabrication of Hybrid Changeable Message Signs (HCMS) and control systems for installation and use along the Turnpike. The HCMS will replace the existing changeable message signs. Daktronics, Inc. will deliver 89 HCMS and 51 System Controller Cabinets under the project.

Percent Complete	62%
Original Contract Value:	$16,050,000
Present Contract Value:	$16,050,000
Construction Start Date:	October 22, 2019
Original Completion Date:	May 1, 2023
Remarks:	Contract was awarded at the October 22, 2019 Board meeting.

Contract No. T600.481A, Installation of Hybrid Changeable Message Signs at Various Locations on the New Jersey Turnpike

This contract provides for the installation of Hybrid Changeable Message Signs (HCMS) at various locations on the NJ Turnpike from Milepost 83.3 to 117.60. This is the first of two contracts that will construct the foundations and sign structures and install new HCMS from Interchange 9 to the northern terminus of the Turnpike. The work also includes the removal of existing changeable message signs, sign structures and foundations and the installation of roadway safety features and associated electrical and ITS communication devices required for the operation of the HCMS.

Percent Complete	65%
Original Contract Value:	$42,982,228
Present Contract Value:	$44,402,288
Construction Start Date:	May 27, 2020
Original Completion Date:	August 31, 2022
Estimated Completion Date:	November 20, 2022
Remarks:	A time extension is being evaluated due to extra work issued by the Authority and COVID related issues.

39200003 PARKWAY WEATHERING STEEL GUIDE RAIL REPLACEMENT

Contract No. P200.524, Guide Rail Improvements, Milepost 0 to 172

This contract provides for repairs and replacements to the highest priority guide rail systems along the Parkway, excluding any guide rail constructed as part of the Authority's recent $7 Billion Capital Improvement Program.

Percent Complete	73%
Original Contract Value:	$12,477,315
Present Contract Value	$12,657,472
Construction Start Date:	August 25, 2020
Original Completion Date:	July 28, 2022
Estimated Completion Date:	October 20, 2022

Remarks: An extension of time is being evaluated.

39200004 PARKWAY SHOULDER WIDENING AND RECONSTRUCTION, MP 30 TO 35

Contract No. P200.252, Shoulder Widening of the Garden State Parkway, Milepost 30 to 35

This contract provides for shoulder widening of the Parkway in both the northbound and southbound directions from Milepost 30 to 35, in accordance with the permits secured for the widening of the Parkway Interchange 30 to 80 Program. The work includes widening of the shoulders along with the reconstruction of eight bridges carrying the Parkway over County Roads, stormwater management facilities and utility relocations.

Percent Complete	60%
Original Contract Value:	$82,831,386
Present Contract Value:	$86,118,424
Construction Start Date:	April 28, 2020
Original Completion Date:	September 29, 2023

Remarks: Contract is on schedule.

39200005 TURNPIKE REDECKING STR. NOS. E106.68 AND E106.92B

Contract No. T100.512, Rehabilitation of Str. Nos. E106.68 and E106.92B, Milepost E106.0 to E107.0

This contract provides for deck reconstruction of Str. Nos. E106.68 and E106.92B on the easterly Turnpike extension. The project will address necessary infrastructure deterioration and safety improvements to the two deteriorated bridge decks.

Percent Complete	60%
Original Contract Value:	$17,940,145
Present Contract Value:	$17,940,145
Construction Start Date:	March 24, 2020
Original Completion Date:	January 12, 2023

Remarks: Contract is on schedule.

39200007 TURNPIKE FOUNDATION IMPROVEMENTS TO STR. NO. N2.01 PIERS E6 TO E8

Contract No. T100.510, Fender System Repairs and Pier E6, E7 and E8 Improvements, Str. No. N2.01, Newark Bay Bridge

This contract will repair or replace deteriorated or damaged navigational channel fender system components at the Newark Bay Bridge, Str. No. N2.01. The work also includes pier column strengthening which requires the installation of temporary cofferdams.

Percent Complete	99%
Original Contract Value:	$7,999,668
Present Contract Value:	$8,079,584
Construction Start Date:	March 24, 2020
Original Completion Date:	December 1, 2021
Estimated Completion Date:	December 31, 2022

Remarks: Original contract work is complete. An extension of time is being evaluated due to extra work added to the contract.

39200008 TURNPIKE BRIDGE LENGTHENING OF STR. NOS. 30.75 AND 33.94

Contract No. T100.514, Bridge Deck Reconstruction and Lengthening, Str. No. 30.75R

This contract originally provided for deck reconstruction and lengthening of two bridge decks which carry local roads over the southern portion of the Turnpike located at Mileposts 30.75 and 33.94. After the preliminary engineering, Str. No. 33.94 will not be progressed under the 2019 CIP. Contract No. T100.514 will reconstruct Str. No. 30.75. The bridge lengthening will provide for adequate space for future widening of the Turnpike.

Percent Complete	76%
Original Contract Value:	$17,363,209
Present Contract Value:	$18,833,092
Construction Start Date:	March 24, 2020
Original Completion Date:	June 15, 2022
Estimated Completion Date:	September 16, 2022

Remarks: A three-month time extension is warranted due to utility coordination issues.

39200009 PARKWAY STR. NOS. 160.6 TO 161.9 (6 BRIDGES BOTH NB AND SB)

Contract No. P100.511, Bridge Deck and Median Reconstruction, Milepost 160.6 to 162.5

This contract provides for the replacement of bridge decks and superstructure re-painting for five bridges, replacement of two bridge superstructures, deck repairs to six bridges, reconstruction of roadway median barrier and other miscellaneous work along the Parkway mainline between Mileposts 160.6 and 161.9.

Percent Complete	33%
Original Contract Value:	$57,288,442
Present Contract Value:	$58,391,770

Construction Start Date: July 28, 2020
Original Completion Date: August 11, 2025
Remarks: Contract is on schedule.

39200010 PARKWAY PNC ARTS CENTER TRAFFIC SIGNALS AND PARKING LOT EXPANSION

Contract No. P300.535, Operational Improvements at PNC Bank Arts Center Ramps

This contract provides intersection improvements at the PNC Arts Center exit ramps from the Parkway. Additional improvements also include reconfiguring the East/West PNC Service Road, overhead lane control system upgrades, roadway and parking lot lighting, and other ancillary activities.

Percent Complete	70%
Original Contract Value:	$7,983,013
Present Contract Value:	$7,983,013
Construction Start Date:	April 27, 2021
Original Completion Date:	May 31, 2022
Estimated Completion Date:	July 31, 2022
Remarks:	Contract is approximately two-months behind schedule due to electrical material supply issues.

39200011 TURNPIKE INTERCHANGE 6 EXPRESS E-ZPASS IMPROVEMENTS

Contract No. T300.463, Express E-ZPass Improvements at Interchange 6 Toll Plaza

This contract will implement additional Express E-ZPass toll collection lanes in the eastbound and westbound directions at the Turnpike Interchange 6 Toll Plaza on the Pearl Harbor Memorial Turnpike Extension. Anticipated work includes toll collection equipment modifications; toll plaza electrical and communications work, approach roadway modifications, and ground mounted and overhead signing improvements.

Percent Complete	99%
Original Contract Value:	$7,131,513
Present Contract Value:	$7,067,162
Construction Start Date:	September 24, 2019
Original Completion Date:	December 22, 2020
Substantial Completion Date:	September 16, 2020
Remarks:	Final Inspection was performed on September 16, 2020, closeout is in progress.

39200013 TURNPIKE INTERCHANGE 18E EXPRESS E-ZPASS/INTERCHANGE 16E IMPROVEMENTS

Contract No. T300.489, Interchange 18E Express E-ZPass and 16E Improvements, Milepost E110.4 to E114.5

This contract provides two Express E-ZPass toll collection lanes in the southbound and northbound directions at Turnpike Interchange 16E/18E Toll Plaza on the Eastern Spur at Milepost 112.3. The contract also includes modifications to the express bus lanes (XBL) and exit ramps at Interchange 16E. This will improve the overall traffic flow at the Interchange and reduce the exiting bus queuing that utilize the contraflow Exclusive Bus Lane. This project also includes toll collection equipment modifications; toll plaza electrical and communications work, approach roadway and striping modifications, and ground mounted and overhead signing improvements.

Percent Complete	99%
Original Contract Value:	$21,186,841
Present Contract Value:	$21,644,070
Construction Start Date:	January 28, 2020
Original Completion Date:	October 31, 2021
Substantial Completion Date:	June 1, 2022

Remarks: Final Inspection was performed on June 1, 2022, closeout is in progress

39200016 PARKWAY BRIDGE DECK RECONSTRUCTION, MP 140 TO 143

Contract No. P100.338, Bridge Deck and Median Barrier Reconstruction, Milepost 140 to 143

This contract provides for the replacement of bridge decks and superstructure re-painting of four bridges, bridge deck repairs for three bridges, reconstruction of approach median barrier and other miscellaneous work on the Parkway between Milepost 140 and 143.

Percent Complete	40%
Original Contract Value:	$48,380,000
Present Contract Value:	$49,030,051
Construction Start Date:	June 23, 2020
Original Completion Date:	May 19, 2023
Estimated Completion Date:	August 14, 2023

Remarks: Contract is approximately three months behind schedule. Contractor is exploring several alternatives to recover lost time.

39200018 SERVICE AREAS – HMS HOST & SUNOCO

The Authority entered into 25-year contracts with Applegreen Ltd. to provide food services and Sunoco Retail LLC to provide fuel services at Authority service areas, which include all service areas on both the Parkway and Turnpike except Colonia (Northbound Parkway) and Colonia (Southbound Parkway) which are privately owned and operated. As a result of the contracts, Applegreen 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.

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)
- Thomas Edison (Turnpike)
- Vince Lombardi (Turnpike)
- Grover Cleveland (Turnpike) - Sunoco work only
- Woodrow Wilson (Turnpike) - ongoing site work but site is open to public
- Molly Pitcher (Turnpike) - ongoing site work but site is open to public

The following service areas are under construction (sites are closed):

- Walt Whitman (Turnpike) - site closed as of 9/8/22
- Vauxhall (Parkway) - site closed as of 8/17/22
- Brookdale South (Parkway) - site closed as of 8/17/22

The following service areas are under design:

- James Fenimore Cooper (Turnpike)
- Joyce Kilmer (Turnpike)

The following service areas are planned for future work (no design work currently being done):

- Clara Barton (Turnpike)
- John Fenwick (Turnpike)
- Cheesequake (Parkway)
- Montvale (Parkway)
- Atlantic (Parkway)
- Oceanview (Parkway)

OPS No. A4037, Supervision of Construction Services for Site Work at Service Areas on the New Jersey Turnpike and Garden State Parkway, Phases 4 and 5

This OPS will provide supervision of construction services for Site Work at Service Areas on the Turnpike and Parkway, Phases 4 and 5. These services include construction inspection, material testing, record keeping, preparation of payment estimates, and other services required to ensure compliance with the contract documents.

39200019 PASSAIC RIVER BRIDGE REHABILITATION

Contract No. P100.476, Superstructure Replacement and Widening of Bridge No. 158.2, GSP Bridge over Passaic River, US Route 46, and River Drive

This contract provides for the superstructure replacement and widening to the Parkway Str. No. 158.2 (major bridge). The work includes construction of a temporary bridge to maintain traffic during construction, pier cap reconstruction, retrofit of pier foundations, isolation bearings, roadway widening and other miscellaneous work.

Percent Complete	5%
Original Contract Value:	$99,956,375
Present Contract Value:	$100,342,850

Construction Start Date August 31, 2021
Original Completion Date: October 7, 2025
Remarks: Contract is on schedule.

39200020 LADERMAN BRIDGE REPAIR PROJECT

Contract No. T100.436, Rehabilitation of TPK Passaic River Bridges, Str. Nos. W107.87 & E107.88

This contract provides for the design and construction for continued rehabilitation of the Turnpike Passaic River Bridges, Str. Nos. W107.87 and E107.88.

Percent Complete 99%
Original Contract Value: $27,986,153
Present Contract Value: $28,556,264
Original Completion Date: March 12, 2021
Substantial Completion Date: December 1, 2021
Remarks: Final Inspection was performed December 1, 2021, closeout in progress.

39200021 WASHINGTON BRIDGE REPAIR PROJECT

Contract No. T100.436, Rehabilitation of TPK Passaic River Bridges, Str. Nos. W107.87 & E107.88

This contract provides for the design and construction for continued rehabilitation of the Turnpike Passaic River Bridges, Str. Nos. W107.87 and E107.88.

Percent Complete 99%
Original Contract Value: $27,986,153
Present Contract Value: $28,556,264
Original Completion Date: March 12, 2021
Substantial Completion Date: December 1, 2021
Remarks: Final Inspection was performed December 1, 2021, closeout in progress.

2008 $7 BILLION CAPITAL IMPROVEMENT PROGRAM

In October 2008, the Authority adopted the 2008 $7 Billion CIP, which includes numerous projects focused on major capacity enhancements and other roadway improvements to both the Turnpike and the Parkway, bridge construction and improvements, interchange improvements, and other facilities improvements. Several projects from this CIP are still in progress as described in more detail later in this section. 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.

Although the 2008 Program is nearly complete, there are several ongoing projects. The work remaining to be completed includes the Newark Bay Hudson County Extension bridge rehabilitation, facilities improvements, interchange improvements, and bridge deck reconstruction. As of the date of this report, the overall 2008 $7 Billion CIP is approximately 99 percent completed.

As Consulting Engineers to the Authority, HNTB has assisted with project planning; provided oversight of design, preparation of construction documents and cost estimates; and monitored construction schedules and costs for the Authority's 2008 $7 Billion CIP. Furthermore, we have reviewed the estimated total construction costs and the schedules for the remaining active projects included in the 2008 $7 Billion CIP and consider the estimated costs and schedules for the projects reasonable based on currently available engineering studies, construction bid trends, inflation trends, escalation factors, and construction statuses.

The projects that comprise the Authority's 2008 $7 Billion CIP can generally be separated into eight categories as shown below. As seen in the breakdown of the 2008 $7 Billion CIP, it is a balanced mix of projects which increase traffic capacity and operational efficiencies while also maintaining the system in a state of good repair. The breakdown of the 2008 $7 Billion CIP is as follows:

Project Category	Estimated Total Project Spending during 2022 – 2026 (thousands)	% of Program
Bridge Construction, Preservation & Security	$73,194	72.0%
Capacity Enhancements - Turnpike	65	0.1%
Capacity Enhancements - Parkway	-	-
Interchanges	20,596	20.3%
Concrete Barrier	198	0.2%
Drainage Structures	-	-
Other Roadway Improvements	3,956	3.9%
Facilities	3,608	3.6%
TOTAL	$7,564	

A summary table followed by a more detailed description of the individual projects for the 2008 $7 Billion CIP is presented below. It is important to note that the total project budget is the budget for the life of the project and may not be fully reflected in the spending plans for the period 2022-2026 if the project duration extends beyond 2026. The summaries presented above only reflect the spending that will occur during the five-year period from 2022-2026.

$7 Billion Capital Improvement Program
as of June 30, 2022

Project No.	Project Name	Total Project Budget	Approx. % Complete through 6/30/22
39001008	Bridge Painting Phase I	$105,047,897	100%
39001010	Deck Reconstruction Phase I	$208,536,498	96%
39001011	Bridge Preservation and Security	$94,160,944	99%
39001033	Deck Reconstruction Phase II	$142,367,293	92%
39001034	Bridge Painting Phase II	$70,214,196	94%

Project No.	Project Name	Total Project Budget	Approx. % Complete through 6/30/22
39002003	Drainage Improvements	$61,914,272	100%
39002016	Improvements to Roadway Appurtenances	$41,479,325	100%
39002017	Median Barrier Improvements	$51,567,090	99%
39003035	Interchange Improvements	$423,179,263	96%
39003040	Salt Storage Facilities	$17,561,201	100%
39005013	Facilities Improvements Phase I	$662,239,236	98%
39006014	Sign Replacements Phase I	$140,270,675	99%
39006019	Sign Replacements Phase II	$157,238,021	99%
39009036	TPK and GSP Southern Improvements	$15,865,192	100%
39011002	TPK Interchange 16E-18E Bridge Improvements	$15,147,165	100%
39011012	TPK Hackensack East Bridge Rehabilitation	$131,979,928	100%
39011025	TPK Newark Bay Hudson County Extension (NBHCE) Bridge Re-decking	$498,070,495	91%
39011028	TPK Special Bridge Structures	$7,385,807	100%
39013005	TPK Interchange 8A to Route 130 Connector Improvements	$6,157,447	100%
39013027	TPK Interchange 14A Reconstruction	$285,784,661	97%
39018001	TPK Interchange 6-9 Widening	$2,131,547,072	100%
39021004	GSP Bass River Bridge	$76,439,827	100%
39021015	GSP Mullica River Bridge	$49,401,763	100%
39021020	GSP Bridge Substructure Repairs	$33,249,295	100%
39021036	GSP Great Egg Harbor and Drag Channel Bridges	$261,081,097	99%
39022023	GSP Mainline Shoulder Improvements	$363,503,148	99%
39023006	GSP Interchange 41 Improvements	$23,001,099	100%
39023007	GSP Interchange 142 Improvements	$654,796	100%
39023009	GSP Interchange 44 Improvements	$28,863,371	100%
39023022	GSP Interchange 9, 10 & 11 Improvements	$84,402,317	98%
39023024	GSP Interchange 125 Phase I	$97,881,577	99%
39023029	GSP Interchange 88 Improvements	$97,432,843	100%
39023030	GSP Interchange 91 Improvements	$11,263,310	23%
39028018	GSP Widening Interchange 63-80	$126,981,057	100%
39028031	GSP Widening Interchange 35-63	$447,291,427	100%
39099999	Contingency	$30,839,395	0%
	Total	$7,000,000,000	99%

A detailed description of the projects contained in the 2008 $7 Billion CIP and the status of each are provided below. It should be noted that many projects consist of multiple Orders for Professional Services (OPSs) for various engineering services and multiple construction contracts. Only currently active projects are shown below.

39001011 Bridge Preservation and Security

This project provides for the design and construction 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 of 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.

Contract No. A100.196, Bridge Security Program

The contract involves construction management and general contracting services to execute and manage work orders as required to perform security improvements at the Authority's highest priority bridges.

Percent Complete:	99%
Original Contract Value:	$79,225,000
Present Contract Value:	$56,510,911
Original Completion Date:	December 31, 2016
Substantial Completion Date:	February 20, 2019

Remarks: Closeout in progress.

39003035 INTERCHANGE IMPROVEMENTS

This project includes improvements to interchanges on the Turnpike and Parkway. Interchange locations include Turnpike Interchanges 9, 10, 15W and 16W, and Parkway Interchanges 0, 105, 109, 145 and 163.

Contract No. P300.433, Replacement of the Central Avenue Overpass at Interchange 145 and Bridge Deck Reconstruction, Milepost 144 to 152

This contract provides for the replacement of the Central Avenue overpass over the Parkway and improvements to Interchange 145 in Essex County. Improvements include the implementation of one-way tolls, widening of the Parkway southbound entrance ramp from the Interchange 145 toll plaza to provide a two-lane entrance ramp and the widening of the northbound Parkway to provide a two-lane exit ramp to the Interchange 145 toll plaza. The contract also includes bridge deck reconstruction at five bridges between Milepost 144.7 to 151.6.

Percent Complete	90%
Original Contract Value:	$63,186,107
Present Contract Value:	$77,346,211
Original Completion Date:	August 12, 2022

Remarks: The Contract is on schedule.

39005013 FACILITIES IMPROVEMENTS PHASE I

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.

Contract No. P500.354, Facilities Improvement Program PMD 1-Swainton, Milepost 13.8 SB and PMD 4-Herbertsville, Milepost 94.3 SB

This contract provides for the construction of a 16,000 SF replacement maintenance building and a new 9,000 SF salt storage shed at Parkway Maintenance District 1 in Middle Township, as well as the construction of a 14,000 SF new maintenance building and 9,000 SF salt shed at Parkway Maintenance District 4 in Wall Township.

Percent Complete:	98%
Original Contract Value:	$31,918,223
Present Contract Value:	$32,378,290
Original Completion Date:	November 28, 2016
Substantial Completion Date:	December 21, 2017

Remarks: Final Inspection was performed at PMD 1 on June 15, 2017. PMD 4 MUB Beneficial Inspection was performed on December 21, 2017. Contract is substantially complete.

Contract No. P500.360, Facilities Improvement Program PMD 5 (Telegraph Hill) Milepost 116, PMD 6 (Clark) Milepost 136.7 SB, PMD 7 (Clifton) Milepost 156.1 NB, and PMD 8 (Paramus) Milepost 164.2 SB

This contract provides for the demolition of existing maintenance buildings and the construction of new multi-use maintenance buildings, including site work, at the Parkway Maintenance District 5 in Holmdel, Parkway Maintenance District 7 in Clifton, and Parkway Maintenance District 8 in Paramus. The contract also includes minor renovations and HVAC rehabilitation at Parkway Maintenance District 6 in Clark.

Percent Complete:	99%
Original Contract Value:	$52,000,000
Present Contract Value:	$57,349,952
Original Completion Date:	February 5, 2018
Substantial Completion Date:	January 18, 2018

Remarks: Final Inspection was performed on January 18, 2018. Closeout is in progress.

Contract No. P500.361, New Multi-use Building and Salt Storage Shed at PMD 2 (Whitehorse) Milepost 41.0 and PMD 3 (Ocean) Milepost 67.7

This contract provides for the construction of a multi-use building and a salt storage shed at Parkway Maintenance District 2 in Galloway Township at Milepost 41, and for the construction of a multi-use building and a salt storage shed at Parkway Maintenance District 3 in Barnegat Township at Milepost 67.7. Both locations include site and utility improvements.

Percent Complete:	99%
Original Contract Value:	$40,838,672
Present Contract Value:	$41,846,561
Original Completion Date:	November 20, 2017
Substantial Completion Date:	May 24, 2018

Remarks: Final Inspection was performed on May 24, 2018. Closeout is in progress.

Contract No. T500.358, Facilities Improvements to Interchange 1, Milepost 2.4 NB; Maintenance Districts TMD 2, Milepost 37.0 NB; and TMD 3, Milepost 56.0 NB

This contract provides for the construction of a salt storage shed at Turnpike Interchange 1 in Carneys Point Township at Milepost 2.4 NB; renovation of an existing multi-use building and the construction of a new multi-use building at Turnpike Maintenance District 2 in Mount Laurel Township at Milepost 37.0 NB; and the construction of a new multi-use building and salt storage shed at Turnpike Maintenance District 3 in Chesterfield Township at Milepost 56.0 NB. The work at all three sites includes site work, utility relocations and utility connections.

Percent Complete:	99%
Original Contract Value:	$56,893,382
Present Contract Value:	$57,806,508
Original Completion Date:	November 30, 2018
Substantial Completion Date:	May 30, 2019

Remarks: The Authority moved into TMD 3 in August 2020. Closeout is in progress.

Contract No. T500.365, Replacement of Maintenance Building at TMD 1, Swedesboro, Milepost 13.0 NB

This contract provides for the construction of a replacement maintenance building at Turnpike Maintenance District 1 in Woolwich Township at Milepost 13.0 NB. The work consists of the construction of a 16,000 SF building, utility relocations, and the establishment of temporary parking facilities for trucks assigned to the district.

Percent Complete:	98%
Original Contract Value:	$12,369,947
Present Contract Value:	$12,612,551
Original Completion Date:	December 30, 2016
Substantial Completion Date:	April 6, 2017

Remarks: Final Inspections were performed for the multi-use building on April 6, 2017 and the final site work on May 30, 2019. Contract is substantially complete.

39006019 Sign Replacements Phase II

This project includes the design, fabrication, and construction of over 220 Variable Message Signs (VMSs) and sign structures at various locations along the Turnpike and the Parkway. The project provides for design and construction of VMS sign supports, provision and installation of VMS signs, and connectivity for communications and controls through the Statewide Traffic Management Center (STMC).

Contract No. A600.102G, Installation of Variable Message Signs at New and Existing Locations on the Turnpike and Parkway

This contract involves the construction of Variable Message Signs (VMS) at 16 new and 13 existing locations which include constructing foundations for new sign structures, furnishing and installing VMS support structures, installing and testing of VMS, installing roadway safety features and associated electrical and ITS work. The work also includes the removal of existing VMS and structures that are no longer needed.

Percent Complete: 99%
Original Contract Value: $17,865,277
Present Contract Value: $17,561,429
Original Completion Date: February 24, 2021
Substantial Completion Date February 23, 2021
Remarks: Final Inspection was performed on February 23, 2021. Closeout is in progress.

39011025 TURNPIKE NEWARK BAY HUDSON COUNTY EXTENSION (NBHCE) BRIDGE RE-DECKING

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, Str. No. N2.01. This project also provides for the repairs to structural steel and substructure units, security improvements and painting.

Contract No. T100.184, Newark Bay Bridge West Approach, Bridge Deck Reconstruction, Miscellaneous Structural Repairs, Roadway Lighting Improvements, Milepost N0.00 to N6.00

This contract provides for deck reconstruction, replacement of deck joints, roadway lighting and drainage improvements, tie chord redundancy retrofit, structural steel repair and retrofit, repainting of tie chords, splash zones repainting of structural steel and the removal of the shoulder use temporary lane control system.
Percent Complete 79%
Original Contract Value: $138,828,000
Present Contract Value: $141,171,893
Original Completion Date: April 19, 2023
Remarks: Contract is on schedule.

Contract No. T100.321, Rehabilitation of Structure Nos. N6.49, N6.80E and N6.80W

This contract provides for the complete rehabilitation of the East Viaduct (Str. No. N6.49) and its companion structures, the Columbus Drive exit ramp (Str. No. N6.80E) and the Merseles Street entrance ramp (Str. No. N6.80W). The primary scope of work involves bridge deck reconstruction in the eastbound direction, structural strengthening and repairs, structural repainting, lighting and drainage improvements and rehabilitation of the Interchange 14C toll plaza approaches at the western limit of the project.
Percent Complete: 100%
Original Contract Value: $88,875,643
Present Contract Value: $90,702,169
Original Completion Date: July 30, 2020
Substantial Completion Date: August 12, 2021
Completion Date: June 28, 2022
Remarks: Final Acceptance was authorized at the June 28, 2022 Board Meeting.

39021036 PARKWAY GREAT EGG HARBOR AND DRAG CHANNEL BRIDGES

This project provides for the design and construction of a new parallel bridge carrying the southbound Parkway over Great Egg Harbor and Drag Channel. The new bridge will be constructed west of the existing southbound structure. The new bridges include a new 3,834-foot-long bridge over Great Egg Harbor and a new 770-foot-long bridge over Drag Channel. Construction will also include approximately 4,900 linear feet of new approach roadways; demolition of the existing southbound bridge; rehabilitation of the northbound Parkway bridge; and demolition of the nearby existing Beesley's Point Bridge. Special construction features include use of high-performance concrete for the bridge decks, a 10-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.

Contract No. P100.251, Replacement of Structure Nos. 28.0S and 28.5S, Milepost 27.0 to 28.8 – Great Egg Harbor Bridge

This contract replaces Str. Nos. 28.0S and 28.5S with two new parallel structures to the west of the existing bridges. The roadway of these bridges will include a 10-foot-wide multi-use pathway. The contract includes interim repairs to the existing northbound Great Egg Harbor and Drag Channel bridges and demolishing the NJDOT's Beesley's Point Bridge.

Percent Complete:	99%
Original Contract Value:	$129,885,762
Present Contract Value:	$139,723,594
Original Completion Date:	June 20, 2016
Substantial Completion Date:	April 19, 2017
Remarks:	Final Inspection was performed on April 19, 2017. Closeout is contingent upon resolution of legal issue being handled by NJTA Law Department.

OPERATING EXPENSES

The Authority is currently implementing an overall Financial Plan that is designed to maintain cost efficiencies, reduce costs where possible, and otherwise constrain the financial needs of Authority operations. Policy decisions that have been adopted during the last several years provide a continued constraint on non-operating staffing levels, a renegotiation of work rules under union contracts, and other procedures that have resulted in control over overall operating expenses. Despite the well-implemented Financial Plan, inflation has affected the Authority in numerous areas. Increases in costs for materials, fuel, fleet vehicles, technology, and contracted services have significantly increased the operating expenses for the Authority. In addition, non-discretionary budget items such as projected wage, pension, and health benefit increases; increased utility costs; increased insurance premiums; and increased state police costs have caused additional increases to the operating expenses. In general, staffing is remaining flat across all departments.

The Authority generally takes a conservative approach when budgeting for maintenance activities associated with severe weather and other unexpected events. The severe winter of 2014 and the lingering effects of Superstorm Sandy have provided great experience and a sound basis for budget planning for such events. The Authority has adopted a philosophy to budget based on the worst actual expenditures so there will be sufficient funds available to address severe weather and other unexpected events. Having the resources to deal with severe weather and similar unexpected events is critically important to the safety and well-being of the traveling public. Overall, the operating budget is being managed in an appropriate manner, keeping increases to a minimum while accounting for the needs of the Authority's assets, employees, and safety of the traveling public.

A review of the history of the Authority's operating expenses was performed for the past five years. From 2017 to 2021, annual operating expenses increased at average annual rates of 2 percent to 3 percent. Due to inflationary pressures and significant increases in labor-related benefits, healthcare, and State Police services, projected operating expenses rose nearly 8 percent from 2021 to 2022. Similar increases are anticipated for 2023 based on inflation and labor-related expenses.

Based on the above analyses, the Authority's Financial Plan and fiscal policies, and our professional judgment, we have applied a yearly escalation factor to our estimates of Operating Expenses as described in the Inflation and Escalation section earlier in this report.

Based upon the factors presented above, our periodic review of the Authority's expenses and budgets, as well as our specific knowledge of the operations for the Turnpike and Parkway, projections for Operating Expenses for the years 2023 through 2032 are as follows:

Estimate of Operating Expenses (In thousands)	
Year	Amount
2022*	$622,200
2023	$713,800
2024	$749,500
2025	$783,200
2026	$814,500
2027	$843,000
2028	$872,500
2029	$903000
2030	$934,600
2031	$967,300
2032	$1,001,200

Note: * - Estimated/Actual

RESERVE FUND REQUIREMENTS

Historically, the Authority has made annual deposits to the Maintenance Reserve Fund to provide funding for maintenance of the infrastructure including bridges and roadways, facilities, and safety appurtenances. The Special Projects Reserve Fund was created to provide funding for various other types of projects including early engineering studies to determine project scopes and feasibility, traffic and revenue studies, repairs of buildings and other facilities, maintaining equipment and vehicle fleets, and improvements in administrative, technology, and communication systems. In short, the two funds provide for the maintenance and improvement of all elements that in some manner contribute to the proper and efficient operation of the Authority's toll road assets.

Currently, the Authority has approximately 4,477 lane miles of pavement that require resurfacing and striping maintenance, 1,116 bridges that require deck maintenance, superstructure and substructure maintenance, and painting, and many safety appurtenances such as guide rail, concrete median barrier, lighting, drainage, and buildings that all require maintenance. The Maintenance Reserve Fund budget will generally provide for the following:

- Resurface 400 lane-miles per year (move from a 15-year cycle to a 12-year cycle to resurface the entire roadway)
- Re-deck approximately eight to ten bridge decks per year
- Maintain all bridge decks (1,116) in a state of good repair
- Paint bridges (approximately 15-year cycle for painting all bridges)
- Maintain annual programs for maintenance of lighting, drainage facilities, median barrier, building facilities, signing, striping, and safety features

The reserve fund amounts presented below are estimates of the annual requirements to meet the needs of the Authority for the purposes cited above. The projected amounts reflect a continuation of the Authority's historic policies and practices regarding the application of the funds and allows for annual increases commensurate with historical trends and current day economic conditions in addition to the needs of the infrastructure. These amounts are necessary and sufficient to meet the needs of the Authority's system and are consistent with those presented in Consulting Engineer's reports prepared by HNTB Corporation that accompanied previous official statements. The following table presents the projected costs to maintain the Turnpike and Parkway during the period 2023 through 2032. In arriving at the amounts, we have generally applied a yearly escalation factor to our estimates of Reserve Fund Deposits as described in the Inflation and Escalation section earlier in this report.

Reserve Fund Deposits (In thousands)		
Year	Maintenance Reserve Fund Deposits	Special Project Reserve Fund Deposits
2022*	$200,000	$50,000
2023	$230,000	$51,500
2024	$240,000	$54,100
2025	$250,000	$56,500
2026	$260,000	$58,800
2027	$269,100	$60,900
2028	$278,500	$63,000
2029	$288,200	$65,200
2030	$298,300	$67,500

Reserve Fund Deposits (In thousands)		
2031	$308,700	$69,900
2032	$319,500	$72,300

CONCLUSIONS

This report presents information to be applied in developing the financial program for the Authority and to assist in planning capital projects for the Turnpike and Parkway. On both roads, there are roadway sections and bridges that are nearly 70 years old. Many projects that make up the CIP provide major reconstruction that is necessary to maintain the facilities in proper condition for safe and convenient use by the traveling public. Timely implementation of this type of extraordinary maintenance is necessary to reduce the risk of revenue loss. Other projects included in the CIP are improvements, enhancements, and asset additions that are deemed necessary. Completion of these projects will improve safety and operations and likely increase revenues.

APPENDIX D

SUMMARY OF GENERAL BOND RESOLUTION AND CERTAIN DEFINITIONS

SUMMARY OF GENERAL BOND RESOLUTION AND CERTAIN DEFINITIONS

A brief description of the General Bond Resolution and certain definitions used therein is included in this Appendix D. Such descriptions do not purport to be comprehensive or definitive and all references herein to the General Bond Resolution are qualified in their entirety by reference to the full text of the General Bond Resolution.

CERTAIN DEFINITIONS

The following is a summary of the definitions of certain terms used in the General Bond Resolution :

"Accreted Value" means, with respect to Capital Appreciation Bonds, the amount to which, as of any specified time, the principal of any such Bond has been increased by accretion, all as may be provided in an applicable Series Resolution.

"Accrued Debt Service" means, as of any date of calculation and with respect to any Series, an amount equal to the sum of (i) interest on the Bonds of such Series accrued and unpaid and to accrue to the end of the then current calendar month, (ii) all amounts due and payable by the Authority and all amounts to accrue to the end of the then calendar month pursuant to a Qualified Swap, and (iii) Principal Installments due and unpaid for such Series and that portion of the Principal Installment for such Series next due which would have accrued to the end of such calendar month if deemed to accrue monthly from a date one year prior to its due date or from the date of issuance of each such Series, whichever is later.

"Aggregate Debt Service" means, for any calendar year and as of any date of calculation, the sum of the amounts of Debt Service for such year with respect to all Series of Bonds then Outstanding and all Qualified Swaps then in effect.

"Annual Budget" means the annual budget, as amended or supplemented, adopted or in effect for a particular calendar year pursuant to the General Bond Resolution.

"Arts Center" means the Garden State Arts Center (currently known as the PNC Bank Arts Center), which is owned by the Authority.

"Authority" means the New Jersey Turnpike Authority, a body corporate and politic organized and existing under the New Jersey Turnpike Authority Act of 1948, constituting Chapter 454 of the Laws of New Jersey of 1948, as amended and supplemented from time to time.

"Authorized Denomination" means the minimum denomination, or any integral multiple thereof, in which a particular Series of Bonds may be issued pursuant to the applicable Series Resolution. In the case of Capital Appreciation Bonds, the Authorized Denominations may be stated in terms of Accreted Value at maturity or such earlier time as the Bonds are required to commence paying interest.

"Authorized Officer" means any member of the Authority or any officer or employee of the Authority authorized to perform specific acts or duties by resolution duly adopted by the Authority.

"Bond" or **"Bonds"** means any Bond or Bonds authenticated and delivered under and pursuant to the General Bond Resolution and an applicable Series Resolution and any obligations issued on or after August 20, 1991 under, or pursuant to the authority of, the 1984 Resolution which the Authority determines are entitled to the benefits of the General Bond Resolution. The term "Bond" shall include

Parity Variable Rate Bonds, any short term note or other debt obligation of the Authority, but shall not include any Variable Rate Debt, Commercial Paper or any Subordinated Indebtedness.

"Capital Appreciation Bonds" means any Bond issued pursuant to the General Bond Resolution and a Series Resolution which do not pay interest either until maturity or until a specified date prior to maturity, but whose amount increases periodically by accretion to a final principal amount.

"Charges Fund" means the Charges Fund established in the applicable Series Resolution related to a Qualified Swap to provide for the payment of fees and charges of the Standby Purchaser, the Remarketing Agent and the Tender Agent.

"Code" means the Internal Revenue Code of 1986, as amended, or any successor thereto, as the same may be in effect from time to time.

"Commercial Paper" means any note or other obligation of the Authority, subject to renewal at the end of any rate period, other than Variable Rate Debt, the term of which (prior to any renewal thereof) does not exceed 270 days.

"Consulting Engineers" means such engineer or engineering firm or corporation as at the time shall be retained by the Authority pursuant to the General Bond Resolution to perform the acts and carry out the duties provided for such Consulting Engineers in the General Bond Resolution.

"Cost of Construction" means with respect to any Project, the cost of construction and/or acquisition, and equipping, including without limitation, bridges or crossings over or under rivers, streams or other waters or over highways and railroads, the cost of acquisition of all land, rights-of-way, property, rights, casements and interests acquired or to be acquired by the Authority, the cost of demolishing or removing any buildings or structures on land so acquired, including the cost of acquiring any lands to which such buildings or structures may be moved, the cost of relocating or reconstructing highways, highway interchanges, access roads to private property, including the cost of land or easements therefor, the response costs, direct and indirect (including but not limited to the costs of testing, investigation, feasibility studies, remediation, treatment, clean-up, removal, litigation, fines and penalties related thereto) incurred with respect to any environmental hazard or perceived environmental hazard under federal, State or local laws or regulations and any third party claims with respect to such hazard or perceived hazard, the amount of any final award or judgment in, or any settlement or compromise of, any proceeding to acquire lands, rights-of-way, easements or other interests, the payment of damages caused by construction in the manner provided by law, the cost of any indemnity and surety bonds and premiums on insurance during construction, administrative expenses, legal fees, cost of audits, the cost of all machinery and equipment, initial inventories, financing expenses, fees and expenses of the Fiduciaries and costs of keeping accounts and making reports required by the General Bond Resolution, cost of traffic estimates and of engineering, financial and legal services, plans, specifications, surveys, estimates of costs and revenues, and other expenses necessary or incident to determining the feasibility or practicability of constructing or acquiring such Project, amounts, if any, required by the General Bond Resolution to be paid into the Debt Service Fund, the Debt Reserve Fund, the Maintenance Reserve Fund or the Special Project Reserve Fund, payments when due (including without limitation, on any early termination date) under a Qualified Swap and payments when due (whether at the maturity of principal or the due date of interest or upon redemption) on any indebtedness of the Authority (other than Bonds), including Variable Rate Debt, Commercial Paper and Subordinated Indebtedness, incurred for such Project, all to the extent applicable to the construction and/or acquisition of such Project and payable by the Authority, and such other expenses payable by the Authority not specified herein as may be necessary or incident to the construction and/or acquisition of such Project and the placing of such Project in operation.

"Credit Facility" means any letter of credit, standby bond purchase agreement, line of credit, surety bond, insurance policy or other insurance commitment or similar agreement (other than a Qualified Swap or an Exchange Agreement), satisfactory to the Authority, that is provided by a commercial bank, insurance company or other entity, with a current long term rating (or whose obligations thereunder are guaranteed by an entity with a long term rating) from Moody's and S&P not lower than the credit rating of any Series of Bonds, to provide support for a Series of Bonds or for any issue of Variable Rate Debt, Commercial Paper or Subordinated Indebtedness, and shall include any Substitute Credit Facility.

"Credit Issuer" means the issuer of the Credit Facility or any Substitute Credit Facility.

"Debt Reserve Fund" means the Debt Reserve Fund established in the General Bond Resolution to secure the Bonds.

"Debt Reserve Requirement" means with respect to all Bonds an amount equal to the lesser of (i) the greatest amount of interest accruing on the Outstanding Bonds in any one calendar year taking into account the increased Accreted Value of Capital Appreciation Bonds in such calendar year (except that the incremental amount attributable to any Parity Variable Rate Bonds may be based upon the fixed rate of interest as set forth in the Series Resolution for such Bonds), determined as of any particular date or (ii) the maximum amount permitted by Section 148(d)(1) of the Code.

"Debt Service" means, for any period, as of any date of calculation and with respect to any Series, an amount equal to the sum of (i) interest accruing during such period on Bonds of such Series, except to the extent that such interest is to be paid from Bond proceeds deposited in the Debt Service Fund, (ii) all net amounts, if any, due and payable by the Authority under a Qualified Swap during such period, and (iii) that portion of each Principal Installment for such Series which would accrue during such period if such Principal Installment were deemed to accrue monthly from a date one year prior to its due date or from the date of issuance of such Series, whichever is later, such amounts in clauses (i) and (iii) to be calculated on the assumption that Bonds Outstanding at the date of calculation will cease to be Outstanding by reason, but only by reason, of the payment of each Principal Installment on its due date; provided however, that in calculating Aggregate Debt Service for purposes of meeting the requirements for issuing Refunding Bonds under the General Bond Resolution and in calculating the Net Revenue Requirement for purposes of meeting the requirements for issuing Non-Refunding Bonds and Refunding Bonds and complying with the Authority's covenants concerning tolls and charges under the General Bond Resolution, Debt Service on Bonds for which the Authority has entered into a Qualified Swap shall be calculated assuming that the interest rate on such Bonds shall equal the stated fixed rate on the Qualified Swap or, if applicable and if greater than such stated fixed rate, the composite rate for the Authority's Parity Variable Rate Bonds for the twelve (12) month period preceding such calculation or such lesser period, if any, of at least three (3) months during which such Parity Variable Rate Bonds were Outstanding, in either case resulting in no assumed payment for purposes of clause (ii) above.

"Depository" means any bank, national banking association, savings or savings and loan institution or trust company selected by the Authority as a depository of moneys and securities held under the provisions of the General Bond Resolution, and may include the Trustee and may include the New Jersey Cash Management Fund.

"Exchange Agreement" means, to the extent from time to time permitted by applicable law, any interest exchange agreement, interest rate swap agreement, currency swap agreement or other contract or agreement, other than a Qualified Swap, authorized, recognized and approved by the Authority as an Exchange Agreement and providing for (i) certain payments by the Authority from the General Reserve Fund and (ii) payments by an entity whose senior long term debt obligations, other senior unsecured long term obligations or claims paying ability, or whose obligations under an Exchange Agreement are guaranteed by an entity whose senior long term debt obligations, other senior unsecured long term obligations or claims paying ability are rated not less than A3 by Moody's and A- by S&P, or the equivalent thereof by any successor thereto; which payments by the Authority and counterparty are calculated by reference to fixed or variable rates and constituting a financial accommodation between the Authority and such counterparty.

"Federal Securities" means (i) 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, (ii) any obligations of any state or political subdivision of a state (collectively "Municipal Bonds") which Municipal 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 Municipal Bonds, and (iii) 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.

"Feeder Road" means any road which in the opinion of the Authority creates or facilitates access to the Turnpike System and the acquisition, construction or repair of which by the Authority will increase or maintain Net Revenues after giving effect to the costs to the Authority of acquiring, constructing, repairing, maintaining and operating such road.

"Fiduciary" or **"Fiduciaries"** means the Trustee, the Registrar, the Tender Agent and the Paying Agents, or any or all of them, as may be appropriate.

"Fitch" means Fitch Ratings and any successor thereto.

"General Project" means a project, other than a Turnpike Project, which the Authority is authorized by law to undertake and all or a portion of the costs of which will be paid from the General Reserve Fund or from the proceeds of Subordinate Indebtedness.

"Investment Securities" means any of the following securities legal for the investment of the Authority funds at the time of purchase thereof:

(i) Federal Securities;

(ii) 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;

(iii) Bonds, debentures, notes or other evidences of indebtedness issued by any of the following agencies: Government National Mortgage Association, Federal Land Banks, Federal Home Loan Mortgage Corporation, Federal National Mortgage Association, Federal home Loan Banks, Federal Intermediate Credit Banks, Banks for Cooperatives, Tennessee Valley Authority, United States Postal Service, Farmers Home Administration, Export-Import Bank, Federal Financing Bank and Student Loan Marketing Association;

(iv) 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 (i) or (ii) of this definition, 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;

(v) 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's and S&P;

(vi) Repurchase agreements collateralized by obligations described in subparagraphs (i), (ii) or (iii) of this definition 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 months 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), and

(f) the fair market value of the securities in relation to the amount of the repurchase obligation is equal to at least 100%.

(vii) Banker's acceptances, eurodollar deposits and certificates of deposit (in addition to the certificates of deposit provided for by subparagraphs (iv) and (v) 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 time as investments of funds under the General 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 S&P and Moody's;

(viii) Other obligations of the United States of America or any agency thereof which may then be purchased with funds belonging to the State or which are legal investments for savings banks in the State;

(ix) Deposits in the New Jersey Cash Management Fund;

(x) 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 S&P and Moody's; and

(xi) Commercial paper with a maturity date not in excess of 270 days rated A-1+ by S&P 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.

"Liquidity Facility" means any letter of credit, line of credit or standby loan commitment made available to fund purchases of Variable Rate Debt, Commercial Paper or Subordinated Indebtedness upon maturity or mandatory optional tender of such obligations; such Liquidity Facility may be part of, or separate from, any Credit Facility or Substitute Credit Facility supporting such obligations.

"Maintenance Reserve Payment" means any amount provided in the Annual Budget for any calendar year to be deposited in the Maintenance Reserve Fund during such year.

"Moody's" means Moody's Investors Service, Inc. and any successor thereto.

"Net Revenue Requirement" means, with respect to any period of time, an amount equal to the greater of (i) the sum of 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).

"Net Revenues" means, for any calendar year or other period of time, the Pledged Revenues during such year or period less the amounts of the Operating Expenses for such year or period.

"Non-Refunding Bonds" means all Bonds issued pursuant to Section 203 of the General Bond Resolution.

"Operating Expenses" means the Authority's expenses for operation, maintenance, repairs, ordinary replacement and ordinary reconstruction of the Turnpike System and ordinary acquisition of equipment for the Turnpike System; including, without limiting the generality of the foregoing, all policing, administrative and engineering expenses, legal and financial advisory expenses, fees and expenses of the Fiduciaries, required payments to pension, retirement, health and hospitalization funds, insurance premiums, Credit Facility fees (except Credit Facility fees, charges and premiums to the extent such fees, charges and premiums are treated as interest under the Code) and any provision or reserves for self-insurance, all arbitrage rebate payments required by Section 148 of the Code to be made from time to time to the United States Government, and any other current expenses or obligations required to be paid by the Authority under the provisions of the General Bond Resolution or by law, all to the extent properly and directly attributable to the operation of the Turnpike System, but excluding any costs or expenses for new construction or any allowance for depreciation and any costs and expenses paid or required to be paid by any party other than the Authority.

"Parity Variable Rate Bonds" means Bonds issued pursuant to the General Bond Resolution and a Series Resolution bearing interest at a variable rate and specifying a maximum rate of interest permitted by law provided that at least one of the following conditions is met: (i) at the time of issuance, the Authority has entered into a Qualified Swap with respect to such Bonds or (ii) the Bonds bear interest at a variable rate, but are issued concurrently in equal par amounts with other Bonds bearing interest at a variable rate and which are required to remain Outstanding in equal amounts at all times, if the net effect of such equal par amounts and variable rates at times is a fixed rate of interest to the Authority.

"Pledged Revenues" means (i) all Turnpike Revenues, (ii) other revenues of the Authority, including but not limited to payments to the Authority under any Qualified Swap, but in all cases only to the extent specifically pledged pursuant to one or more Series Resolutions to secure Bonds issued under the General Bond Resolution, and (iii) investment income from any moneys or securities held under the General Bond Resolution and paid into the Revenue Fund.

"Principal Installment" means, as of any particular date of calculation and with respect to any particular future date and with respect to Bonds of a particular Series, (i) the principal amount of Outstanding Bonds of said Series which mature on such future date, taking into account the Accreted Value of any Capital Appreciation Bond but reduced by the aggregate principal amount of such Outstanding Bonds which would at or before said future date cease to be Outstanding by reason, but only by reason, of the payment when due and application in accordance with the General Bond Resolution of Sinking Fund Installments payable on or before said future date toward the retirement of such Outstanding Bonds, and (ii) the amount of any Sinking Fund Installment payable on said future date toward the retirement of any Outstanding Bonds of said Series.

"Purchase and Remarketing Fund" means, with respect to each Series of Bonds subject to tender purchase pursuant to the applicable Series Resolution, the Fund so designated in such Series Resolution.

"Qualified Swap" or **"Swap Agreement"** means, with respect to a Series of Bonds, any financial arrangement (i) that is entered into by the Authority with an entity that is a Qualified Swap Provider at the time the arrangement is entered into; (ii) which provides that the Authority shall pay to such entity an amount based on the interest accruing at a fixed rate on an amount equal to the principal amount of the Outstanding Bonds of such Series, and that such entity shall pay to the Authority an amount based on the interest accruing on a principal amount initially equal to the same principal amount as such Bonds, at a variable rate of interest computed according to a formula set forth in such arrangement (which need not be the same as the actual rate of interest borne by the Bonds) or that one shall pay to the other any net amount due under such arrangement; and (iii) which has been designated in writing to the Trustee by an Authorized Officer of the Authority as a Qualified Swap with respect to the Bonds; provided, however, that if the Bonds corresponding to such Qualified Swap are retired in whole, unless the Qualified Swap is also terminated, the Qualified Swap Provider shall then be entitled to receive a Counsel's Opinion from the law firm or firms rendering an opinion as to the Authority's obligations under the Swap Agreement on its date of issue, as to whether or not the Swap Agreement is a valid and binding obligation of the Authority after such retirement of the Bonds under then existing law.

"Qualified Swap Provider" means, with respect to a Series of Bonds, an entity whose senior long term debt obligations, other senior unsecured long term obligations or claims paying ability or whose payment obligations under a Qualified Swap are guaranteed by an entity whose senior long term debt obligations, other senior unsecured long term obligations or claims paying are rated (at the time the subject Qualified Swap is entered into) at least as high as A3 by Moody's and A– by S&P, or the equivalent thereof by any successor thereto.

"Rating Agencies" means (i) each of Fitch, Moody's and S&P so long as each such agency shall have assigned a rating to any Series of Bonds and (ii) any other nationally recognized securities rating agency which shall have assigned a rating to any Series of Bonds.

"Series Resolution" means any resolution of the Authority adopted pursuant to the General Bond Resolution to authorize the issuance of a particular Series of Bonds.

"Special Project" means any (i) major resurfacing of the Turnpike System, replacement or reconstruction of the Turnpike System or any part thereof, or any other major or extraordinary repairs, renewals or replacements of the Turnpike System, (ii) studies, surveys, estimates and investigations in connection with any of the foregoing purposes, and (iii) advance or contribution authorized by the Act for the State of New Jersey's share or any portion thereof under the Federal aid highway laws of the cost of construction of any highway improvement determined by the Authority to be a major improvement necessary to restore or prevent physical damage to the Turnpike System, for the safe or efficient operation of such System, or to prevent loss of Pledged Revenues.

"Special Project Reserve Payment" means any amount provided or required to be provided in the Annual Budget for any calendar year to be deposited in the Special Project Reserve Fund during such year.

"Special Project Reserve Requirement" means, as of any date of calculation, (i) at any time during the period commencing January 1, 1992 and ending December 31, 1995, an amount equal to \$25,000,000, (ii) for calendar year 1996, an amount equal to \$30,000,000, (iii) for calendar year 1997, an amount equal to \$35,000,000, (iv) for calendar year 1998, an amount equal to \$40,000,000, (v) for calendar year 1999, an amount equal to \$45,000,000, and (vi) for calendar year 2000 and each year thereafter, an amount equal to \$50,000,000.

"Special Treasury Obligations" means United States Treasury Certificates of Indebtedness, Notes and Bonds-State and Local Government Series.

"S&P" means Standard & Poor's, a division of The McGraw-Hill Companies, Inc., and any successor thereto.

"Standby Agreement" means, with respect to a Series of Bonds, an irrevocable letter of credit and related reimbursement agreement, line of credit, standby bond purchase agreement or similar agreement providing for the purchase of all or a portion of the Bonds of such Series, as amended, supplemented or extended from time to time.

"Standby Purchaser" means, with respect to a Series of Bonds, the provider of the Standby Agreement for such Series of Bonds.

"State" means the State of New Jersey.

"Subordinated Indebtedness" means any evidence of indebtedness permitted to be issued in accordance with the provisions described herein under the caption "Variable Rate Debt; Commercial Paper; Subordinated Indebtedness".

"Substitute Credit Facility" means any letter of credit, standby bond purchase agreement, line of credit, surety bond, insurance policy or other insurance commitment or similar agreement (other than a

Qualified Swap or an Exchange Agreement), satisfactory to the Authority, that replaces a Credit Facility and is provided by a commercial bank, insurance company or other financial institution with a current long term credit rating (or whose obligations thereunder are guaranteed by a financial institution with a long term credit rating) from Moody's and S&P not lower than the credit rating of any Series of Bonds.

"Supplemental Resolution" means any resolution of the Authority adopted pursuant to Article XI of the General Bond Resolution.

"Tax Exempt Obligations" means Bonds of the Authority the interest on which is intended to be excluded from gross income of the Owners thereof for purposes of federal income tax, except for any alternative minimum or similar tax.

"Tender Agent" means, with respect to a Series of Bonds, any commercial bank or trust company organized under the laws of any state of the United States or any national banking association designated as a tender agent for such Series of Bonds, and its successor or successors hereafter appointed in the manner provided in the applicable Series Resolution.

"Traffic Engineers" means such engineer or engineering firm or corporation at the time retained by the Authority pursuant to the General Bond Resolution to perform the acts and carry out the duties provided for such Traffic Engineers in the Resolution.

"Turnpike Project" or **"Project"** means (a) any express highway, superhighway or motorway authorized under the Act to be acquired or constructed by or on behalf of the Authority and that, except for (i) the I-95 extension referred to in Section 19 of the Act and (ii) a proposed by-pass highway at Hightstown, is subject to tolls and charges by the Authority under Section 27:23-9 of the Act, and (b) the Arts Center, all bridges, tunnels, overpasses, underpasses, interchanges, entrance plazas, approaches, toll facilities, service areas, service stations, service facilities, communications facilities, park and ride projects, Feeder Roads and administration, storage and other buildings, machinery and equipment, and all other structures, facilities and appurtenances necessary for the construction, operation or maintenance of the Turnpike System and all replacements, improvements and modifications thereto, together in each case with all land and rights in land required therefor.

"Turnpike Revenues" means (i) all tolls, revenues, fees, charges, rents and other income and receipts derived from the operation of the Turnpike System, (ii) the proceeds of any business interruption insurance relating to the Turnpike System and of any other insurance which insures against loss of Turnpike Revenues, and (iii) amounts on deposit in the Construction Fund, the Special Project Reserve Fund and the General Reserve Fund, and available for deposit in the Revenue Fund and actually deposited therein.

"Turnpike System" means the existing New Jersey Turnpike and all Turnpike Projects in addition thereto.

"Variable Rate Debt" means obligations of the Authority, other than Parity Variable Rate Bonds, Commercial Paper or Subordinated Indebtedness, bearing interest at a variable rate and specifying a maximum rate of interest permitted by law.

SUMMARY OF CERTAIN PROVISIONS OF THE GENERAL BOND RESOLUTION

The following is a brief summary of certain provisions of the General Bond Resolution .

Issuance of Non-Refunding Bonds (General Bond Resolution, Section 203)

One or more Series of Non-Refunding Bonds may be issued for the purpose of (i) paying the Costs of Construction of a Project and (ii) to raise funds to complete any Project for which Non-Refunding Bonds were issued pursuant to clause (i) above, subject to the following conditions and tests, among others:

(1) The Net Revenues for any period of 12 consecutive calendar months (reflecting any adjustment in toll rates made at any time during such period as if such toll rates were effective since the beginning of such period out of the preceding 24 calendar months equal or exceed the Net Revenue Requirement for such 12 months without regard to the Bonds to be issued; and

(2) The estimated Net Revenues for the then current and each future calendar year to and including the fifth full calendar year after the estimated date when the Project will be placed in service equal or exceed the Net Revenue Requirement for each such year and Net Revenues in the fifth such calendar year equal or exceed future maximum Aggregate Debt Service in any year.

(3) There will be deposited (i) in the Debt Reserve Fund the amount, if any, necessary so that the balance in such fund equals the Debt Reserve Requirement, calculated immediately after delivery of such Non-Refunding Bonds, (ii) in any other Fund the amount required by the Series Resolution, and (iii) in the Construction Fund for the Project specified by the Series Resolution the remaining balance.

For the purposes of the above tests, the estimated Net Revenues are to be based on estimates by the Authority's Traffic Engineers, as defined in the General Bond Resolution, of Turnpike Revenues and estimates by the Authority's Consulting Engineers, as defined in the General Bond Resolution, of Operating Expenses and are to give effect to the construction of the Project for which such Bonds are being issued and any other uncompleted Project. The estimates of the Traffic Engineers are to reflect the effect of the construction, improvement or acquisition of any highway or other facility which any Federal, State or other agency is then projecting or planning and which, in their opinion, may be materially competitive with any part of the Turnpike System.

Issuance of Refunding Bonds (General Bond Resolution, Section 204)

One or more Series of Refunding Bonds may be issued to refund (i) any or all Outstanding Bonds of one or more Series or maturities within a Series or Bonds within a maturity or (ii) any Variable Rate Debt, Commercial Paper or Subordinated Indebtedness.

Bonds may be issued to refund outstanding Bonds only if, among other conditions, (i) either the Authority meets the tests described above under "ISSUANCE OF NON-REFUNDING BONDS" or Aggregate Debt Service is not increased for any calendar year as a result of such refunding and (ii) if there shall be in effect a Qualified Swap with respect to the Bonds to be refunded and such Qualified Swap shall be terminated upon the date such Refunding Bonds are issued, moneys in an amount sufficient to make the payment, if any, due by the Authority under such Qualified Swap upon such termination are deposited with the Trustee.

The issuance of Bonds to refund Variable Rate Debt, Commercial Paper or Subordinated Indebtedness is subject to substantially the same conditions and tests referred to above under "ISSUANCE OF NON-REFUNDING BONDS".

Pledge Effected by General Bond Resolution (General Bond Resolution, Sections 501 and 504)

The General Bond Resolution pledges for the payment of the principal and Redemption Price of, and interest on, the Bonds, and all obligations of the Authority under any Qualified Swap and certain Credit Facilities securing all or a portion of any Series of Bonds, in accordance with their terms and the provisions of the General Bond Resolution and such Qualified Swap and Credit Facilities, subject only to the provisions of the General Bond Resolution permitting the application thereof for the purposes and on the terms set forth in the General Bond Resolution: (i) the proceeds of the sale of the Bonds, (ii) all Pledged Revenues, and (iii) amounts on deposit in all Funds established by the General Bond Resolution, except for certain funds deposited in the Construction Fund and, under certain circumstances, the General Reserve Fund. The pledge and lien created by the General Bond Resolution may be modified by a Series Resolution or a supplemental resolution to provide for a pledge of amounts on deposit in particular funds or accounts to a particular Series of Bonds, the proceeds of which Series of Bonds funded such funds or accounts, superior to the pledge of such funds and accounts to other Bonds. The General Bond Resolution requires that the Authority shall pay out of moneys in the Revenue Fund, free and clear of any pledge created by the General Bond Resolution, all amounts required for reasonable and necessary Operating Expenses.

Funds

Construction Fund: The General Bond Resolution provides that the Authority shall establish within the Construction Fund a separate account for each Project the costs of which are to be paid in whole or in part out of the Construction Fund.

The Authority will pay into each separate account established for each Project the proceeds of Non-Refunding Bonds issued therefor, to the extent not required to make other required deposits. Amounts in each separate account established for each Project financed by Non-Refunding Bonds shall be applied to the purposes specified in the Series Resolution authorizing such Bonds. Certain insurance proceeds are also to be paid into the Construction Fund.

Moneys in the Construction Fund shall be invested by the Authority to the fullest extent practicable in Investment Securities maturing in such amounts and at such times as may be necessary to provide funds when needed to pay the Costs of Construction or other costs payable from such moneys.

To the extent that other moneys are not available therefor, amounts in the Construction Fund, except for moneys accepted from the United States Government or the State on the condition that such moneys not be encumbered by the Authority's debt service obligations, shall be applied to the payment of Debt Service.

Upon completion, substantial completion or abandonment of any Project and upon certification of an Authorized Officer of the Authority, any amount remaining in the separate account established therefor not required to complete payment of the Costs of Construction shall be deposited in the Debt Reserve Fund to the extent necessary to meet the Debt Reserve Requirement, and the balance shall be deposited into the Revenue Fund or the Maintenance Reserve Fund as directed by the Authority.

(General Bond Resolution, Section 503)

Debt Service Fund: The Trustee shall pay or request the Depository holding such Fund to pay from the Debt Service Fund the following amounts (a) to the respective Paying Agents, (i) the payment of interest and maturing principal amounts of the Bonds when due, (ii) payment of the redemption price and accrued interest on the redemption of Bonds, and (iii) payment of the purchase price of Bonds purchased through application of moneys accumulated in this fund by reason of the payment of any Sinking Fund Installment, and (b) to the Qualified Swap Provider, any amounts due and payable by the Authority during such month pursuant to a Qualified Swap under which the Authority is the fixed rate payor. All amounts held at any time in the Debt Service Fund shall be held on a parity basis for the ratable security and payment of Accrued Debt Service for the benefit of the Owners of all Bonds and of any Qualified Swap Provider in proportion to the amounts accrued and due to each of them.

(General Bond Resolution, Section 505)

Debt Reserve Fund: Amounts in the Debt Reserve Fund are to be applied to make up any deficiency in the Debt Service Fund. The General Bond Resolution provides that as a condition to the issuance of each Series of Bonds there shall be deposited in the Debt Reserve Fund the amount, if any, necessary so that the amount in such Fund equals the Debt Reserve Requirement calculated immediately after the issuance of such Series of Bonds.

Whenever the moneys and securities on deposit in the Debt Reserve Fund, together with the amount in the Debt Service Fund, are sufficient to pay in full all outstanding Bonds in accordance with their terms, together with any obligations owed by the Authority under any Credit Facility or any Qualified Swap secured on a parity with the Bonds, the funds on deposit in the Debt Reserve Fund are to be transferred to the Debt Service Fund.

In lieu of the required deposits into the Debt Reserve Fund, the Authority may deposit into the Debt Reserve Fund a surety bond or an insurance policy or a letter of credit in an amount equal to the difference between the Debt Reserve Requirement and the sums then on deposit in the Debt Reserve Fund, if any. The surety bond, insurance policy or letter of credit shall be payable on any interest payment date on which moneys will be required to be withdrawn from the Debt Reserve Fund and applied to the payment of Debt Service and such withdrawal cannot be withdrawn from the Debt Reserve Fund and applied to the payment of Debt Service and such withdrawal cannot be met by amounts on deposit in the Debt Reserve Fund or provided from any other Fund under the Resolution. The insurer providing such surety bond or insurance policy shall be an insurer whose municipal bond insurance policies insuring the payment, when due, of the principal of and interest on municipal bond issues results in such issues being rated in the highest rating category by both S&P and Moody's or any insurer who holds the highest policyholder rating accorded insurers by A.M. Best & Co. or any comparable service or successor service, provided that if the insurer is rated by A.M. Best & Co. but not by both Moody's and S&P, the Authority shall not agree to purchase the surety bond or insurance policy from such insurer unless the Authority gives at least fifteen (15) days' advance notice of its intention to do so to each of the Rating Agencies, which notice shall specify the identity of such insurer. The letter of credit issuer shall be a bank or trust company which is rated not lower than the second highest rating category (without regard to rating sub-categories) by both Moody's and S&P, and the letter of credit itself shall be rated in the highest category of both such ratings agencies. If a disbursement is made pursuant to a surety bond, an insurance policy or a letter of credit, the Authority shall be obligated either (i) to reinstate the maximum limits of such surety bond, insurance policy or letter of credit or (ii) to deposit into the Debt Reserve Fund, funds in the amount of the disbursement made under such surety bond, insurance policy or letter of credit, or a combination of such alternatives, as shall provide that the amount in the Debt Reserve Fund equals the Debt Reserve Requirement within a time period not longer than would be required to restore the Debt Reserve Fund by application of moneys in the Revenue Fund. The General Bond Resolution requires that if there is a reduction or suspension of any of the credit ratings of any insurer or letter of credit bank providing support for the Debt Reserve Fund, the Authority shall, within the time period provided in the General

Bond Resolution, provide a substitute surety bond, insurance policy or letter of credit meeting the requirements of the General Bond Resolution or shall deposit cash in the Debt Reserve Fund so that the amount in such Fund shall equal the Debt Reserve Requirement.

The Authority's payment obligation under any Qualified Swap shall be made from the Debt Service Fund if the Authority's obligation under the Qualified Swap remains a fixed rate obligation; otherwise, such payment shall be made from the General Reserve Fund. The Authority will not enter into any Qualified Swap unless it gives it at least fifteen (15) days' advance notice of its intention to do so to each of the Rating Agencies, which notice shall specify the identity of the Qualified Swap Provider.

(General Bond Resolution, Section 506)

Maintenance Reserve Fund: Amounts in the Maintenance Reserve Fund may be applied to the cost of major resurfacing, replacement or reconstruction of the Turnpike System and major or extraordinary repairs, renewals, or replacement of the Turnpike System, to the extent stated in a certificate of the Consulting Engineers filed with the Trustee and the Authority to be necessary (i) to restore or prevent physical damage to the Turnpike System or any part thereof, (ii) for the safe and efficient operation of the Turnpike System or (iii) to prevent loss of Pledged Revenues. Under certain conditions this fund is also to be used to meet certain deficiencies which may require transfers to be made to the Debt Service Fund.

(General Bond Resolution, Section 507)

Special Project Reserve Fund: Amounts in the Special Project Reserve Fund may be applied to the cost of one or more Projects or Special Projects. This fund may also be used in an amount up to 20% of the amount on deposit therein on the first day of any year to meet budgeted payments into the Maintenance Reserve Fund. Under certain circumstances, it is also to be used to meet deficiencies in the following Funds: the Debt Service Fund, the Debt Reserve Fund, the Charges Fund and the General Reserve Fund and excess amounts may be deposited in the Revenue Fund.

(General Bond Resolution, Section 509)

General Reserve Fund: Amounts in the General Reserve Fund are to be used to make up deficiencies in the Revenue Fund, the Debt Service Fund, the Debt Reserve Fund, the Charges Fund, the Maintenance Reserve Fund and the Special Project Reserve Fund. Amounts in this fund which are not required to remedy any such deficiency may be applied, subject to the terms of any pledge securing Subordinated Indebtedness. Variable Rate Debt, Commercial Paper or any Credit Facility supporting such obligations and any Exchange Agreement to: (i) the purchase or redemption of any Bonds and expenses in connection therewith; (ii) payment of the principal or redemption price of and interest on any Variable Rate Debt or Commercial Paper; (iii) payment of the principal or redemption price of and interest on any Subordinated Indebtedness; (iv) payments into the Construction Fund; (v) or the provision of reserves for these purposes; (vi) payments into the Revenue Fund; or (vii) any other corporate purpose of the Authority, including but not limited to any payments to be made to the State with respect to the development of State transportation projects.

(General Bond Resolution, Section 510)

Satisfaction of Sinking Fund Installments (General Bond Resolution, Section 505)

The Trustee, from amounts on deposit in the Debt Service Fund for Sinking Fund Installments, and the Authority (in lieu of depositing moneys in the Debt Service Fund) from any available funds, may purchase Bonds subject to redemption by operation of Sinking Fund Installments. Bonds so retired may be credited against the Sinking Fund Installment at the then applicable sinking fund Redemption Price. If the principal amount of such Bonds so retired through application or in lieu of any Sinking Fund Installment shall exceed the amount of such Sinking Fund Installment, such excess shall be credited toward future Sinking Fund Installments in such order as the Authority shall determine, provided, however, that the Authority shall give notice to the Trustee of its election to credit any such excess to a Sinking Fund Installment at least 45 days prior to the due date thereof.

Variable Rate Debt; Commercial Paper; Subordinated Indebtedness (General Bond Resolution, Sections 511 and 512)

The Authority may, at any time or from time to time, issue Variable Rate Debt and Commercial Paper payable out of, and which may be secured by a pledge of, such amounts in the General Reserve Fund as may from time to time be available for the purpose of payment thereof; provided, however, that (a) such indebtedness shall be incurred only for any one or more of the purposes set forth above under the description of the General Reserve Fund and the proceeds of such Variable Rate Debt or Commercial Paper shall only be applied for such purpose or purposes, (b) the Authority shall covenant to provide sufficient moneys in the General Reserve Fund to pay the Variable Rate Debt and Commercial Paper when and as due, and (c) such indebtedness shall be, and shall be expressed to be, subordinate in all respects to the Bonds issued or to be issued under the General Bond Resolution and subordinate to all obligations payable from Funds other than the General Reserve Fund but senior in all respects to any pledge to secure Subordinated Indebtedness. No Variable Rate Debt or Commercial Paper may be issues unless the Authority has first determined by certified resolution that the issuance of such Variable Rate Debt or Commercial Paper, as applicable, will not impair the financial viability of the Authority or its operations.

The Authority may incur Subordinated Indebtedness for one or more of the purposes mentioned above under description of the General Reserve Fund. Such indebtedness may be payable out of and secured by a pledge of such amounts in the General Reserve Fund as may from time to time be available therefor. Such pledge must be subordinate to the pledge created by the General Bond Resolution.

Variable Rate Debt, Commercial Paper and Subordinated Indebtedness may be issued without regard to the level of Net Revenues of the Authority but all Debt Service must be paid before any further payment of principal or interest on Variable Rate Debt, Commercial Paper or Subordinated Indebted if any of the following events occur: (i) an event of default under the General Bond Resolution resulting from the non-payment of Debt Service (until cured); (ii) an event of default occurs under the General Bond Resolution with respect to Bonds resulting in acceleration of Principal Installments and interest on Bonds; (iii) the principal and interest on Variable Rate Debt, Commercial Paper or Subordinated Indebtedness is accelerated; (iv) the Authority becomes insolvent; or (v) early termination of a Qualified Swap. Any event of default with respect to Variable Rate Debt, Commercial Paper or Subordinated Indebtedness shall not in itself create the right to declare an event of default with respect to Bonds. No Subordinated Indebtedness may be issued unless the Authority has first determined by certified resolution that the issuance of such Subordinated Indebtedness will not impair the financial viability of the Authority and its operations.

In connection with the issuance of Variable Rate Debt, Commercial Paper or Subordinated Indebtedness, the Authority may enter into Exchange Agreements with respect to such obligations if the Authority determines that such Exchange Agreement will assist the Authority in more effectively managing its interest costs. The Authority's payment obligation under any such Exchange Agreement shall be made from the General Reserve Fund.

Investment of Certain Funds (General Bond Resolution, Section 603)

The General Bond Resolution provides that certain funds held thereunder may, and in the case of the Debt Service Fund, the Debt Reserve Fund and the Charges Fund shall, be invested and reinvested to the fullest extent practicable in Investment Securities, as defined in the General Bond Resolution. The General Bond Resolution provides that such investments shall mature no later than such times as shall be necessary to provide moneys when needed for payments from such funds and, in the case of the following funds, not later than the period set forth below:

- the Revenue Fund, one year,
- the Debt Reserve Fund, five years,
- the Maintenance Reserve Fund, two years,
- the Special Project Reserve Fund, two years, and
- the General Reserve Fund, three years.

Net Investment income from investment of the Debt Service Fund shall be deposited in such Fund or Funds as the Authority directs from time to time provided that all deposits from the Revenue Fund required by the General Bond Resolution are made. Net investment income from investment of the Debt Reserve Fund shall be deposited in the same manner as other excess moneys in such fund as provided in the General Bond Resolution. Net investment income from all other Funds, except the Construction Fund, shall be paid into the Revenue Fund. Net investment income from the Construction Fund shall be held in the Construction Fund.

Valuation and Sale of Investments (General Bond Resolution, Section 604)

Investment securities in any Fund created under the provisions of the General Bond Resolution shall be deemed at all times to be part of such Fund, and any profit realized from the liquidation of such investments shall be credited to such Fund and any loss resulting from liquidation of such investment shall be charged to such Fund.

A valuation of the Debt Reserve Fund shall be made as of December 1 in each year. The value of securities held under the General Bond Resolution shall mean the amortized value thereof, provided, however, that all Special Treasury Obligations shall be valued at par and those obligations which are redeemable at the option of the holder shall be valued at the price at which such obligations are then redeemable. The computations shall include accrued interest on securities paid as a part of the purchase price thereof and not collected. Amortized value, when used with respect to a security purchased at par, means the purchase price of such security and when used with respect to a security purchased at a premium above or discount below par, means as of any subsequent date of valuation, the value obtained by dividing the total premium or discount by the number of days remaining to maturity on any such security at the time of such security at the time of such purchase and by multiplying the amount as calculated by the number of days having passed since the date of purchase and (i) in the case of a security purchased at a premium, by deducting the product thus obtained form the purchase price, and (ii) in the case of a security purchase at a discount, by adding the product thus obtained to the purchase price.

Annual Budget (General Bond Resolution, Section 710)

The Authority covenants that, not less than 40 days before the beginning of any calendar year, the Authority shall prepare and file with the Trustee a preliminary budget of Operating Expenses and reserves therefor for the ensuing year. Each such budget and each Annual Budget shall include, in addition to appropriations for all anticipated Operating Expenses and reserves therefor, provision for Maintenance Reserve Payments and for Special Project Reserve Payments. Such preliminary budget and any Annual Budget may set forth such additional material as the Authority may determine and shall contain a certificate of the Consulting Engineers approving such preliminary budget or such Annual Budget, as the case may be.

On or before the 15th day of each calendar year, the Authority shall finally adopt the Annual Budget for such year. The Authority may at any time adopt an amended Annual Budget for the remainder of the then current calendar year. Copies of the Annual Budget and of any amended Annual Budget shall be promptly filed with the Trustee, for inspection by Bondholders.

The Special Project Reserve Payments included in the Annual Budget shall be in an amount equal to the difference between (i) the balance on deposit in the Special Project Reserve Fund on the date of adoption of the Annual Budget and (ii) the Special Reserve Requirement.

If, in the Annual Budget for any calendar year or in any amended Annual Budget for any calendar year, the total Operating Expenses stated exceed 110% of the total Operating Expenses stated in the preliminary budget for such year as filed with the Trustee, such Annual Budget or amended Annual Budget shall not be effective or supersede any prior budget until the Authority shall have prepared a report in reasonable detail as to the reasonableness and necessity thereof, file copies of such report with the Trustee, and thereafter held a public hearing thereon at which any Bondholder may appear in person or by agent or attorney and present any objections he may have.

If the Owners of 25% in aggregate principal amount of the Bonds then Outstanding shall so request in writing at the time of the public hearing mentioned in the immediately preceding paragraph, the Authority shall obtain a report by the Consulting Engineers as to the reasonableness and necessity of such budget, and the Annual Budget for such year shall not be adopted until ten days after a copy of such report shall have been filed with the Trustee.

Toll Covenants (General Bond Resolution, Sections 713 and 714)

The Authority covenants in the General Bond Resolution that:

(i) It will at all times fix, charge and collect such tolls for the use of the Turnpike System as are required in order that in each calendar year Net Revenues shall at least equal the Net Revenue Requirement for such year.

(ii) On or before December 1 in each year, the Authority will review its financial condition in order to estimate whether the Net Revenues for such year and for the next succeeding year will be sufficient to comply with the toll covenant described in paragraph (i) above. Such review shall take into consideration the completion of any uncompleted Projects and the issuance of future series of Bonds, if necessary, to finance the completion of such Projects. If the Authority determines that the Pledged Revenues may not be so sufficient, it will cause its Traffic Consultants to make a study and to recommend a schedule of tolls which will provide sufficient Pledged Revenues in the following year to comply with the toll covenant described in paragraph (i) above and will cause additional Pledged Revenues to be collected in the following and later years sufficient to eliminate any deficiency at the earliest practicable time. The Authority will place the recommended schedule of tolls in effect no later than the next April 1.

Failure to comply with the toll covenant described in paragraph (i) above in any calendar year will not constitute an event of default under the General Bond Resolution if either (a) the Authority complies with the covenant described in paragraph (ii) above or (b) the Authority's Traffic Consultants are of the opinion that a toll schedule which will comply with the toll covenant described in paragraph (i) above is impracticable at that time, and the Authority therefor cannot comply with the covenant described in paragraph (ii) above, and the Authority establishes a schedule of tolls which is recommended by its traffic consultants to comply as nearly as practicable with the tolls covenant described in paragraph (i) above.

The Authority will not reduce any toll (except by way of certain adjustments or reclassifications of toll rates as referred to below) unless the following conditions and tests shall be met:

(1) There shall have been delivered to the Trustee a certificate of an Authorized Officer of the Authority to the effect that the cumulative reductions in the immediately preceding 12 months, including the proposed and all other reductions as if they had been in effect for such period, would not reduce Net Revenues for such period by more than one percent (1%), with schedules of traffic and toll collections demonstrating such conclusion and that, taking into account such reductions, the Authority would have met the Net Revenue Requirements for such period; or

(2) (i) the Net Revenues for the preceding calendar year shall have equaled at least the Net Revenue Requirement for such preceding calendar year;

(ii) the estimated Net Revenues for the then current and each future calendar year to and including the latest maturity of the Bonds (giving effect to the proposed toll reduction but not to any additional traffic which might result therefrom) shall equal at least the Net Revenue Requirement (giving effect to future Series of Bonds estimated to be required to complete uncompleted Additional Projects) for each such year;

(iii) the Authority is not in default in the performance of any of the provisions of the Bonds or the General Bond Resolution or of any Qualified Swap; and

(iv) the amount in the Debt Reserve Fund is at least equal to the Debt Reserve Requirement.

For purposes of the test referred to in paragraph (2)(ii) above, the estimated Net Revenues are to be based on estimates by the Authority's Traffic Consultants of Turnpike Revenues and estimates by the Authority's Consulting Engineers of Operating Expenses, Maintenance Reserve Payments and Special Project Reserve Payments in each case giving effect to the completion of any uncompleted Turnpike Project. The estimates of the Traffic Consultants are to reflect the effect of the construction, improvement or acquisition of any highway or other facility which any Federal, State or other agency is then projecting or planning and which, in their opinion, may be materially competitive with any part of the Turnpike System.

The Authority may increase toll rates and make any other adjustment or reclassification of toll rates or establish special toll rates provided that such action (i) is concurred in by the Traffic Engineers and affects tolls accounting for less than 10% of the Turnpike Revenues, as evidenced by a certificate filed with the Trustee, or (ii) is subject to a certification of the Traffic Engineer, filed with the Trustee, that the changed tolls will not result in a reduction in Net Revenues by reason of collectibility, reduction in traffic or costs of operation or any other reason.

The Authority shall not grant free passage for the use of any portion of the Turnpike System subject to tolls, except (i) to members, officers and employees of the Authority actually in the performance of their duties or in the course of traveling to or from the place of the performance of such duties, to members of the New Jersey State Police Force, to members of any fire department or any local police department in the performance of their duties and to any public or private ambulance or rescue squad service for the emergency passage of its ambulance or rescue vehicles, (ii) by means of passes or otherwise, to such vehicles owned by individuals, corporations or partnerships with which the Authority has entered into leases, concession contracts or service and maintenance contracts, as in its discretion may be deemed necessary for the operation of concessions and facilities upon the Turnpike System, for the maintenance of such concessions or facilities and for the prompt and economical furnishing of emergency services to patrons of the Turnpike System or any concession or facility thereof, (iii) commuter buses (as defined from time to time by the Authority's regulations), but only if and to the extent that the Authority first determine by certified resolution that the exemption of such commuter buses from tolls will not impair the financial viability of the Authority and its operations, and (iv) to others by passes, provided that there shall not be more than fifty such passes outstanding at any one time.

Insurance (General Bond Resolution, Section 715)

The Authority covenants that it will at all times maintain, to the extent reasonable obtainable, the, following kinds and the following amounts of insurance, or otherwise make provision for the payment of claims against the Authority, with such variations as shall reasonable be required to conform to applicable standard or customary insurance practice and subject to such exceptions and permissible deductions as are ordinarily required, all to be determined by the Authority after consultation with its insurance consultants:

(1) Property insurance on all real and personal property, including bridges and viaducts owned by the Authority in sufficient amounts to cover direct physical loss or damage from causes normally insured against;

(2) Liability insurance to cover injury to persons or damage to property for claims arising out of the construction, maintenance, reconstruction or operation of the roadway and other facilities owned or operated by the Authority;

(3) Business interruption insurance covering loss of Pledged Revenues due to any interruption in the use of the roadway or other facilities of the Authority which would cause a loss of revenue to the Authority;

(4) Any coverage required to be maintained by any State or federal law, including, but not limited to, workers' compensation coverage, and motor vehicle liability coverage;

(5) Any coverage which is customarily deemed appropriate to protect the interests of the Authority during any construction or reconstruction of any portion of the Turnpike System; and

(6) Any additional insurance which may be necessary or advisable to protect the interests of the Authority.

Reports (General Bond Resolution, Sections 717 and 718)

The Authority covenants to file with the Trustee, and to mail to those Bondholders who file with it their names and addresses for such purpose, periodic reports on the operations of the Turnpike System, including statements of traffic, Pledged Revenues and Net Revenues. Quarterly reports are to cover the preceding quarter and 12-month period, with comparative data for corresponding periods a year earlier. In addition, semi-annual reports are to cover a Six-month period and contain, among other things, a statement of transactions in and investments of funds established by the General Bond Resolution, and annual reports are to contain statements of traffic, Pledged Revenues, Net Revenues, fund transactions and investments audited by an independent public accountant or accounting firm of recognized national standing approved by the Trustee. The Authority will cause an annual audit to be made of its books and accounts relating to the Turnpike System for the preceding calendar year.

With respect to each Project under construction, the Authority covenants to file and to mail (as provided above) quarterly construction progress reports prepared by its consulting engineers, with comparisons between actual elapsed times and costs and previously estimated times and costs.

Arbitrage (General Bond Resolution, Section 720)

The Authority covenants that it will not at any time take any action or fail to take any action which would cause any Tax Exempt Obligation to be an arbitrage bond within the meaning of the Code or permit any of the proceeds of Tax Exempt Obligations or any other funds of the Authority to be used directly or indirectly to acquire any securities or obligations the acquisition of which would cause any Tax Exempt Obligation to be an arbitrage bond within the meaning of the Code.

Events of Default and Remedies (General Bond Resolution, Sections 801 and 804)

The General Bond Resolution defines events of default which include, among others, (i) defaults (a) in the due and punctual payment of the principal or redemption price of any Bond when and as the same shall become due and payable or the payment of the purchase price of a tendered Bond on any date on which Bonds are required to be purchased pursuant to a Series Resolution, (b) in the due and punctual payment of any installment of interest on any Bond, (c) in the compliance with the toll covenant of the General Bond Resolution, except as stated under "Toll Covenants" above, (d) the Authority undertaking the filing of a petition seeking a composition of indebtedness under the federal bankruptcy laws, or under any other applicable law or statute of the United States of America or of the State of New Jersey, (e) in the performance of any other covenant or condition in the General Bond Resolution or in the Bonds if such default shall continue for 60 days after notice by the Owners of not less than 10% in principal amount of Bonds outstanding, and (f) failure by the Authority to vacate the appointment by a court of a receiver or receivers of the Turnpike System or any part thereof, or of the tolls and other revenues therefrom within 90 days after the entry thereof, and (ii) the Trustee's receipt from the Standby Purchaser of notice of the Occurrence of an "event of default" under the Standby Agreement.

If an event of default shall happen and shall have not been remedied, the Trustee may, and upon written request of the Owners of 10% in principal amount of the Bonds outstanding shall, proceed to enforce by such proceedings at law or in equity as it deems most effectual, the rights of the Owners of Bonds issued under the General Bond Resolution, and either the Trustee or the Owners of 25% in principal amount of the Bonds then outstanding may declare the principal of and interest on all the Bonds then outstanding due and payable immediately.

No Bondholder shall have any right to institute any suit or proceeding for the execution of any trust under the General Bond Resolution, or for the enforcement of any provision of the General Bond Resolution, unless such Bondholder shall have given previously the Trustee written notice of the event of default on account of which such suit or proceeding is to be instituted, and unless the holders of at least 25% in principal amount of the Bonds then outstanding shall have filed a written request to the Trustee and shall have afforded the Trustee a reasonable opportunity to exercise its powers or to institute such suit or proceeding, and unless there shall have been offered to the Trustee adequate security and indemnity against its costs, expenses and liability to be incurred and the Trustee shall have refused or failed to comply with such request within 60 days after receipt of such notice, request and offer of indemnity. Nothing in the General Bond Resolution or the Bonds affects or impairs the Authority's obligation to pay the Bonds and the interest thereon when due or the right of any Bondholder to enforce such payment.

Resignation and Removal of Trustee (General Bond Resolution, Sections 908, 909 and 910)

The Trustee may at any time resign and be discharged of its duties and obligations under the General Bond Resolution by giving the Authority not less than 60 days written notice and publishing notice of its resignation in certain newspapers. The Trustee may also be removed at any time by the Owners of a majority in principal amount of the Bonds then Outstanding by a signed and acknowledged instrument. The resignation, discharge or removal of the Trustee shall not become effective until a successor Trustee has assumed the duties and obligations of the Trustee under the General Bond Resolution.

In the case of the resignation or removal of the Trustee, or if the Trustee is incapable of acting or is otherwise relieved of its duties, the Owners of a majority in principal amount of the Bonds then Outstanding may appoint a successor. Any successor Trustee shall be a bank or trust company or national banking association, doing business and having its principal office in the City and State of New Jersey and having capital stock and surplus aggregating at least $50,000,000, if there be such a bank or trust company or national banking association willing and able to accept the office on reasonable and customary terms and authorized by law to perform all the duties imposed upon it by the General Bond Resolution.

Co-Trustee (General Bond Resolution, Section 917)

At any time so long as no event of default has occurred and is continuing under the General Bond Resolution, the Authority, by Supplemental Resolution, may, solely in its discretion, appoint an additional institution as a separate or Co-Trustee meeting the requirements of a successor trustee under the General Bond Resolution, in which event each and every remedy, power, right, claim, demand, cause of action, immunity, estate, title interest and lien expressed or intended by the General Bond Resolution to be exercised by or vested in or conveyed to the Trustee with respect thereto shall be exercisable by and vest in such separate or Co-Trustee, but only to the extent necessary to enable such separate or Co-Trustee to exercise such powers, rights and remedies, and every covenant and obligation necessary to the exercise thereof by such separate or Co-Trustee shall run to and be enforceable by either of them. In case any separate or Co-Trustee, or a successor, shall become incapable of acting, resign or be removed, all the estates, properties, rights, powers, trusts, duties and obligations of such separate or Co-Trustee, so far as permitted by law, shall vest in and be exercised by the Trustee until the appointment, if any, by the Authority of a successor to such separate or Co-Trustee. Any Co-Trustee appointed by the Authority pursuant to the General Bond Resolution may resign in accordance with the General Bond Resolution or be removed in accordance with the General Bond Resolution, in which case all powers, rights and remedies vested in the Co-Trustee shall again vest in the Trustee as if no such appointment of a Co-Trustee had been made. No successor Co-Trustee shall be required (but shall be permitted subject to the requirements of the General Bond Resolution) so long as the Trustee continues to act under the General Bond Resolution.

In connection with the appointment of any Co-Trustee pursuant to the General Bond Resolution the Authority, the Trustee and the Co-Trustee shall execute a separate Agreement in form acceptable to the parties thereto defining the respective duties of such Co-Trustee and the Trustee under the General Bond Resolution.

Series Resolutions (General Bond Resolution, Section 1001)

The Authority may adopt at any time and from time to time Series Resolutions to authorize the issue of Series of Bonds under the General Bond Resolution. A Series Resolution may also designate Variable Rate Debt, Commercial Paper and Subordinated Indebtedness as Bonds if at the time of such designation specified requirements of the General Bond Resolution are met with respect to such indebtedness. A Series Resolution shall be fully effective in accordance with its terms upon its adoption by the Authority in order to specify, determine or authorize any matters and things concerning any such Bonds or the proceeds thereof which are not contrary to or inconsistent with the General Bond

Resolution. Upon the adoption of a Series Resolution, the Authority shall file with the Trustee a copy thereof, certified by an Authorized Officer of the Authority.

Amendments and Supplements (General Bond Resolution, Sections 1101 and 1102)

The Authority may, without Bondholder consent, adopt at any time or from time to time a Supplemental Resolution supplementing and amending the General Bond Resolution or any Series Resolution or any Supplemental Resolution for one or more of the following purposes:

(1) To close the General Bond Resolution against, or impose additional limitations or restrictions on, the issuance of Bonds, or of other notes, bonds, obligations or evidences of indebtedness;

(2) To impose additional covenants or agreements to be observed by the Authority which are not contrary to or inconsistent with the General Bond Resolution;

(3) To impose other limitations or restrictions upon the Authority;

(4) To cure any ambiguity, omission or defect in the General Bond Resolution, any Series Resolution or Supplemental Resolution in such manner as shall not be inconsistent with the overall intent of the General Bond Resolution and shall not impair or adversely affect the security for any Bonds issued under the General Bond Resolution;

(5) To revise the timing for the performance of certain of the Authority's covenants contained in the General Bond Resolution in the event that the Authority's fiscal year is ever changed from a calendar year to a different 12 month period, provided that such revisions shall require the performance of such covenants within the same relative time periods of the new fiscal year as is required currently in a calendar year;

(6) To surrender any right, power or privilege reserved to or conferred upon the Authority by the General Bond Resolution;

(7) To confirm, as further assurance, any pledge of or lien upon the Pledged Revenues or any other moneys, securities or funds;

(8) To effect any other change necessary to maintain the excludability of the interest on Tax Exempt Obligations from gross income for federal income tax purposes;

(9) To appoint a Co-Trustee in the discretion of the Authority pursuant to the General Bond Resolution; and

(10) To effect any other change in the General Bond Resolution, any Series Resolution or Supplemental Resolution that does not materially adversely affect the Owners of the Bonds.

The Authority also may adopt modifications or amendments to the General Bond Resolution, any Series Resolution or Supplemental Resolution in addition to the amendments described above, (i) by adoption of a Supplemental Resolution with the written consent of the Holders of at least 51% in principal amount of the Bonds Outstanding at the time such consent is given, or (ii) in case less than all of the several Series of Bonds then Outstanding are affected by the modification or amendment, of the Holders of at least 51% in principal amount of the Bonds of each Series so affected and Outstanding at the time such consent is given; provided, however, that if such modification or amendment will, by its terms, not take effect so long as any Bonds of any specified like Series and maturity remain Outstanding, the consent of the Owners of such Bonds shall not be required and such Bonds shall not be deemed to be Outstanding for the purpose of any calculation of Outstanding Bonds. If permitted by an applicable Series Resolution, a Credit Issuer for a Credit Facility or Substitute Credit Facility securing a Series of Bonds shall have the right to consent to amendments on behalf of the Owners of the Bonds of such Series. No such modification or amendment shall permit a change in the terms of redemption or maturity of the principal of any Outstanding Bonds, or of any installment of interest thereon or a reduction in the principal amount or the Redemption Price thereof or in the rate of interest thereon without the consent of the Holder of such Bond, or shall reduce the percentages or otherwise affect the classes of Bonds the consent of the Holders of which is required to effect any such modification or amendment, or shall change or modify any of the rights or obligations of any Fiduciary without its written assent thereto.

Each such Supplemental Resolution shall be accompanied, when filed with the Trustee, by (a) a Counsel's Opinion to the effect that such resolution has been duly and lawfully adopted by the Authority in accordance with the provisions of the General Bond Resolution, is authorized or permitted by the General Bond Resolution and, when effective, will be valid and binding upon the Authority, the Bondholders and the Trustee, and (b) if such Supplemental Resolution shall change or modify any of the rights or obligations of any Qualified Swap Provider, any Standby Purchaser, any Tender Agent or any Remarketing Agent, the written consent of such person to such Supplemental Resolution (which consent shall not be unreasonably withheld).

Defeasance (General Bond Resolution, Section 1201)

If the principal or redemption price, if applicable, of and interest due and to become due on all Bonds is paid to the Bondholders and all obligations of the Authority due or to become due under each Qualified Swap and Standby Agreement then in effect or thereupon terminated is paid in accordance with the terms thereof, then the pledge of Pledged Revenues and other moneys and all covenants, agreements and other obligations of the Authority to the Bondholders, each Qualified Swap Provider and each Standby Purchaser are discharged and satisfied. All outstanding Bonds prior to the maturity or redemption date thereof shall be deemed to have been paid and shall cease to be entitled to any lien, benefit or security under the General Bond Resolution and all covenants, agreements and obligations of the Authority to the Owners thereof shall be discharged and satisfied, if the following conditions are met: (i) (a) the interest rates in effect with respect to Bonds that are to be deemed paid with the meaning of the defeasance provisions of the General Bond Resolution cannot be reset prior to the date on which such Bonds are to be redeemed or their maturity date, and (b) such Bonds are not subject to tender for purchase prior to the date on which such Bonds are to be redeemed or their maturity date, (ii) in the case of the Bonds to be redeemed, the Authority shall have given to the Trustee instructions to pay or redeem all of said Bonds in accordance with the applicable Sinking Fund Installments and to publish the notice of redemption thereof, (iii) there shall have been deposited with the Trustee in trust either moneys in an amount which shall be sufficient, or Federal Securities, the principal of and interest on which, when due, will provide moneys which, together with any moneys also deposited, shall be sufficient to pay when due the principal or redemption price, if applicable, and interest due or to become due on such Bonds, and (iv) in the event such Bonds are not to be redeemed with the next succeeding 60 days, the Authority shall have given the Trustee irrevocable instructions to publish, as soon as practicable, a notice to the Owners of such Bonds that the above deposit has been made with the Trustee and that such Bonds are deemed to be paid and stating the maturity or redemption dates upon which moneys are to be available to pay the principal or redemption price, if applicable, of such Bonds.

No payments of principal of any of the Federal Securities deposited with the Trustee or interest thereon shall be withdrawn or used for any purpose other than the payment of such principal or Redemption Price of, or interest on, the Bonds deemed to be paid unless after such withdrawal the amount held by the Trustee and interest to accrue on Federal Securities so held shall be sufficient to provide fully for the payment of the principal or Redemption Price of and interest on the balance of such Bonds.

Amounts deposited with the Trustee for the payment of Principal Installments of and interest on any Bonds deemed to be paid, if so directed by the Authority, shall be applied by the Trustee to the purchase of such Bonds in accordance with the General Bond Resolution. Bonds for which a redemption date has been established may be purchased on or prior to the 45th day preceding the redemption date. The principal amount of Bonds to be redeemed shall be reduced by the principal amount of Bonds so purchased. Bonds which mature on a single future date may be purchased at any time prior to the maturity date. All such purchases shall be made at prices not exceeding the applicable principal amount or redemption price established pursuant to the General Bond Resolution, plus accrued interest, and such purchases shall be made in such manner as the Trustee shall determine. No purchase shall be made by the Trustee if such purchase would result in the Trustee holding less than the moneys and Federal Securities required to be held for the payment of all other Bonds deemed to be paid.

The Authority may purchase with any available funds any Bonds determined to be paid in accordance with the General Bond Resolution. Bonds for which a redemption date has been established may be purchased by the Authority on or prior to the 45th day preceding the redemption date. On or prior to the 45th day preceding the redemption date the Authority shall give notice to the Trustee of its intention to surrender such Bonds on the redemption date. The Trustee shall proceed to call for redemption the remainder of the Bonds due on the redemption date and shall pay to the Authority on the redemption date the redemption price of and interest on Bonds purchased by the Authority upon surrender of such Bonds to the Trustee. Bonds which mature on a single future date may be purchased at any time prior to the maturity date. The Trustee shall pay to the Authority the principal amount of and interest on such Bonds upon surrender of such Bonds on the maturity date.

APPENDIX E

COPY OF THE CERTIFICATE OF DETERMINATION

NEW JERSEY TURNPIKE AUTHORITY

TURNPIKE REVENUE BONDS, SERIES 2023 A

<u>CERTIFICATE OF DETERMINATION</u>

DATED: AUGUST 16, 2023

I, JAMES CARONE, Executive Director of the New Jersey Turnpike Authority (the "*Authority*"), DO HEREBY make the following determinations and certifications as further proceedings of the Authority in connection with the issuance of its Turnpike Revenue Bonds, Series 2023 A (the "*Series 2023 A Bonds*") under and pursuant to the Resolution (as defined below):

1. <u>Authority for this Certificate</u>. This Certificate of Determination (this "*Certificate*") is being executed and delivered pursuant to the provisions of the Turnpike Revenue Bond Resolution, initially adopted by the Authority on August 20, 1991, as amended and restated on September 26, 1991, and as further amended and restated as of November 22, 1991, as amended and supplemented to the date hereof (collectively, the "*General Bond Resolution*"), including as supplemented by the Series 2023 Turnpike Revenue Refunding Bond Resolution adopted by the Authority on July 25, 2023 (the "*Series 2023 Resolution*"; and together with the General Bond Resolution, the "*Resolution*"), and the delegation of authority contained in the Series 2023 Resolution, including Section 502 thereof, in connection with the issuance, exchange and delivery by the Authority of the Series 2023 A Bonds.

2. <u>Definitions</u>. The following terms shall have the meanings set forth below for all purposes of this Certificate. Capitalized terms used in this Certificate and not otherwise defined shall have the meanings given to such terms in the General Bond Resolution and the Series 2023 Resolution, as applicable. In the event of a conflict between the meaning given to a capitalized term in the General Bond Resolution or the Series 2023 Resolution and the meaning given to such capitalized term in this Certificate, the meaning given to such term in this Certificate shall control.

"*Affiliate*" means, with respect to the Purchaser, any Person directly or indirectly controlling or controlled by or under common control with the Purchaser. For purposes of this definition, "control" (including "controlled by" and "under common control with"), when used with respect to the Purchaser, means the power to direct the management and policies of the Purchaser, directly or indirectly, whether through the ownership of voting rights, membership, the power to appoint members, trustees or directors, by contract or otherwise. Without limiting the foregoing, the definition of "Affiliate" of the Purchaser shall include any subsidiary of the Purchaser.

"*Amortization End Date*" means the first to occur of (i) the second anniversary date of the commencement of the Amortization Period, (ii) the maturity date of the Series 2023 A Bonds or any other date on which payment in full of the Series 2023 A Bonds is due, and (iii) the occurrence of an Event of Default under the Resolution and the acceleration of the Series 2023 A Bonds as a result thereof.

"*Amortization Period*" means, with respect to any Series 2023 A Bonds that are not purchased on the Mandatory Purchase Date, the period commencing on the Mandatory Purchase Date and ending on the Amortization End Date.

"*Authority Bond Rating*" means the long-term rating assigned by any Rating Agency to Bonds issued and outstanding under the Resolution without regard to any third-party credit or liquidity enhancement for such Bonds.

"*Bond Counsel*" means McManimon, Scotland & Baumann, LLC or any other attorney or firm of attorneys selected from time to time by the Authority having recognized standing and expertise in the field of law relating to municipal finance and whose legal opinions are generally accepted by purchasers of municipal obligations.

"*Bondholder Agreement*" has the meaning given to such term in Section 8 hereof.

"*Business Day*" means any day that is not (i) a Saturday, Sunday or legal holiday in the State or the City of New York, New York, (ii) a day on which banks located in the City of New York, New York, or the cities in which the offices of the Trustee or the Purchaser are located, are required or authorized by law or executive order to close, (iii) a day on which the Securities Depository for the Series 2023 A Bonds is closed, or (iv) a day on which the New York Stock Exchange is closed.

"*Capital Lease Obligations*" of any Person means the obligations of such Person to pay rent or other amounts under any lease of (or other arrangement conveying the right to use) real or personal property, or a combination thereof, which obligations are required to be classified and accounted for as capital leases on a balance sheet of such Person under GAAP, and the amount of such obligations shall be the capitalized amount thereof determined in accordance with GAAP.

"*Debt*" means, with respect to any Person, all items that would be classified as a liability in accordance with GAAP, including, without limitation, (a) indebtedness or liability for borrowed money including amounts drawn under a letter of credit or other credit facility, or amounts advanced under a commercial paper program, or for the deferred purchase price of property or services (including trade obligations); (b) all Capital Lease Obligations of such Person; (c) current liabilities in respect of unfunded benefits under employee benefit, retirement or pension plans; (d) obligations issued for the account of any other Person; (e) all obligations arising under acceptance facilities; (f) all Guarantees and other contingent obligations to purchase, to provide funds for payment, to supply funds to invest in any other Person or otherwise to assure a creditor against loss; (g) obligations secured by full faith and credit or by any mortgage, lien, pledge, security interest or other charge or encumbrance on property, whether or not the obligations have been assumed; (h) all unfunded amounts under a loan agreement, letter of credit or other credit facility for which such Person would be liable, if such amounts were advanced under the credit facility; (i) obligations of such Person under Hedge Agreements; and (j) all amounts required to be paid by such Person as a guaranteed payment to partners or members or as a preferred or special dividend, including any mandatory redemption of shares or interests; and, in each case, whether such Person is liable contingently or otherwise, as obligor, guarantor or otherwise, or in respect of which obligations such Person otherwise assures a creditor against loss.

"*Exposure*" means, for any date with respect to the Authority and any Hedge Agreement, the amount of any Settlement Amount that would be payable by the Authority if such Hedge Agreement were terminated as of such date. Exposure shall be determined in accordance with the methodology for calculating amounts due upon early termination as set forth in the related Hedge Agreement and taking into account the notional principal amount, term and other relevant provisions thereof.

"*Fitch*" means Fitch Ratings, Inc., or any successor thereto.

"*GAAP*" means accounting principles generally accepted and consistently applied to governmental entities in the United States, as set forth in the opinions and pronouncements of the Accounting Principles Board, the American Institute of Certified Public Accountants, the Financial Accounting Standards Board and the Governmental Accounting Standards Board or in such other statements by such other entity as may be in general use by significant segments of the accounting profession as in effect from time to time.

"*Governmental Authority*" means any national, state or local government (whether domestic or foreign), any political subdivision thereof or any other governmental, quasi-governmental, judicial, administrative, public or statutory instrumentality, authority, body, agency, department, commission, bureau, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory, fiscal, monetary or administrative powers or functions of or pertaining to government, or any arbitrator, mediator or other Person with authority to bind a party at law.

"*Guarantee*" of or by any Person (the "*guarantor*") means any obligation, contingent or otherwise, of the guarantor guaranteeing or having the economic effect of guaranteeing any Debt or other obligation of any other Person (the "*primary obligor*") in any manner, whether directly or indirectly, and including any obligation of the guarantor, direct or indirect, (a) to purchase or pay (or advance or supply funds for the purchase or payment of) such Debt or other obligation or to purchase (or to advance or supply funds for the purchase of) any security for the payment thereof, (b) to purchase or lease property, securities or services for the purpose of assuring the owner of such Debt or other obligation of the payment thereof, (c) to maintain working capital, equity capital or any other financial statement condition or liquidity of the primary obligor so as to enable the primary obligor to pay such Debt or other obligation, or (d) as an account party in respect of any letter of credit or letter of guaranty issued to support such Debt or obligation; *provided*, that the term Guarantee shall not include endorsements for collection or deposit in the ordinary course of business.

"*Hedge Agreement*" means any rate swap transaction, basis swap, forward rate transaction, commodity swap, commodity option, equity or equity index swap, equity or equity index option, bond option, interest rate option, foreign exchange transaction, cap transaction, floor transaction, collar transaction, currency swap transaction, cross-currency rate swap transaction, currency option, total return swap, credit default swap or any other similar transaction (including any option with respect to any of these transactions) and any other agreement or option involving, or settled by reference to, one or more rates, currencies, commodities or equity or debt instruments or securities, or economic, financial or pricing indices or measures of economic, financial or pricing risk or value or any similar transaction or any combination of these transactions.

"*Insured*" means, with respect to any judgment or order referred to in the definition of the term "Mandatory Purchase Event" contained in this Section 2, that all claims, causes of action, losses, costs or expenses, fees (including attorneys' fees and the costs of any proceeding), liabilities and damages claimed, alleged, granted or awarded therein against the Authority (collectively, "*Damages*") are covered by a valid and effective policy of insurance, are within policy dates and limits, are not subject to any exclusion or exception from coverage and with respect to which the respective insurance carrier has received notice and has agreed to provide coverage with respect to all such Damages and has not reserved, denied or disputed coverage.

"*Interest Payment Date*" has the meaning given to such term in Section 4 hereof.

"*Mandatory Purchase Date*" means the date fixed by written notice from the Purchaser to the Authority and the Trustee in accordance with the Bondholder Agreement, which shall be a Business Day not less than 90 days following the occurrence of a Mandatory Purchase Event.

"*Mandatory Purchase Event*" means the occurrence of any one or more of the following events:

(i) failure by the Authority to pay, or cause to be paid, when due (whether by scheduled maturity, required prepayment or redemption, acceleration, demand or otherwise) (A) the principal or Redemption Price of or interest on any Bond, including any Series 2023 A Bond, (B) any amounts owed by the Authority under any other Parity Debt, or (C) any amounts owed by the Authority under the Bondholder Agreement or any other Debt owed to the Purchaser or an Affiliate of the Purchaser;

(ii) an "event of default" shall have occurred and be continuing beyond the applicable grace period under any Parity Debt or under any document or instrument entered into by the Authority and evidencing or securing any Parity Debt;

(iii) any Parity Debt shall have been accelerated and declared to be immediately due and payable prior to its stated maturity as a result of the occurrence of an event of default thereunder;

(iv) the Authority Bond Rating is reduced to or below "BBB-" by S&P or to or below "BBB-" by Fitch or to or below "Baa3" by Moody's, or the Authority Bond Rating assigned by any Rating Agency is for any reason removed, withdrawn or suspended;

(v) any representation or warranty made or deemed made by or on behalf of the Authority in the Bondholder Agreement or in any amendment of, or waiver under, the Bondholder Agreement, or in any certificate, financial statement or other document furnished by or on behalf of the Authority pursuant to or in connection with the Bondholder Agreement shall have been inaccurate or incomplete in any material respect when made or deemed to have been made;

(vi) the entry or filing of one or more judgments or orders or of any similar decrees or decisions for the payment of money that, individually or in the aggregate, equals or exceeds $10,000,000, is not Insured and is or could be payable from Pledged Revenues (each, a "*Judgment*") shall be rendered against the Authority or against the Turnpike System and (A) such Judgment shall be undischarged, unstayed or unbonded for a period of 45 days, or (B) any action shall be taken by the holder of any such Judgment by which such holder attaches, executes or levies upon any of the Pledged Revenues to enforce any such Judgment;

(vii) (A) a Governmental Authority with jurisdiction to rule on the validity of the Bondholder Agreement or the Resolution, including this Certificate, shall find, announce or rule that (1) any provision of the Resolution, including this Certificate, relating to the payment and security of the Bonds or any other Parity Debt, the Authority's ability to pay the Bonds or any other Parity Debt, the Authority's ability to perform its obligations under the Resolution, including this Certificate, or the rights or remedies of the Purchaser thereunder, or (2) any provision of the Bondholder Agreement shall cease to be valid and binding on the Authority, (B) the Authority or any Person on its behalf shall (1) contest the validity or enforceability of any provision of the Resolution, including this Certificate, relating to the payment and security of the Bonds or any other Parity Debt, the Authority's ability to pay the Bonds or any other Parity Debt, the Authority's ability to perform its obligations under the Resolution, including this Certificate, or the rights and remedies of the Purchaser thereunder, or any provision of the Bondholder Agreement, or (2) seek an adjudication that any provision of the Resolution, including this Certificate, relating to the payment and security of the Bonds or any other Parity Debt, the Authority's ability to pay the Bonds or any other Parity Debt, the Authority's ability to perform its obligations under the Resolution, including this Certificate, or the rights and remedies of the Purchaser thereunder, or any provision of the Bondholder Agreement, is not valid and binding on the Authority, or (C) for any other reason any provision of the Resolution, including this Certificate, relating to the payment and security of the Bonds or any other Parity Debt, the Authority's ability to pay the Bonds or any other Parity Debt, the Authority's ability to perform its obligations under the Resolution, including this Certificate, or the right or remedies of the Purchaser thereunder, or any provision of the Bondholder Agreement, shall cease to be valid and binding upon the Authority;

(viii) (A) failure by the Authority to pay, or cause to be paid, when due (whether by scheduled maturity, required prepayment or redemption, acceleration, demand or otherwise) any amounts owed by the Authority to any Person other than the Purchaser or an Affiliate of the Purchaser under any Subordinated Indebtedness having an aggregate outstanding principal amount in excess of $5,000,000 (measured, in the case of any Hedge Agreement, by the Authority's Exposure thereunder), beyond the period of grace, if any, provided in the instrument or agreement under which such Subordinated Indebtedness was created; or (B) default in the observance or performance of any agreement or condition relating to any Subordinated Indebtedness in excess of $5,000,000 or contained in any instrument or agreement evidencing, securing or relating thereto, or any other event shall occur or condition exist, the effect of which default or other event or condition is to cause, or to permit the holder or holders of such

Subordinated Indebtedness (or a trustee or agent on behalf of such holder or holders) to cause (determined without regard to whether any notice is required), any such Subordinated Indebtedness to become due prior to its stated maturity (or, with respect to any Hedge Agreement, an event that results in such Hedge Agreement being terminated early or being capable of being terminated early, other than in the case of an optional termination exercised by the Authority and without liability for payment by the Authority of any Settlement Amount);

(ix) the Trustee and the Authority shall have received a written notice from the Purchaser of the occurrence of an "event of default" under the Bondholder Agreement; *provided*, that upon any acceleration of the Series 2023 A Bonds pursuant to the Resolution, the Series 2023 A Bonds shall be immediately due and payable; or

(x) the occurrence of an Event of Default under the Resolution; *provided*, that upon any acceleration of the Series 2023 A Bonds pursuant to the Resolution, the Series 2023 A Bonds shall be immediately due and payable.

"*Moody's*" means Moody's Investors Service, Inc., or any successor thereto.

"*Parity Debt*" means (i) all Bonds issued and outstanding under the Resolution, (ii) the Authority's reimbursement obligations with respect to any Credit Facility (as such term in defined in the Resolution) supporting the Bonds, and (iii) the Authority's payment obligations to any Qualified Swap Provider (as such term is defined in the General Bond Resolution) under a Qualified Swap (as such term is defined in the General Bond Resolution) where payments from the Qualified Swap Provider have been pledged under the Resolution as part of the Pledged Revenues.

"*Person*" means an individual, a corporation, a partnership, an association, a joint venture, a trust, a business trust, a limited liability company or any other entity or organization, including a governmental or political subdivision or an agency or instrumentality thereof.

"*Purchaser*" means Barclays Capital Inc. and/or any of the other Purchaser Entities, as applicable.

"*Purchaser Entities*" means (i) the Purchaser, (ii) an Affiliate or other party related to the Purchaser, or (iii) a funding entity or other special purpose arrangement established by the Purchaser or an Affiliate of the Purchaser such as a tender option bond trust (or similar securitization vehicle) the owners of any beneficial interest in which are limited to qualified institutional buyers or accredited investors.

"*Rating Agency*" means (i) each of Fitch, Moody's and S&P, so long as each such entity shall have a rating assigned to any Bonds issued and outstanding under the Resolution, and (ii) any other nationally recognized securities rating agency that shall have a rating assigned to any Bonds issued and outstanding under the Resolution.

"*Redemption Date*" has the meaning given to such term in Section 5(b) hereof.

"*Refunded Bonds*" has the meaning given to such term in Section 3 hereof.

"*S&P*" means S&P Global Ratings, acting through Standard & Poor's Financial Services LLC, or any successor thereto.

"*Settlement Amount*" means, with respect to the Authority and any Hedge Agreement, any amount payable by the Authority under the terms of such Hedge Agreement in respect of, or intended to compensate the other party for, the value of such Hedge Agreement upon early termination thereof.

3. Authorization and Purpose of Series 2023 A Bonds. Pursuant to the provisions of the Resolution, including, specifically, the Series 2023 Resolution, the issuance, exchange, execution and delivery of the Series 2023 A Bonds entitled to the benefits, protection and security of the provisions of the Resolution are hereby authorized. The Series 2023 A Bonds shall be designated as, and shall be distinguished from the Bonds of all other Series or sub-series by the title, "Turnpike Revenue Bonds, Series 2023 A" and shall constitute Tax-Exempt Series 2023 Refunding Bonds for all purposes of the Series 2023 Resolution. In accordance with Section 201(b) of the Series 2023 Resolution, the Series 2023 A Bonds shall be issued in exchange for a portion of the Authority's Turnpike Revenue Bonds, Series 2020 C (Federally Taxable) maturing on the date and in the principal amount, and bearing interest at the rate, as set forth on Schedule A attached hereto (collectively, the "*Refunded Bonds*").

4. Principal Amount, Dated Date, Maturity Dates, Interest Rates, Interest Payment Dates and Authorized Denominations of Series 2023 A Bonds. The Series 2023 A Bonds shall be issued in the aggregate principal amount of $107,305,000 and shall be dated the date of their issuance. The Series 2023 A Bonds shall mature on January 1 in each of the years and in the principal amounts, and shall bear interest from the date of their issuance at the rates per annum, as follows:

Maturity (January 1)	Principal Amount	Interest Rate
2029	$ 5,940,000	5.00%
2030	21,575,000	5.00
2031	25,695,000	5.00
2032	26,950,000	5.00
2033	15,370,000	5.00
2034	3,085,000	5.00
2035	8,690,000	5.00

During the Amortization Period, the Series 2023 A Bonds owned by the Purchaser Entities shall bear interest at the rate of seven and one-half percent (7.50%) per annum. Interest on the Series 2023 A Bonds shall be calculated on the basis of a 360-day year comprised of twelve 30-day months. Interest on the Series 2023 A Bonds shall be payable on January 1 and July 1 of each year, commencing January 1, 2024 (each, an "*Interest Payment Date*"). The Series 2023 A Bonds shall be issued in Authorized Denominations of $100,000 and any integral multiple of $5,000 in excess thereof, as provided in the Series 2023 Resolution. The Series 2023 A Bonds shall initially be registered in the name of DTC or its nominee, as the Securities Depository for the Series 2023 A Bonds.

5. Redemption of Series 2023 A Bonds.

(a) *Optional Redemption*. The Series 2023 A Bonds are subject to optional redemption by the Authority, in whole or in part, on any date on or after July 1, 2033, at a Redemption Price equal to the principal amount of the Series 2023 A Bonds being redeemed, without premium, plus accrued interest to the redemption date.

(b) *Mandatory Redemption Upon Failure to Purchase*. If all of the Outstanding Series 2023 A Bonds owned by the Purchaser Entities are not purchased on the Mandatory Purchase Date as provided in Section 6 hereof, such Series 2023 A Bonds that are not purchased on the Mandatory Purchase Date shall be subject to mandatory redemption in the following amounts and on the following dates (each such date, a "*Redemption Date*"): (i) 50% of the aggregate principal amount of such Outstanding Series 2023 A Bonds that were not purchased on the Mandatory Purchase Date shall be subject to mandatory redemption by the Authority on the date that is one year after the commencement of the Amortization Period at a Redemption Price equal to 100% of the aggregate principal amount of such Series 2023 A Bonds to be redeemed multiplied by the percentage shown in the chart set forth on Schedule B attached hereto for such Redemption Date or, if such Redemption Date shall not be a date set forth on Schedule B, the date set forth on Schedule B that is immediately prior to such Redemption Date plus, in each case, accrued interest to such Redemption Date; and (ii) the entire remaining aggregate principal amount of such Outstanding Series 2023 A Bonds shall be subject to mandatory redemption by the Authority on the Amortization End Date at a Redemption Price equal to 100% of the aggregate principal amount of such Outstanding Series 2023 A Bonds multiplied by the percentage shown in the chart set forth on Schedule B attached hereto for such Redemption Date or, if such Redemption Date shall not be a date set forth on Schedule B, the date set forth on Schedule B immediately prior to such Redemption Date plus, in each case, accrued interest to such Redemption Date.

(c) *Selection of Series 2023 A Bonds for Redemption*. If less than all of the Series 2023 A Bonds are to be redeemed and paid prior to maturity, (a) if the Series 2023 A Bonds are in book-entry form at the time of such redemption, the Paying Agent shall instruct DTC to instruct the DTC Participants to select the specific Series 2023 A Bonds for redemption by lot among such Series 2023 A Bonds, and neither the Authority nor the Paying Agent shall have any responsibility to insure that DTC or the DTC Participants properly select such Series 2023 A Bonds for redemption, and (b) if the Series 2023 A Bonds are not then in book-entry form at the time of such redemption, on each redemption date the Paying Agent shall select the specific Series 2023 A Bonds for redemption by lot among all of the Series 2023 A Bonds.

In the case of a partial redemption of the Series 2023 A Bonds when Series 2023 A Bonds of denominations greater than the minimum applicable Authorized Denomination are then Outstanding, for all purposes in connection with such redemption, each principal amount equal to the minimum Authorized Denomination shall be treated as though it were a separate Series 2023 A Bond for purposes of selecting the specific Series 2023 A Bonds to be redeemed; *provided*, that no Series 2023 A Bond shall be redeemed in part if the principal amount to be Outstanding following such partial redemption is not an applicable Authorized Denomination.

(d) *Notice of Redemption*. In the event of any redemption of the Series 2023 A Bonds, either in whole or in part, notice of such redemption shall be sent by first class mail, postage prepaid, at least 30 days, but not more than 60 days prior to the redemption date to the registered owners of any Series 2023 A Bonds or portions of Series 2023 A Bonds to be redeemed at their registered addresses and to S&P and Moody's or their respective successors, if any, in the manner and under the terms and conditions provided in the Resolution. As long as DTC remains the sole registered owner of the Series 2023 A Bonds, notice of redemption shall be sent to DTC as provided in the Resolution. Such mailing shall not be a condition precedent to such redemption and failure to mail any such notice shall not affect the validity of the proceedings for the redemption of the Series 2023 A Bonds. Any failure of DTC to advise any DTC Participant or of any DTC Participant to notify the beneficial owners of the Series 2023 A Bonds of any such notice and its content or effect will not affect the validity of the redemption of the Series 2023 A Bonds called for redemption or of any other action premised on such notice.

6. Mandatory Purchase of Series 2023 A Bonds. Upon the occurrence of a Mandatory Purchase Event, the Series 2023 A Bonds owned by the Purchaser Entities shall be subject to mandatory purchase by the Authority from the Purchaser Entities on the Mandatory Purchase Date at a purchase price equal to 100% of the aggregate principal amount of such Series 2023 A Bonds Outstanding on the Mandatory Purchase Date multiplied by the percentage shown in the chart set forth on Schedule B attached hereto for the Mandatory Purchase Date or, if the Mandatory Purchase Date shall not be a date set forth on such Schedule B, the date set forth on such Schedule B that is immediately prior to the Mandatory Purchase Date, plus accrued interest to the Mandatory Purchase Date (unless the Mandatory Purchase Date is an Interest Payment Date, in which case the purchase price shall not include accrued interest, which shall be paid in the normal course). Any Series 2023 A Bonds owned by the Purchaser Entities that are not purchased by the Authority on the Mandatory Purchase Date shall be subject to mandatory redemption as provided in Section 5(b) hereof. Notwithstanding anything in the Resolution, including this Certificate, to the contrary, any Series 2023 A Bonds that are not owned by the Purchaser Entities shall not be subject to mandatory purchase by the Authority pursuant to this Section 6 and the Authority shall have no obligation to purchase any such Series 2023 A Bonds in accordance with this Section 6.

7. Form of Series 2023 A Bonds. The form of the Series 2023 A Bonds and the Trustee's Certificate of Authentication thereon shall be of substantially the tenor set forth in the form of the Series 2023 A Bonds attached hereto as Exhibit A.

8. Exchange of Series 2023 A Bonds; Execution and Delivery of Bondholder Agreement. On August 30, 2023 or such other date as shall be mutually agreed upon by the Authority and the Purchaser, the Series 2023 A Bonds shall be issued by the Authority and delivered to Barclays Capital Inc., as Purchaser, pursuant to and in accordance with the provisions of the Bondholder Agreement, dated August 16, 2023 (the "*Bondholder Agreement*"), by and between the Authority and the Purchaser, a copy of which Bondholder Agreement is attached hereto as Exhibit B. The execution and delivery by the Authority of the Bondholder Agreement are hereby ratified, confirmed and approved. The Bondholder Agreement shall constitute a "Direct Purchase Agreement" for all purposes of the Series 2023 Resolution. In accordance with the Bondholder Agreement, the Series 2023 A Bonds shall be delivered by the Authority to the Purchaser in exchange for the Refunded Bonds, which are currently owned by

the Purchaser. Upon receipt by the Purchaser of the Series 2023 A Bonds, the Refunded Bonds will be canceled by the Authority and deemed to be no longer Outstanding under the Resolution.

9. Designation as Refunding Bonds. The Series 2023 A Bonds are hereby designated as Refunding Bonds for the purposes of the General Bond Resolution and, accordingly, shall be issued in compliance with the requirements of Section 204(b) of the General Bond Resolution.

10. Establishment of Series 2023 A Debt Service Subaccount. The Bank of New York Mellon, in its capacity as Co-Trustee under the Resolution, is hereby instructed to establish a subaccount in the Debt Service Fund for the Series 2023 A Bonds.

11. Receipt of Approval Letters. I hereby acknowledge receipt of the approval letters from the Governor and the Treasurer of the State of New Jersey, as required by Section 3(F) of the Act, approving the adoption by the Authority of the Series 2023 Resolution and the issuance of the Series 2023 A Bonds.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, I have hereunto set my hand as of the date first above written.

NEW JERSEY TURNPIKE AUTHORITY

By:____________________________
James Carone
Executive Director

[Signature Page to Certificate of Determination]

SCHEDULE A

REFUNDED BONDS

NEW JERSEY TURNPIKE AUTHORITY

TURNPIKE REVENUE BONDS, SERIES 2020 C (FEDERALLY TAXABLE)

Maturity (January 1)	Principal Amount	Interest Rate	CUSIP[†]
2035	$135,230,000	3.223%	646140 DG5

[†]The CUSIP number is being provided solely for the convenience of the holders of the Refunded Bonds, and the Authority does not make any representation with respect to such number or undertake any responsibility for its accuracy.

SCHEDULE B

	646140FE8	646140FF5	646140FG3	646140FH1	646140FJ7	646140FK4	646140FL2
1/1/2024	108.786%	110.560%	112.141%	113.598%	114.653%	114.998%	114.205%
7/1/2024	107.966	109.752	111.356	112.841	113.941	114.315	113.561
1/1/2025	107.135	108.931	110.560	112.074	113.219	113.622	112.906
7/1/2025	106.290	108.097	109.752	111.294	112.485	112.917	112.241
1/1/2026	105.432	107.251	108.931	110.502	111.740	112.201	111.565
7/1/2026	104.561	106.392	108.097	109.699	110.983	111.474	110.877
1/1/2027	103.676	105.520	107.251	108.882	110.214	110.735	110.179
7/1/2027	102.778	104.635	106.392	108.054	109.434	109.985	109.470
1/1/2028	101.866	103.736	105.520	107.212	108.641	109.222	108.749
7/1/2028	100.940	102.823	104.635	106.358	107.836	108.448	108.016
1/1/2029	100.000	101.896	103.736	105.491	107.018	107.662	107.271
7/1/2029		100.955	102.823	104.610	106.187	106.863	106.514
1/1/2030		100.000	101.896	103.716	105.344	106.051	105.745
7/1/2030			100.955	102.808	104.487	105.227	104.963
1/1/2031			100.000	101.886	103.617	104.389	104.169
7/1/2031				100.950	102.734	103.539	103.362
1/1/2032				100.000	101.836	102.675	102.541
7/1/2032					100.925	101.797	101.708
1/1/2033					100.000	100.905	100.861
7/1/2033						100.000	100.000
1/1/2034						100.000	100.000
7/1/2034							100.000
1/1/2035							100.000

EXHIBIT A

FORM OF SERIES 2023 A BOND

No. ___ **$__,___,000**

NEW JERSEY TURNPIKE AUTHORITY

TURNPIKE REVENUE BOND, SERIES 2023 A

Dated Date	**Maturity Date**	**Interest Rate**	**CUSIP**
August 30, 2023	**January 1, 20__**	**____%**	**646140 ___**

REGISTERED OWNER: CEDE & CO.

PRINCIPAL AMOUNT: __________________________ DOLLARS

The NEW JERSEY TURNPIKE AUTHORITY (the "*Authority*"), a body corporate and politic organized and existing under and by virtue of the laws of the State of New Jersey, acknowledges itself indebted to, and for value received hereby promises to pay to, the Registered Owner specified above, but solely from the tolls, other revenues and funds of the Authority hereinafter mentioned, on the Maturity Date specified above, upon presentation and surrender of this Bond at the designated corporate trust office of The Bank of New York Mellon, Woodland Park, New Jersey (the "*Paying Agent*"), the Principal Amount stated above, and to pay, but solely from such tolls, other revenues and funds of the Authority, interest on such Principal Amount from the Dated Date specified above at the Interest Rate per annum specified above (or such other interest rate as may be specified in the Resolution (as defined below)) on each Interest Payment Date (as defined below), until the Authority's obligation with respect to the payment of such Principal Amount has been paid in full, discharged and satisfied. Interest on this Bond shall be calculated on the basis of a 360-day year consisting of twelve 30-day months and shall be payable semiannually on January 1 and July 1 of each year, commencing January 1, 2024 (each such date being referred to herein as an "*Interest Payment Date*") in the manner provided in the Resolution.

This Bond is one of a duly authorized issue of Bonds of the Authority designated as its "Turnpike Revenue Bonds, Series 2023 A" (the "*Series 2023 A Bonds*"), in the aggregate principal amount of $107,305,000 issued pursuant to the New Jersey Turnpike Authority Act of 1948, constituting Chapter 454 of the Laws of 1948 of the State of New Jersey, as amended and supplemented (the "*Act*"), and under and pursuant to a resolution of the Authority entitled "Series 2023 Turnpike Revenue Refunding Bond Resolution", adopted by the Authority on July 25, 2023, as supplemented by a Certificate of Determination relating to the Series 2023 A Bonds, dated August 16, 2023 (collectively, the "*Series 2023 Resolution*"), which is authorized by the Turnpike Revenue Bond Resolution, initially adopted by the Authority on August 20, 1991, as amended and restated on September 26, 1991, and as further amended and restated as of November 22, 1991, as amended and supplemented to the date hereof (collectively, the "*General*

Bond Resolution"). The General Bond Resolution, as supplemented by the Series 2023 Resolution, is referred to herein as the "*Resolution*". All capitalized terms used but not defined herein shall have the meanings given to them in the Resolution.

The Series 2023 A Bonds are subject to redemption prior to maturity upon the terms and conditions set forth or referred to in the Resolution.

The Series 2023 A Bonds are secured by the General Bond Resolution on a parity with all other Bonds (as defined in the General Bond Resolution) heretofore or hereafter issued and certain Qualified Swaps and Credit Facilities, as defined therein. As provided in the Resolution, the principal or Redemption Price of and interest on the Series 2023 A Bonds are payable solely from, and secured by, the Pledged Revenues (as defined in the General Bond Resolution) and proceeds of Bonds held or set aside under the Resolution. Copies of the Resolution are on file at the office of the Authority and at the corporate trust office of The Bank of New York Mellon in Woodland Park, New Jersey, as Trustee under the Resolution, or its successors as Trustee (the "*Trustee*"), and reference to the Act and to the Resolution and any and all modifications and amendments thereof is made for a description of the pledge and covenants securing the Series 2023 A Bonds; a description and listing of all other Bonds outstanding on a parity with the Series 2023 A Bonds; the nature, extent and manner of enforcement of such pledge; the rights and remedies of the Registered Owners of the Series 2023 A Bonds with respect thereto; and the terms and conditions upon which the Series 2023 A Bonds are issued and upon which additional parity Bonds may be issued thereunder, to all of which the Registered Owner assents as a material part of the consideration to the Authority for the issuance of the Series 2023 A Bonds.

The pledge of tolls and other revenues and funds and the other obligations of the Authority under the Resolution may be discharged at or prior to the maturity of the Series 2023 A Bonds upon the making of provision for their payment on the terms and conditions set forth in the Resolution.

This Bond is transferable, as provided in the Resolution, only upon the books of the Authority kept for that purpose at the office of the Registrar by the registered owner hereof in person, or by his or her duly authorized attorney, upon surrender with a written instrument of transfer satisfactory to the Registrar duly executed by the registered owner or his or her duly authorized attorney, and thereupon a new registered Series 2023 A Bond or Bonds, in the same aggregate principal amount, shall be issued to the transferee therefor as provided in the Resolution, and upon payment of the charges therein prescribed. The Authority, the Trustee, the Registrar and the Paying Agent may deem and treat the person in whose name this Bond is registered as the absolute owner hereof for the purpose of receiving payment of, or on account of, the principal or Redemption Price due hereon and for all other purposes.

Subject to the conditions and upon the payment of the charges provided in the Resolution, registered Series 2023 A Bonds may be surrendered (accompanied by a written instrument of transfer satisfactory to the Registrar duly executed by the Registered Owner or his or her duly authorized attorney) in exchange for an equal aggregate principal amount of registered Series 2023 A Bonds of any other authorized denominations.

Neither the members of the Authority nor any person executing the Series 2023 A Bonds shall be personally liable on the Series 2023 A Bonds or be accountable by reason of the issuance thereof in accordance with the provisions of the Act.

The Series 2023 A Bonds shall not be deemed to constitute a debt or liability of the State of New Jersey or of any political subdivision thereof or a pledge of the faith and credit of the State of New Jersey or any such political subdivision. The Authority is obligated to pay the Series 2023 A Bonds and the interest thereon only from tolls, other revenues and proceeds of such Series 2023 A Bonds, and neither the State of New Jersey nor any political subdivision thereof is obligated to pay the Series 2023 A Bonds or the interest thereon, and neither the faith and credit nor the taxing power of the State of New Jersey or any political subdivision thereof is pledged to the payment of the principal or Redemption Price of or the interest on the Series 2023 A Bonds.

It is hereby certified and recited that all conditions, acts and things required by law and the Resolution to exist, to have happened and to have been performed precedent to and in the issuance of this Bond exist, have happened and have been performed and that the issue of Bonds of which this is one, together with all other indebtedness of the Authority, is within every debt and other limit prescribed by the laws of the State of New Jersey.

This Bond shall not be entitled to any benefit under the Resolution or be valid or become obligatory for any purpose until this Bond shall have been authenticated by the execution by a Co-Trustee of the Co-Trustee's Certificate of Authentication hereon.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the NEW JERSEY TURNPIKE AUTHORITY has caused this Bond to be signed in its name and on its behalf by the manual or facsimile signature of its Chair, and its corporate seal (or a facsimile thereof) to be hereunto impressed, imprinted, engraved or otherwise reproduced hereon and attested by its Secretary and its Treasurer, all as of the Dated Date specified above.

NEW JERSEY TURNPIKE AUTHORITY

By:________________________________
Chair

[SEAL]

ATTEST:

By:________________________________
Secretary

By:________________________________
Treasurer

[FORM OF CERTIFICATE OF AUTHENTICATION
ON ALL SERIES 2023 A BONDS]

CO-TRUSTEE'S CERTIFICATE OF AUTHENTICATION

This Bond is one of the Bonds delivered pursuant to the within mentioned Resolution, and is one of the series of such Bonds designated "Turnpike Revenue Bonds, Series 2023 A".

THE BANK OF NEW YORK MELLON,
as Co-Trustee

By:________________________________
Authorized Signatory

Date of Authentication: August 30, 2023

==

(ASSIGNMENT PROVISION ON BACK OF SERIES 2023 A BONDS)
[ONLY EFFECTIVE WHEN NO "BOOK-ENTRY ONLY" REGISTRATION]

FOR VALUE RECEIVED, ______________________________ hereby sells, assigns and transfers unto

____

(Please insert Social Security or
Other Indemnifying Number of Assignee)

____

(Please Print or Type Name and Address of Assignee)

the within Bond and hereby irrevocably appoints _____________________________________, as attorney, to transfer said Bond on the registration books of the Authority, with power of substitution and revocation.

Dated:____________________________

____
NOTICE: The signature on this assignment must correspond with the name as it appears on the face of the within Bond in every particular.

Signature Guarantee:

____

==

APPENDIX F

COPY OF THE BONDHOLDER AGREEMENT

BONDHOLDER AGREEMENT

By and Between

NEW JERSEY TURNPIKE AUTHORITY

and

BARCLAYS CAPITAL INC.

Relating to

New Jersey Turnpike Authority
Turnpike Revenue Bonds, Series 2023 A

Dated August 16, 2023

TABLE OF CONTENTS

TABLE OF CONTENTS

Page

TABLE OF CONTENTS

Page

ARTICLE VIII
NATURE OF OBLIGATIONS

ARTICLE IX
MISCELLANEOUS

BONDHOLDER AGREEMENT

This **BONDHOLDER AGREEMENT** (the "*Agreement*"), dated August 16, 2023, by and between the **NEW JERSEY TURNPIKE AUTHORITY** (the "*Authority*"), a public body corporate and politic of the State of New Jersey created and existing 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*"), and **BARCLAYS CAPITAL INC.**, a corporation duly organized and validly existing under the laws of the State of Connecticut (the "*Purchaser*").

W I T N E S S E T H:

WHEREAS, on June 18, 2020, the Authority issued and currently has outstanding $163,230,000 aggregate principal amount of its Turnpike Revenue Bonds, Series 2020 C (Federally Taxable) (the "*Series 2020 C Bonds*"); and

WHEREAS, the Authority will be issuing $107,305,000 aggregate principal amount of its Turnpike Revenue Bonds, Series 2023 A (the "*Series 2023 A Bonds*"), in exchange for a portion of the outstanding Series 2020 C Bonds in the aggregate principal amount of $135,230,000 (the "*Refunded Bonds*"), which are currently owned by the Purchaser; and

WHEREAS, the Series 2023 A Bonds will be issued under and pursuant to the 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 further amended, restated and supplemented from time to time in accordance with its terms by each duly adopted Supplemental Resolution and Series Resolution (collectively, the "*General Bond Resolution*"), including as supplemented by a resolution entitled "Series 2023 Turnpike Revenue Refunding Bond Resolution" adopted by the Authority on July 25, 2023 (the "*Series 2023 Resolution*") and a Certificate of Determination relating to the Series 2023 A Bonds executed by the Executive Director of the Authority dated August 16, 2023 (the "*Series 2023 A Certificate of Determination*"; and together with the General Bond Resolution and the Series 2023 Resolution, the "*Resolution*"); and

WHEREAS, the Purchaser has agreed to exchange the Refunded Bonds for the Series 2023 A Bonds with the Authority upon the terms and conditions contained herein, and, as a condition to such exchange, the Purchaser has required the Authority to enter into this Agreement and to agree to perform the covenants and obligations stated herein.

NOW, THEREFORE, in consideration of the premises and other good and valuable consideration, including the covenants, terms and conditions hereinafter contained, and to induce the Purchaser to exchange the Refunded Bonds for the Series 2023 A Bonds, the Purchaser and the Authority agree as follows:

ARTICLE I

DEFINITIONS

Section 1.01. Definitions. In addition to terms defined at other places in this Agreement, the following defined terms are used throughout this Agreement with the following meanings:

"*Accountant*" means an independent certified public accountant or a firm of independent certified public accountants selected by the Authority and satisfactory to the Purchaser.

"*Affiliate*" means, with respect to the Purchaser, any Person directly or indirectly controlling or controlled by or under common control with the Purchaser. For purposes of this definition, "control" (including "controlled by" and "under common control with"), when used with respect to the Purchaser, means the power to direct the management and policies of the Purchaser, directly or indirectly, whether through the ownership of voting rights, membership, the power to appoint members, trustees or directors, by contract or otherwise. Without limiting the foregoing, the definition of "Affiliate" of the Purchaser shall include any subsidiary of the Purchaser.

"*Agreement*" means this Bondholder Agreement, including such amendments, modifications or supplements permitted pursuant to the terms hereof.

"*Amortization End Date*" means the first to occur of (i) the second anniversary date of the commencement of the Amortization Period, (ii) the Maturity Date or any other date on which payment in full of the Series 2023 A Bonds is due, and (iii) the occurrence of an Event of Default under the Resolution and the acceleration of the Series 2023 A Bonds as a result thereof.

"*Amortization Period*" means, with respect to any Series 2023 A Bonds that are not purchased on the Mandatory Purchase Date, the period commencing on the Mandatory Purchase Date and ending on the Amortization End Date.

"*Annual Budget*" has the meaning assigned to such term in the General Bond Resolution.

"*Anti-Terrorism Laws*" has the meaning assigned to such term in Section 4.21.

"*Applicable Law(s)*" means, collectively, the Constitutions of the United States and the State of New Jersey, all applicable common law and principles of equity and all international, foreign, federal, state and local laws, statutes, treaties, codes, acts, rules, regulations, guidelines, ordinances, resolutions, orders, judgments, decrees, injunctions and administrative or judicial precedents or authorities, including the interpretation or administration thereof by any Governmental Authority charged with the enforcement, interpretation or administration thereof, and all administrative orders, directed duties, requests, licenses, certificates, authorizations and permits of, and agreements with, any Governmental Authority, in each case whether or not having the force of law, that are applicable now or are applicable at any time hereafter to (a) the Authority, or (b) any assets, property, operations or facilities (including the Turnpike System) of the Authority, or (c) the Transactions.

"*Authority*" means the New Jersey Turnpike Authority and its successors and assigns.

"*Authority Bond Rating*" means the long-term rating assigned by any Rating Agency to Bonds issued and outstanding under the Resolution without regard to any third-party credit or liquidity enhancement for such Bonds.

"*Authorized Denominations*" has the meaning assigned to such term in the General Bond Resolution, as modified by the Series 2023 A Certificate of Determination.

"*Authorized Authority Representative*" means the Chairman or the Executive Director of the Authority and any other officer or employee of the Authority authorized and designated by resolution duly adopted by the Authority to act on behalf of the Authority; *provided, however*, that in each case for which a certification or other statement of fact or condition is required to be submitted by an Authorized Authority Representative pursuant to the terms of this Agreement, such certificate or statement shall be executed only by an Authorized Authority Representative in a position to know or to obtain knowledge of the facts or conditions that are the subject of such certificate or statement. Any document or certificate hereunder that is executed by an Authorized Authority Representative shall be deemed to have been authorized by all necessary action by the Authority.

"*Bond Counsel*" means McManimon, Scotland & Baumann, LLC or any other attorney or firm of attorneys selected from time to time by the Authority having recognized standing and expertise in the field of law relating to municipal finance and whose legal opinions are generally accepted by purchasers of municipal obligations.

"*Bondholder*" has the meaning assigned to such term in the General Bond Resolution.

"*Bonds*" means "Bonds", as such term is defined in, and as issued, authenticated and delivered and Outstanding under and pursuant to, the General Bond Resolution.

"*Book-Entry System*" has the meaning assigned to such term in the Series 2023 Resolution.

"*Business Day*" has the meaning assigned to such term in the Series 2023 A Certificate of Determination.

"*Capital Lease Obligations*" of any Person means the obligations of such Person to pay rent or other amounts under any lease of (or other arrangement conveying the right to use) real or personal property, or a combination thereof, which obligations are required to be classified and accounted for as capital leases on a balance sheet of such Person under GAAP, and the amount of such obligations shall be the capitalized amount thereof determined in accordance with GAAP.

"*Closing Date*" means August 30, 2023, or such other date as shall be mutually agreed upon by the Authority and the Purchaser.

"*Code*" means the Internal Revenue Code of 1986, as amended, or any successor provision or provisions thereto or any successor federal tax code, and any regulations (including temporary and proposed regulations relating to the matters governed by this Agreement) thereunder or under any such provision or successor federal tax code.

"*Contract*" means any indenture, contract, mortgage, deed of trust, guaranty, note or agreement (other than this Agreement), other contractual restriction, lease, instrument, certificate of incorporation, charter or by-law.

"*Counsel*" means an attorney duly admitted to practice law before the highest court of any state.

"*Credit Protection Provider*" means, collectively, (a) any Person, including the Purchaser, that provides credit protection or liquidity support in favor of any Person holding a direct or indirect interest in the Series 2023 A Bonds, and (b) any Person that participates in any such credit protection or liquidity support.

"*Debt*" means, with respect to any Person, all items that would be classified as a liability in accordance with GAAP, including, without limitation, (a) indebtedness or liability for borrowed money including amounts drawn under a letter of credit or other credit facility, or amounts advanced under a commercial paper program, or for the deferred purchase price of property or services (including trade obligations); (b) all Capital Lease Obligations of such Person; (c) current liabilities in respect of unfunded benefits under employee benefit, retirement or pension plans; (d) obligations issued for the account of any other Person; (e) all obligations arising under acceptance facilities; (f) all Guarantees and other contingent obligations to purchase, to provide funds for payment, to supply funds to invest in any other Person or otherwise to assure a creditor against loss; (g) obligations secured by full faith and credit or by any mortgage, lien, pledge, security interest or other charge or encumbrance on property, whether or not the obligations have been assumed; (h) all unfunded amounts under a loan agreement, letter of credit or other credit facility for which such Person would be liable, if such amounts were advanced under the credit facility; (i) obligations of such Person under Hedge Agreements; and (j) all amounts required to be paid by such Person as a guaranteed payment to partners or members or as a preferred or special dividend, including any mandatory redemption of shares or interests; and, in each case, whether such Person is liable contingently or otherwise, as obligor, guarantor or otherwise, or in respect of which obligations such Person otherwise assures a creditor against loss.

"*Debt Service*" has the meaning assigned to such term in the General Bond Resolution.

"*Debtor Relief Laws*" means the Bankruptcy Code of the United States, and all other liquidation, conservatorship, bankruptcy, assignment for the benefit of creditors, moratorium, rearrangement, receivership, insolvency, reorganization or similar debtor relief laws and regulations of the United States or other applicable jurisdictions from time to time in effect and affecting the rights of creditors generally.

"*Default*" means the occurrence of any event or the existence of any condition that constitutes an Event of Default or the occurrence of any event or the existence of any condition that, with the giving of notice, the passage of time or both, would constitute an Event of Default.

"*Division*" has the meaning assigned to such term in Section 6.08.

"*DTC*" has the meaning assigned to such term in the Series 2023 Resolution.

"*DTC Participant*" has the meaning assigned to such term in the Series 2023 Resolution.

"*Environmental Claim*" means any and all administrative, regulatory or judicial investigations, proceedings, actions, suits, demand letters, claims, liens, notices of noncompliance or violation, relating in any way to any Environmental Law ("*claims*") or any permit issued under any such Environmental Law, including, without limitation, (a) any and all claims by Governmental Authorities for enforcement, cleanup, removal, response, remedial or other actions or damages pursuant to any applicable Environmental Law, and (b) any and all claims by any third-party seeking damages, contribution, indemnification, cost recovery, compensation or injunctive relief resulting from Hazardous Materials or arising from alleged injury or threat of injury to health, safety or the environment.

"*Environmental Law(s)*" means any and all federal, state, local and foreign statutes, laws, regulations, ordinances, rules, judgments, orders, decrees, permits, concessions, grants, franchises, licenses, agreements or other governmental restrictions relating to air, water or land pollution, wetlands or the protection of the environment or to emissions, discharges or releases of Hazardous Materials into the environment, including, without limitation, ambient air, surface water, ground water or land, or otherwise relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Materials or the clean-up or other remediation thereof.

"*Environmental Liability*" means any liability, contingent or otherwise (including any liability for damages, costs of environmental remediation, fines, penalties or indemnities), of the Authority directly or indirectly resulting from or based upon (a) violation of any Environmental Law, (b) the generation, use, handling, presence, transportation, storage, treatment or disposal of any Hazardous Materials, (c) exposure to any Hazardous Materials, (d) the release or threatened release of any Hazardous Materials into the environment, or (e) any contract, agreement or other consensual arrangement pursuant to which liability is assumed or imposed with respect to any of the foregoing.

"*ERISA*" means the Employee Retirement Income Security Act of 1974, as amended from time to time, and all rules and regulations from time to time promulgated thereunder, or any successor statute.

"*Event of Default*", when used in relation to this Agreement, shall have the meaning assigned to such term in Article VII and, when used in relation to any Related Document, shall have the meaning set forth therein.

"*Event of Insolvency*" means, with respect to the Authority, the occurrence of one or more of the following events:

(a) the issuance, under the laws of the State or under the laws of the United States, of an order of rehabilitation, liquidation or dissolution of the Authority;

(b) the commencement by or against the Authority of a case or other proceeding seeking liquidation, reorganization or other relief with respect to the Authority or its debts under any bankruptcy, insolvency or other similar state or federal law now or hereafter in effect, including, without limitation, the appointment of a trustee, receiver, liquidator, custodian or other similar official for the Authority or any substantial part of its property or there shall be appointed or designated with respect to it, an entity such as an organization, board, commission, authority, agency or body to monitor, review, oversee, recommend or declare a financial emergency or similar state of financial distress with respect to it or there shall be declared or introduced or proposed for consideration by it or by any legislative or regulatory body with competent jurisdiction over it, the existence of a state of financial emergency or similar state of financial distress in respect of it;

(c) the making of an assignment for the benefit of creditors by the Authority;

(d) the failure of the Authority to generally pay its debts as they become due;

(e) the declaration or imposition by the Authority or by any Governmental Authority having jurisdiction over the Authority of a debt moratorium, debt adjustment, debt restructuring or comparable restriction with respect to the payment of any Debt of the Authority;

(f) the Authority shall admit in writing its inability to pay its debts when due; or

(g) the initiation of any actions to authorize or consent to any of the foregoing by or on behalf of the Authority.

"*Executive Order*" has the meaning assigned to such term in Section 4.21.

"*Exposure*" means, for any date with respect to the Authority and any Hedge Agreement, the amount of any Settlement Amount that would be payable by the Authority if such Hedge Agreement were terminated as of such date. Exposure shall be determined in accordance with the methodology for calculating amounts due upon early termination as set forth in the related Hedge Agreement and taking into account the notional principal amount, term and other relevant provisions thereof.

"*Fiscal Year*" means the fiscal year of the Authority ending on December 31st of each calendar year.

"*Fitch*" means Fitch Ratings, Inc., or any successor thereto.

"*GAAP*" means accounting principles generally accepted and consistently applied to governmental entities in the United States, as set forth in the opinions and pronouncements of the Accounting Principles Board, the American Institute of Certified Public Accountants, the

Financial Accounting Standards Board and the Governmental Accounting Standards Board or in such other statements by such other entity as may be in general use by significant segments of the accounting profession as in effect on the date hereof.

"*General Bond Resolution*" has the meaning set forth in the recitals hereto.

"*Governmental Approvals*" means an authorization, consent, approval, permit, license, certificate of occupancy or an exemption of, a registration or filing with, or a report to, any Governmental Authority.

"*Governmental Authority*" means any national, state or local government (whether domestic or foreign), any political subdivision thereof or any other governmental, quasi-governmental, judicial, administrative, public or statutory instrumentality, authority, body, agency, department, commission, bureau, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory, fiscal, monetary or administrative powers or functions of or pertaining to government, or any arbitrator, mediator or other Person with authority to bind a party at law.

"*Guarantee*" of or by any Person (the "*guarantor*") means any obligation, contingent or otherwise, of the guarantor guaranteeing or having the economic effect of guaranteeing any Debt or other obligation of any other Person (the "*primary obligor*") in any manner, whether directly or indirectly, and including any obligation of the guarantor, direct or indirect, (a) to purchase or pay (or advance or supply funds for the purchase or payment of) such Debt or other obligation or to purchase (or to advance or supply funds for the purchase of) any security for the payment thereof, (b) to purchase or lease property, securities or services for the purpose of assuring the owner of such Debt or other obligation of the payment thereof, (c) to maintain working capital, equity capital or any other financial statement condition or liquidity of the primary obligor so as to enable the primary obligor to pay such Debt or other obligation, or (d) as an account party in respect of any letter of credit or letter of guaranty issued to support such Debt or obligation; *provided*, that the term Guarantee shall not include endorsements for collection or deposit in the ordinary course of business.

"*Hazardous Materials*" means all explosive or radioactive substances or wastes and all hazardous or toxic substances, contaminants, chemicals, wastes or other pollutants, including petroleum or petroleum distillates, asbestos or asbestos-containing materials, polychlorinated biphenyls, radon gas, infectious or medical wastes and all other substances or wastes of any nature regulated pursuant to any Environmental Law.

"*Hedge Agreement*" means any rate swap transaction, basis swap, forward rate transaction, commodity swap, commodity option, equity or equity index swap, equity or equity index option, bond option, interest rate option, foreign exchange transaction, cap transaction, floor transaction, collar transaction, currency swap transaction, cross-currency rate swap transaction, currency option, total return swap, credit default swap or any other similar transaction (including any option with respect to any of these transactions) and any other agreement or option involving, or settled by reference to, one or more rates, currencies, commodities or equity or debt instruments or securities, or economic, financial or pricing indices or measures of economic, financial or pricing risk or value or any similar transaction or any combination of these transactions.

"*Insured*" has the meaning assigned to such term in the Series 2023 A Certificate of Determination.

"*Interest Payment Date*" means January 1 and July 1 of each year, commencing January 1, 2024.

"*Interest Rate*" means (a) collectively, the interest rates per annum for each maturity of the Series 2023 A Bonds set forth in the Series 2023 A Certificate of Determination calculated on the basis of a 360-day year comprised of twelve 30-day months, and (b) during the Amortization Period, the Step Coupon Rate; *provided*, that if at any time more than one of the foregoing specified interest rates would by their terms apply, "Interest Rate" shall mean and be equal to the highest such rate.

"*Lien*", on or with respect to any asset, means any mortgage, deed of trust, lien, pledge, charge, security interest, hypothecation, assignment, deposit arrangement or encumbrance of any kind in respect of such asset, whether or not filed, recorded or otherwise perfected or effective under applicable law, as well as the interest of a vendor or lessor under any conditional sale agreement, capital or finance lease or other title retention agreement relating to such asset and, in the case of securities, any purchase option, call or similar right of a third-party with respect to such securities.

"*Mandatory Purchase Date*" means the date fixed by written notice from the Purchaser to the Authority and the Trustee in accordance with Section 2.03, which shall be a Business Day not less than 90 days following the occurrence of a Mandatory Purchase Event.

"*Mandatory Purchase Event*" means the occurrence of any one or more of the following events:

(a) failure by the Authority to pay, or cause to be paid, when due (whether by scheduled maturity, required prepayment or redemption, acceleration, demand or otherwise) (i) the principal or Redemption Price of or interest on any Bond, including any Series 2023 A Bond, (ii) any amounts owed by the Authority under any other Parity Debt, or (iii) any amounts owed by the Authority under this Agreement or any other Debt owed to the Purchaser or an Affiliate of the Purchaser;

(b) an "event of default" shall have occurred and be continuing beyond the applicable grace period under any Parity Debt or under any document or instrument entered into by the Authority and evidencing or securing any Parity Debt;

(c) any Parity Debt shall have been accelerated and declared to be immediately due and payable prior to its stated maturity as a result of the occurrence of an event of default thereunder;

(d) the Authority Bond Rating is reduced to or below "BBB-" by S&P or to or below "BBB-" by Fitch or to or below "Baa3" by Moody's, or the Authority Bond Rating assigned by any Rating Agency is for any reason removed, withdrawn or suspended;

(e) any representation or warranty made or deemed made by or on behalf of the Authority in this Agreement or in any amendment of, or waiver under, this Agreement, or in any certificate, financial statement or other document furnished by or on behalf of the Authority pursuant to or in connection with this Agreement shall have been inaccurate or incomplete in any material respect when made or deemed to have been made;

(f) the entry or filing of one or more judgments or orders or of any similar decrees or decisions for the payment of money that, individually or in the aggregate, equals or exceeds $10,000,000, is not Insured and is or could be payable from Pledged Revenues (each, a "*Judgment*") shall be rendered against the Authority or against the Turnpike System and (i) such Judgment shall be undischarged, unstayed or unbonded for a period of 45 days, or (ii) any action shall be taken by the holder of any such Judgment by which such holder attaches, executes or levies upon any of the Pledged Revenues to enforce any such Judgment;

(g) (i) a Governmental Authority with jurisdiction to rule on the validity of this Agreement or the Resolution, including the Series 2023 A Certificate of Determination, shall find, announce or rule that (A) any provision of the Resolution, including the Series 2023 A Certificate of Determination, relating to the payment and security of the Bonds or any other Parity Debt, the Authority's ability to pay the Bonds or any other Parity Debt, the Authority's ability to perform its obligations under the Resolution, including the Series 2023 A Certificate of Determination, or the rights or remedies of the Purchaser thereunder, or (B) any provision of this Agreement shall cease to be valid and binding on the Authority, (ii) the Authority or any Person on its behalf shall (A) contest the validity or enforceability of any provision of the Resolution, including the Series 2023 A Certificate of Determination, relating to the payment and security of the Bonds or any other Parity Debt, the Authority's ability to pay the Bonds or any other Parity Debt, the Authority's ability to perform its obligations under the Resolution, including the Series 2023 A Certificate of Determination, or the rights and remedies of the Purchaser thereunder, or any provision of this Agreement, or (B) seek an adjudication that any provision of the Resolution, including the Series 2023 A Certificate of Determination, relating to the payment and security of the Bonds or any other Parity Debt, the Authority's ability to pay the Bonds or any other Parity Debt, the Authority's ability to perform its obligations under the Resolution, including the Series 2023 A Certificate of Determination, or the rights and remedies of the Purchaser thereunder, or any provision of this Agreement, is not valid and binding on the Authority, or (iii) for any other reason any provision of the Resolution, including the Series 2023 A Certificate of Determination, relating to the payment and security of the Bonds or any other Parity Debt, the Authority's ability to pay the Bonds or any other Parity Debt, the Authority's ability to perform its obligations under the Resolution, including the Series 2023 A Certificate of Determination, or the right or remedies of the Purchaser thereunder, or any provision of this Agreement, shall cease to be valid and binding upon the Authority;

(h) (i) failure by the Authority to pay, or cause to be paid, when due (whether by scheduled maturity, required prepayment or redemption, acceleration, demand or otherwise) any amounts owed by the Authority to any Person other than the Purchaser or an Affiliate of the Purchaser under any Subordinated Indebtedness having an aggregate outstanding principal amount in excess of $5,000,000 (measured, in the case of any Hedge Agreement, by the Authority's Exposure thereunder), beyond the period of grace, if any, provided in the instrument or agreement under which such Subordinated Indebtedness was created; or (ii) default in the observance or performance of any agreement or condition relating to any Subordinated Indebtedness in excess of $5,000,000 or contained in any instrument or agreement evidencing, securing or relating thereto, or any other event shall occur or condition exist, the effect of which default or other event or condition is to cause, or to permit the holder or holders of such Subordinated Indebtedness (or a trustee or agent on behalf of such holder or holders) to cause (determined without regard to whether any notice is required), any such Subordinated Indebtedness to become due prior to its stated maturity (or, with respect to any Hedge Agreement, an event that results in such Hedge Agreement being terminated early or being capable of being terminated early, other than in the case of an optional termination exercised by the Authority and without liability for payment by the Authority of any Settlement Amount);

(i) the Trustee and the Authority shall have received a written notice from the Purchaser of the occurrence of an "event of default" under this Agreement; *provided*, that upon any acceleration of the Series 2023 A Bonds pursuant to the Resolution, the Series 2023 A Bonds shall be immediately due and payable; or

(j) the occurrence of an Event of Default under the Resolution; *provided*, that upon any acceleration of the Series 2023 A Bonds pursuant to the Resolution, the Series 2023 A Bonds shall be immediately due and payable.

"*Margin Stock*" has the meaning assigned to that term in Regulation U promulgated by the Board of Directors of the Federal Reserve System, as now and hereafter from time to time in effect.

"*Material Adverse Change*" means the occurrence of any event or change that results in a material and adverse change in the business, condition (financial or otherwise), operations or prospects of the Authority since the last day of the period reported in the draft unaudited annual financial statements of the Authority dated as of December 31, 2022, or that materially and adversely affects (a) the enforceability of this Agreement or any of the other Related Documents, (b) the ability of the Authority to perform its obligations hereunder or thereunder, or (c) the rights of, or benefits or remedies available to, the Purchaser under the General Bond Resolution, the Series 2023 Resolution, this Agreement or any other Related Document.

"*Material Adverse Effect*" means (a) a materially adverse effect upon the Authority's business, assets, liabilities, condition (financial or otherwise), results of operations or business prospects, (b) with respect to this Agreement or any of the other Related Documents or any of the Authority's obligations arising under this Agreement or any of the other Related Documents, an adverse effect upon the binding nature, validity or enforceability of such agreement or obligation, (c) an adverse effect on the exclusion of the interest paid or to be paid on the Series 2023 A Bonds from gross income for purposes of federal income taxation or the exemption of such interest from State personal income taxes, or (d) a materially adverse effect (i) on the authority or ability of the Authority to perform any of its obligations under any Related Document or the ability of the Authority to complete the Transactions or (ii) on the rights or remedies of the Purchaser hereunder or under the other Related Documents or on the pledge of the Pledged Revenues under the General Bond Resolution or on the priority of the Liens created thereby.

"*Material Litigation*" has the meaning assigned to such term in Section 4.07.

"*Maturity Date*" means January 1, 2035.

"*Maximum Lawful Rate*" means the respective maximum, non-usurious, lawful rate of interest that may be contracted for, charged or received in connection with the Required Payments under this Agreement, under Applicable Law presently in effect or, to the extent permitted by law, under Applicable Law that may hereafter be in effect and that allows a higher maximum and non-usurious rate of interest than Applicable Law now allows.

"*Moody's*" means Moody's Investors Service, Inc., or any successor thereto.

"*MSRB*" has the meaning assigned to such term in Section 5.18.

"*1933 Act*" has the meaning assigned to such term in Section 9.01.

"*OFAC*" has the meaning assigned to such term in Section 4.21.

"*Operating Expenses*" has the meaning assigned to such term in the General Bond Resolution.

"*Optional Redemption*" means any optional redemption of all or any portion of the Series 2023 A Bonds under Section 5(a) of the Series 2023 A Certificate of Determination.

"*Other Taxes*" means any and all present or future stamp or documentary taxes or any other excise or property taxes, charges or similar levies arising from any payment made hereunder or from the execution, delivery or enforcement of, or otherwise with respect to, the Series 2023 A Bonds or this Agreement.

"*Outstanding*" has the meaning assigned to such term in the General Bond Resolution.

"*Owner*" has the meaning assigned to such term in the General Bond Resolution.

"*Parity Covenant*" has the meaning assigned to such term in Section 5.13.

"*Parity Creditor*" has the meaning assigned to such term in Section 5.13.

"*Parity Debt*" means (i) all Bonds issued and outstanding under the Resolution, (ii) the Authority's reimbursement obligations with respect to any Credit Facility (as such term in defined in the Resolution) supporting the Bonds, and (iii) the Authority's payment obligations to any Qualified Swap Provider (as such term is defined in the General Bond Resolution) under a Qualified Swap (as such term is defined in the General Bond Resolution) where payments from the Qualified Swap Provider have been pledged under the Resolution as part of the Pledged Revenues.

"*Patriot Act*" has the meaning assigned to such term in Section 4.21.

"*Pension Plan*" means any "employee pension benefit plan" that is maintained by the Authority or to which the Authority contributes or has an obligation to contribute, or has made contributions at any time during the immediately preceding six plan years.

"*Permitted Liens*" means Liens permitted to be incurred with respect to the Authority and the Turnpike System under the General Bond Resolution.

"*Person*" means an individual, a corporation, a partnership, an association, a joint venture, a trust, a business trust, a limited liability company or any other entity or organization, including a governmental or political subdivision or an agency or instrumentality thereof.

"*Pledged Revenues*" means the Turnpike Revenues, the Revenue Fund and the other revenues, receipts, funds and income included in the definition of "Pledged Revenues" in the General Bond Resolution.

"*PP&E*" means all real and personal property of the Authority that is "property, plant and equipment" under GAAP.

"*Property*" means all real, mixed and personal property of the Authority, tangible and intangible, wherever located, in which the Authority shall have any right, title or interest, including (without limitation) the Turnpike System, all PP&E, all Pledged Revenues and other income, receipts, accounts and cash and investment property, and any such property constructed, acquired or leased from time to time by the Authority after the Closing Date.

"*Purchase Price*" means an amount equal to 100% of the aggregate principal amount of the Series 2023 A Bonds Outstanding on the Mandatory Purchase Date multiplied by the percentage shown in the chart set forth on <u>Schedule B</u> attached to the Series 2023 A Certificate of Determination for the Mandatory Purchase Date or, if the Mandatory Purchase Date shall not be a date set forth on such <u>Schedule B</u>, the date set forth on such <u>Schedule B</u> that is immediately prior to the Mandatory Purchase Date, plus accrued interest to the Mandatory Purchase Date.

"*Purchaser*" means Barclays Capital Inc. and/or any of the other Purchaser Entities, as applicable.

"*Purchaser Entities*" means (i) the Purchaser, (ii) an Affiliate or other party related to the Purchaser, or (iii) a funding entity or other special purpose arrangement established by the Purchaser or an Affiliate of the Purchaser such as a tender option bond trust (or similar securitization vehicle) the owners of any beneficial interest in which are limited to qualified institutional buyers or accredited investors.

"*Rating Agency*" means S&P, Moody's, Fitch or any successor or additional rating agency that rates Parity Debt at the written request of the Authority.

"*Redemption Price*" has the meaning assigned to such term in the General Bond Resolution.

"*Refunded Bonds*" has the meaning set forth in the recitals hereto.

"*Related Documents*" means, collectively, this Agreement, the General Bond Resolution, the Series 2023 Resolution, the Series 2023 A Certificate of Determination and the Series 2023 A Bonds and any exhibits, instruments or agreements relating thereto, as the same may be amended from time to time in accordance with their respective terms and the terms hereof.

"*Required Payments*" means all present and future debts, obligations and liabilities of the Authority to the Purchaser arising pursuant to, or on account of, the provisions of this Agreement, the Series 2023 A Bonds or any of the other Related Documents (or to the Trustee, for the benefit of any of the foregoing Persons), including the obligations: (a) to pay all principal, interest, late charges, Redemption Price and Purchase Price (in each case, as applicable) and other amounts due at any time under the Series 2023 A Bonds in accordance with the provisions of the Resolution and this Agreement and to make all other payments required under the Resolution and this Agreement; and (b) to perform, observe and comply with all of the terms, covenants and conditions, expressed or implied, with which the Authority is required to perform, observe or comply pursuant to the terms of any of the other Related Documents to which the Authority is a party.

"*Resolution*" has the meaning set forth in the recitals hereto.

"*Revenue Fund*" has the meaning assigned to such term in the General Bond Resolution.

"*Rule*" has the meaning assigned to such term in Section 5.18.

"*S&P*" means S&P Global Ratings, acting through Standard & Poor's Financial Services LLC, or any successor thereto.

"*Securities Depository*" has the meaning assigned to such term in the Series 2023 Resolution.

"*Series 2023 Resolution*" has the meaning set forth in the recitals hereto.

"*Series 2023 A Bonds*" has the meaning set forth in the recitals hereto.

"*Series 2023 A Certificate of Determination*" has the meaning set forth in the recitals hereto.

"*Settlement Amount*" means, with respect to the Authority and any Hedge Agreement, any amount payable by the Authority under the terms of such Hedge Agreement in respect of, or intended to compensate the other party for, the value of such Hedge Agreement upon early termination thereof.

"*Solvent*" means, with respect to any Person on a particular date, that on such date (a) the fair value of the property of such Person is greater than the total amount of Debts and liabilities, including contingent, subordinated, unmatured and unliquidated Debts and liabilities, of such Person; (b) the present fair salable value of the assets of such Person is not less than the amount that will be required to pay the probable liability of such Person on its Debts and liabilities as they become absolute and matured; (c) such Person does not intend to, and does not believe that it will, incur Debts or liabilities beyond such Person's ability to pay as such Debts and liabilities mature; and (d) such Person is not engaged in a business or transaction, and is not about to engage in a business or transaction, for which such Person's property would constitute an unreasonably small capital. The amount of contingent Debts or liabilities (such as litigation and State Pension System liabilities) at any time shall be computed as the amount that, in light of all the facts and circumstances existing at the time, represents the amount that can be reasonably expected to become an actual or matured liability.

"*State*" means the State of New Jersey.

"*State Pension System*" means the Public Employees Retirement System, an actuarially funded pension system operated by the State, and any successor pension system or plan thereto.

"*Step Coupon Rate*" means seven and one-half percent (7.50%) per annum.

"*Subordinated Indebtedness*" has the meaning assigned to such term in the General Bond Resolution.

"*Tax Event*" has the meaning assigned to such term in Section 5.19.

"*To the best knowledge of*" (or any similar knowledge qualifier) means, when modifying a representation, warranty or other statement of any Person, that the fact or situation described therein is known by the Person (or, in the case of a Person other than a natural Person, known by an authorized representative of such Person) making the representation, warranty or other statement, or with the exercise of reasonable due diligence under the circumstances (in accordance with the standard of what a reasonably prudent Person in similar circumstances would have done) would have been known by the Person (or, in the case of a Person other than a natural Person, by such Person's authorized representative).

"*Transactions*" means the issuance of the Series 2023 A Bonds, the execution and delivery by the Authority of this Agreement and the other Related Documents, the performance by the Authority of its obligations (including payment obligations) hereunder and thereunder, the purchase by the Purchaser of the Series 2023 A Bonds and the use by the Authority of the proceeds of the Series 2023 A Bonds.

"*Trustee*" means The Bank of New York Mellon or its permitted successor as Trustee under the General Bond Resolution.

"*Turnpike Revenues*" has the meaning assigned to such term in the General Bond Resolution.

"*Turnpike System*" has the meaning assigned to such term in the General Bond Resolution.

"*Verification Report*" means, with respect to the deemed payment of the Series 2023 A Bonds pursuant to Section 1201 of the General Bond Resolution, a report of an Accountant verifying that the Federal Securities (as defined in the General Bond Resolution) and cash, if any, deposited in connection with such deemed payment satisfy the requirements of Section 1201 of the General Bond Resolution.

"*Written*" or "*in writing*" means any form of written communication or a communication by means of facsimile device and as described in Section 9.05.

Section 1.02. Incorporation of Certain Definitions by Reference. Each capitalized term used herein and not otherwise defined herein shall have the meaning provided therefor in the General Bond Resolution, the Series 2023 Resolution, the Series 2023 A Certificate of Determination and the Series 2023 A Bonds, as applicable, unless the context requires otherwise.

Section 1.03. Accounting Matters. All accounting terms used herein without definition shall be interpreted in accordance with GAAP, and except as otherwise expressly provided herein all accounting determinations required to be made pursuant to this Agreement shall be made in accordance with GAAP.

Section 1.04. Computation of Time Periods. In this Agreement, in the computation of a period of time from a specified date to a later specified date, unless otherwise specified herein, the word "from" means "from and including" and the words "to" and "until" each mean "to but excluding".

Section 1.05. New York City Time Presumption. All references herein to times of the day shall be presumed to refer to New York City time unless otherwise specified.

Section 1.06. Relation to Other Documents. Nothing in this Agreement shall be deemed to amend, or relieve the Authority of any of its obligations under, any Related Document. To the extent that the Authority undertakes in any provision of this Agreement representations, covenants or obligations that conflict with, or are more exacting than, a provision of any other Related Document to which the Authority is a party, such provisions of this Agreement shall control for all purposes of this Agreement.

Section 1.07. Interpretation. All words used herein shall be construed to be of such gender as the circumstances require. Unless the context of this Agreement otherwise clearly requires, references to the plural includes the singular, the singular includes the plural and the part includes the whole. Whenever the context may require, any pronoun shall include the corresponding masculine, feminine and neuter forms. The words "include", "includes" and "including" shall be deemed to be followed by the phrase "without limitation". The word "will" shall be construed to have the same meaning and effect as the word "shall". Unless otherwise specified (a) any definition of or reference to any agreement, instrument or other document herein shall be construed as referring to such agreement, instrument or other document as from time to time amended, supplemented or otherwise modified (subject to any restrictions on such amendments, supplements or modifications set forth in such document or herein), (b) any reference herein to any Person shall be construed to include such Person's permitted successors and assigns, (c) the words "herein", "hereof" and "hereunder", and words of similar import, shall be construed to refer to this Agreement in its entirety and not be limited to any particular provision of this Agreement, (d) all references herein to Articles, Sections, Exhibits and Schedules shall be construed to refer to Articles and Sections of, and Exhibits and Schedules to, this Agreement, and (e) the words "asset" and "property" shall be construed to have the same meaning and effect and, when used in connection with any Person, to refer to all rights, title and interests of such Person in and to any and all property, whether real, personal or mixed, or tangible or intangible, and wherever situated, including cash, securities, investment property, accounts, land, buildings, general intangibles, chattel, intellectual property, contract rights and other property and assets.

ARTICLE II

PAYMENT OBLIGATIONS

The Authority hereby unconditionally, irrevocably and absolutely agrees to make prompt and full payment of all payment obligations owed to the Purchaser under the Series 2023 A Bonds and this Agreement and each of the other Related Documents, whether now existing or hereafter arising, irrespective of their nature, whether direct or indirect, absolute or contingent, with interest thereon at the rate or rates provided in such Related Document and under such Required Payments.

Section 2.01. Payment of Series 2023 A Bonds and Other Required Payments. The Authority shall pay the principal, Redemption Price and Purchase Price of, and interest on, the Series 2023 A Bonds, when due, at the times, in the manner and on the terms and conditions set forth in the Resolution (including the Series 2023 A Certificate of Determination) and the Series 2023 A Bonds. The Authority shall pay all other Required Payments as and when required hereunder and under the other Related Documents and, if not previously paid, shall pay all Required Payments due and owing on the Mandatory Purchase Date or the Amortization End Date.

Section 2.02. Interest Rate. The Outstanding principal amount of the Series 2023 A Bonds shall bear interest at the Interest Rate from time to time in effect pursuant to the General Bond Resolution, the Series 2023 Resolution (including the Series 2023 A Certificate of Determination) and the Series 2023 A Bonds. Interest that is unpaid when due shall be payable on demand.

Section 2.03. Mandatory Purchase.

(a) The Authority covenants and agrees to inform the Trustee and the Purchaser in writing within five Business Days after the day upon which the Authority is notified of, or otherwise obtains knowledge of, a Mandatory Purchase Event.

(b) The deemed date of occurrence of a Mandatory Purchase Event shall be the earliest of the date any of the Authority or the Purchaser learns of the occurrence of such event.

(c) Upon the occurrence of a Mandatory Purchase Event, the Purchase Price of all of the Outstanding Series 2023 A Bonds owned by the Purchaser Entities and all other amounts due and owing under such Series 2023 A Bonds and hereunder and all amounts due and owing under any of the other Related Documents shall automatically become due on the Mandatory Purchase Date determined pursuant to Section 2.03(d) below and payable in accordance with the provisions of the Series 2023 A Certificate of Determination, without presentment, demand, protest or other notice of any kind, all of which are hereby waived by the Authority; *provided*, that notwithstanding the foregoing, the provisions of Section 6 of the Series 2023 A Certificate of Determination shall control and provide for the payment of the Redemption Price of the Series 2023 A Bonds on the terms stated therein.

(d) The Purchaser agrees to provide written notice to the Authority and the Trustee specifying the Mandatory Purchase Date, which shall be a Business Day not less than 90 days following the deemed date of occurrence of the Mandatory Purchase Event, and the Authority covenants and agrees that (i) the Series 2023 A Bonds shall bear interest at the Step Coupon Rate retroactively to the deemed date of occurrence of the Mandatory Purchase Event, and (ii) neither the deemed date of occurrence of the Mandatory Purchase Event nor the obligation of the Authority to pay all amounts due hereunder or under the Related Documents on the Mandatory Purchase Date shall be affected, impaired, modified or limited in any way by the Purchaser's failure to provide such notice by any specific date.

Section 2.04. Optional Redemption. In connection with any Optional Redemption of all or any portion of the Series 2023 A Bonds, the Authority shall pay to the Purchaser the Redemption Price in accordance with the provisions of the Series 2023 A Certificate of Determination.

Section 2.05. Payments Generally.

(a) All payments of the principal, Redemption Price and Purchase Price of, and interest on, the Series 2023 A Bonds shall be made by the Authority at the times, in the manner and on the terms and conditions set forth in the General Bond Resolution, the Series 2023 Resolution (including the Series 2023 A Certificate of Determination) and the Series 2023 A Bonds. All payments to be made by or on behalf of the Authority to the Purchaser under the other Related Documents and this Agreement shall be fully earned when due and nonrefundable when paid and made in lawful currency of the United States and in immediately available funds. All Required Payments payable to the Purchaser hereunder, unless otherwise directed by the Purchaser in writing, shall be paid by wire transfer to the Purchaser's account at The Bank of New York, ABA# 021000018, Account Name: BZW, Account# GLA111569 (or to such other account of the Purchaser as the Purchaser may specify by written notice to the Authority or the Trustee received by no later than 12 noon on the day prior to the date payment is due) not later than 3:30 p.m. on the date payment is due. Any payment received by the Purchaser after 3:30 p.m. shall be deemed to have been received by the Purchaser on the next Business Day. If any payment hereunder is due on a day that is not a Business Day, then such payment shall be due on the next succeeding Business Day, and, in the case of the computation of the interest or fees hereunder, such extension of time shall, in such case, be included in the computation of the payment due hereunder.

(b) If at any time insufficient funds are received by and available to the Purchaser to pay fully all amounts of principal and interest then due under the Series 2023 A Bonds or hereunder, such funds shall be applied, *first*, to payment of that portion of the Required Payments constituting accrued and unpaid interest on the Series 2023 A Bonds or other amount unpaid hereunder (and, in any such case, first to past due interest and second to current interest) and, *second*, to payment of that portion of the Required Payments constituting unpaid principal of the Series 2023 A Bonds.

ARTICLE III

CONDITIONS PRECEDENT

Section 3.01. Documents and Related Closing Conditions. The Purchaser has entered into this Agreement in reliance upon the representations and agreements of the Authority contained herein and the performance by the Authority of its obligations hereunder, both as of the date hereof and as of the date of Closing. At or prior to the Closing, the Purchaser shall receive copies of each of the following documents, certificates and opinions, each dated the date of the Closing unless otherwise specified, and in form and substance satisfactory to the Purchaser and the Authority:

(i) the Resolution (including the Series 2023 Resolution), certified by an Authorized Officer of the Authority;

(ii) the Continuing Disclosure Agreement, executed by the Authority and The Bank of New York Mellon and U.S. Bank Trust Company, National Association, as the Co-Trustees under the Resolution (the "*Co-Trustees*");

(iii) a general certificate, dated the date of Closing, of an Authorized Officer of the Authority as to incumbency of officers, authorized signatures, certification of the minutes of the meeting of the Authority held on July 25, 2023, relating to the adoption of the Series 2023 Resolution, the Authority's by-laws, the Governor and State Treasurer approval letters, representations and warranties, no default under the Resolution and other matters;

(iv) a certificate, dated the date of Closing, signed by an Authorized Officer of the Authority, to the effect that, to the best of that person's knowledge, the representations of the Authority herein are true and correct in all material respects as if made as of the date of the Closing, and the Resolution is in full force and effect and has not been amended or supplemented since the date of this Agreement;

(v) the Arbitrage and Tax Certificate of the Authority relating to the Series 2023 A Bonds;

(vi) a certificate signed by an Authorized Officer of the Authority as required by Section 204(b)(3) of the General Bond Resolution to comply with such section;

(vii) the approving opinion of Bond Counsel, dated the date of the Closing and addressed to the Authority, the Co-Trustees and the Purchaser, to the effect that: (i) the Authority has been duly created and is validly existing as a public body corporate and politic under the provisions of the Act, with power to adopt the Resolution and to issue the Series 2023 A Bonds; (ii) the Resolution has been duly and lawfully adopted by the Authority, is in full force and effect, is valid and binding upon the Authority and is enforceable in accordance with its terms, and no other authorization for the Resolution is required; (iii) the Series 2023 A Bonds have been duly authorized and validly issued by the Authority in accordance with the Act and the provisions of the Resolution, are valid and binding obligations of the Authority enforceable in accordance with their terms and the terms of the Resolution, and are entitled to the benefit, protection and security of the Resolution and the Act; (iv) the Resolution creates the valid pledge that it purports to create of the Pledged Revenues and the amounts on deposit in all Funds established by the Resolution (except for moneys provided by governmental authorities whose availability is conditioned on such amounts not being subject to the pledge of the Resolution), subject only to the provisions of the Resolution permitting the application thereof for the purposes and on the terms set forth in the Resolution; (v) the Series 2023 A Bonds constitute additional Bonds under the Resolution, and are equally and ratably entitled to the benefits, protection and security of the Resolution along with all other Bonds heretofore issued and Outstanding under the Resolution and certain other obligations described in the Resolution; (vi) under existing law, interest on the Series 2023 A Bonds is excluded from gross income of the owners thereof for federal income tax purposes pursuant to Section 103 of the Internal Revenue Code of 1986, as amended, and interest on the Series 2023 A Bonds is not an item of tax preference under Section 57 of the Code for purposes of computing alternative minimum tax; and (vii) interest on the Series 2023 A Bonds and any gain from the sale thereof are not includable as gross income under the New Jersey Gross Income Tax Act;

(viii) a supplemental opinion of Bond Counsel, dated the date of Closing and addressed to the Authority, the Co-Trustees and the Purchaser, to the effect that: (i) the Bondholder Agreement and the Continuing Disclosure Agreement have each been duly authorized, executed and delivered by the Authority and each constitutes a legal, valid and binding obligation of the Authority, enforceable against the Authority in accordance with its terms, except as the enforceability of such documents may be limited by applicable bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium or other similar laws now or hereafter enacted by any state or by the federal government affecting the enforcement of creditors' rights generally and general principles of equity (regardless of whether enforcement is sought in a proceeding in equity or at law) and the valid exercise of the sovereign police powers of the State of New Jersey and the constitutional power of the United States of America; (ii) the Series 2023 A Bonds are not subject to the registration requirements of the Securities Act of 1933, as amended, and the Resolution is exempt from qualification under the Trust Indenture Act of 1939, as amended; (iii) the Series 2023 Resolution (1) constitutes a Series Resolution (as defined in the General Bond Resolution) that the Authority is authorized to adopt pursuant to Section 1001 of the General Bond Resolution without the consent of the Co-Trustees under the Resolution, the holders of any bonds heretofore issued by the Authority pursuant to the Resolution or any Credit Issuer; (2) does not specify, determine or authorize any matters or things that are contrary to or inconsistent with the Resolution; (3) has been duly and lawfully adopted by the Authority in accordance with the provisions of the General Bond Resolution and is valid and binding upon the Authority, the Co-Trustees and the holders of any bonds, including the Series 2023 A Bonds, heretofore or hereafter issued by the Authority pursuant to the Resolution; and (iv) the Refunded Bonds have been deemed to have been paid within the meaning and with the effect expressed in Section 1201 of the General Bond Resolution, the Refunded Bonds are no longer entitled to any lien, benefit or security under the Resolution and all covenants, agreements and obligations of the Authority to the Owners of the Refunded Bonds have been discharged and satisfied;

(ix) the opinion of the Acting Director of Law of the Authority, dated the date of Closing and addressed to the Authority, the Co-Trustees and the Purchaser, to the effect that: (i) the Authority is a public body, corporate and politic, organized and existing as an instrumentality of the State under the laws of the State of New Jersey, including the Act; (ii) the Resolution has been duly and lawfully adopted by the Authority, is in full force and effect on the date hereof, and no other authorization for the Resolution is required; (iii) the Bondholder Agreement and the Continuing Disclosure Agreement (collectively, the "*Authority Documents*") have each been duly executed, attested and delivered by officers of the Authority duly authorized to do so; (iv) except as disclosed in the Bondholder Agreement, there are no actions, suits, proceedings, inquiries or investigations (as to which the Authority has received formal notice), at law or in equity, before or by any court, governmental agency or public board or body, pending or, to such officer's knowledge after due inquiry, threatened, that (1) affect the due organization or existence of the Authority or the entitlement of its officers to their respective offices; or (2) seek to prohibit, restrain or enjoin the sale, issuance or delivery of the Series 2023 A Bonds or the pledging of the Pledged Revenues (as defined in the General Bond Resolution) or the application of the funds of the Authority for deposit in certain funds established pursuant to the Resolution to pay the principal of or interest on the Series 2023 A Bonds; or (3) in any way contest or affect (A) the validity or enforceability of the Resolution, the Series 2023 A Bonds or the Authority Documents or (B) the power of the Authority to adopt the Resolution or to execute or deliver the Series 2023 A Bonds or the Authority Documents; or (4) if determined in a manner adverse to the Authority, would materially and adversely affect the operations or financial condition of the Authority as a whole; (v) except as disclosed in the Bondholder Agreement, there are no actions, suits, proceedings, inquiries or investigations (as to which the Authority has received formal notice), at law or in equity, before or by any court, governmental agency or public board or body, pending or, to such officer's knowledge after due inquiry, threatened, that (1) affect in any way the current schedule of tolls charged by the Authority, (2) contest the lawfulness of the current schedule of tolls charged by the Authority, or (3) seek to enjoin or restrain or reduce the imposition, collection or amounts of the current schedule of tolls; and (vi) the adoption of the Resolution, the execution, delivery and performance by the Authority of its obligations under the Authority Documents and the issuance of the Series 2023 A Bonds did not and will not conflict with or constitute a breach of or default under: (1) any State statute or regulation; (2) any resolution or agreement to which the Authority is a party; or (3) any applicable court decree of any State court or of any federal court in New Jersey;

(x) the opinion of counsel to the Co-Trustees in form and substance satisfactory to the Authority and the Purchaser;

(xi) certificates of the Co-Trustees, in form and substance satisfactory to the Authority and the Purchaser;

(xii) a copy of the Form 8038-G to be filed by the Authority in connection with the Series 2023 A Bonds;

(xiii) a copy of the blanket DTC Letter of Representations, executed by the Authority;

(xiv) the written order of the Authority required by Section 202(a)(2) of the General Bond Resolution; and

(xv) such additional legal opinions, certificates, proceedings, instruments and other documents as the Purchaser may reasonably request to evidence compliance by the Authority with legal requirements, the truth and accuracy, as of the time of Closing, of the Authority's representations herein contained and the due performance or satisfaction by the Authority at or prior to such time of all agreements then to be performed and all conditions then to be satisfied by the Authority.

In addition, within 45 days of the Closing, the Authority shall deliver to the Purchaser a private placement memorandum or other similar disclosure document relating to the Series 2023 A Bonds (together with the customary opinions of counsel and certifications) in form and substance satisfactory to the Purchaser.

ARTICLE IV

REPRESENTATIONS, WARRANTIES AND COVENANTS

The Authority represents, warrants and covenants to and with the Purchaser as of the date hereof and as of each day during the term of this Agreement, as follows:

Section 4.01. Due Organization; Power and Authority. The Authority is a body corporate and politic of the State of New Jersey created and existing under the laws of the State of New Jersey with the powers and authority, among others, set forth in the Act, including all requisite power and authority to execute and deliver the Related Documents to which the Authority is a party, to own and operate the Turnpike System and to perform its obligations under the Related Documents to which the Authority is a party, including the power and authority to issue and deliver the Series 2023 A Bonds.

Section 4.02. Authorization and Validity of Agreement, Related Documents and Borrowing. The execution, delivery and performance by the Authority of this Agreement and the other Related Documents to which it is a party and the issuance and delivery of the Series 2023 A Bonds by the Authority have been duly authorized by all necessary action of the governing body of the Authority. Each of this Agreement and the Related Documents (other than the Series 2023 A Bonds) to which the Authority is a party constitutes a legal, valid and binding obligation of the Authority, enforceable against the Authority in accordance with its terms, except as such enforceability may be limited by applicable reorganization, insolvency, liquidation, readjustment of debt, moratorium or other similar laws affecting the enforcement of the rights of creditors generally and by general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law). Each Series 2023 A Bond when issued, and as authenticated and delivered by the Trustee against payment therefor, as contemplated by the General Bond Resolution and the Series 2023 Resolution (including the Series 2023 A Certificate of Determination) and this Agreement, will have been duly issued, authenticated and delivered under the Act and in conformity with the General Bond Resolution and the Series 2023 Resolution (including the Series 2023 A Certificate of Determination) and will constitute the legal, valid and binding obligation of the Authority enforceable in accordance with its terms, and will be entitled to the benefits of the General Bond Resolution and the Series 2023 Resolution (including the Series 2023 A Certificate of Determination). The obligation of the Authority to pay Debt Service under the General Bond Resolution is absolute and unconditional.

Section 4.03. Compliance of Agreement, Related Documents with Applicable Law, Organizational Documents, Etc. The execution, delivery and performance of this Agreement and each of the other Related Documents in accordance with its and their respective terms, the assignment and pledge of the Pledged Revenues pursuant to the General Bond Resolution and the Series 2023 Resolution (including the Series 2023 A Certificate of Determination) and the consummation of the Transactions do not and will not (a) contravene or conflict with the Authority's By-Laws or other organizational documents or with any provision of the Act, (b) require any consent or approval of any creditor of the Authority, (c) violate any Applicable Law (including, without limitation, Regulations G, T, U or X of the Board of Governors of the Federal Reserve System, or any successor regulations), (d) conflict with, result in a breach of or constitute a default under any Contract to which the Authority is a party or by which any of its Property may be bound, or (e) result in or require the creation or imposition of any charge, pledge, security interest, encumbrance or other Lien upon or with respect to any Property now owned or hereafter acquired by the Authority, except such Liens, if any, created under and pursuant to this Agreement or the General Bond Resolution. The Resolution has been adopted in compliance with all requirements of Applicable Law.

Section 4.04. Governmental Approvals. Other than the approval letters provided to the Purchaser pursuant to Section 301 of this Agreement, no authorizations, consents or other Governmental Approvals are necessary for the Authority to enter into this Agreement and the other Related Documents and perform the transactions contemplated hereby and thereby and such approval letters remain in full force and effect and are subject to no further executive, legislative, administrative or judicial review. No other authorization or approval or other action by, and no notice to or filing with, any Governmental Authority is required for the due execution, delivery and performance by the Authority of this Agreement or the due execution, delivery or performance by the Authority of the Related Documents to which it is a party.

Section 4.05. Compliance with Law. Except as otherwise set forth on Schedule 4.05 attached hereto, the Authority is in compliance with all Applicable Law, including all Governmental Approvals, except for noncompliance that, singly or in the aggregate, has not had and will not have a Material Adverse Effect or have an adverse effect on the Authority's ability to perform its obligations under this Agreement and under the other Related Documents. The Authority has not received any complaint or other notice alleging a violation of, or failure to comply with, any judgment, order, writ, injunction or decree of any Governmental Authority applicable to the Authority or the Turnpike System or any statute, law, rule or regulation applicable to the Authority or the Turnpike System. The collection of Pledged Revenues and the accounting and recordkeeping therefor are in material compliance with all Applicable Law and all applicable resolutions, ordinances and rules of the Authority.

Section 4.06. Title to Properties. The Authority has good, marketable title to or a leasehold interest in its respective Property. None of the Property of the Authority is subject to any Lien, except Permitted Liens. The Authority has complied with all obligations under all leases to which it is a party and under which it is in occupancy, and all such leases are in full force and effect. The Authority enjoys peaceful and undisturbed possession under all such leases.

Section 4.07. Litigation. Except as otherwise set forth on Schedule 4.07 attached hereto, there is no action, suit, proceeding, inquiry or investigation pending nor, to the best knowledge of the Authority after due inquiry, is there any action, suit, proceeding, inquiry or investigation threatened against or affecting the Authority or any Property of the Authority in any court or before any arbitrator of any kind or before or by any other Governmental Authority, (i) wherein an unfavorable decision, ruling or finding could have a Material Adverse Effect or could result in a Material Adverse Change, (ii) that seeks to restrain or enjoin any of the Transactions, or (iii) that could adversely affect (A) the status of the Authority as a public body corporate and politic of the State, (B) the exclusion of interest on the Series 2023 A Bonds from gross income for federal income tax purposes, (C) the validity, binding effect and perfection of the pledge of and lien on the Pledged Revenues or (D) the ability of the Authority to perform its obligations under this Agreement, the General Bond Resolution or any other Related Document (any such action, suit, proceeding, inquiry or investigation being herein referred to as "*Material Litigation*").

Section 4.08. Absence of Defaults and Events of Default.

(a) No Default or Event of Default has occurred and is continuing.

(b) The Authority is not in material default under (i) any order, writ, injunction or decree of any court or governmental body, agency or other instrumentality applicable to the Authority, or (ii) any law or regulation applicable to the Authority, or (iii) any Contract, default under which would have an adverse effect on the Properties, business, condition (financial or other), results of operations or prospects of the Authority or the Transactions, or would have an adverse effect on the validity or enforceability of this Agreement or any of the other Related Documents, or on the authority or ability of the Authority to perform its obligations under this Agreement or any of the other Related Documents to which the Authority is a party. The Authority is not in breach of any rate or financial covenant or any other material provision of any Contract entered into in connection with any Debt.

Section 4.09. Financial Statements. The balance sheets of the Authority as of December 31, 2021 and 2022, and the related statement of revenues and expenses and changes in financial position for the years then ended and the auditors' report with respect to the period ending December 31, 2021, copies of which have heretofore been furnished to the Purchaser, are complete and correctly and fairly present the financial condition, changes in financial position and results of operations of the Authority at such dates and for such periods, and were prepared in accordance with GAAP consistently applied, except as stated in the notes thereto. Since December 31, 2022, except as otherwise set forth on Schedule 4.09(a) attached hereto, there has been no Material Adverse Change nor, except as otherwise set forth on Schedule 4.09(b) attached hereto, any increase in the Authority's Debt. The Authority has no material contingent liabilities or other material contracts or commitments payable from the Pledged Revenues that are not reflected in such financial statements or in the notes thereto.

Section 4.10. Accuracy and Completeness of Information. All information, reports and other papers and data furnished by the Authority to the Purchaser were, at the time the same were so furnished, complete and correct in all material respects, to the extent necessary to give the recipient a true and accurate knowledge of the subject matter and were provided in expectation of the Purchaser's reliance thereon in purchasing the Series 2023 A Bonds. No fact is known to the Authority that has had or, so far as the Authority can now reasonably foresee, may in the future have a Material Adverse Effect, which has not been set forth in the financial statements referred to in Section 4.09 or in such other information, reports or other data disclosed in writing to the Purchaser prior to the Closing Date. Any financial, budget and other projections furnished to the Purchaser by the Authority or its agents were prepared in good faith on the basis of the assumptions stated therein, which assumptions were fair and reasonable in light of the conditions existing at the time of delivery of such financial, budget or other projections, and represented and, as of the date of this representation, represent the Authority's best estimate of its future financial performance. No document furnished nor any representation, warranty or other written statement made to the Purchaser in connection with the negotiation, preparation or execution of this Agreement or the Related Documents contains or will contain any untrue statement of a material fact or omits or will omit (as of the date made or furnished) to state any material fact necessary in order to make the statements contained herein or therein, in light of the circumstances under which they were or will be made, not misleading.

Section 4.11. Sovereign Immunity. The Authority is not entitled to claim the defense of sovereign immunity in any action, suit or proceeding arising under or relating to the Series 2023 A Bonds, this Agreement or any Related Document.

Section 4.12. Incorporation of Representations and Warranties. The Authority hereby makes to the Purchaser the same representations and warranties as are made by the Authority in each Related Document to which it is a party, which representations and warranties, together with the related definitions of terms contained therein, are incorporated by reference in this Section 4.12 with the same effect as if each and every such representation, warranty and definition were set forth in this Section 4.12 in its entirety. No amendment to or waiver of such representations, warranties or definitions made pursuant to the relevant Related Document shall be effective to amend such representations, warranties or definitions as incorporated by reference herein without the prior written consent of the Purchaser.

Section 4.13. Insurance. The Authority currently maintains insurance of such type and in such amounts or in excess of such amounts as are necessary to comply with the requirements of the General Bond Resolution.

Section 4.14. Series 2023 A Bonds. Each Series 2023 A Bond has been duly and validly issued under the General Bond Resolution and is entitled to the benefits thereof. The Series 2023 A Bonds as purchased by the Purchaser are free and clear of any pledge, security interest, claim or other Lien of any Person.

Section 4.15. Compliance with Code.

(a) The Authority does not maintain nor contribute to a Pension Plan, nor has it ever contributed to a Pension Plan, other than the State Pension System.

(b) (i) The Authority's participation in the State Pension System is in compliance in all material respects with the applicable provisions of the Code and other federal or State law; (ii) there are no pending or, to the best knowledge of the Authority, threatened claims, actions or lawsuits, or action by any Governmental Authority, with respect to the Authority's participation in the State Pension System that has resulted or could reasonably be expected to result in a Material Adverse Effect; (iii) the Authority's contributions to the State Pension System are made pursuant to invoices received by the Authority from or on behalf of the State Pension System in amounts as determined by the New Jersey Division of Pensions and Benefits, and the Authority has not failed to make any contribution to the State Pension System for which it has been invoiced; and (iv) to the best knowledge of the Authority, the State Pension System is a governmental plan as defined in Section 3(32) of ERISA.

Section 4.16. Interest. None of the Related Documents to which the Authority is a party or the Series 2023 A Bonds provide for any payments that would violate any Applicable Law regarding permissible maximum rates of interest or the calculation or collection of interest upon interest. In particular, and not in limitation of the foregoing, under the laws of the State, the obligation of the Authority under this Agreement and under the Series 2023 A Bonds to pay interest at the Interest Rate is a valid, binding and enforceable contractual obligation, which the Purchaser is entitled to enforce and collect in accordance with the laws of the State and is not subject to any limitation, restriction or cap on the per annum rate of interest that may be charged or recovered by the Purchaser or paid by the Authority.

Section 4.17. Investment Company Act. The Authority is not an "investment company" or a company "controlled" by an "investment company", as such terms are defined in the Investment Company Act of 1940 (15 U.S.C. §80a-1 *et seq.*), as amended.

Section 4.18. Federal Reserve Board Regulations. The Authority is not engaged principally, or as one of its important activities, in the business of extending credit for the purpose of purchasing or carrying Margin Stock. The Authority will not use any part of the proceeds of the Series 2023 A Bonds and has not incurred any Debt to be reduced, retired or purchased by the Authority out of such proceeds for the purpose of purchasing or carrying any Margin Stock.

Section 4.19. No Proposed Legal Changes. Except as otherwise set forth on Schedule 4.19 attached hereto, there is no amendment or, to the best knowledge of the Authority, proposed amendment to the Constitution of the State or any State law or any published administrative interpretation of the Constitution of the State or any State law, or any proposition or referendum (or proposed proposition or referendum) or other ballot initiative or any legislation that has passed either house of the legislature of the State, or any published judicial decision interpreting any of the foregoing, the effect of which could reasonably be expected to affect adversely (a) the issuance of, or security for, any of the Series 2023 A Bonds, (b) the rights or remedies of the Purchaser of the Series 2023 A Bonds, or (c) the Authority's existence or its power or ability to perform its obligations hereunder or under any of the other Related Documents, including, without limitation, the Authority's ability to repay when due its obligations under this Agreement and the Series 2023 A Bonds.

Section 4.20. Environmental Matters. In the ordinary course of its business, the Authority conducts an ongoing review of the effect of Environmental Laws on the business, operations and Properties of the Authority, in the course of which it identifies and evaluates associated liabilities and costs (including, without limitation, any capital or operating expenditures required for clean-up or closure of Properties presently or previously owned or operated, any capital or operating expenditures required to achieve or maintain compliance with environmental protection standards imposed by law or as a condition of any license, permit or contract, and related constraints on operating activities, and any actual or potential liabilities to third-parties, including employees, and any related costs and expenses). Except as otherwise set forth on Schedule 4.20 attached hereto, the Authority and its Property (i) have not become subject to any Environmental Liability nor does the Authority know of any basis for any Environmental Liability, (ii) have not received notice of any Environmental Claim or of any failure or alleged failure to comply with applicable federal, State or local health and safety statutes or regulations, and (iii) to the best knowledge of the Authority, are in compliance with all Environmental Laws and have obtained and maintain and are in material compliance with any permit, license or other approval required under any Environmental Law.

Section 4.21. Anti-Terrorism Representation.

(a) The Authority is not in violation of any laws relating to terrorism or money laundering ("*Anti-Terrorism Laws*"), including Executive Order No. 13224 on Terrorist Financing, effective September 24, 2001 (the "*Executive Order*"), and the USA Patriot Act, Title III of Pub. L. 107-56, 115 Stat. 272 (the "*Patriot Act*").

(b) The Authority is not any of the following:

(i) a Person that is listed in the annex to, or is otherwise subject to the provisions of, the Executive Order;

(ii) a Person owned or controlled by, or acting for or on behalf of, any Person that is listed in the annex to, or is otherwise subject to the provisions of, the Executive Order;

(iii) a Person with which the Purchaser is prohibited from dealing or otherwise engaging in any transaction by any Anti-Terrorism Law;

(iv) a Person that commits, threatens, conspires to commit or supports "terrorism" as defined in the Executive Order; or

(v) a Person that is named as a "specially designated national and blocked person" on the most current list published by the Office of Foreign Asset Control ("*OFAC*") or any list of Persons issued by OFAC pursuant to the Executive Order at its official website or any replacement website or other replacement official publication of such list.

(c) The Authority does not (i) conduct any business or engage in making or receiving any contribution of funds, goods or services to or for the benefit of any Person described in subsection (b)(ii) above, (ii) deal in, or otherwise engage in any transaction relating to, any property or interests in property blocked pursuant to the Executive Order, or (iii) engage in or conspire to engage in any transaction that evades or avoids, or has the purpose of evading or avoiding, or attempts to violate, any of the prohibitions set forth in any Anti-Terrorism Law.

Section 4.22. Valid Lien. The Authority's irrevocable pledge and assignment of the Pledged Revenues under the General Bond Resolution to and for the payment of the Series 2023 A Bonds as Bonds issued thereunder and as authorized under and in accordance with the Act: (i) is valid and binding as of the Closing Date and all Pledged Revenues now or hereafter received by the Authority are immediately subject to the lien thereof; and (ii) requires no act, instrument, approval, filing, registration, recording or publication of the General Bond Resolution or any other instrument nor any prior separation or physical delivery of the Pledged Revenues or notice to any Person, to validly establish the pledge provided for under the General Bond Resolution or to create, attach, perfect, protect or maintain the first priority Lien and security interest created thereby on and in the Pledged Revenues to secure the Series 2023 A Bonds and the other Bonds for the benefit of the Purchaser. Neither the issuance and delivery of the Series 2023 A Bonds nor the pledge and assignment of the Pledged Revenues requires any act of appropriation for the application thereof to the purposes for which issued, delivered and pledged, respectively.

Section 4.23. Obligations; Other Debt. The obligations of the Authority to pay the principal, Redemption Price and Purchase Price of, and interest on, the Series 2023 A Bonds are payable and secured on a parity with the Parity Debt, are payable from the Pledged Revenues, are secured (together with the other Parity Debt) by a valid first lien on, pledge of and security interest in the Pledged Revenues as provided in the General Bond Resolution and are not subordinate to any payment secured by a Lien on the Pledged Revenues or any other claim, and are prior as against all Persons having claims of any kind in tort, contract or otherwise, whether or not such Persons have notice of the Lien established by the General Bond Resolution. All Required Payments hereunder other than Required Payments constituting principal, Redemption Price or Purchase Price of, or interest on, the Series 2023 A Bonds are payable from the General Reserve Fund as defined in the General Bond Resolution and shall be (i) limited in all respects to the amounts on deposit in the General Reserve Fund created and established under the General Bond Resolution from time to time available to be used by the Authority to make such payments, and (ii) special and limited obligations of the Authority that are subject and subordinate and junior in all respects to the lien and pledge created by the General Bond Resolution to secure the payment of the Bonds, including the Series 2023 A Bonds, and the other Parity Debt. As of the Closing Date, the Authority has not incurred, issued, created or assumed (i) any Debt payable from or secured by the Pledged Revenues or any portion thereof that is senior in right of payment or security to any of its obligations under the Series 2023 A Bonds or any of the other Parity Debt, (ii) any Debt payable from or secured by the Pledged Revenues or any portion thereof that is *pari passu* in right of payment or security with the Series 2023 A Bonds other than the Parity Debt, or (iii) any Debt payable from or secured by the Pledged Revenues or any portion thereof other than the Parity Debt and the Subordinated Indebtedness.

Section 4.24. Solvency. Both before and after giving effect to the issuance of the Series 2023 A Bonds and the undertaking of the other obligations contemplated by this Agreement, the General Bond Resolution, the Series 2023 Resolution (including the Series 2023 A Certificate of Determination) and the other Related Documents, the disbursement of the proceeds of the Series 2023 A Bonds and the payment and accrual of all transaction costs in connection with the foregoing, the Authority is and will be Solvent.

Section 4.25. General Bond Resolution a Contract. The provisions of the General Bond Resolution constitute a contract between the Authority and the Purchaser, and any Purchaser Entity, subject to the provisions of the General Bond Resolution and the Series 2023 A Bonds, may at law or in equity, by suit, action, mandamus or other proceedings, enforce and compel the performance of all duties required to be performed by the Authority under the Resolution and the Series 2023 A Bonds.

ARTICLE V

AFFIRMATIVE COVENANTS

The Authority covenants and agrees that until the principal, Redemption Price and Purchase Price of, and all interest on, the Series 2023 A Bonds have been paid to the Purchaser and all other Required Payments have been indefeasibly paid in full, and all other obligations of the Authority under this Agreement and under the Series 2023 A Bonds have been performed:

Section 5.01. Compliance with Laws and Regulations. The Authority shall comply with all Applicable Laws, including Environmental Laws, to which it or its Property may be subject; *provided*, *however*, that the Authority may contest the validity or application thereof and appeal or otherwise seek relief therefrom, so long as the Authority continues to perform all of its obligations hereunder and under the Related Documents and provided such acts do not affect the Authority's power and authority to execute this Agreement and the Related Documents to which it is a party or to perform its obligations and pay all amounts payable by it hereunder and thereunder, or otherwise result in a Default or Event of Default hereunder or under any of the other Related Documents.

Section 5.02. Reporting Requirements. The Authority shall furnish to the Purchaser each of the following:

(a) *Financial Statements*. Concurrently with the delivery thereof to the Trustee, copies of all financial statements, reports, summaries and other information required to be delivered by the Authority to the Trustee pursuant to Section 717 of the General Bond Resolution and copies of each Annual Budget and any amendment thereof or supplement thereto required to be delivered by the Authority to the Trustee pursuant to Section 710 of the General Bond Resolution; *provided*, *however*, with respect to (i) the annual audited financial statements prepared in accordance with Section 717 of the General Bond Resolution, such annual financial statements shall be delivered to the Purchaser as soon as available and in any event within 213 days after the end of each Fiscal Year of the Authority, and (ii) the quarterly financial statements prepared in accordance with Section 717 of the General Bond Resolution, such quarterly financial statements shall be delivered to the Purchaser as soon as available and in any event within 60 days after the end of each fiscal quarter of the Authority.

(b) *Hedge Agreements*. As soon as available, and in any event within 60 days after the end of each fiscal quarter, the Authority shall provide to the Purchaser (i) a detailed list of its investments and (ii) a detailed list of each Hedge Agreement of the Authority (including, without limitation, the counterparties to each Hedge Agreement, the interest rates applicable in each Hedge Agreement and the mark-to-market value of each Hedge Agreement as of the end of such fiscal quarter).

(c) *Certificate of Compliance*. Simultaneously with the delivery of each set of financial statements referred to in (a) above, a certificate of the Authority stating that, to the best knowledge of the Executive Director (or an Authorized Authority Representative) of the Authority, there exists on the date of such certificate no Default or

Event of Default or, if any Default or Event of Default then exists, setting forth the details thereof and the action that the Authority is taking or proposes to take with respect thereto.

(d) *Notice of Default*. Promptly after knowledge thereof by the Authority, written notice of the occurrence of any Default or Event of Default, together with a statement of the Authority setting forth the details thereof and the action that the Authority is taking or proposes to take with respect thereto.

(e) *Additional Parity Debt*. Promptly following the date of issuance or incurrence of any Parity Debt, a copy of the final official statement, offering memorandum or other final disclosure statement prepared with respect to such additional Parity Debt, if any.

(f) *Legal Proceedings*. Promptly after process has been served on the Authority, notice of any action, suit or proceeding before any court or Governmental Authority constituting Material Litigation.

(g) *Change in Ratings*. Promptly after obtaining knowledge thereof, written notice of any change in any Authority Bond Rating.

(h) *Legislation*. As soon as available to the Authority, copies of all enacted legislation that, to the best knowledge of the Authority, relates to, in any material way, or impacts upon this Agreement, the Series 2023 A Bonds or the other Related Documents or the ability of the Authority to perform its obligations in connection herewith or therewith.

(i) *Other Information*. (a) Such other information respecting the business, the Properties or the condition or operations, financial or otherwise, of the Authority as the Purchaser may from time to time reasonably request, and (b) such additional information as the Authority may be required to provide to the Purchaser pursuant to Section 5.18.

Section 5.03. Notices. In addition to the notices described in Section 5.02 hereof, the Authority will provide promptly to the Purchaser the following:

(a) *Notice of Potential Material Adverse Effect*. Notice in writing of any event or development that results in, or could reasonably be expected to result in, a Material Adverse Effect.

(b) *Amendments*. Promptly after the adoption or execution thereof, copies of any amendments of or supplements to any of the Related Documents.

Section 5.04. Further Assurances. The Authority will from time to time promptly execute and deliver to the Purchaser (or as directed by the Purchaser) all further financing statements, amendments and confirmation statements and will register, record and file and re-register, re-record and re-file all such documents and instruments, at such time or times, in such manner and at such place or places, and shall take any and all other actions as may be necessary or reasonably required by the Purchaser to (a) perfect and protect any lien, pledge or security interest or other right or interest given, or purported to be given, to the Trustee, the Purchaser or any other Person under or in connection with the General Bond Resolution, this Agreement or the Related Documents and ensure that the Series 2023 A Bonds constitute Bonds under the General Bond Resolution secured by the Lien provided in Section 501(a) of the General Bond Resolution, (b) enable the Trustee and the Purchaser to exercise and enforce their respective rights under this Agreement, the General Bond Resolution and the other Related Documents, or (c) further and more fully vest in the Trustee and the Purchaser all rights, interests, powers, benefits, privileges and advantages conferred or intended to be conferred upon them by any of the Related Documents. Except to the extent it is exempt therefrom, the Authority will pay or cause to be paid all filing, registration and recording fees incident to such filing, registration and recording, and all expenses incident to the preparation, execution and acknowledgment of such instruments of further assurance, and all federal or state fees and other similar fees, duties, imposts, assessments and charges arising out of or in connection with the execution and delivery of such instruments of further assurance.

Section 5.05. Right of Entry; Communication with Accountant. The Authority shall permit the agents or representatives of the Purchaser, during normal business hours and upon reasonable notice, to enter the premises of the Authority, or any parts thereof, to examine and copy the Authority's financial and corporate books, records and accounts, and to discuss the affairs, finances, business and accounts of the Authority with the Authority's officers, employees and agents. The Authority authorizes the Purchaser, after the occurrence and during the continuance of an Event of Default and upon reasonable notice to the Authority, to communicate directly with its Accountant, including KPMG LLP, its current accountant, and authorizes and shall instruct those accountants and advisors to communicate with, disclose and make available to the Purchaser any and all financial statements and other supporting financial documents, schedules and information relating to the Authority with respect to the business, results of operations and financial condition and other affairs of the Authority.

Section 5.06. Payment of Obligations; Removal of Liens. The Authority will pay (a) all Debts and obligations of the Authority in accordance with the terms thereof, (b) all amounts payable by it hereunder and under the Related Documents in accordance with the terms hereof or thereof and (c) all assessments or other governmental charges as the same respectively become due, all taxes, assessments (general or special) and governmental charges of any kind whatsoever that may be at any time lawfully assessed or levied against or with respect to any of its Property or any interest thereon and promptly discharge or cause to be discharged all Liens (other than Permitted Liens), fees and charges on such Property; *provided*, that the Authority may withhold payment of sums described under subpart (c) where (i) the validity or amount thereof is being contested in good faith by appropriate proceedings, (ii) the Authority has set aside on its books adequate reserves with respect thereto in accordance with GAAP and (iii) the failure to make payment pending such contest could not result in a Material Adverse Effect. Notwithstanding the foregoing, the Authority will pay and discharge any and all lawful claims for labor, materials or supplies that, if unpaid, might become a Lien on the Pledged Revenues or on any funds in the hands of the Authority or the Trustee pledged to pay the Parity Debt prior or superior to the Lien of the Parity Debt or that might impair the security of the Parity Debt.

Section 5.07. Incorporation of Covenants.

(a) The covenants of the Authority set forth in the General Bond Resolution and each of the other Related Documents to which the Authority is a party, as well as related defined terms contained therein, are hereby incorporated by reference in this Section 5.07 with the same effect as if each and every such provision were set forth in this Section 5.07 in its entirety for the benefit of the Purchaser and shall be enforceable by the Purchaser against the Authority. All such incorporated covenants shall be in addition to the express covenants contained in this Agreement and shall not be limited by the express covenants contained in this Agreement nor shall such incorporated covenants be a limitation on the express covenants contained in this Agreement. To the extent that any such incorporated provision permits any Person to waive compliance with or consent to such provision or requires that a document, opinion, report or other instrument or any event or condition be acceptable or satisfactory to any Person, the waiver, consent or approval, as applicable, of the Purchaser shall be required under this Agreement and such compliance shall be waived, or such provision shall be consented to, only if it is waived or consented to, as the case may be, by the Purchaser and such document, opinion, report or other instrument shall be acceptable or satisfactory to the Purchaser. No amendment to such covenants (or the defined terms relating thereto) made pursuant to the Related Documents or cessation of the effectiveness of any such covenants shall be effective to amend or cease the effectiveness of such incorporated covenants without the written consent of the Purchaser. Notwithstanding the termination or expiration of any Related Document, the Authority shall, unless such Related Document has terminated or expired in accordance with its terms and has been replaced by a new Related Document, continue to observe the covenants therein contained for the benefit of the Purchaser until the termination of this Agreement.

(b) The Authority shall diligently and in good faith pursue enforcement of each of the Related Documents to which it is a party against each of the other parties thereto and shall in particular and not in limitation of the foregoing cause the Trustee at all times to comply with the terms of the Related Documents to which it is a party.

Section 5.08. Maintenance of Governmental Approvals. The Authority shall at all times maintain in effect, renew and comply with all the terms and conditions of all consents, licenses, approvals, authorizations and other Governmental Approvals that are necessary or appropriate under Applicable Law to conduct its activities and operations as of the Closing Date or at any time thereafter and for the execution, delivery and performance of this Agreement and the Related Documents to which it is a party.

Section 5.09. Books and Records. The Authority will keep proper books of record and account in which full, true and correct entries shall be made of all dealings and transactions in relation to its business and activities to the extent necessary to prepare its financial statements in conformity with GAAP.

Section 5.10. Performance of This and Other Agreements. The Authority shall promptly pay all amounts payable by it under this Agreement, the Series 2023 A Bonds, the General Bond Resolution and the Series 2023 Resolution (including the Series 2023 A Certificate of Determination) according to the terms hereof and thereof and shall duly perform each of its obligations under this Agreement, the Series 2023 A Bonds and each of the other

Related Documents to which it is a party; and the Authority will take all such action as may be requisite to enforce or to cause the enforcement of the obligations of the other parties to the Related Documents under and in accordance with the Related Documents.

Section 5.11. Maintenance of Existence. Except as otherwise required by law, the Authority will preserve and maintain its existence as a body corporate and politic of the State of New Jersey and maintain all rights, privileges and franchises necessary and desirable in the normal conduct of its business and in the performance of its obligations under the Related Documents to which it is a party. Except as otherwise required by law, the Authority will continue to conduct in the ordinary course the activities in which it is presently engaged and activities ancillary thereto.

Section 5.12. [Reserved].

Section 5.13. Parity Creditors and Covenants. In the event that the Authority has previously entered into or hereafter shall enter into any agreement or instrument (or any amendment, supplement or modification thereto) providing for the incurrence of or relating to Parity Debt, which provides to the related trustee, purchaser, credit facility provider or other obligee thereunder (each, a "*Parity Creditor*") (a) any preference or priority with respect to the Pledged Revenues or other collateral or the allocation of the Pledged Revenues or other collateral as compared to the pledge and allocation to, in favor of or for the benefit of the Trustee or the Purchaser or (b) any additional or materially different rights (not including interest rates or methods of calculating interest rates) and remedies as compared to the rights and remedies of the Purchaser as set forth in the Related Documents and this Agreement (any such provision, a "*Parity Covenant*") than are provided to the Purchaser, then each such Parity Covenant shall automatically be deemed to be incorporated into this Agreement for the duration of this Agreement and the Purchaser shall have the benefits of such Parity Covenant as if it were specifically set forth in this Agreement. Upon request of the Purchaser, the Authority shall promptly enter into an amendment to this Agreement to include the Parity Covenant (provided that the Purchaser shall maintain the benefit of such Parity Covenant even if the Authority fails to provide such amendment).

Section 5.14. Government Regulation. The Authority shall not (a) be or become subject at any time to any law, regulation or list of any Governmental Authority of the United States (including, without limitation, the OFAC list) that prohibits or limits the Purchaser from making any advance or extension of credit to the Authority or from otherwise conducting business with the Authority, or (b) fail to provide documentary and other evidence of the identity of the Authority as may be requested by the Purchaser at any time to enable the Purchaser to verify the identity of the Authority or to comply with any applicable law or regulation, including, without limitation, Section 326 of the Patriot Act.

Section 5.15. Insurance. The Authority shall comply with all requirements of the General Bond Resolution and Applicable Law with regard to the procurement and maintenance of insurance with respect to the Authority and its Property.

Section 5.16. No Sovereign Immunity; Waiver of Related Defenses. To the fullest extent permitted by Applicable Law, the Authority hereby waives any exemption or immunity, whether on the basis of sovereign immunity or any similar legal or equitable principle, doctrine or rule of law and whether now or at any time hereafter arising, of the Authority with respect to its contractual obligations under the Series 2023 A Bonds, this Agreement and the other Related Documents or with respect to any of its revenues, assets or Property (irrespective of their use or intended use) from (a) jurisdiction, (b) liability, suit or other legal or equitable remedy for the amounts due and payable under the Series 2023 A Bonds, this Agreement or any of the other Related Documents or the performance of any of its other obligations hereunder or thereunder, and (c) enforcement of any judgment, order or decree to which it or its revenues, assets or Property may be made subject.

Section 5.17. Ratings for Series 2023 A Bonds. Simultaneously with the Authority obtaining a long-term unenhanced rating on its Turnpike Revenue Bonds, Series 2023 B, from Moody's or S&P, but, in any event, by no later than September 15, 2023 (regardless of whether a rating is obtained on the Series 2023 B Bonds), the Authority shall obtain a long-term unenhanced rating on the Series 2023 A Bonds from each of Moody's and S&P and provide written evidence of such ratings to the Purchaser.

Section 5.18. Filings with Municipal Securities Rulemaking Board. As soon as practicable after the issuance of the Series 2023 A Bonds, the Authority shall file, or cause to be filed, with the Municipal Securities Rulemaking Board (the "*MSRB*"), in an electronic format as shall be prescribed by MSRB Rule G-32, copies of the Resolution, including, the Series 2023 A Certificate of Determination, and this Agreement. The copies of the Resolution and this Agreement filed, or caused to be filed, by the Authority with the MSRB in accordance with the preceding sentence may have omitted or redacted therefrom any information considered confidential or proprietary by the Authority or the Purchaser so long as such copies do not omit any information that could be considered to be material for the purposes of any potential purchaser or holder the Series 2023 A Bonds. Additionally, thereafter all filings of all material event notices and any other information filed by the Authority with the MSRB in satisfaction of or as may be required by the provisions of Rule 15c2 12 promulgated pursuant to the Securities Exchange Act of 1934, as amended (17 C.F.R. Sec. 240 15c2 12) (the "*Rule*"), or any successor or similar legal requirement, shall be linked to the CUSIP numbers for the Series 2023 A Bonds so that the Purchaser shall have access to such information through the MSRB system. In the event that during any time while the Series 2023 A Bonds are Outstanding, the Authority is no longer a party to any continuing disclosure agreements entered into pursuant to the Rule, or any successor or similar legal requirement, the Authority shall send to the Purchaser, as an additional reporting requirement under Section 5.02 hereof, all such material event notices and any other information that the Authority would have been required to file with the MSRB in satisfaction of or as may be required by the provisions of the Rule or any successor or similar legal requirement.

Section 5.19. Occurrence of Tax Event. Within ten Business Days of the Authority obtaining actual knowledge of any material events affecting the tax-exempt status of the Series 2023 A Bonds or the receipt of any material notices of determinations with respect to the tax-exempt status of the Series 2023 A Bonds, including, but not limited to, any adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability or Notices of Proposed Issue (IRS Form 5701-TEB) (each, a "*Tax Event*"), the

Authority shall provide notice of such Tax Event to the Trustee and the Purchaser, including, if applicable, a copy of the written notice or written communication received by the Authority relating to the Tax Event.

ARTICLE VI

NEGATIVE COVENANTS AND COVENANTS ANCILLARY THERETO

The Authority covenants and agrees that until the principal, Redemption Price and Purchase Price of, and all interest on, the Series 2023 A Bonds have been paid to the Purchaser and all other Required Payments have been indefeasibly paid in full, and all other obligations of the Authority under this Agreement and under the Series 2023 A Bonds have been performed:

Section 6.01. Amendments. Without the prior written consent of the Purchaser, the Authority will not agree to any amendment to, or waive any default under, any Related Document in a manner that would (a) have a Material Adverse Effect or (b) adversely affect the rights and remedies of the Purchaser thereunder or alter any covenant therein to the detriment of the Purchaser. The Authority agrees to provide written notice to the Purchaser at least 30 days in advance of any proposed amendment (together with a copy of the proposed text of the amendment) or waiver of a Default. Notwithstanding the foregoing, the Authority shall be entitled to adopt one or more supplemental resolutions authorizing the issuance of Bonds or Subordinated Indebtedness under the Resolution without the need to obtain the consent of the Purchaser so long as the Authority complies with the provisions of the Resolution and the issuance of such Bonds or Subordinated Indebtedness would not otherwise result in a Default or an Event of Default. The Authority shall not take any action, nor cause the Trustee to take any action, under any of the Related Documents that is inconsistent with, or could reasonably be expected to impair, the Authority's obligations, or the rights of the Purchaser or the Trustee, under this Agreement or any of the other Related Documents, including, without limitation, any right or remedy of the Purchaser upon an Event of Default, the Authority's obligations to make payments to the Purchaser under the Series 2023 A Bonds or this Agreement, and the pledge of the Pledged Revenues under the General Bond Resolution and the priority of the Lien and security interest created thereby.

Section 6.02. Preservation of Existence, Etc. Except as otherwise required by law, the Authority will not directly or indirectly liquidate, wind up, terminate, reorganize, dissolve, merge or consolidate with any other Person (or suffer any liquidation, winding up, termination, reorganization or dissolution), or form or acquire any subsidiary (other than in the ordinary course of business as conducted as of the Closing Date), nor shall it sell, lease, assign, transfer or otherwise dispose of (in a single transaction or a series of transactions) all or substantially all of its Property. Except as otherwise required by law, the Authority will not sell, transfer, dispose of or abandon any material portion of the Turnpike System or condemn, or consent to any condemnation of, any material portion of the Turnpike System.

Section 6.03. Certain Information. The Authority shall not include in an offering document or circular or reoffering supplement for the Series 2023 A Bonds any information concerning the Purchaser that is not supplied in writing, or otherwise approved in writing, by the Purchaser expressly for inclusion therein.

Section 6.04. Trustee. The Authority, without the prior written consent of the Purchaser, which consent shall not be unreasonably withheld, conditioned or delayed, shall not take any action or refrain from taking any action that results in a change of the Trustee or the Paying Agent.

Section 6.05. Accounting Methods; Fiscal Year; Entity Classification. Except as may be required by law or any governmental or accounting rule or regulation or as may be recommended by the Governmental Accounting Standards Board, the Authority will not adopt, permit or consent to any change in accounting practices other than as required by GAAP and will not adopt, permit or consent to any change in its Fiscal Year or take (or permit to be taken) any action that results in a change to its entity classification for U.S. federal income tax purposes.

Section 6.06. Exempt Status. The Authority shall not take any action or omit to take any action, respectively, that, if taken or omitted, respectively, could cause any revocation or adverse modification of its federal income tax-exempt status or that would cause the interest on the Series 2023 A Bonds to be included in the gross income of the owners thereof for purposes of federal income taxation under the Code.

Section 6.07. Redemption and Defeasance.

(a) *Redemption*. The Authority promptly shall notify the Purchaser of the amount of any redemption of any Series 2023 A Bonds, together with the date of each such redemption and otherwise comply with the provisions of this Agreement and the Resolution (including the Series 2023 A Certificate of Determination) applicable thereto.

(b) *Defeasance*. The Authority will not defease, nor allow the defeasance of, the Series 2023 A Bonds without (i) procuring a Verification Report and providing a copy thereof to the Purchaser, and (ii) contemporaneously paying all Required Payments and satisfying all obligations of the Authority hereunder.

Section 6.08. Pension Plans. The Authority shall participate in the State Pension System in compliance in all material respects with the applicable provisions of the Code and other federal, state or local law and shall make contributions to the State Pension System pursuant to invoices received by the Authority from or on behalf of the State Pension System in amounts as determined by the New Jersey Division of Pensions and Benefits (the "*Division*"); *provided*, *however*, that the foregoing shall not be construed to prevent the State Pension System, the Division and the Authority from agreeing that the Authority may participate in a deferred payment plan with respect to its contributions, if such plan is in compliance in all material respects with the applicable provisions of the Code and other federal, state or local law.

Section 6.09. Additional Debt. The Authority shall not issue, incur, assume, guarantee or otherwise become obligated under any Debt that is payable from or secured by the Pledged Revenues or any portion thereof prior to the Parity Debt or otherwise preferred to the Parity Debt.

ARTICLE VII

EVENTS OF DEFAULT

Section 7.01. Events of Default. The occurrence of any of the following events shall constitute an "*Event of Default*":

(a) Failure of the Authority to pay or cause to be paid when due any amount owed by the Authority hereunder or under any of the other Related Documents;

(b) Failure of the Authority to observe or perform the covenants set forth in Sections 5.02, 5.03, 5.05, 5.07, 5.09, 5.11, 5.12, 5.16, 5.17, 5.18, 6.01, 6.02, 6.04, 6.07, 6.08 or 6.09;

(c) Failure of the Authority to observe or perform any covenant, condition or provision of this Agreement (other than as specified in (a) or (b) above) and such failure remains uncured 30 days after written notice of such failure from the Purchaser to the Authority and the Trustee, or failure to observe or perform any covenant, condition or provision contained in any Related Document and, in the case of any covenant incorporated by reference pursuant to Section 5.07 hereof that is not a payment or financial covenant, after the expiration of any applicable grace period contained in the relevant Related Document;

(d) The occurrence and continuation of a default, event of default or termination event under the General Bond Resolution or any of the other Related Documents, irrespective of whether said default, event of default or termination event is declared or undeclared or has been waived under the terms of such respective document, or a mandatory redemption, prepayment or acceleration has occurred with respect to the Series 2023 A Bonds or any other Parity Debt or Subordinated Indebtedness; or

(e) The occurrence of an Event of Insolvency with respect to the Authority.

Section 7.02. Rights and Remedies; Consequences of Event of Default. If an Event of Default specified in Section 7.01 hereof shall occur, then in addition to any other rights or remedies available to the Trustee or the Purchaser under any other Related Documents or under Applicable Law, the Purchaser may exercise any one or more of the following rights and remedies:

(a) by notice to the Authority, accelerate all of the amounts payable to the Purchaser under this Agreement arising from or relating to this Agreement or the Series 2023 A Bonds or the Authority's obligations hereunder or thereunder (other than the principal or Purchase Price of or interest on the Series 2023 A Bonds, which are subject to mandatory purchase as provided in Section 2.03 of this Agreement), whereupon such amounts shall become immediately due and payable without presentment, demand for payment, protest or notice of nonpayment or dishonor, or other notice of any kind or character, all of which are hereby expressly waived, and an action therefor shall immediately accrue; *provided*, that if any Event of Default described in Section 7.01(e) hereof shall occur, such amounts shall automatically mature and be due and payable on the date of the occurrence of such Event of Default without presentment, demand, protest, notice of default or intention to accelerate, notice of acceleration or other notice of any kind to the Authority or any other Person, all of which are hereby expressly waived;

(b) (i) apply to any court of competent jurisdiction for, and obtain appointment of, a receiver, (ii) either personally or by attorney or agent and without bringing any action or proceeding, or by such a receiver, take whatever action at law or in equity may appear necessary or desirable to collect the amounts due and payable under the Related Documents or to enforce performance or observance of any of the Required Payments under the Related Documents, whether for specific performance of any agreement or covenant of the Authority or in aid of the execution of any power granted to the Purchaser in the Related Documents or as otherwise available at law or in equity;

(c) deliver a notice to the Trustee and the Authority that an Event of Default has occurred and is continuing and directing the Trustee to call the Series 2023 A Bonds for mandatory purchase on the designated Mandatory Purchase Date;

(d) cure any Default, Event of Default or event of non-performance hereunder or under any other Related Document; *provided*, *however*, that the Purchaser shall have no obligation to effect such a cure; and

(e) exercise, or cause to be exercised, any and all remedies as it may have under the other Related Documents, including, without limitation, any rights it holds as a Bondholder singly or together with other Bondholders to accelerate the Series 2023 A Bonds and the other Parity Debt as provided in the General Bond Resolution and to take any and all actions otherwise available under the General Bond Resolution, and any and all remedies as are otherwise available at law and at equity.

Section 7.03. Remedies Cumulative; Solely for Benefit of Purchaser. To the extent permitted by, and subject to the mandatory requirements of, Applicable Law, each and every right, power and remedy herein specifically given to the Purchaser shall be cumulative, concurrent and non-exclusive and shall be in addition to every other right, power and remedy herein specifically given or now or hereafter existing at law, in equity or by statute, and each and every right, power and remedy (whether specifically herein given or otherwise existing) may be exercised from time to time and as often and in such order as may be deemed expedient by the Purchaser, and the exercise or the beginning of the exercise of any power or remedy shall not be construed to be a waiver of the right to exercise at the same time or thereafter any other right, power or remedy.

The rights and remedies of the Purchaser specified herein are for the sole and exclusive benefit, use and protection of the Purchaser, and the Purchaser is entitled, but shall have no duty or obligation to the Authority, the Trustee or any other Person or otherwise, to exercise or to refrain from exercising any right or remedy reserved to the Purchaser hereunder or under any of the other Related Documents.

Section 7.04. Waivers or Omissions. No delay or omission by the Purchaser in the exercise of any right, remedy or power or in the pursuit of any remedy shall impair any such right, remedy or power or be construed to be a waiver of any default on the part of the Purchaser or to be acquiescent therein. No express or implied waiver by the Purchaser of any Event of Default shall in any way be a waiver of any future or subsequent Event of Default. No delay or omission on the part of the Purchaser (or the Trustee) in exercising any right to acceleration of the maturity of the Series 2023 A Bonds or any of the other Required Payments, or any remedy under the Related Documents following any Event of Default as aforesaid, or any other option granted to the Purchaser (or the Trustee) hereunder in any one or more instances, or the acceptance by the Purchaser (or the Trustee) of any partial payment on account of the Required Payments, shall constitute a waiver of any such Event of Default and each such option shall remain continuously in full force and effect.

Section 7.05. Discontinuance of Proceedings. In case the Purchaser shall invoke any right, remedy or recourse permitted hereunder or under the Related Documents and shall thereafter elect to discontinue or abandon the same for any reason, the Purchaser shall have the unqualified right so to do and, in such event, the Authority and the Purchaser shall be restored to their former positions with respect to the Required Payments, the Related Documents and otherwise, and the rights, remedies, recourse and powers of the Purchaser hereunder shall continue as if the same had never been invoked.

Section 7.06. Injunctive Relief. The Authority recognizes that, in the event an Event of Default occurs, any remedy of law may prove to be inadequate relief to the Purchaser; therefore, the Authority agrees that the Purchaser, if the Purchaser so requests, shall be entitled to temporary and permanent injunctive relief in any such case.

ARTICLE VIII

NATURE OF OBLIGATIONS

Section 8.01. Obligations Absolute. The obligations of the Authority to pay all Required Payments under this Agreement and the other Related Documents shall be absolute, unconditional and irrevocable, notwithstanding any other provision of this Agreement or any other Related Document, and shall not be subject to any right of set-off, recoupment or counterclaim against the Purchaser and shall be paid and performed strictly in accordance with the terms of this Agreement under all circumstances whatsoever. Until the principal, Redemption Price and Purchase Price of, and all interest on, the Series 2023 A Bonds and all other Required Payments have been indefeasibly paid in full and all other obligations of the Authority hereunder and under the Related Documents have been performed and discharged, the Authority will not suspend or discontinue any Required Payments for any reason or terminate any of the Related Documents and the Authority waives and covenants not to assert any right of set-off or recoupment against its obligation to make all payments of principal, Redemption Price and Purchase Price of, and all interest on, the Series 2023 A Bonds and all other Required Payments due hereunder and under the other Related Documents in the amounts and at the times required hereby and thereby, and without abatement, diminution, deduction, counterclaim or defense for any reason, including, without limitation, in the following circumstances:

(a) any lack of validity or enforceability of any of the Related Documents;

(b) any amendment or waiver of any provision, term or condition of any of the Related Documents;

(c) any failure of any portion of the Turnpike System to be delivered, constructed or completed, any defects, malfunctions, breakdowns or infirmities in the Turnpike System, any accident, condemnation, destruction or unforeseen circumstances, any damage, destruction or condemnation of the Turnpike System or any part thereof, any acts or circumstances that may constitute failure of consideration or commercial frustration of purpose or any change in the tax or other laws of the United States or of the State or any political subdivision of either thereof;

(d) the existence of any dispute with, or any claim, right of set-off or recoupment, defense or other rights that the Authority may have at any time against, the Trustee, the Purchaser (other than the defense of payment to the Purchaser in accordance with the terms of this Agreement) or any other Person, whether in connection with this Agreement, the other Related Documents or any transaction contemplated hereby or thereby or any unrelated transaction; or

(e) any other event or circumstance whatsoever, whether or not similar to any of the foregoing, that might, but for the provisions of this Section 8.01, constitute a legal or equitable discharge of, or provide a right of set-off or recoupment against, the Authority's obligations hereunder or under any of the other Related Documents.

Section 8.02. Continuing Obligation. All covenants, agreements, representations and warranties made by the Authority in this Agreement and in the certificates or other instruments delivered in connection with or pursuant to this Agreement shall be considered to have been relied upon by the Purchaser and shall survive the execution and delivery of this Agreement and the issuance and purchase by the Purchaser of the Series 2023 A Bonds, regardless of any investigation made by the Purchaser or on its behalf and notwithstanding that the Purchaser may have had notice or knowledge of any Default or incorrect representation or warranty at the time any credit is extended hereunder, and shall continue in full force and effect as long as the principal and Purchase Price of, and all interest on, the Series 2023 A Bonds or any other Required Payments remain outstanding and unpaid. The obligations of the Authority under this Agreement shall continue until the date upon which the principal and Purchase Price of, and all interest on, the Series 2023 A Bonds and all other Required Payments due and owing to the Purchaser under the Series 2023 A Bonds and this Agreement shall have been paid in full and are no longer subject to being set aside or otherwise required to be repaid by the Purchaser as described in Section 9.14; *provided*, *however*, that the obligations of the Authority set forth in Article II and Section 9.14 shall survive any expiration or termination of this Agreement.

ARTICLE IX

MISCELLANEOUS

Section 9.01. Exchange of Series 2023 A Bonds.

(a) Upon and subject to the conditions precedent contained in Section 301 of this Agreement and the terms and conditions provided herein and based on the representations, warranties and covenants of the Authority set forth in the Related Documents and herein, the Purchaser has agreed to the exchange of the Refunded Bonds for the Series 2023 A Bonds with the Authority. The Series 2023 A Bonds are to be dated the date of delivery thereof and are to mature, be subject to redemption prior to maturity and bear interest as set forth in the Series 2023 Resolution (including the Series 2023 A Certificate of Determination).

(b) The Purchaser represents that it (i) is a "qualified institutional buyer" as defined in Rule 144A promulgated under the Securities Act of 1933, as amended (the "*1933 Act*"), or an "accredited investor" as defined in Rule 501 of Regulation D under the 1933 Act, (ii) will comply with all federal and state securities laws in connection with any subsequent resale of the Series 2023 A Bonds, and (iii) has made its own independent investigation and evaluation of the financial condition and business of the Authority and that it has received all documents and information requested from the Authority in connection with such independent investigation and evaluation.

Section 9.02. Right of Set-Off. Upon the occurrence of an Event of Default, the Purchaser and its Affiliates may, at any time and from time to time, without notice to the Authority or any other Person (any such notice being expressly waived), set-off and appropriate and apply, against and on account of, any obligations and liabilities of the Authority to the Purchaser or its Affiliates, whether or not arising under or connected with this Agreement or the Related Documents and without regard to whether or not the Purchaser shall have made any demand therefor and although such obligations and liabilities may be contingent or unmatured and regardless of currency, place of payment or booking office thereof, any and all deposits (general or special, including, but not limited to, Debt evidenced by certificates of deposit, but not including trust accounts) and any other Debt or other payment obligation at any time held or owing by the Purchaser or its Affiliates to or for the credit or the account of the Authority, whether or not arising under or connected with this Agreement or the Related Documents, whether or not matured, whether or not contingent and regardless of the currency, place of payment or booking office thereof. The rights of the Purchaser under this Section 9.02 are in addition to other rights and remedies (including other rights of set-off) that the Purchaser may have at law or in equity.

Section 9.03. Amendments and Waivers; Remedies Cumulative. No amendment or waiver of any provision of this Agreement nor consent to any departure by the Authority from any such provision will in any event be effective unless the same shall be in writing and signed by the Purchaser. Any such waiver or consent shall be effective only in the specific instance and for the specific purpose for which given. In the event any covenant or agreement contained in this Agreement should be breached by the Authority and thereafter waived by the Purchaser, such waiver shall be limited to the particular breach so waived for the specific period set out in such waiver, and such waiver shall not constitute a waiver of such breach for any other period and shall not waive any other or similar breach hereunder. Specifically and not in limitation of the foregoing, this Agreement may not be amended or modified by course of dealing, by oral acknowledgement or agreement or by any writing, unless it is a writing that is expressly stated to constitute an amendment of this Agreement and is signed by an authorized officer of the Purchaser and an Authorized Authority Representative. The rights and remedies of the Purchaser hereunder are cumulative and are not exclusive of any rights or remedies that it would otherwise have.

Section 9.04. Patriot Act Notice. The Purchaser hereby notifies the Authority that, pursuant to the requirements of the Patriot Act, it is required to obtain, verify and record information that identifies the Authority, which information includes the name and address of the Authority and other information that will allow the Purchaser to identify the Authority in accordance with the Patriot Act. The Authority hereby agrees that it shall promptly provide such information upon request by the Purchaser.

Section 9.05. Notices. All notices, requests, demands, directions and other communications (collectively, "*notices*") under the provisions of this Agreement must be in writing (including facsimile communication), unless otherwise expressly permitted hereunder, and must be properly addressed and sent by registered or certified mail or by express courier for next Business Day delivery and will be deemed received as follows: (a) if by registered or certified mail, five days after mailing; (b) if by express courier for next Business Day delivery, on the next Business Day; and (c) if by facsimile, when confirmation of transmission is obtained if prior to 5:00 p.m. local time on a Business Day, and otherwise, on the next Business Day; *provided*, that service of a notice prescribed by any applicable statute shall be considered complete when the requirements of that statute are met. Notices by electronic mail (e-mail) will not constitute notice under this Agreement and are only to be used in addition to notice given as prescribed under (a), (b) or (c) of this Section 9.05. All notices shall be sent to the applicable party at the following address or in accordance with the last unrevoked written direction from such party to the other parties hereto:

if to the Authority:

New Jersey Turnpike Authority
1 Turnpike Plaza
P.O. Box 5042
Woodbridge, New Jersey 07095
Attention: Executive Director
Telephone: (732) 750-5300, ext. 8520
Facsimile: (732) 750-5315
E-Mail: jcarone@njta.com

if to the Purchaser:

Barclays Capital Inc.
745 Seventh Avenue – 19th Floor
New York, New York 10019
Attention: John Gerbino, Managing Director
Telephone: (212) 526-3466
E-Mail: john.gerbino@barclays.com

if to the Trustee:

The Bank of New York Mellon
385 Rifle Camp Road
Woodland Park, New Jersey 07424
Attention: Vanessa Mesa
Telephone: (973) 357-7827
Facsimile: (973) 357-7840
E-Mail: vanessa.mesa@bnymellon.com

or as to each party at such other address as shall be designated by such party in a written notice to the other parties.

Any notice or other communication shall be sufficiently given and shall be deemed given when delivered to the addressee in writing or when given by telephone immediately confirmed in writing by tested telex, telecopier or other telecommunication device.

Section 9.06. Severability. Any provision of this Agreement that is prohibited, unenforceable or not authorized in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition, unenforceability or non-authorization without invalidating the remaining provisions hereof or affecting the validity, enforceability or legality of such provision in any other jurisdiction.

Section 9.07. Governing Law. THIS AGREEMENT SHALL BE DEEMED TO BE A CONTRACT UNDER AND, TOGETHER WITH ANY DISPUTES OR CONTROVERSIES ARISING OUT OF OR RELATING TO THIS AGREEMENT, SHALL BE GOVERNED BY, AND CONSTRUED AND INTERPRETED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW JERSEY AND APPLICABLE FEDERAL LAW, WITHOUT REGARD TO CHOICE OF LAW RULES.

Section 9.08. Consent to Jurisdiction, Venue and Service of Process. The Authority and the Purchaser, irrevocably (a) agree that any suit, action or other legal proceeding arising out of or relating to this Agreement shall be brought and filed in, and be subject to the exclusive jurisdiction of, the courts of the State of New Jersey or the United States District Courts for the State of New Jersey, (b) consent to the jurisdiction of each such court in any such suit, action or proceeding, and (c) waive any objection that it may have to the laying of venue of any such suit, action or proceeding in any of such courts and any claim that any such suit, action or proceeding has been brought in an inconvenient forum. The Authority and the Purchaser also irrevocably consent to the service of any and all process in any such action or proceeding by the mailing of copies of such process to the respective address set forth for such party in Section 9.05. The Authority and the Purchaser agree that a final judgment in any suit, action or proceeding will be conclusive and may be enforced in appropriate jurisdictions by suit on the judgment or in any other manner provided by law. All mailings under this Section 9.08 must be by certified mail, return receipt requested.

Nothing in this Section 9.08 will affect the right of the Purchaser to serve legal process in any other manner permitted by law or affect the right of the Purchaser to bring any suit, action or proceeding against the Authority or its Property in the courts of any other jurisdiction.

Section 9.09. Headings. Section headings in this Agreement are included herein for convenience of reference only and will not have any effect for purposes of interpretation or construction of the terms of this Agreement.

Section 9.10. Successors and Assigns.

(a) *Transfer and Assignment.* (i) This Agreement is a continuing obligation and is binding upon and inures to the benefit of the Authority and the Purchaser; *provided*, that the Authority will not assign, transfer or delegate all or any portion of its rights or obligations hereunder or under the other Related Documents without the prior written consent of the Purchaser. The Purchaser may from time to time and without the consent of the Authority or any other Person assign, sell or transfer, in whole or in part, all or any part of its interest in the Series 2023 A Bonds and the Related Documents; *provided*, *however*, that those portions of the Series 2023 A Bonds that are sold or transferred to any subsequent Owner that is not a Purchaser Entity shall not be entitled to any of the rights or the benefits of this Agreement granted to the Purchaser hereunder, including, without limitation, any provisions of Section 2.03 hereof relating to the mandatory purchase and/or redemption of the Series 2023 A Bonds; and *provided*, *further*, that at such time as no Purchaser Entity is an Owner of any of the Series 2023 A Bonds, this Agreement shall terminate and shall no longer be in force and effect.

(ii) The Purchaser may designate any nominee, designee or agent to act for and in the name of the Purchaser by written notice to the Authority and the Trustee and any such duly designated nominee, designee or agent shall thereupon be empowered to act for and on behalf of the Purchaser and exercise the rights, powers, privileges and responsibilities of the Purchaser in this Agreement and each of the other Related Documents.

(b) *Certain Pledges*. The Purchaser may at any time, without notice to, or any requirement to seek the consent of, the Authority, pledge or grant a security interest in all or any portion of its rights under the Series 2023 A Bonds, this Agreement and the other Related Documents (including, without limitation, rights to payment under the Series 2023 A Bonds and this Agreement) to secure obligations of the Purchaser, including any pledge or assignment to secure obligations to a Federal Reserve Bank; *provided*, that no such pledge or assignment shall release the Purchaser from any of its obligations hereunder or substitute any such pledgee or assignee for the Purchaser as a party hereto.

Section 9.11. Counterparts; Complete and Controlling Agreement. This Agreement may be executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument. This Agreement may be delivered by the exchange of signed signature pages by facsimile transmission or by e-mail with a PDF copy or other replicating image attached, and any printed or copied version of any signature page so delivered shall have the same force and effect as an originally signed version of such signature page. This Agreement and the other Related Documents completely set forth the agreements between the Purchaser and the Authority and supersede all prior and contemporaneous understandings, agreements and contracts, both written and oral, between the Purchaser and the Authority relating to the exchange of the Refunded Bonds for the Series 2023 A Bonds and all matters set forth herein and in the Related Documents.

Section 9.12. Waiver of Rule of Construction. The Authority hereby waives any and all provisions of law to the effect that an ambiguity in a contract or agreement should be interpreted against the party responsible for its drafting.

Section 9.13. Waiver of Jury Trial. THE AUTHORITY AND THE PURCHASER EACH HEREBY KNOWINGLY, VOLUNTARILY AND INTENTIONALLY WAIVE ANY RIGHTS THEY MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY LITIGATION (WHETHER AS CLAIM, COUNTER-CLAIM, AFFIRMATIVE DEFENSE OR OTHERWISE) BASED HEREON, OR ARISING OUT OF, UNDER OR IN CONNECTION WITH, THIS AGREEMENT, OR ANY COURSE OF CONDUCT, COURSE OF DEALING, STATEMENTS (WHETHER ORAL OR WRITTEN) OR ACTIONS OF THE AUTHORITY OR THE PURCHASER. THE AUTHORITY ACKNOWLEDGES AND AGREES THAT IT HAS RECEIVED FULL AND SUFFICIENT CONSIDERATION FOR THIS PROVISION AND RECOGNIZES AND AGREES THAT THIS PROVISION IS A MATERIAL INDUCEMENT FOR THE PURCHASER ENTERING INTO THIS AGREEMENT AND PURCHASING THE SERIES 2023 A BONDS. THE AUTHORITY REPRESENTS AND ACKNOWLEDGES THAT IT HAS REVIEWED THIS PROVISION WITH ITS LEGAL COUNSEL AND THAT IT HAS KNOWINGLY AND VOLUNTARILY WAIVED ANY JURY TRIAL RIGHTS IT MAY HAVE FOLLOWING CONSULTATION WITH SUCH LEGAL COUNSEL.

Section 9.14. Payments Set Aside. To the extent that any payment by or on behalf of the Authority is made to the Purchaser, or the Purchaser exercises its right of set-off, and such payment or the proceeds of such set-off or any part thereof is subsequently invalidated, declared to be fraudulent or preferential, set aside or required (including pursuant to any settlement entered into by the Purchaser in its discretion) to be repaid to a trustee, receiver or any other party, in connection with any proceeding under any Debtor Relief Law or otherwise, then to the extent of such recovery, the obligation or part thereof originally intended to be satisfied shall be revived and continued in full force and effect as if such payment had not been made or such set-off had not occurred.

Section 9.15. Usury. If Applicable Law shall be interpreted by a court of competent jurisdiction to render usurious any amount or amounts payable to the Purchaser under this Agreement or under the Series 2023 A Bonds, or contracted for, charged or received by the Purchaser with respect to the obligations of the Authority hereunder or under the Series 2023 A Bonds, or if any acceleration or optional or extraordinary prepayment results in the Authority having paid any interest (or other amounts construed under Applicable Law to be interest) in excess of that permitted by Applicable Law, then it is the Purchaser's express intent that all excess amounts theretofore collected by the Purchaser will be credited against the principal balance of the Authority's obligations to the Purchaser and the provisions of this Agreement and the other Related Documents will immediately be deemed reformed and the amounts thereafter collectible hereunder and thereunder modified, without the necessity of the execution of any new documents, so as to comply with the Applicable Law, but so as to permit the recovery of the fullest amount otherwise called for hereunder or thereunder. All sums paid or agreed to be paid to the Purchaser that may be characterized as interest under Applicable Law will, to the extent permitted thereby, be amortized, prorated, allocated and spread throughout the full stated term of the Series 2023 A Bonds or other obligations of the Authority until payment in full so that the rate or amount of interest on account of such obligations does not exceed the Maximum Lawful Rate from time to time in effect and applicable to such obligations for so long as the obligations are outstanding.

Section 9.16. Electronic Signature; Electronically Signed Document. For purposes hereof, "electronic signature" means a manually-signed original signature that is then transmitted by electronic means; "transmitted by electronic means" means sent in the form of a facsimile or sent via the Internet as a PDF (portable document format) or other replicating image attached to an e-mail message; and "electronically signed document" means a document transmitted by electronic means and containing, or to which there is affixed, an electronic signature. The parties agree that the electronic signature of a party to this Agreement (or any amendment of or supplement to this Agreement) shall be as valid as an original signature of such party and shall be effective to bind such party to this Agreement. The parties agree that any electronically signed document (including this Agreement) shall be deemed (i) to be "written" or "in writing", (ii) to have been signed, and (iii) to constitute a record established and maintained in the ordinary course of business and an original written record when printed from electronic files. Such paper copies or "printouts", if introduced as evidence in any judicial, arbitral, mediation or administrative proceeding, will be admissible as between the parties to the same extent and under the same conditions as other original business records created and maintained in documentary form. Neither party shall contest the admissibility of true and accurate copies of electronically signed documents on the basis of the best evidence rule or as not satisfying the business records exception to the hearsay rule.

Section 9.17. No Advisory or Fiduciary Responsibility. In connection with all aspects of the transactions contemplated hereby (including in connection with any amendment, waiver or other modification hereof or of any other Related Document), the Authority acknowledges and agrees that: (a) (i) the arranging, structuring and other services regarding this Agreement provided by the Purchaser and any of its Affiliates are arm's-length commercial transactions between the Authority, on the one hand, and the Purchaser and its Affiliates, on the other hand, (ii) the Authority has consulted its own legal, accounting, regulatory and tax advisors to the extent it has deemed appropriate, and (iii) the Authority is capable of evaluating, and understands and accepts, the terms, risks and conditions of the transactions contemplated hereby and by the other Related Documents; (b) (i) the Purchaser and each of its Affiliates is and has been acting solely as a principal and has not been, is not and will not be acting as an advisor, agent or fiduciary for the Authority or any other Person and (ii) neither the Purchaser nor any of its Affiliates has any obligation to the Authority with respect to the Transactions, except those obligations expressly set forth herein; and (c) the Purchaser and each of its Affiliates may be engaged in a broad range of transactions that involve interests that differ from those of the Authority, and neither the Purchaser nor any of its Affiliates has any obligation to disclose any of such interests to the Authority. To the fullest extent permitted by Applicable Law, the Authority hereby waives and releases any claims that it may have against the Purchaser and each of its Affiliates with respect to any breach or alleged breach of agency or fiduciary duty in connection with any aspect of any transaction contemplated hereby.

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[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the parties hereto have caused this Bondholder Agreement to be duly executed and delivered by their respective officers thereunto duly authorized as of the date first above written.

NEW JERSEY TURNPIKE AUTHORITY

By:____________________________
James Carone
Executive Director

BARCLAYS CAPITAL INC.

By:____________________________
John Gerbino
Managing Director

IN WITNESS WHEREOF, the parties hereto have caused this Bondholder Agreement to be duly executed and delivered by their respective officers thereunto duly authorized as of the date first above written.

NEW JERSEY TURNPIKE AUTHORITY

By:______________________________
James Carone
Executive Director

BARCLAYS CAPITAL INC.

By:______________________________
John Gerbino
Managing Director

SCHEDULE 4.05

None

SCHEDULE 4.07

In 2017, a Petition for Rule Change seeking to have the Authority revoke its rule imposing an administrative fee in connection with collecting unpaid tolls from toll violators on the Turnpike and the Parkway was filed with the Authority. In the Petition, the petitioners argue that the administrative fee is unreasonable and therefore not authorized by the Act. The Petition also includes a demand for a refund of the administrative fees collected by the Authority to the extent unreasonable, which amount the petitioners claim is nearly $200,000,000. After reviewing a financial analysis of the costs of processing, prosecuting and collecting unpaid tolls from toll violators, the Authority concluded that the administrative fee is reasonable and consistent with the Act and, in a written response dated October 18, 2017, the Executive Director of the Authority denied the Petition. On December 1, 2017, the petitioners filed an appeal of that denial with the Appellate Division of the Superior Court of the State of New Jersey and oral argument occurred on February 4, 2019. On March 8, 2019, the Appellate Division issued its decision rejecting the petitioners' contention that the Authority violated the Administrative Procedures Act or notions of due process or fundamental fairness, when it initially promulgated the regulation in 2011, and in 2017, when it considered the Petition for Rule Change. However, the Appellate Division remanded for further proceedings in Middlesex County Superior Court to supplement the record. At the trial court level, the matter was handled before the Honorable Alberto Rivas, A.J.S.C., in Middlesex County. The parties engaged in extensive discovery between May 2019 and May 2021, which was followed by the evidentiary hearing as ordered by the Appellate Division. The evidentiary hearing was conducted by Judge Rivas and took place between June 28, 2021 and July 2, 2021. The parties concluded the hearing on August 4, 2021 and then submitted post-hearing briefs on September 20, 2021.

On January 10, 2022, the parties received Judge Rivas' opinion, which upheld the $50 administrative fee. In short, Judge Rivas rejected the petitioners' arguments and concluded that the administrative fee was both reasonable and based on the costs associated with processing and collecting a toll violation. The parties submitted supplemental briefs and thereafter received notice from the Appellate Division that additional briefing was required on one discrete issue – namely, the impact (if any) of a recent statute on the Authority's definition of a toll "violator" and, in turn, on the Authority's calculation of the fee.

The Appellate Division heard oral argument on May 1, 2023 and issued its opinion on May 11, 2023. The opinion affirmed Judge Rivas' opinion in all respects and confirmed that the administrative fee is reasonable and calculated in accordance with the authorizing statute. On June 1, 2023, petitioners' counsel filed a notice of petition for certification with the New Jersey Supreme Court. Those proceedings are now fully briefed and the parties are awaiting word from the Supreme Court as to whether Certification will be granted. The Authority does not expect to hear the Court's determination until September or October 2023.

On December 1, 2017, the law firm representing the petitioners also filed a class action lawsuit in the United States District Court for the District of New Jersey alleging, among other things, that the administrative fee violates the Fair Debt Collections Practices Act (FDCPA) and the Eighth Amendment to the United States Constitution. With the agreement of the parties, on January 17, 2018, the Court issued an order staying this lawsuit pending the resolution of the appeal with the Appellate Division of the Superior Court of the State of New Jersey described above. If and when this lawsuit is reactivated, the Authority intends to vigorously defend its conclusion that the administrative fee does not violate the FDCPA or the United States Constitution.

SCHEDULE 4.09(a)

On January 1, 2023, the Authority executed an agreement with the State Treasurer on behalf of the State to provide funding for the Hudson Tunnel Project (HTP). The agreement outlines payments to the State on a quarterly basis in an amount not to exceed $124 million annually, to be utilized for payment of the State's share of the costs of the HTP. Payments will commence upon completion of construction of the HTP, anticipated in or about 2033. Additionally, the Authority is obligated to make payments to the State in an amount not to exceed $1,666,667 monthly beginning on January 1, 2023 for GDC operations. These payments will end when the HTP construction is complete, anticipated in or about 2033.

On March 28, 2023, the Authority authorized amending an existing operating agreement with Applegreen NJ Welcome Centres, LLC ("*Applegreen*"). The amendment requiring Applegreen to provide electronic vehicle ("*EV*") charging stations is an extension of the on-site services that Applegreen currently provides at the service areas. The amendment commits Applegreen to construct and operate 80 EV charging stations for electric passenger vehicles by December 31, 2025 as well as an additional 160 EV charging stations by the later of April 2033 or the date the EV adoption in New Jersey reaches 100%. Applegreen also agreed to construct and operate 20 EV charging stations for medium duty vehicles by no later than December 31, 2038. The Authority, in return for a contribution of $25,714,000, will receive 5% of gross revenues with an additional rent increase based on subsidies received by Applegreen up to 10% of gross revenues.

SCHEDULE 4.09(b)

None

SCHEDULE 4.19

As of the date of this Agreement, fifteen bills have been introduced in the New Jersey State Legislature in the current legislative session ending in January 2022, which, if enacted in their present form, would (i) modify the penalties to be charged by the Authority in connection with toll violations, (ii) provide exemptions from the payment of tolls on both the Turnpike and the Parkway for certain disabled veterans, (iii) prohibit employees of the Authority from using power tools in inclement weather to perform non-emergency roadside maintenance, require all Authority roadside maintenance operations involving the use of gas-powered landscaping equipment be performed in daylight hours except in emergency situations, and require that portable roadside light towers be used for all Authority roadside maintenance operations taking place at night, (iv) exempt New Jersey E-ZPass customers from certain fees if their motor vehicle is stolen, (v) prohibit the Authority from charging administrative fees when mailing requests for toll violation payments at cashless toll exits, (vi) direct the Authority to apply a 10% discount to toll payments made by customers having a New Jersey E-ZPass account in event of a motor fuel tax increase for two years after the increase, (vii) require the Authority to establish a temporary amnesty program for fees associated with outstanding unpaid tolls, (viii) require the Authority to establish an online web portal and mobile application permitting E-ZPass customers to utilize any account services related to their E-ZPass account, (ix) prohibit fees associated with a toll violation from exceeding twice the value of the relevant toll fee, (x) prohibit late fees from being assessed if the Authority does not have proof that it provided notice to the account holder within 31 days of the toll fee being incurred, (xi) require that E-ZPass account holders always receive the E-ZPass toll rate, even if the account holder's account has insufficient funds, (xii) urge the Governor to reject Authority toll increases, and (xiii) require the Authority to extend the payment period for violations of the E-ZPass system during the COVID-19 pandemic and related state of emergency and public health emergency.

In this current lame duck session, legislation was introduced to rescind the January 1, 2022 scheduled toll increase. This legislation would also seek to restrict the Authority to a toll increase every three years. Additional legislation was introduced to create an annual toll hike.

In the current and several of its previous legislative sessions, the State Legislature is considering or has considered several other bills that could adversely impact the Authority's revenues and/or expenses and/or require the Authority to alter the way it currently conducts its operations, including, without limitation, bills requiring that the Authority display toll information at each collection point on the Turnpike and the Parkway and that it provide natural gas refueling, propane refueling, hydrogen refueling and electric vehicle recharging stations at certain rest areas on both the Turnpike and the Parkway.

The Authority is unable to predict whether the currently pending bills will be enacted into law, or whether any such previously introduced bills, or substantially similar bills, will be introduced in the current or any future session of the State Legislature or, if introduced, whether any such bills will be enacted into law. If the currently pending bills or any such future bills are enacted into law, the Authority is unable to predict whether or not such bills will have a material impact on the Authority's operations.

SCHEDULE 4.20

The Turnpike

The Authority continues with the remediation of environmental contamination resulting from historical discharges from underground/above-ground storage tanks located at the service areas, maintenance districts and interchanges along the Turnpike. Progress is being made in addressing the contamination with Unrestricted and/or Limited Restricted Response Action Outcomes ("*RAOs*") being issued at multiple locations. The Authority met the New Jersey Department of Environmental Protection ("*NJDEP*") Remedial Investigation deadline of May 2016 for all applicable Turnpike sites with the focus now on Remedial Action ("*RA*"). The Authority has submitted RA timeframe extensions for multiple sites in order to extend the regulatory and/or mandatory timeframes. The remediation progress has eliminated all but one groundwater treatment system located at a single service area on the Turnpike. This single groundwater treatment system will remain in operation for the foreseeable future and will necessitate periodic monitoring, sampling and maintenance under directives issued by the NJDEP. The Authority and the current operator of the service areas on the Turnpike have undertaken an aggressive remedial program, including, but not limited to, contaminated soil removal as part of the improvement program for the service areas, which will extend through 2025.

In the late 1980's, the NJDEP determined that residues from the processing of chromium ore were distributed as fill material on construction projects throughout Hudson County, New Jersey, and in surrounding environs. The contaminant levels at certain sites receiving chromium ore processing residue exceed the currently established standards. Seven sites owned or controlled by the Authority are included on the NJDEP's list of sites containing contamination from chromium ore processing residue above the currently established levels; however, as described below, the Authority has accepted responsibility to remediate conditions at three of the affected sites and bears no remedial responsibility for any of the additional sites.

In May 2005, the NJDEP instituted litigation against the three firms that had generated the chromium ore processing residue. The Authority was not named as a defendant in such litigation by the NJDEP. In March 2006, the Authority was named as a third-party defendant by one of the firms as a result of the Authority's ownership of certain parcels impacted by the residue. The Authority accepted responsibility to remediate conditions at three affected sites with the understanding that, by doing so, it will not have any responsibility for any additional sites. The cost to complete the remediation of the three sites is estimated to be approximately $17 million over a 30-year period. Remediation of one of those affected sites has been completed and a RAO was issued to close the site. Remediation design is complete at another one of those sites and it is possible the remediation of that site will be completed in 2021. Remedial activities at the third site are delayed due to site operations.

The Parkway

The Authority continues with the remediation of environmental contamination resulting from historical discharges from underground/above-ground storage tanks located at the service areas, toll plazas, maintenance districts, a former communication tower and State Police barracks along the Parkway. Progress is being made in addressing the contamination and Unrestricted and/or Limited Restricted RAOs have been issued at multiple locations. The Authority met the NJDEP Remedial Investigation deadline of May 2016 for all but two Parkway sites. Of these two sites, the Remedial Investigation for one site was completed with the focus now on RA. The Authority has submitted RA timeframe extensions for multiple sites in order to extend the regulatory and/or mandatory timeframes.

The remediation progress has eliminated all but one groundwater treatment system located at one service area on the Parkway roadway. This groundwater treatment system will be in operation for the foreseeable future and will necessitate periodic monitoring, sampling and maintenance under directives issued by the NJDEP.

Generally

With respect to the Turnpike System generally, soil contamination, groundwater contamination and/or solid waste found on off-site properties, Authority properties and properties for which the Authority has assumed remediation responsibility, as well as waterway contamination that is alleged to have resulted from operations conducted at Parkway facilities, have resulted in claims against the Authority and may lead to additional claims in the future. Claims for reimbursement of remediation costs and other alleged damages have been asserted or may be forthcoming from other parties responsible for undertaking remediation activities at these properties. As a result, it may be necessary for the Authority to undertake, fund or reimburse others for remediation activities at these properties. The Authority believes the ultimate resolution of these claims will not have a material adverse impact on the financial position of the Authority. As to environmental regulatory compliance expenditures, such costs are also not expected to have a material adverse impact on the financial position of the Authority.

APPENDIX G

COPY OF THE BOND COUNSEL OPINION

August 30, 2023

New Jersey Turnpike Authority
1 Turnpike Plaza
P.O. Box 5042
Woodbridge, New Jersey 07095

Barclays Capital Inc.
745 Seventh Avenue
New York, New York 10019

The Bank of New York Mellon
385 Rifle Camp Road
Woodland Park, New Jersey 07424

U.S. Bank Trust Company, National Association
333 Thornall Street
Edison, New Jersey 08837

Ladies and Gentlemen:

We have examined a record of proceedings relating to the issuance by the New Jersey Turnpike Authority (the "*Authority*") of $107,305,000 aggregate principal amount of its Turnpike Revenue Bonds, Series 2023 A (the "*Series 2023 A Bonds*"). The Authority is a public body corporate and politic 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*").

The Series 2023 A Bonds are issued under and pursuant to the 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 as of November 22, 1991, as the same has been further amended, restated and supplemented from time to time (collectively, the "*General Bond Resolution*"), including as supplemented by the Series 2023 Turnpike Revenue Refunding Bond Resolution, adopted by the Authority on July 25, 2023 (the "*Series 2023 Resolution*"), and by a Certificate of Determination executed by the Executive Director of the Authority, dated August 16, 2023 (the "*Certificate of Determination*"; and together with the General Bond Resolution and the Series 2023 Resolution, the "*Resolution*"), relating to the Series 2023 A Bonds. Capitalized terms used but not otherwise defined herein shall have the meaning ascribed thereto in the Resolution.

The Series 2023 A Bonds are being sold by the Authority on a direct purchase basis to Barclays Capital Inc., as Purchaser of the Series 2023 A Bonds (the "*Purchaser*"), pursuant to a Bondholder Agreement, dated August 16, 2023 (the "*Bondholder Agreement*"), by and between the Authority and the Purchaser.

The Series 2023 A Bonds are dated the date hereof, mature on the dates and in the principal amounts, bear interest from their date at the rates, are payable on such dates and contain such other provisions, all as set forth in the Series 2023 Resolution and the Certificate of Determination. The Series 2023 A Bonds are subject to redemption prior to maturity on the terms and conditions set forth in the Resolution.

The Series 2023 A Bonds are being issued in exchange for a portion of the Authority's Turnpike Revenue Bonds, Series 2020 C (Federally Taxable) maturing on the date and in the principal amount, and bearing interest at the rate, as set forth in the Certificate of Determination (the "*Refunded Bonds*"), which Refunded Bonds are currently owned by the Purchaser. Upon receipt by the Purchaser of the Series 2023 A Bonds, the Refunded Bonds will be canceled by the Authority and deemed to be no longer Outstanding under the Resolution.

Under the terms of the Resolution, the Authority may hereafter authorize and issue other additional Bonds under the Resolution for the purposes and on the terms and conditions set forth in the Resolution. Any such additional Bonds, when issued, will be entitled, equally and ratably with the Series 2023 A Bonds, all other Bonds heretofore or hereafter issued and Outstanding under the Resolution and certain other obligations described in the Resolution, to the benefit, protection and security of the provisions, covenants and agreements of the Resolution, including the pledge of Pledged Revenues and the amounts on deposit in all Funds established by the Resolution, except as otherwise set forth in the Resolution.

In rendering the opinions set forth below, we have examined such matters of law and documents, certificates, records and other instruments as we deemed necessary or appropriate to enable us to express the opinions set forth below, including, without limitation, the Act, original counterparts or certified copies of the Resolution and the other documents, certifications, instruments, opinions and records filed with the Trustee in connection with the issuance of the Series 2023 A Bonds. In rendering the opinions set forth below, we have assumed and relied upon the genuineness of all signatures, the authenticity of all documents submitted to us as originals and the conformity to the original documents of all documents submitted to us as copies. As to any facts material to our opinions we have, when such facts were not independently established, relied upon the truthfulness, completeness and accuracy of the aforesaid documents, certifications, instruments, opinions and records without any independent investigation thereof.

Based on the foregoing and subject to the limitations, qualifications and exceptions set forth below, we are of the opinion that:

1. The Authority has been duly created and is validly existing as a public body corporate and politic under the provisions of the Act, with power to adopt the Resolution and to issue the Series 2023 A Bonds.

2. The Resolution has been duly and lawfully adopted by the Authority, is in full force and effect, is valid and binding upon the Authority and is enforceable in accordance with its terms, and no other authorization for the Resolution is required.

3. The Series 2023 A Bonds have been duly authorized and validly issued by the Authority in accordance with the Act and the provisions of the Resolution, are valid and binding obligations of the Authority enforceable in accordance with their terms and the terms of the Resolution, and are entitled to the benefit, protection and security of the Resolution and the Act.

4. The Resolution creates the valid pledge that it purports to create of the proceeds of the sale of the Bonds, the Pledged Revenues and the amounts on deposit in all Funds established by the Resolution (except for moneys provided by governmental authorities whose availability is conditioned on such amounts not being subject to the pledge of the Resolution), subject only to the provisions of the Resolution permitting the application thereof for the purposes and on the terms set forth in the Resolution.

5. The Series 2023 A Bonds constitute additional Bonds under the Resolution, and are equally and ratably entitled to the benefits, protection and security of the Resolution along with all other Bonds heretofore issued and Outstanding under the Resolution and certain other obligations described in the Resolution.

6. The Authority has covenanted to comply with any continuing requirements that may be necessary to preserve the exclusion from gross income of interest on the Series 2023 A Bonds for purposes of federal income taxation under the Internal Revenue Code of 1986, as amended (the "*Code*").

Assuming that the Authority continuously complies with its covenants, under existing law, interest on the Series 2023 A Bonds is excluded from gross income of the owners thereof for federal income tax purposes pursuant to Section 103 of the Code, and interest on the Series 2023 A Bonds is not an item of tax preference under Section 57 of the Code for purposes of computing alternative minimum tax; however, for tax years beginning after December 31, 2022, interest on the Series 2023 A Bonds is included in the "adjusted financial statement income" of certain corporations that are subject to alternative minimum tax under Section 55 of the Code.

7. Interest on the Series 2023 A Bonds and any gain from the sale thereof are not includable as gross income under the New Jersey Gross Income Tax Act.

The foregoing opinions in paragraphs 2 and 3 above are qualified to the extent that the enforceability of the Resolution and the Series 2023 A Bonds may be limited by applicable bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium or other similar laws now or hereafter enacted by any state or by the federal government affecting the enforcement of creditors' rights generally and general principles of equity (regardless of whether enforcement is sought in a proceeding in equity or at law) and the valid exercise of the sovereign police powers of the State of New Jersey and the constitutional power of the United States of America.

In rendering the opinion expressed in paragraph 6 above, we have relied on representations of the Authority with respect to matters solely within the knowledge of the Authority that we have not independently verified, and we have assumed continuing compliance with the covenants in the Resolution pertaining to the Code that affect the exclusion from gross income of interest on the Series 2023 A Bonds for federal income tax purposes. In the event that such representations are determined to be inaccurate or incomplete or the Authority fails to comply with such covenants, interest on the Series 2023 A Bonds could be includable in gross income for federal income tax purposes from the date of their original delivery, regardless of the date on which the event causing such inclusion occurs.

Except as stated above, we express no opinion as to any federal, state or local tax consequences of the ownership or disposition of the Series 2023 A Bonds.

Attention is called to the fact that we have not been requested to examine and have not examined any documents or information relating to the Authority other than the certified copies of the proceedings and proofs referred to hereinabove, and no opinion is expressed as to any financial or other information, or the adequacy thereof, that has been or may be supplied to any purchaser of the Series 2023 A Bonds.

The opinions expressed herein are based upon the laws and judicial decisions of the State of New Jersey and the United States of America as of the date hereof and are subject to any amendment, repeal or other modification of the applicable laws or judicial decisions that served as the basis for our opinion or to any laws or judicial decisions hereafter enacted or rendered. Our engagement as bond counsel with respect to the opinions expressed herein does not require, and shall not be construed to constitute, a continuing obligation on our part to notify or otherwise inform the addressees hereof of the amendment, repeal or other modification of the applicable laws or judicial decisions that served as the basis for this opinion letter or of the laws or judicial decisions hereafter enacted or rendered that impact on this opinion letter.

This opinion letter is being furnished solely to the parties to whom it is addressed and may not be relied upon by any other person or quoted in whole or in part or otherwise referred to without our prior written consent. This is only an opinion letter and not a warranty or guaranty of the matters discussed herein.

This opinion is issued as of the date hereof. We assume no obligation to update, revise or supplement this opinion to reflect any facts or circumstances that may come to our attention after the date of this opinion, or any changes in law or interpretations thereof that may occur after the date of this opinion or for any reason whatsoever.

Very truly yours,

McManimon, Scotland & Baumann, LLC

APPENDIX H

COPY OF THE CONTINUING DISCLOSURE AGREEMENT

CONTINUING DISCLOSURE AGREEMENT

BY AND AMONG

NEW JERSEY TURNPIKE AUTHORITY,

THE BANK OF NEW YORK MELLON, CO-TRUSTEE

AND

U.S. BANK TRUST COMPANY, NATIONAL ASSOCIATION, CO-TRUSTEE

Relating To

New Jersey Turnpike Authority

$107,305,000
Turnpike Revenue Bonds, Series 2023 A

Dated: August 30, 2023

CONTINUING DISCLOSURE AGREEMENT

This **CONTINUING DISCLOSURE AGREEMENT** (the "*Disclosure Agreement*") is made this 30th day of August, 2023, by and among the New Jersey Turnpike Authority (the "*Authority*"), The Bank of New York Mellon and U.S. Bank Trust Company, National Association (as successor in interest to U.S. Bank National Association), in their capacity as co-trustees (the "*Co-Trustees*") under the Authority's Turnpike Revenue Bond Resolution, adopted on August 20, 1991, as amended, restated and supplemented (the "*Resolution*"), including as supplemented by the Series 2023 Turnpike Revenue Refunding Bond Resolution adopted by the Authority on July 25, 2023. This Disclosure Agreement is entered into in connection with the issuance and sale by the Authority of its Turnpike Revenue Bonds, Series 2023 A, and any additional bonds hereinafter issued under the Resolution and designated pursuant to a supplemental schedule as bonds to be covered hereunder (collectively, the "*Bonds*").

1. **Purpose of this Disclosure Agreement.** This Disclosure Agreement is being executed and delivered for the benefit of the holders and beneficial owners of the Bonds (collectively, the "*Bondholders*") and in compliance with Rule 15c2-12(b)(5) of the Securities and Exchange Commission, as it may be amended from time to time, including administrative or judicial interpretations thereof, as it applies to the Bonds.

2. **Definitions.** In addition to the definitions set forth in the Resolution and hereinabove, which apply to any capitalized term used in this Disclosure Agreement unless otherwise defined in this Section 2, the following capitalized terms shall have the following meanings:

"*Annual Report*" shall mean the Authority's Annual Report provided pursuant to, and as described in, Sections 3 and 4 of this Disclosure Agreement.

"*Continuing Disclosure Information*" shall mean, collectively, (i) each Annual Report, (ii) any notice required to be filed by the Authority with the MSRB pursuant to Section 3(c) of this Disclosure Agreement and (iii) any notice of a Listed Event required to be filed by the Authority with the MSRB pursuant to Section 5(b) of this Disclosure Agreement.

"*Financial Obligation*" means a (i) debt obligation, (ii) derivative instrument entered into in connection with, or pledged as security or a source of payment for, an existing or planned debt obligation or (iii) guarantee of (i) or (ii); *provided*, *however*, that the term "Financial Obligation" shall not include municipal securities as to which a final official statement has been provided to the MSRB consistent with the Rule.

"*Listed Events*" shall mean any of the events listed in Section 5(a) of this Disclosure Agreement.

"*MSRB*" shall mean the Municipal Securities Rulemaking Board.

"*Opinion of Counsel*" shall mean a written opinion of counsel expert in federal securities law acceptable to the Authority.

"*Rule*" shall mean Rule 15c2-12 adopted by the SEC under the Securities Exchange Act of 1934, as it may be amended from time to time, including administrative or judicial interpretations thereof, as it applies to the Bonds.

"*SEC*" shall mean the United States Securities and Exchange Commission.

"*State*" shall mean the State of New Jersey.

3. **Provision of Annual Reports.**

(a) The Authority shall, not later than May 1 of each year during which any of the Bonds remain Outstanding, provide to the MSRB, in accordance with the provisions of Section 6 of this Disclosure Agreement, the Annual Report prepared for the respective fiscal year of the Authority ending the immediately preceding December 31 (or if the fiscal year of the Authority shall end on any date other than December 31, the Authority shall provide its Annual Report to the MSRB not later than the first day of the fifth month next following the end of such other fiscal year). Each Annual Report shall comply with the requirements of Section 4 of this Disclosure Agreement and may be submitted as a single document or as separate documents comprising a package.

(b) The Authority shall, at the same time as it submits the Annual Report to the MSRB, provide written notice of such submission to the Co-Trustees.

(c) The Authority shall also file with the MSRB, in a timely manner and in accordance with the provisions of Section 6 of this Disclosure Agreement, notice of any failure of the Authority to provide an Annual Report in compliance with the requirements of this Section 3 and Section 4 of this Disclosure Agreement.

4. **Contents of Annual Report.**

(a) The Annual Report shall include information pertaining to the Authority of the type appearing in the Official Statement circulated in connection with the issuance of the Bonds and will include the (i) audited financial statements of the Authority for the preceding fiscal year of the Authority as required by Section 3(a) hereof prepared using the accounting standards described in subsection (b) of this Section 4, (ii) annual budgets of the Authority, (iii) debt service coverage certifications and (iv) management's discussion of results of operations, if and to the extent not otherwise provided in the audited financial statements. In the event that audited financial statements are not available on the date required in Section 3(a) hereof, the Authority shall file unaudited financial statements for such fiscal year until audited financial statements are available. Each Annual Report may cross-reference other information that is available to the public on the MSRB's internet website or that has been filed with the SEC and, if the document incorporated by reference is a final official statement, it must be available from the MSRB.

(b) As of the date of this Disclosure Agreement, the Authority prepares its financial statements in accordance with generally accepted accounting principles in the United States of America.

5. **Reporting of Listed Events.**

(a) This Section 5 shall govern the giving of notices of the occurrence, with respect to the Bonds, of any of the following Listed Events:

(1) Principal and interest payment delinquencies;
(2) Non-payment related defaults, if material;
(3) Unscheduled draws on debt service reserves reflecting financial difficulties;
(4) Unscheduled draws on credit enhancements reflecting financial difficulties;
(5) Substitution of credit or liquidity providers, or their failure to perform;

(6) Adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the Bonds, or other material events affecting the tax status of the Bonds;

(7) Modifications to the rights of Bondholders, if material;

(8) Bond calls, if material, and tender offers;

(9) Defeasances of the Bonds;

(10) Release, substitution or sale of property securing repayment of the Bonds, if material;

(11) Rating changes relating to the Bonds;

(12) Bankruptcy, insolvency, receivership or similar event of the Authority;

(13) The consummation of a merger, consolidation or acquisition involving the Authority or the sale of all or substantially all of the assets of the Authority, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material;

(14) Appointment of a successor or additional trustee for the Bonds or the change of name of a trustee for the Bonds, if material;

(15) Incurrence of a Financial Obligation of the Authority, if material, or agreement to covenants, events of default, remedies, priority rights or other similar terms of a Financial Obligation of the Authority, any of which affect Bondholders, if material; and

(16) Default, event of acceleration, termination event, modification of terms or other similar events under a Financial Obligation of the Authority, if any such event reflects financial difficulties.

(b) The Authority shall, in a timely manner not in excess of 10 business days after the occurrence of any Listed Event, file a notice of the occurrence of such Listed Event with the MSRB in accordance with the provisions of Section 6 of this Disclosure Agreement. In determining the materiality of any of the Listed Events specified in subsection (a) of this Section 5, the Authority may, but shall not be required to, rely conclusively on an Opinion of Counsel. The Authority shall also provide written notice of such Listed Event to the Co-Trustees at the same time it provides notice of such Listed Event to the MSRB.

6. **Filing of Continuing Disclosure Information.** Any Continuing Disclosure Information filed with the MSRB in accordance with this Disclosure Agreement shall be in an electronic format as shall be prescribed by the MSRB or such other format as the Rule may require or permit, and shall be accompanied by such identifying information as shall be prescribed by the MSRB or as may otherwise be required by the Rule.

7. **Termination of Reporting Obligation.** The obligations of the Authority under this Disclosure Agreement shall terminate upon the defeasance, prior redemption or payment in full of all of the Bonds.

8. **Amendment; Waiver.** Notwithstanding anything in this Disclosure Agreement to the contrary, the Authority may amend this Disclosure Agreement, and any provision of this Disclosure Agreement may be waived, if such amendment or waiver is supported by an Opinion of Counsel addressed to the Authority and the Co-Trustees to the effect that such amendment or waiver will not, in and of itself, cause the undertakings herein to violate the Rule.

9. **Additional Information.** Nothing in this Disclosure Agreement shall be deemed to prevent the Authority from disseminating any other information, using the means of dissemination set forth in this Disclosure Agreement or any other means of communication, or including any other information in any Annual Report or notice of occurrence of a Listed Event, in addition to that which is required by this Disclosure Agreement. If the Authority chooses to include any information in any Annual Report or notice of occurrence of a Listed Event in addition to that which is specifically required by this Disclosure Agreement, it shall not have any obligation under this Disclosure Agreement to update such information or include it in any future Annual Report or notice of occurrence of a Listed Event.

10. **Default.** In the event of a failure of the Authority to comply with any provision of this Disclosure Agreement, the Co-Trustees may (and, at the written request of the holders of at least 25% in aggregate principal amount of Outstanding Bonds affected by such failure, shall), or any Bondholder may, take such actions at law or in equity as may be necessary and appropriate to enforce the specific performance and observance of the obligations of the Authority under this Disclosure Agreement; *provided, however*, that no person or entity shall be entitled to recover monetary damages hereunder under any circumstances and the right of any Bondholder, or the Co-Trustees on behalf of Bondholders, to challenge the adequacy of information provided pursuant to this Disclosure Agreement shall be limited in the same manner as enforcement rights are limited under the Resolution. A default under this Disclosure Agreement shall not be deemed an Event of Default under the Bonds or the Resolution, and the sole remedy under this Disclosure Agreement in the event of any failure of the Authority to comply with this Disclosure Agreement shall be an action to compel performance.

11. **Beneficiaries.** This Disclosure Agreement shall inure solely to the benefit of the Bondholders, and each Bondholder is hereby declared to be a third-party beneficiary of this Disclosure Agreement. Except as provided in the immediately preceding sentence, this Disclosure Agreement shall create no rights in any other person or entity.

12. **Notices.** All notices and other communications required or permitted under this Disclosure Agreement shall be in writing and shall be deemed to have been duly given and made only when delivered (personally, by recognized national or regional courier service or by other messenger, for delivery to the intended addressee) or when deposited in the United States mail, registered or certified mail, postage prepaid, return receipt requested, addressed as set forth below:

(i) *If to the Authority:*

1 Turnpike Plaza
P.O. Box 5042
Woodbridge, New Jersey 07095
Attention: James D. Carone, Executive Director

(ii) *If to the Co-Trustees:*

(a) The Bank of New York Mellon
385 Rifle Camp Road – 3rd Floor
Woodland Park, New Jersey 07424
Attention: Vanessa Mesa, Vice President

(b) U.S. Bank Trust Company, National Association
333 Thornall Street – 4th Floor
Edison, New Jersey 08837
Attention: Christopher E. Golabek, Vice President

Any party may alter the address to which communications are to be sent by giving notice of such change of address in conformity with the provisions of this Section 12.

13. **Successors and Assigns.** All of the covenants, promises and agreements contained in this Disclosure Agreement by or on behalf of the Authority or the Co-Trustees shall bind and inure to the benefit of their respective successors and assigns, whether so expressed or not.

14. **Headings for Convenience Only.** The descriptive headings in this Disclosure Agreement are inserted for convenience of reference only and shall not control or affect the meaning or construction of any of the provisions hereof.

15. **Counterparts.** This Disclosure Agreement may be executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

16. **Severability.** If any provision of this Disclosure Agreement, or the application of any such provision in any jurisdiction or to any person or circumstance, shall be held invalid or unenforceable, the remaining provisions of this Disclosure Agreement, or the application of such provision as is held invalid or unenforceable in jurisdictions or to persons or circumstances other than those in or as to which it is held invalid or unenforceable, shall not be affected thereby.

17. **Governing Law.** This Disclosure Agreement shall be governed by and construed in accordance with the laws of the State.

18. **Compliance with L. 2005, c. 271, Reporting Requirements.** Each Co-Trustee is hereby advised of its responsibility to file an annual disclosure statement on political contributions with the New Jersey Election Law Enforcement Commission ("*ELEC*") pursuant to N.J.S.A. 19:44A-20.13 (L. 2005, c. 271, section 3) if the Co-Trustee enters into contracts or agreements with public entities in the State, such as the Authority, and receives compensation or fees in excess of $50,000 or more in the aggregate from public entities in the State, such as the Authority, in a calendar year. It is each Co-Trustee's responsibility to determine if filing is necessary. Failure to do so can result in the imposition of financial penalties by ELEC. Additional information about this requirement is available from ELEC at 888-313-3532 or at www.elec.state.nj.us.

19. **Compliance with L. 2005, c. 92.** In accordance with L. 2005, c. 92, each Co-Trustee agrees that all services performed under this Disclosure Agreement or any subcontract awarded under this Disclosure Agreement shall be performed within the United States of America.

20. **Certain Provisions Relating to Co-Trustees.** The provisions of Article IX of the Resolution relating to the duties, obligations, protections and indemnities of the Co-Trustees shall apply to the Co-Trustees' performance of this Disclosure Agreement and are by this reference incorporated as if set forth in full herein.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the NEW JERSEY TURNPIKE AUTHORITY, THE BANK OF NEW YORK MELLON and U.S. BANK TRUST COMPANY, NATIONAL ASSOCIATION have caused this Disclosure Agreement to be executed and delivered in their respective names by their respective authorized officers, all as of the date first above written.

NEW JERSEY TURNPIKE AUTHORITY

By: ______________________
James D. Carone
Executive Director

THE BANK OF NEW YORK MELLON,
as Co-Trustee

By: ______________________
David J. O'Brien
Senior Vice President

U.S. BANK TRUST COMPANY,
NATIONAL ASSOCIATION,
as Co-Trustee

By: ______________________
Annette M. Marsula
Vice President

[Signature Page to Continuing Disclosure Agreement]

IN WITNESS WHEREOF, the NEW JERSEY TURNPIKE AUTHORITY, THE BANK OF NEW YORK MELLON and U.S. BANK TRUST COMPANY, NATIONAL ASSOCIATION have caused this Disclosure Agreement to be executed and delivered in their respective names by their respective authorized officers, all as of the date first above written.

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Executive Director

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as Co-Trustee

By:______________________________
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Senior Vice President

U.S. BANK TRUST COMPANY,
NATIONAL ASSOCIATION,
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By:______________________________
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[Signature Page to Continuing Disclosure Agreement]